EDO STATE LIAISON OFFICE COMPLEX, ABUJA.

AN ATTEMPT AT REFLECTING BENIN ART IN CONTEMPORARY BUILDINGS.

BY

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August, 2005

DECLARATION

I do hereby declare that this thesis presented for the degree of Master of Science in architecture is my authentic work under the guidance of my supervisor. All quotations used and their sources have to the best of my knowledge been duly acknowledged.

CERTIFICATION

This thesis entitled "EDO STATE LIAISON OFFICE COMPLEX, ABUJA" by OLOWOJOBA Sanu Samuel meets the requirement for the award of the degree of Master of Science in architecture of the Ahmadu Bello University and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This project is dedicated to my late sister and to all those who contributed to my academic career.

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First and foremost I can not but acknowledge the omnipresence of my creator- my greatest source of inspiration ALMIGHTY GOD, for the knowledge and will power.

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ABSTRACT

In a federalism system of government, state governments are answerable to the federal government. Liaison offices have been established to serve as a link between the federal seat and the state. Being a representational building, representing the state in the Federal Capital Territory, a liaison office building therefore stands the task of providing all necessary information concerning the state at the Federal Capital Territory.

This thesis fundamentally seeks to look into the present approach of liaison offices design based on their function and purpose. However, this thesis design will go beyond the office and guest accommodation approach to attempting at reflecting the richer aspect of Edo culture- the Benin art in contemporary buildings.

After carrying out some research, some problems were found to be associated with liaison offices. Topping the list is the lack of regional architectural approach in liaison office buildings and public buildings in general in the federal capital territory. In his book '*Art in Nigeria'*, Ulli Beier stated categorically and I quote that "the artistic life in Nigeria is being powerfully influenced by European architects who at the present time build all-important public buildings. Much of this architecture seems ill-adapted to its surroundings both from an aesthetic and practical point of view". Asides architectural regionalism, other problems associated liaison office buildings in the federal capital territory is that of cultural identification and cultural assimilation among the citizens and the states they represent.

This thesis however, is aimed at achieving the following objectives; To make findings into the common features of the Benin Art and an attempt at reflecting such common features in contemporary buildings, to bring to limelight the richest of the Edo culture- the Benin Art,

An attempt at identifying a common ground for Art and Architecture, To design a liaison office capable of accommodating the state government workers on official duty at Abuja; considering the high cost of hotel accommodation in Abuja, this will help cut down on government spending and to be a source of revenue generation by providing let-able office spaces with commercial accommodation.

The author was motivated by the present lack of originality in the design of public buildings in Abuja. Abuja being the Federal Capital Territory, should be able to show case various cultures of the different parts of the country in a bid to improving tourism. Ulli Beier author of 'Art in Nigeria' stated that buildings especially public buildings should reflect some cultural aspect of the people for whom the building is built. He concluded by saying that architects should try to get 'the feel of the place' and adjust their buildings to the climate. Therefore, this thesis research was born out of the immense contribution of Benin Art to the Nigerian Art history and also by the need to retrieve this internationally recognized Primitive Art Style in an attempt at immortalizing them.

The methodology of research involves first and foremost the identification of the problem statement, collection of data relevant to the problem statement, collection of data relevant to the research area (Benin Art and Architecture), case study of existing situations and similar projects, analysis of data and case studies. Some of the findings include the fact that the Benin Artwork collection is the largest in Nigeria, it is known worldwide for its naturalistic primitive concept, and some of the finest Benin artefacts are on display in the Museum of Primitive Art, New York. Some other thousands are in foreign museums in London, Berlin, Vienna etc. other findings include the fact that Benin architecture was usually reflected on their artworks, the Benin buildings usually serve as medium for

reflecting their artworks. Further more is the fact that researches have shown that in the early Benin kingdom, certain art forms and images were created and were employed in the political processes. Discoveries have been able to bring into limelight how art was created, allocated and used, by both kings and their powerful rivals, to control historical memory.

In conclusion, Edo state may be a minority state but it is the Nigerian image for art. In respect of this achievement, the state deserves the right to showcase this rich aspect of their culture at the federal level. This will in turn make the building itself serve as a self educative structure and an icon of cultural identity asides the principal function of a liaison office.

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CHAPTER ONE

(INTRODUCTION)

1.0 An Introduction to Benin Art

Benin Art has been described by William fagg in his book '*Nigerian Images'* as the firmest that we shall ever have for the art history of any part of Africa before the European times. This he said is based on the great corpus of some thousands of bronze and other antiquities, surviving from the past 500 years of Benin history, which can be read like a book. After frequently handling some 200 Benin bronze plaques in the British museum collection, William Fagg again described them as a body of highly competent, but essentially uninspired, official art, the majestic fossil of the greatness of Benin. for the most part they express stolid confidence through a measured classicism of style: these plaques which were used as an imposing background for court ceremonial are even now the most impressive to be seen in Africa.

In conclusion he stated that Nigeria's reputation in the word of art rest at present very largely on the Ife-Benin tradition, on the fact that ancient Nigerian were able to make a reasonable approximation to the highly rated arts of Egypt, Greece, Rome, India, Renaissance Italy and the western word in general.

The Benin Art and Architecture are inseparable as the Benin architecture(buildings) are seen to reflect some features of the Benin art and sometimes the buildings themselves are used as a medium to showcase their rich art culture-the Benin court style where plaques are used in the background for court ceremonials.

Far more informative are the Artefacts made by Benin artist who had a better understanding than strangers from overseas of the essentials of buildings they were depicting, and especially of their structural details. They showed the elevations of the buildings in their city on plaques, cast in bronze using a lost wax technique. These plaques covered the walls and pillars of the palaces in the town. The central subject of the composition was always a group of figures, but the background was always architectural. Brass caskets are another group of art objects which depicts Benin architecture. An example is shown below:



Plate1.1: Brass casket representing the Oba's palace with turret roofs.
Photo: courtesy Museum for Volkerkund. Berlin.

These descriptive and iconographic materials (which were comprehensively compiled by H. Ling Roth, P.A Talbot, R.E Bradbury and the research carried out by the department antiquities in 1958 and 1965, together provided the basis for the attempt to synthesis a presentation of Benin Architecture. With art playing so much prominence in the

very existence of the architecture of a people, it is only fair to preserve such artefacts. This is why therefore an attempt at reflecting Benin Art in contemporary buildings should be very much embraced if we are to preserve and educate the people on such a rich art history. And which better building would best fit this purpose other than the state's own liaison office to be situated in a federal capital territory.

Mostly, liaison offices are political institution charged with the task of effective representation at the federal seat they are a means of effective communication, between the state and the federal seat and vice-versa. A liaison office within the federal setting can be compared to an embassy, in some of the duties they perform. The liaison office serves the populace of which it represents and non-citizens that are resident within around the area it is situated.

A liaison officer is an information data bank of the state within the federal capital, also serves as means of linkage to the state and information gathering of matters happing in the state for the citizens so concerned.

In the present system of establishing liaison offices, political issue dominates the other important aspects of liaison offices, such as cultural heritage, creating a sense of identity, regional architectural expression and imagery. All these factors form the research basis for this thesis.

1.1 Problem Statement:

The artistic life in Nigeria is been powerfully influenced by European architectural styles which at the present are used in important public buildings.

Much of this architecture seems ill-adapted to its surroundings both from an aesthetic and practical point of view. Fry, Drew and partners, who built the university college, Ibadan are among the few who tried to get 'the feel of the place and adjusted their buildings to the artistic environment. One of the principal features of the university buildings- the broken wall patterns- is also found in the Ife art style and the traditional Yoruba Mud Architecture. Another example is the Nigerian embassy building in Saudi Arabia by Multi-System associates. The building which reflected regional architecture using contemporary building materials was able to portray the Hausa traditional architecture.

The problems that exist with public buildings in Nigeria are that of cultural identification, architectural regionalism and cultural assimilation among the citizens all these have not been given proper recognition in existing public buildings.

The fact that liaison offices serves as the first contact of a person with the state, then such a person whether a citizen or not should be able to see and comprehend a lot on the potentials and other necessary information needed to form an impression of the state.

Liaison offices in Nigeria have derailed from their duty of showcasing their rich cultural heritage. Liaison offices are likened to embassy buildings and as such should portray their places of origin not only in the information they provide but also in the building image (appearance) and form.

1.2 Aims and Objectives:

The aims and objectives of this research thesis include the following:

- To make findings into the common features of the Benin Art and an attempt at reflecting such common features in contemporary buildings
- Bringing to limelight the richest of the Edo culture- the Benin Art.
- An attempt at identifying a common ground for Art and Architecture.
- An attempt at using architecture as medium for expressing Art.
- To design a liaison office capable of accommodating the state government workers on official duty at Abuja; considering the high cost of hotel accommodation in Abuja, this will help cut down on government spending.
- To design a liaison office that will portray the culture of the Edo people at the federal level.
- To design a liaison office that will reflect some Edo art forms and styles in its elevations.
- To design a liaison office that will synthesize architecture and one of the richest primitive art cultures in Africa (the Benin art).

1.3 Scope:

The paramount consideration of this study is to analyse two of the most out-spoken aspects of the Edo culture- the Benin Art and Architecture. In doing this the author's intention is to reflect this rich cultural heritage using architecture as the medium.

The scope of the design will be an attempt at synthesizing contemporary Architecture and one of the richest primitive art cultures in Africa- the Benin Art.

The design however shall consist of basic components such as the administrative block, residential and accommodation units, recreational area, catering department, maintenance, conference hall and state hall of fame/museum and library of state literature and history.

1.4 Limitations of the Research:

Some of the limitations that were encountered in this research include the following:

- The author's inability to gain access to some of the documented materials that would help in providing more background information of the subject.
- The inability of the author to gain access into certain spaces classified as restricted areas, in attempt at a more critical case studies.
- The researcher could only conduct a face to face discussion with scholars in the research area – the Benin art and not with the artists themselves.
- Financial constraint can not be ruled out since the availability of fund is always a major factor in carrying out research work.

- The inability of the researcher to see most of the facts live as most of them are an exhibition in foreign Museum in Britain, U.S.A, Portugal & Berlin.

1.6 Motivation:

This thesis research was born out of the immense contribution of Benin Art to the Nigerian Art history and by the need to retrieve this internationally recognized Primitive Art Style in an attempt at immortalizing them.

In general, the author was motivated by the present lack of originality in the design of public buildings in Abuja. Abuja being the Federal Capital Territory, should be able to show case various cultures of the different parts of the country in a bid to improving tourism.

1.7 Research Methodology:

In the search for research materials during the course of this study, the source of the bulk of the data analyzed is secondary. These include materials that form the background for the literature analysis of the subject matter. These also include materials for ecological analysis in the form of regional climatic data, relief features and socio-economic data.

The collection of data with primary source is mostly in relation to site inventory and the case studies.

Another area where primary source was used is in the interview with scholars in the field of the author's research area.

Generally, the method of synthesis in this study is in the following order:

I. Collection and documentation of subject materials and data.

II. Analysis of the documented data and materials.

III. Drawing of inferences and deductions.

IV. Formulation of solutions, design criteria, concepts and proposals.

1.8 Architectural Significance:

This Thesis is an attempt at expressing regional character in contemporary buildings. The subject matter contributes to the Nigerian architecture by synthesizing regional art and architecture with contemporary buildings.

The significance of this research work is to provide a platform of cultural identity through the use of regional artistic style and architecture. Another significance of this study is its contribution to Nigerian regional architectural style. It helps to encourage student architects to develop their minds in the line of regionalist approach to design instead of the western style.

In conclusion this thesis edges the Nigerian architect a step further into considering regional architecture as a viable architectural style both in aesthetics and originality.

CHAPTER TWO

(LITERATURE REVIEW)

2.1 Definition of Liaison office

The dictionary defines liaison as a connection or a process of linkage between two separated parts of an entity, applied to physical aspect of this thesis, liaison offices are establishments provided to serve as a link between the community and the committee. With the former being the state and the latter being the federal seat. Mostly liaison offices are political institutions charged with the affair of effective representation of the state within the federal seat.

According to the oxford dictionary of current English, the word liaise is to cooperate on a matter of shared concern. To liaise is to act as a link to assist communication or cooperation between people or organizations.

2.2 Evolution of liaison offices

Generally an office complex enhances centrality of functions. Due to large developments, the liaison offices were instituted as there arose the need for decentralization of office functions and a close alliance with these functions became inevitable. As the society is getting more scientific in its operations, there is also a need for decentralization; this led to the creation of liaison offices to cope with the various liaison demands.

2.3 Liaison offices in the Nigerian context

Asides the obvious function of a liaison office as known all over the world, in Nigeria, the function of a liaison office goes beyond the political duties. In Nigeria there is

a new trend in function of liaison office especially those located in the federal capital territory. In Nigeria, the following duties can be associated with liaison offices:

- Assist and promotes polices, programs and activities of the state.
- Provision of accommodation for both government officials and the general public that is willing to pay for it.
- Serving as a source of revenue generation for the state by provision of let-able office spaces.
- Portraying the rich cultural heritage of the state.
- Serving as a centre for recreational activities serving both indigenes and the general public.
- To develop service policy and procedures concerning its associate or on behalf of its associates.
- Assist in identifying and resolving actual and potential conflicts and disagreement with tribes and intertribal organizations.
- To carry out policies on government to government basis.

2.4 Liaison office as a medium for expression of regional architecture

As a public building, liaison offices are many atimes used as a medium for expression of the architecture of the people. Just like embassy buildings, liaison offices have similar roles which include representation of a particular country or state as the case may be. This representation goes beyond political negotiations to representation of all aspect of the way of life of the people under study. In Nigeria, many of the liaison office

buildings do not portray this very vital aspect. In Abuja, only the Lagos state liaison office building has been able to reflect regionalism in its building.

2.5 Regional Architecture:

Regional architecture is viewed from various perspectives as the integration between man, his physical and his social environment to produce an architecture which would reflect the socio-cultural component of the people through relevant expressive mediums.

In the context of this research, regionalism in architecture may be redefined as an architecture that tends to pull the very essence of the nature of the people (the Benin people) and their environment and to reflect these qualities in their buildings. And by so doing, the architect tries to understand the cultural values in a society (the Benin kingdom) and ties to capture these values in his design.

It is on this background that the need to reflect the Benin Art in a contemporary building is said to be justifiable.

2.5.1 The Concept of Regionalism:

The concept of regionalism especially in Architecture dates back to the late 70's where there seem to be a move against Modernism expressed in the past modernist movement understanding the main components of Modern Architecture gives light to the arguments preferred by Post Modernist.

The Problems of Modern Architecture as viewed by the post modernist was that while technology and ideology allowed for inspiring achievements, it failed to take into

cognizance others aspect of design as it pertains to the user and the environment and post modernist hope to correct this.

In spite of the achievements of Architecture, the quarrel has been that architects continue to borrow randomly from technologies whose practical values do not contribute to a society's sense of good life. On the other hand, architects could not divorce their works from the contemporary styles predominant in urban centre all over the world. The problem of Modern Architecture was viewed to be that, the majority of the public (people) remained indifferent or hostile to the modern Aesthetic and also the architectural and planning ideas failed to regard the social and aesthetic value of the users.

Against this background, a new disposition of non-western cultures, different societies have over the years established standard, and criteria about the concept of architecture. The idea of beauty varies from one culture to another; hence all societies cannot embrace one style and adopt it in totality. The sense of place or region must be clearly expressed in the physical disposition of their architecture; this would constitute the identity or individuality of a society. The concept of regionalism thus came to be and this was basically a return to a style deeply rooted in societal and cultural icons which did not necessarily evoke traditional or local tendencies i.e. have a variation, a sub-style within a broader frame work of a style. This concept was one of in which the architect tried to understand the cultural values and concepts inherent in a society and try to capture the essence in his work. This embodied not only the cultural concepts but also the natural scenery of the physical environment which can suggest design forms. In the Design of Brasilia, the Architect Oscar Niemeyer says;"… the strength line, hard inflexible, created by man doesn't attract one …what it does is the free and sensuous curves that one find in

the mountain of my country in the sensuousness of her rivers, in the clouds of the sky and the waves of the sea.".

Thus, it can be said that Regionalism tends to pull the very essence of the nature of the people and their environment to reflect in their Architecture and by so doing, allow the use of technology in the context of post Modernism especially in area of materials and aesthetics.

2.6 Significant Examples of Regionalism:

Architecture in some country has been largely considered as being able to successfully retain their traditional concepts within the frame work of Post Modernism. The architecture of Japan although cultured and highly sophisticated developed in an original way and has attained results of international importance though amidst many difficulties and controversies. This in itself gave impetus to others to follow and use more permanent concepts rather than superficial ones. The emphasis was on the environment rather than the technology of materials employed as seen in most of the early architecture of Japan.

According to Kenzo Tange, "Architecture is said to be one that should be a reflection or expression of social structure, a dynamic form of architecture suited to not only the quintessential of traditionalism but also pragmatic functionally rational modern methods of applications". The Philosophy of design included mobility and population trends of the Japanese, their Buddhist architecture reliance on wood, but utilizes the Technological Orientation of Modernization, with the Japanese concept of continuity in architecture, society and nature, concepts of an en-space-a semi public space, circumventing the schizophrenic durability are inside/outside of the space as found in Japanese streets and merges outside with private living accommodation with using light

screens. A good example is the Fukwoka Bank by Kenzo Tange (1975), another example is the Hiraoka city Hall, by Junzo Sakakura (1964) a form of a traditional palace with Architecture elements reflecting vernacular Architecture expressed in modern Architecture.

In Mexico, there have been also attempt to design within the frame work of the ideas of modernism but with expression of their Mayan culture shown in the mural decorations and adaptation of the forms in their design e.g. the Central Library, university Mexico by the Trio of J.O Gorman, J.M Velasco and G. Saavedua. There is a clear expression of ancient Mexican Architecture.



Plate 2.2: The central bank building (BCEAO) Dakar, Senegal.
A symbolic expression with a strong regional language.
Source: African, Oceanic, and New world Culture

In Brazil, the physical environments as well as traditional values of the people have continued to inspire. Architecture continent, the need for the adoption of a style that will seem to suit our socio-cultural environment, the need to fully understand the mind set of the Region is an important step to achieving a genuine African or a regional representational

architecture. Even with this view held by many, still there is a poor reflect on the change and this can be said to be due to:

1. Industrialization.
2. Ease of communication of travel and awareness.
3. Abstract qualities inherent in new concepts of space with materials and physiological satisfaction and;
4. Spirit of timers.

But we must come to a compromise, one in which there is an identity and expression of our socio-cultural as well as traditional heritage especially of the environment in which this architecture will stand. The works of a number of architects may come to mind e.g., Hassan Fatty, Pierre Goudiabay, Atepa and others.



Plate 2.1: The ECOWAS Fund Headquarters in Lome, Togo.
A symbolic expression with a strong regional language.
Source: African, Oceanic, and New world Culture

The identity which should be deeply rated in basic architectural pre-conditions for function economy and beauty should adopt form to reflect this identity and I n so doing stand out as a symbol of people. Example of this is the ECOWAS Fund headquarters in Togo by P.G Atepa, the architect in this case tried to reconcile both the African culture

shown in the facades of the building as well as the planning and the modernist values. The emphasis of black African traits in the design, decorations and colour of the building takes accounts of local climate and social values and integrate it within the context of modern techniques.

2.7 Characteristics of regional architecture.

The search for a regional identity which generally should reflect the people of a particular region, their environment both social and physical is the main aim of regionalism i.e. regional expression embodied in an architectural style.

This search has, to a large extent led so many architects to try and harness the very essence of the architectural elements in indigenous architecture. Their significance cannot be over emphasized, the ideal of symbolism then is viewed as a function of this identity SMBOLISM in architecture is seen to be inherent in FORM or STRUCTURE and can be impersonal and general or personal and specific in character.

Basically, regionalists insist that there must be certain characteristics namely:

Symbols:

The oxford dictionary defines a symbol as a "sign, mark, object etc looked upon as representing something." While symbolism is the "the representation of ideas using symbols". The Architecture of the various countries already mentioned show this very important character of regional expression as shown in the entrance gateway, university of science and technology Kumasi, the ideal of symbols in relations to culture can best be grasped in its analogy to the relationship of Atomto matter being the basic unit of culture. This could in a sense be seen as a representation of ideas of an ethnic group.

Forms:

The expression of regional architecture can and is very often reflected in the form obtained in the designs of architects; The Hotel Ivoire, Abidjan (and other public buildings in and around the country) has shown this trait as forms of cottages as in traditional African round huts.

Again, this symbolic expression or language is the reflection of a culture with a strong regional heritage. The expression could take shapes and form which visual expressions are of the design form of the Hausa which are circular in forms with pinnate tipped doused roof of the Soho in elevation.

Decoration (motifs):

The decorative patterns as seen in the facades of building which satisfy an aesthetic need and a language of the culture which hopes to communicate the general idea of a complex include beliefs, arts, law, custom and embodies a common view point which binds people together.

The motif which could be mural painting, fluting or decorative patterns on the surfaces of the structural elements like walls, columns are clearly seen in numerous examples on walls of traditional architecture in African cities especially and in other parts of the world (the Mayan civilization in Mexico and Japan)

Planning (spatial organisation):

The plan form and its general design concepts as seen in the indigenous traditional architecture of most of the architecture design of the postmodernist era stem from a deep noted traditional spatial organisation practised in their architecture.

The character of regional expression as seen in the representation of the language of culture inherent or obtained in symbolism reflected in form, shape, decoration and spatial organisation also encompasses the technology and building materials.

The role therefore of all these qualities must be played out to act as a basis for proper integration of traditional ideas and modern philosophy like Kenzo Tange said "Tradition should be seen as a means to an end and not an end itself".

Identity by means of elemental compositions:

Regional architectural styles of the post modernist movement have certain aims which according to Charles Jencks, was to "…. Giving buildings a strong regional identity and a sense of place…." This regional architecture must be viewed properly and seen to possess certain qualities characteristics which readily express its intentions and thus find its place in the history of Architecture.

Bearing in mind, the complex nature of any society usually of a high heterogeneous nature, one must therefore find design expressions peculiar to a region which truly reflects the spirit of a place and the essence of the people in its architecture.

2.8 How Regionalism was applied in this research work:

It can be assumed that by now we have good knowledge of what Regionalism is and the concept of regionalism. Research has shown in previous times that by standard, the

Benin architecture does not qualify as a regional architecture. For this reason, and also to avoid complexity of this thesis work, the author has decided to narrow the concept of regionalism in this scheme of work to reflecting a strong cultural value (the Benin Art) of the Benin people using architecture as the medium.

The author has therefore considered the following characteristics of regional architecture in this scheme: creating identity by means of elemental compositions, decoration (motifs) and use of symbols which have been mentioned above amongst the characteristics of regional architecture.

Therefore, regionalism was applied to this scheme by carefully studying the various characteristics of the Benin art works and collected the most common features of the artworks. The role played by every artwork in the day to day activity of the Benin people mattered in its selection for use in the scheme.

The following are the diagrammatic illustrations of how identity was achieved in the scheme by reflecting Benin art by means of elemental compositions:

The fanning of the Oba:

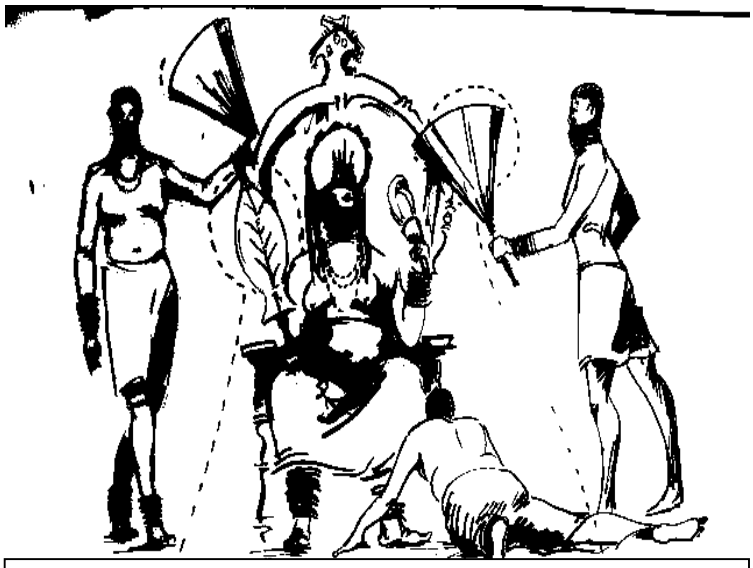


Figure 2.1 An Oba of Benin seated on the throne.

It is always 'quite the thing' for an African potentate to have at least two slaves fanning him while he is seated on the thrown. The Benin court fan is usually a highly ornamented peace of art made of cow hide with bright coloured flannel or

Hausa leather sewn on it. Also noticeable on the thrown is the 'Ebere' (the staff of office) usually held in hand by the oba.

Conceptualisation of the plan:

The conceptualisation of the plan form was derived from the basic appearance of the thrown of the oba during a court session. The exact positioning has been abstracted as shown below to achieve a form of identity on plan.

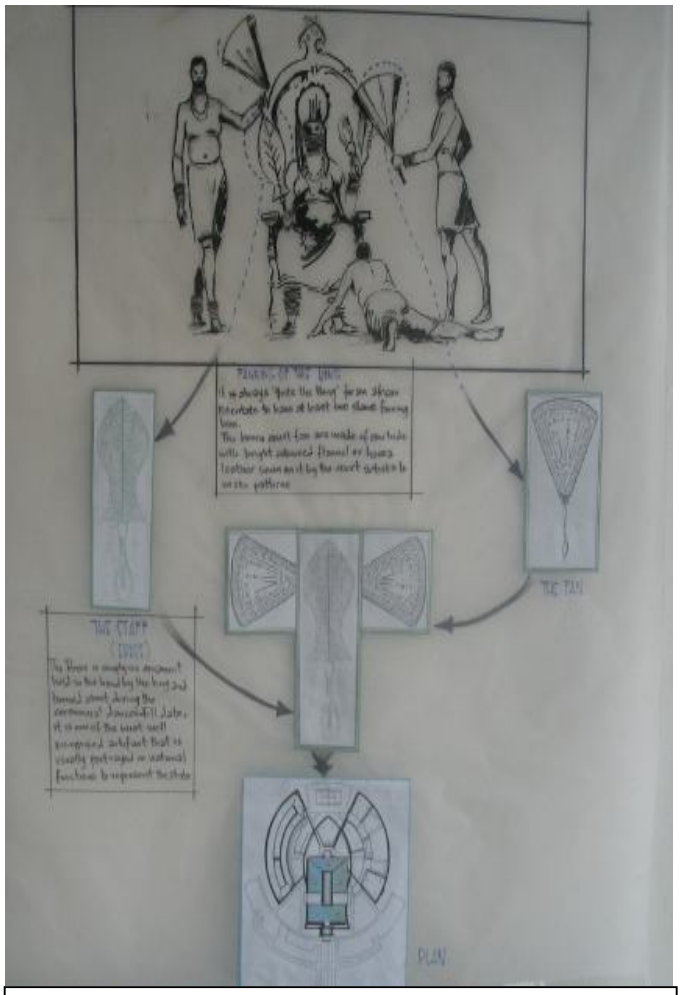


Figure 2.2 Diagrammatic illustration of the plan concept.

The 'Ebere' The Benin staff of office is usually a well adorned piece of artwork known the world over. This staff of office referred to as" ebere" is one of the artworks that are employed in the political process of the Benin kingdom.

The illustrations above shows how the basic shapes of the fan and the shape of the ebere have both been used to achieve the basic plan form. The ebere is positioned at the centre and then flanked on both sides with the court fan.

Conceptualisation of the approach elevation:

The conceptualisation of the approach elevation was derived from the use common Benin artworks such as the Benin mask (FESTAC `77), the ebere, the carved elephant ivory tusk, and the ivory cestrum (gong). The system in which these artworks were applied is simply by the using the various elements of the building as a medium.

The artworks used on the approach elevation are those artworks that are usually displayed during ceremonies.

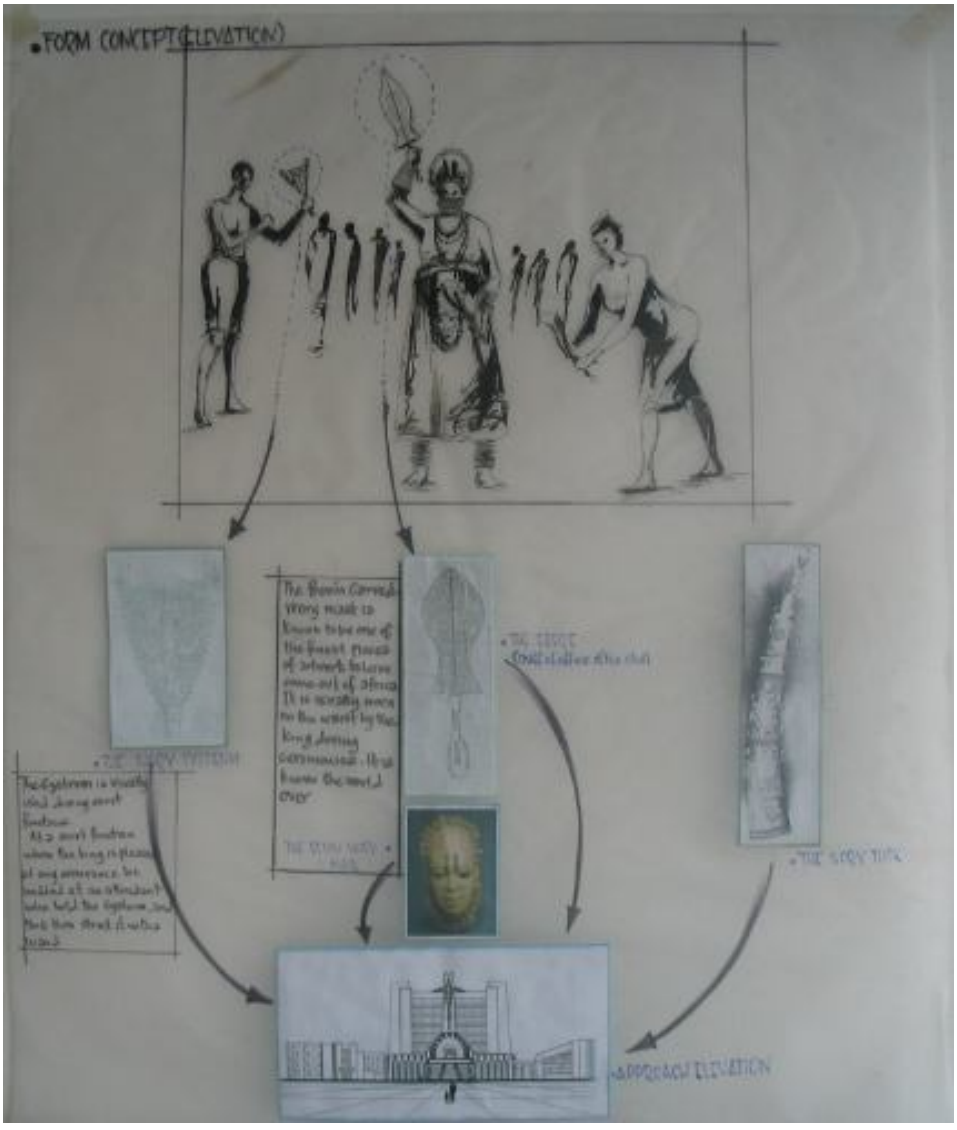


Figure 2.3 A diagrammatic illustration showing the conceptualization of the approach elevation.

2.9 An introduction to the concept of culture, tradition and architecture of Benin:

As already established, the relationship between culture and architecture is that of, to a larger portion, a direct connection as culture which is a complex structure which has traditions that dictates and is synonyms with all aspects of life, materials artefacts, capabilities art, customs, of which architecture has been argued to belong.

The architecture of the Edo people which falls under traditional indigenous architecture is one that can be said to be vibrant with potentials of being expressed as regional in character with a particularity of expression which already has an identity.

The idea of a true expressive architecture can be extracted by looking at the characteristics of its architecture. These characteristics must be looked at from the point of view of a purely traditional architecture whose only manifestation were in domestic building and very few public buildings (palace and as such the regionalist theorist might find very little to build a solid argument, but nevertheless, the Architectural style manifested in the generality of the region include:

Use of motifs (decorative patterns):

Most Benin households, the presence of symbols of deities and the like always featured prominently in that, thesis was an act from as seen in the Oba's palace in Benin and similar traditional movements.

Fluted walls and highly decorative entrances were all prominent features of their architecture.

The plan form:

The plan form of the traditional architecture was one that reflected the functional needs of the users and most times was a clear indication of culture and values of the occupants where as the predominant square shape form was a later development earlier,

Hausa forms had circular shape with a spatial organisation that allow a clear integrated circulation peculiar to certain cultural preferences.

The presence of massive elements:

These were seen in the palace buildings giving a sense of Monumentality were usually reflected in the placement of columns and the massive walls which were of course often fluted. The sense of Monumentality to be appreciated in the context of an adaptation of recognizable understanding of proportion and scale as it relates to man and in that egad give a feeling of power to the Architecture.



Plate2.3: The Oba Akenzua Cultural centre, Benin. An expressive regional architecture with the presence of massive horizontal elements. Source: Author

CHAPTER THREE

OFFICE PLANNING AND LAYOUT

3.1 Human Element in Office Space

The audience which modern office buildings exists to serve makes human factor predominant in office spaces creation and management.

Just as factories are built around the machines they house; an office building is usually built around functions it houses and since office function are carried out primarily by people rather than machines, its needs are more than those of the factory that employs the straight-line work characteristics.

Therefore, the office building by contrast, must allow, for extreme flexibility and as the size of offices for individual worker has reduced due to technological advancement, then care must be taken to ensure that adequate spaces are provided for both man and machines. Also due to individual need for comfort, it as become increasingly important to design offices in such a way that the individual worker does not become submerged in a great mass of fellow workers. Consequently, the office environment must be kept in human scale if we are to have the best and most efficient clerical procedure in the office.

3.2 Office Layout

The office operation is like a large machine which needs to have all of its' parts working smoothly. Each office function must flow smoothly with others with a minimum of friction.

The source of power is information and it is the purpose of good office layout design to permit this information to flow smoothly avoiding unnecessary turns and traps.

Although there is certainly no one office layout that will fit all companies hut there are some reasonably good principle of layout by function that could be applied to any office situation.

3.2.1 Theory of Office layout

The most functional office layout approach is that which offers as much unhampered interior space arrangement as possible, while still providing a comfortable atmosphere and protection from the building elements. In**,** office layout, there are two basic theories: integrated and compartmented office layout.

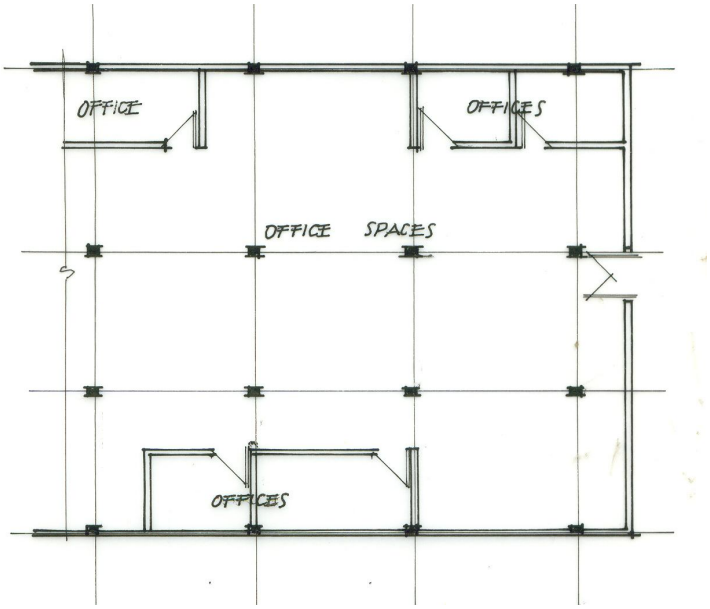


Figure 3.1: An open office plan layout

Integrated layout (Open plan: Basically, the theory of integrated space calls for open general office areas with a minimum of partition, of either the fixed or movable type. This type of plan is gaining ground today, because it generally offers more flexibility, economy of space, easier workers supervision and equality of facilities for all parts of the office.

Compartmental layout: This approach is older and more conventional and it involves the use of partitions to create custom build departmental units. For example, in a compartmented office of sales department with a total staff strength of 150. Whereby it is known that the company handles eight or more number of different products, the concept believes that each of the eight or more product sections could have varying number of partitioned offices, for executives, assistants, secretaries and special partition for section office personnel.

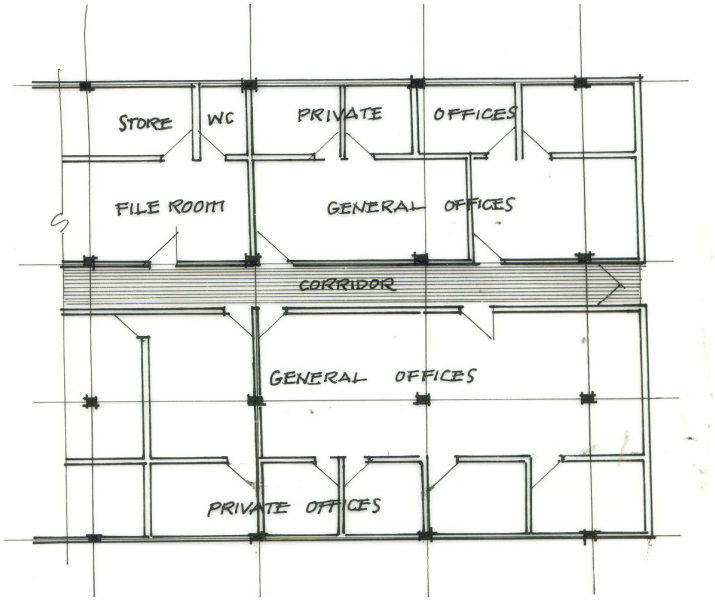


Figure3.2: Compartmental layout type of office

In this case, the total office area housing the eight or more sections would be composed of tailor-made layout of eight or more planned units: Thus if expansion or contraction becomes necessary in any one of the units, the entire area might have to be rearranged.

3.2.2 Rules for planning office circulation layout

- Working groups will be arranged to follow patterns of work flow and interaction to avoid cross circulation between groups.
- Primary circulation which generally links access and egress points and the major groups should not be less than 2.0 m in width.
- Tertiary circulation which is the circulation within the working groups should not be les than 800 mm in width.
- All routes should be kept clean and defined by planters and screens.

3.2.3 Rules for specific furniture

- No person should directly face a circulation route, another person or storage furniture.
- Each person should be able to see who is coming.
- Functions with highest visitors contact should be placed closed to primary routes.
- Planting should always satisfy a particular functional need such as “landmark”, screening or as a control element on circulation routes to block or direct traffic.

3.3 Planning Concept and Form

In the design of new office buildings, there are several basic forms or shell

arrangements which can be used to advantage. The basic form of the office shell in planning is usually determined by the location of the service area, major circulation, site constraints and the depth of space.

However, other determinants which affect the form and internal layout of the building shall include density, light and overshadowing, fire regulations, and means of escape and legislature controls.

3.3.1 The basic form

The most common are the simple rectangle, the L shape type building, the 'E', 'I', 'U', square, 'O' shaped, pentagonal type are the extremely functional design of a large general office area with attached expandable wings for executive and special service area.

However, in city locations where site constraints exist, building density and land costs are both high; a rectangular or square shape has proved most economical and efficient.

(a) Rectangular-shape form:

This is the most common forms in architecture, because it is the easiest to layout and to build too. However, where such shape is adopted in office design the form should be laid out so that there are at least two appendages for building services.

(b) E-type shape:

This often may be used and arrangement could start as an 'L-shaped' building. Conceptually as additional space is required, additional pre-planned and symmetrical building units are added by the same concept, the L-shaped, by the addition of one unit can become a basic U, or F shaped building.

Advantages of E-shaped Form:

- Offers maximum natural light and window space.
- May be expanded or contracted very easily, without altering the physical, structural and mechanical elements of the building.
- Executive office space can be segregated completely from general office where desirable

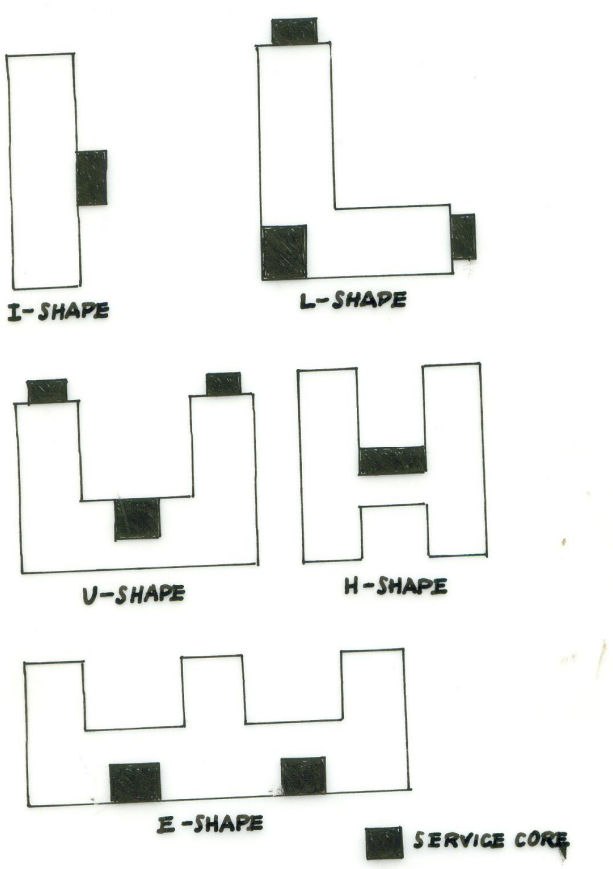


Figure 3.3: Basic forms of office buildings

3.4 Office Space Control

This is a complete layout freedom within the office space that allows partitions, electric and telephone connections and machines to be placed almost anywhere in the office area without alteration in the physical, mechanical and structural elements of the building. The result of proper coordination of these elements in office building means absolute space control and layout freedom.

3.5 Space Flexibility and Adaptability

This is could simply be put to mean the ability of a space to be contracted or expanded as functions, conditions or circumstances demand without endangering the building. Generally, buildings could tend to be obsolete if they are uni-functional and these elements are not properly coordinated.

3.5.1 Relationship between function, space and form

Function: This refers to the human activities that take place within a defined space. There is always the tendency for a function to be established first before the space, because without the function, space cannot be established and hence function controls space, flexibility and utilization.

Space: concept of space covers a wide region depending on individual perception whether restricted or otherwise. In restricted term, an architectural space may be defined as "a concretization of existential space" which is a psychological concept, denoting the schemata that man develops thereby, interacting with the environment in order to get along satisfactorily.

On the other hand, one can see space as an enveloping concept which is self-contained entity. Finite or infinite; an empty "vehicle" ready and having the capacity to be filled with things.

Form: This may be defined in terms of the visual properties that guide perception of its qualities such as shape, size, colour, texture, position and orientation. The idea that form follows functions is a common phrase amongst architects, but its perception varies because the relationship between form and function is by no means a single one.

However, the one mostly recognized is that form of a building which is a cover to its functional requirement. By this, it is meant that building forms are provided only after the required spaces have been determined. And in most cases, buildings under such a category are mostly utilitarian in function with emphasis on maximum utilization of space. Examples include hospital, church and offices, etc.

Another interpretation of form is that "the physiognomy of the building is an indication of its function. In other words, a theatre will look like a theatre; church like a church; etc. This approach suggests a conventional method of design which recognizes the specialty of facilities involved as the determinants of the spaces, structure and material usage.

From the foregoing, a relationship between function, space and form could be drawn as to which one takes precedence over the others. Since function needs to be established before a space is determined, and as "form is just a cover to its technical and functional requirement" or, just "a cloth to a skeleton of architectural needs", it then follows that function takes precedence over the other two; space and form.

Therefore since office buildings are mainly utilitarian in function where maximum utilization, flexibility and adaptability of functional space are advocated, there is need to design the office building taking into consideration function first, and space which can be tailored in line with the form to be used, thus allowing for the flexibility and adaptability of the office space.

3.6 Philosophy of Space Design

"Space constantly encompasses our being through the volume of space we move in, we see objects or forms, bear sound, feel breeze, and smell the fragrance of flower gardens in bloom. Space is a material structure just as stone or wood yet it is inherently formless. Its visual quality, light, dimension and scale depends completely on its boundaries as defined by the elements of form. As space is being enclosed, moulded and organized by the elements of form, architecture comes into being" (Francis D.K. Ching).

Architecture is the art into which we walk; it is the art that surrounds us. Frank Lloyd Wright believes space was the essence of architecture. Okakwa Kakuzo expressed the same in his "Book of Tea". The reality of architecture lies not in the solid elements that seem to make it, but rather 'the reality of an allocation was to be found in the space enclosed by the roof and walls not in the roof and walls themselves.

The architect manipulates spaces of many kinds, these includes:

Physical space: Defined by volume of air bounded by elements such as walls, floors and ceilings of a room and can be easily computed.

Perceptual space: Perceived or seen space especially in glass walled buildings the space could be extensive and impossible to quantify.

Conceptual space: Related to perceptual space, defined as mental map or image we retain in our memory or plans stored. Successful buildings are those which users grasp and retain in their mind's eye and which they can move about easily with a kind of inevitability.

B*ehavioural* space: Spaces which are actually moved through and used, an example is the Lloyd Lewis house in Libertyville Illinois by Frank Lloyd Wright, 1939. In physical terms, the table takes up volume, but in behavioural terms, it determines in a dramatic and decisive way how to move about in the space.

Architectural space is a powerful sharpener of behaviour. Winston Churchill understood this well, when in 1943**,** before the House of Commons, be said "we shape our buildings and afterwards our buildings shape us." Other categories of spaces include:

Interwoven space: Is an interconnected and free flowing spaces or a linkage of interior and exterior like in the Italian architecture.

Directional and non-directional space: The determination or suggestion of patterns of behaviour by its very configuration, regardless of barrier or hindrances.

Positive and negative space: Positive space is one which is conceived as **a** void, then wrapped in a building shell erected to define and contain it. The concept of positive and negative space can be applied to urban space as well. In this context, negative space might be defined as open space that is simply left over after the construction of the building,

whereas positive urban space would be defined as deliberately shaped and defined in accordance with a preconceived plan.

3.7 Space and Mass

Space is an immaterial essence that the painter suggests and the sculptor fills, the architect envelops, creating a wholly human and finite environment within the infinite environment of nature. The concept that space can have a quality other than emptiness is difficult to grasp. When a building is entered, floor, supports, walls, and a ceiling are seen, all of which can be studied and perhaps enjoyed, while the space, in the sense that one is accustomed to think of it, is void: the absence of mass, filled by air.

But spatial experiences that express something are common to everyone, though they are not always consciously grasped. One feels insecure a low cave or a narrow defile, exhilarated and powerful on a hilltop; these are psychological and motor reactions that result from measuring one's potential for movement against the surrounding spaces, and the same reactions take loot even in language ("confining" circumstances and "elevating" experiences are spoken of). An infinite variety of such reactions may be summoned by the architect, because be controls the limits above, below, and on all sides of the observer. As a person enters the architect's space be measures it in terms of the degree and the quality of his potential for movement.

The concept of potentiality is important, first, because the observer can anticipate where be may move merely looking about him and, second, because be can conceive movements that be cannot execute. Thus in the nave of a Gothic cathedral the high walls closely confining the observer on two sides restrict his possible movements, suggesting

advance along the free pace of the nave toward the altar; or their compression forces him to look upward to the vaults and the light far overhead, there to feel a sense of physical release, though be is earthbound. The experience of Gothic space is called uplifting because it urges one to rise.

Renaissance space, on the other hand, attempts to balance its suggestion of movement, to draw the observer to a focal point at which be can sense an equilibrium of movement in all directions, a resolution of the conflict of compression and release. At this point one feels physically at rest, at the opposite extreme from the elevating sensation of the cathedral.

Spatial experience is not restricted to the interiors of buildings. The sensations one has in nature's open may be re-created by art. City squares and streets, even gardens achieve a variety of expression comparable with that of interiors. The Baroque piazza of St. Peter's in Rome, which directs the observer along its great embracing arcs toward the entrance, is at least as moving as the church interior.

The exterior of a single building, particularly one that is isolated from other architecture, does not create a space. It occupies the space of nature. Thus, it may be experienced as sculpture, in terms of the play of masses in a void. The aesthetics of masses, like that of spaces, is rooted in one's psychology. When a tall tree or a mountain is called majestic and a rocky cliff menacing, human attributes are being projected. Man inevitably humanizes inert matter and so gives the architect the opportunity to arouse predictable patterns of experience.

The appreciation of mass, like that of space, depends on movement, but this movement must be physical. It cannot be experienced in anticipation, because, no matter where one stands to observe even the simplest building, part of it is out of sight. The mass of a complex building is differently composed from every point of view. The 20th century art critic Sigfried Giedion, emphasizes the need for movement in experiencing modern architecture, suggested that architecture may be four-dimensional, since time (for movement) is as meaningful as the spatial dimensions.

Some architecture depends much more on mass expression than on space expression. The Egyptian pyramid, the Indian stupa, and the dagoha of Sri Lanka have no meaningful interior spaces; they are architectural in function and technique, sculptural in expression. The interior of a Greek temple is of little interest compared with the wonderful play of forms on its colonnaded exterior, while early Christian and Byzantine architecture reverse the emphasis, making the simple exterior a shell for a splendid and mystical pace. Gothic architecture balances the two, partly in order to express a dual content: earthly power over the world outside, spiritual power inside. Modern techniques permit a reduction of the contrast between space and mass expressions by reducing the mass of walls and the size and number of supports and by allowing the interpenetrations of interior and exterior space.

3.8 Factors Influencing Design Choice of the liaison office

Successful designs should be unquestionably related to a context. Design should be associated to the environment in which they are to be created. In the tropical climate as we have in Nigeria, several factors will influence the overall look of a design. These include

climate, culture, raw material availability, materials, and personal values. Although all of the above mentioned factors have played important roles in the conceptualization of the office complex, culture stand the most elaborate as it serves as the research area of the project work.

Culture:

As the name implies; it is defined as a way of life. The ideas and custom of the people dictates their personality and relationship with others, this flows into their identity which will invariably be stamped on their structures. In Nigeria where there is a diversity of culture, an architect should make an effort to understand the way of life of his client in other to produce a successful design.

The inhabitants or people of Northern Nigeria, live in a close sheltered way. Their buildings are predominantly compound houses split in three major parts; the public i.e. Zaure, where all visitors pass through first; then the semi private quarters and the private quarters. The buildings are characterized by a main courtyard which all the rooms face. In the West and South, the design pattern differs, and is influenced by religious beliefs and the need for privacy.

Contemporary design advocates or suggests a trend towards open plans which changes in levels and space flowing into space, now this is in the strictest sense just becoming an acceptable as a design method in Nigerian architecture. The culture of the Benin people is vast just like the culture of any tribe in Nigeria. As such, the most distinct culture of the Benin people- art in form of metal castings, ivory carving has been the major factor that influences this project.

3.9 Design Parameters

Scale and Proportion

Scale refers to the relationship between the size of the building, the size of the furnishing and the size of the people, who use the building. A design for an area is in scale, while the size of furnishing and the size of the people who use the space are in balance. Certain measurements for furniture pieces have become generally accepted since they suit the average person. If there is too great a variance from the usual dimensions, the object will be out of scale.

The proportioning of furniture pieces must be in scale with the other piece of furniture for example lamplight must be adjusted to fall where reading conveniences requires as well as above or below that level. The psychological effect of scale cannot be overemphasized for example, the effect of high ceilings in churches give a feeling of reverence for God, but this will be most unsuitable in guest accommodation.

Functionality and Flexibility

Beauty in an object does not depend solely on the perceived aesthetic value alone but judgment must also be based on utility and functionality. In order for a space to be useful, it must be functional in all its part and as a whole. Simplicity and ease of use in the accommodation can only be achieved when the building is tailored in size, configuration, lighting, ventilation, and furnishing.

Flexibility on the other hand refers to the adaptability of the space to new conditions or requirements and this begins with the very conception of the accommodation

itself. A flexible design is not one that is merely able to meet the client immediate needs; rather, it is one that can adapt to change in the future, a space that can comfortably adapt to another need, an interrelationship of functional spaces which can grow, shrink and flow into each other.

Balance and Rhythm

The human eye requires a feeling of balance to achieve comfort and such as it is important to achieve a proper relationship of weight in a room. Balance may be achieved by:

- Arrangement of objects on either sides of an axis. In a symmetrical composition, two like objects, exactly balance each other, while in an asymmetrical composition; unlike objects achieve an optical balance.

- Colour and patterned objects may also influence balance for example, a small vivid, boldly pattern object may balance a large, pale monochrome object.

- Furniture and accessories should also ba1ance architectural features, such as doors and windows.

Rhythm is the creation of a pattern, the alternation between incident and interval, between solids and voids, undulating or curved surfaces (which have a more dramatic impact). In architecture rhythm is read by scanning the surface. Rhythm combined with balance results in a successful design.

Colour and Light

One of the most important and powerful element of design is colour, wben working on a limited budget, a skilful application of colour, can yield dramatic results. Colour can give a room personality; it makes the room a pleasing place to come to, and is ideal in creating the mood of a setting.

A colour is affected by everything else around it especially light and shadow, and other colours. Light affects the tone, warmth and the clarity of colour. A deep colour in a dark corner will appear dark while in a brightly lit corner, the colour seems to evaporate.

Circulation and Style

Style is associated with architectural types developed during a particular period of history. Style though has a broader meaning than just this; it refers, to the mood created by the combination of items. Many designers believe design should reflect the need of people in an area.

Circulation refers to the flow within a building, the relation of spaces. There are no hard or fast rules; circulation pattern depends on the size and layout of the room, and the people using it. Various guidelines can dictate the circulation flow, this include: the seating arrangement, which has to meet working, relaxing and entertaining needs without chaos wben adopting to each function. Horizontal circulation refers to movement from one space to another on the same level or plane while interval suggests movement from one level or place to another.

3.9.1 Definitions of basic functional spaces in a liaison office complex

Main reception area: The main reception area is the "first appearance" to most visitors, and as such the reception area to any office complex with different organization must be made to express dignity and comfort.

Since visitors receive their first impression of an organization from the decoration and layout of the reception area, it should therefore be attractive, neat, and adequate enough to accommodate normal visitor traffic at peak periods. For the purpose of enhancing the beauty and functional space in the reception area, company's exhibits, replicas of trademark and display of the company's name in the reception area, indicating floor level most especially in a multi-storey building.

The interior decoration of the reception can vary in style from a slightly more elaborate version in terms of walls, floors, colour scheme, and furniture, to a highly stylized interiors, utilizing specially built equipment and custom made furniture in traditional or contemporary design. Usually the receptionist should be placed so as to command a clear view of those entering and should be easily accessible to visitors.

Office services: Every office requires basic office services, the location and functional layout for the areas housing these services must be carefully planned at the conceptual stage in office design.

In a small organization, the basic service areas will relatively be few and sometimes may be physically located within the general office, while with big organization, they sometimes occupy a large proportion of' office space. However, basic similarity between a

very small office and a very large one is underlined by the fact that in every office layout, there is one best place for each service in terms of the departments making the greatest use of it and in terms of the physical space available.

Conference hall/conference room: Since conferences, meetings and assemblies are an important part of government operations, it should be provided, and accessible to all and sundry within and outside the office building. Although, there is no established standard suggesting the number of conference halls, based on the number of people, the need will vary somehow among agencies depending largely on the nature of their work.

- ***Location of conference halls:*** The conference hall should be centrally located possible, with direct access by external visitors and company's employees within the office building. Access to conference hall is best through corridors or through reception.

- ***Size of conference hall:*** Conference hall should be designed to accommodate average but not maximum attendance. Extra chairs can be used to achieve additional seating.

Conference rooms: These are usually provided by individual organizations or companies to serve their own needs: Such conference rooms may have as their main functions;

- Housing of works conference between individual executives.

- Representing the various departments of the company.

They are better placed next to a general office area for meeting between personnel, top company officials and customers or for meetings of the board.

Storage facilities: Storage facilities must be provided for office supplies, old records and equipment, and maintenance materials. Office storage space should be designed for only working inventories of office supplies and other materials maintained in standard supply cabinet, while secondary space such as basement shall be used to store basic supply materials.

Telephone switchboard and booths: The true nerve centre of any office is the telephone switchboard or telephone booth room. In **a** small company, the switchboard is usually located next to the reception room, and the operator may do double duty as a receptionist and telephone operator. In a larger office, the switchboard is usually manned by several operators under a supervisor and it is usually located alone with a wiring rack room, in the service area of the office space and its responsibility is required to cover the needs of the various organizations or companies within the office complex.

The floor loading requirements of the telephone rack room often demand special design and floor reinforcement because of the concentrated weight of the telephone racks. Therefore, it is very vital in office building and at the design stage that this special reinforcement of floors to satisfy the layout requirement of the telephone company be worked out with the telephone engineers.

Telephone booths: These should be located at convenient places within the office complex so that employees can make such calls without going too far from their desks. These booths should be placed adjacent to semi-public corridors so that they can serve visitors and office personnel.

Exhibition hall: This is usually located near the reception area, so that it is easily accessible to visitors. However, instead of exhibition hall, exhibition room may be provided by individual companies according to their needs, and his could be handled as part of a company office-service responsibility or be administered by the advertising or public relations department.

Restaurant: The provision of restaurant for any office building is dependent on location, staff strength and anticipated patronage from outside. However, requirement for the restaurant will vary in terms of facilities, type and volume. And also certain general information such as numbers to be served, turnover, overall rate and type of service will be very helpful in deciding dining area needs and accompanying facilities. When considering space requirements, the adequacy of space allowance will influence building and operating costs and efficiency of the restaurant. When space is too small, labour time and effort are likely to increase, and the volume and quality of output will decrease. But when it is too large, building and maintenance costs are usually excessive. Therefore area requirements for functional and profit oriented restaurant should be calculated in terms of:

- Volume and type of service
- Amount and size of equipment to be used
- Number of workers required
- Space for needed supply and suitable traffic area.

Reception and lobby: The reception area comprises the lobby, reception desk and baggage handling consequently becoming a multi-purpose area. The guest accommodation gets a first and last impression from this area, it should ‘therefore be welcoming and not totally overwhelming, which might result in the guest expecting higher rates.

Today's lobby can be a grandiose volume or an integrated space, both are valid. The huge atrium lobby is an adventurous experience giving a grand spectacle superseding old-world traditions, while the small lobby gives an opposite impression of personalized service.

Reception area also incorporates the lounge and serves as a lobby; these spaces are increasingly less defined by partitions or even changes in floor materials. It is all one space; the space should be design to accommodate all the function done there.

Lighting effect is very important here also, for instance, a human scale has to be brought to a lobby scale, through subtle variations of light, it should be thought of in terms of distinct areas, e.g. planting, fountain and seating, to do this lamps are selected with special focus pattern and range so that no matter at what distance they are mounted, the area to be lit can be controlled.

Restaurants and bars: Restaurants and dining rooms are a source of revenue and a way of keeping the guest within the physical confines of the accommodation. Not only do they serve as source of delivering food to the guests, guests can interact while eating in a totally relaxed environment, and provide an ambience that makes dining a special occasion.

Guestrooms and suite: The standard qualifications for a guest room in a guest accommodation includes; comfort, ventilation, durability, perfectly adjustable lighting and total sound proofing others like telephone service, good view and room service are secondary. It is perhaps here more than anywhere else that the designer has to be aware of the comfort and well being of the guest. In the 19th century, it was considered a luxury to have a gas lamp, wash howl and a cake of soap in every room, but today's typical guest accommodation expect a variety of amenities and luxuries.

They are various type of guest room in a guest accommodation. The most demanded area a twin bedded rooms and double rooms. The guest room in a resort is larger than that in an urban hotel. Other room types include: double room in a holiday resort most suited for a family on vacation. Studio room is suitable for business persons since it suggest the appearance of a living room but could be used for meetings. Unlike a residential bedroom, a guest accommodation is a transitory experience. Here the designer has a responsibility to make the world a more attractive place starting with the accommodation to menu and entrance doors.

Suites have been features of guest accommodation since the early 17th century, they can be described as parlours with connecting bed chambers, and are requested by guests who want palatial accommodation and executives who desire them for meetings and small parties during conventions. Suites are normally located on one floor preferably at the top floor or pent house, where the guest feels he is a V.I.P. as a result of segregation. This allows for possible provision of extra services not given to the average guests.

Restrooms: A guest accommodation bathroom is the place that makes the greatest impression on a guest. No matter how elegant the guest room, a guest may discredit his accommodation if the bathroom is out of model or the fixtures are worn or damaged. Physically guest lodging bathroom are becoming smaller as a result of high and ever-increasing building cost and thus should be planned economically and with good care. A complicated and time-consuming space to design, is a small cubicle of space writing an army of trades, including plasterers, tillers, plumbers, electricians, carpenters who should make it technologically possible to prefabricated unit and then into place.

Outdoor spaces and gardens: Around the world, the popularity of container gardening, testifies to the effectiveness of outdoor planting for brightening up odd corners and edges, it is important to consider whether the plants and their containers suit the character of the building. Growing anything around a building of architectural distinction can set up the symmetry while romantic creepers may blur the outline. Bricks, flag-stones, pavers, or granite seats will be more reminiscent of the garden. Cobbles can be uncomfortable to walk on; these should be used in moderation. Solid screens can cause more problems than they solve by creating turbulence. Special treatment should be given to the base or roof-checking. Furniture arrangement and durability should also be considered, in all the gaiety of the spirit of the outdoor should be captured in the decoration.

3.10 New trends in high-rise office building design.

"Office buildings are getting smarter, greener and more flexible"

…….Blaine Weber

Building safety and security naturally top the list of concerns for many prospective lessees since Sept. 11. Thanks to American building codes, today's office building design reassuringly provides for life safety. Structures designed to the latest building codes are capable of comfortably withstanding the powerful forces of earthquakes, wind, gravity, fire and most man-made catastrophic events without fear of failure. Asides security other new trends in high rise office building design exist we shall now discuss these new trends.

I. Safety and security

Prospective lessees will favour newer buildings that are designed to more stringent codes. They are also aware of the need for control over access points, parking garages and other vulnerable areas. As a result, security consultants will be more in demand, and architects and developers will need to seek project-specific safety and security solutions.

II. More bandwidth and smarter buildings

To keep pace with tenants who require more power and bandwidth to stay ahead of their network growth, buildings will continue to get smarter information systems that require more room for wiring and ducting. For the owner, this also means additional space devoted to information systems infrastructure. The net result of this will be increased revenue for the owner, provided tenants are willing to pay for rooftop, basement or service floor data centers in spaces that would otherwise go under-used.

Tenants are demanding more hours of operation, along with more electrical capacity, fiber optic access, and heating and air conditioning capacity. Life safety, vertical transportation, security and mechanical systems are getting smarter all the time. More than ever, building infrastructure must be well planned to attract tenants willing to pay top rent. Allowances need to be made for easy upgrades and retrofitting to accommodate future technologies.

III. Earth-friendly and green building design.

Earth-friendly, green building design is driven partly by energy efficiency and other cost savings. It also helps businesses attract the best employees, since these buildings can make for very attractive workplaces.

Green buildings provide fresh air, some connection to nature, day lighting, personal control over the workspace and greater comfort. Comfort factors are thoughtfully considered in an effort to create a more hospitable work place. There is now proof that green buildings reduce life-cycle costs and improve staff productivity.

Enlightened businesses are insisting on, and paying premium rents for, space in high-performance green buildings. In soft markets, vacancy rates for these buildings are lower. In strong markets they command significant premiums. While most green buildings are low-rise structures, some high-rises have incorporated these benefits. The single largest issue is "demand development."

IV. Layered, sculpted and well scaled spaces.

Monolithic, redundant and one-dimensional office buildings with stark and empty plazas are becoming a thing of the past. Today's cutting-edge buildings are elegant compositions of sculpture, with a rich palette of colors and textures. Carefully proportioned and massed, this new design aesthetic breaks a building's bulk into smaller components to emphasize the drama of overlapping and layered vertical and horizontal components, creating a scale that is respectful of context in a modern way.

V. Light, air and space.

Attracting and keeping the best and brightest employees requires office space that supports an employee's personal best. Today's knowledge workers need a work environment that inspires and motivates.

Prospective lessees are paying more attention to the configuration of office floor plans, favoring those with fewer columns, reduced glass-to-core depths, and more glass. Glass allows more light into the space, so back offices do not grow mushrooms. In addition to furnishing healthier mechanical systems that clean the air, another current trend is providing taller panels of high performance vision glass in office buildings, especially on premium floors. Vision glass that goes to the ceiling and has lowered sills is highly desirable and will command a premium rate.

VI. Facilitating collaboration

It was thought that by 2002 many employees would be working from their laptop at any location. But this is 2005 so why are we not all working from our laptops at the beach? Well, a funny thing happened on the way to our telecommuting, paperless lifestyle. While 43 million people now do at least some of their work from home, it has been re-discovered that we still work most effectively through meaningful interaction that can be fostered only through face-to-face social engagement.

Enlightened companies provide semi-private enclaves such as dens, “eddies,” chat rooms, “clubs” or “hives” where small, casual breakout groups can interact spontaneously without having to reserve a formal conference room.

In today’s workplace where people disappear into their cubicles, it is extremely important that the design of the office provides places for people to think and talk.

VII. Leisure space in the office

At the height of the dot.com bubble, office environments were on the verge of becoming virtual playgrounds. Video games and pool tables, bowling alleys and climbing walls, bumper cars and hot tubs became almost routine. Now that the bubble has burst, we are beginning to see the return to conventional decorum.



Figure3.4: Designed by Weber + Thompson for Triad Development, 800 Western Avenue is a proposed 170,000-square-foot Class A speculative office building. Some observers say security concerns will make tenants favour newer buildings. An example of how new office buildings should be designed. Source: Seattle daily journal.com

However, the dot.com revolution did introduce the idea of creature comfort and amenities that allow hard working employees places to commiserate and de-stress. Living rooms (complete with fireplace), meeting nooks, sports bars, yoga rooms and workout gyms are showing up in new office projects because they translate into increased productivity, less employee turnover and strong team building.

CHAPTER FOUR

(BENIN ART AND ARCHITECTURE)

4.1 Historical Background on Benin Art:

Perhaps the best, and certainly the most numerous, sculptures in bronze in the whole of black Africa come from the city of Benin, capital of Edo kingdom. Knowledge of them reached the outside world as a result of a British punitive expedition to that city in 1897, when thousands of sculptures, not only in bronze, but also in wood and ivory, were removed first to England and from there to many parts of the world.

Benin art has rightly been referred to as "court art", because the Oba (king) had a monopoly of the works. He maintained specialist guilds of bronze-smith, wood and ivory carvers, and head-workers. The bronze-smiths in particular were forbidden, on pain of death to work for anyone outside the court, where everything was concentrated.

The most important oral historian of Benin, chief Jacob egharevba, says that the Benin are not indigenous to their present location, that they migrated from Egypt and settled both in the Sudan and at Ile-Ife before establishing themselves in their present position. Egharevba claims that there first kings were know as ogiso, or sky kings, but that the dynasty was changed about A.D. 1170 for one established by Ife prince, oranmiyan. Although oranmiyan eventually returned to Ile-Ife, he left a prince in Benin to succeed him.

4.1.1 The Influence of Ife Art on Benin Art.

Benin tradition continues by pointing out that it was during the reign of the fourth Oba jof Benin of the present dynasty, Oba oguola, the starting date which has been put at A.D. 1400, that the Oba requested a bronze-smith to be sent from Ile-Ife, his ancestral

home to teach the craft in Benin. Iguehae (a rather strange name for an Ife man) was sent for the purpose, and there are shrines in Benin City today where he is worshipped.

This tradition, together with another which says that the heads of the deceased Obas were sent to Benin to be kept there has given rise to speculation that Benin court art was derived from Ife. It is said further that this practice of sending bronze memorial heads to Benin was stopped by oguola after the arrival of iguehae.

The exponents of this view have compared the naturalism of Ife works with the naturalism of those Benin works regarded as the earliest specimens, when Ife influence was still very strong in Benin. Furthermore certain sculptures in Benin style have been found in Ile-Ife and vice-versa.

The present Benin people believe that the art of Ife was derived from Benin and iguehae, which sounds more like an Edo name, introduced the art there. They that oduduwa, regarded by the Yorubas as their ancestor of all Yoruba kings, actually originated from Benin.

There is yet a third school of though which points out that there no tradition of bronze –casting in Ife today, that the present day Ife is not very old, and the antiquities of Ife lack institutional background. Accordingly, Ife art is said to have derived from the old Beny confederacy in the present Nupe country, from where Benin court is also believed to have originated.

Generally, art historians are of the opinion that we do not yet know enough about the two art centres to enable us draw final conclusion. It is observed, for example, that those heads which were regarded as the earliest Benin pieces are very much naturalistic than the Ife classical pieces. Secondly, has been noted that there are differences in the

casting processes of Ife and Benin bronzes. Thirdly, the interchange of objects between the two art centres does not necessarily imply derivation.

4.1.2 Differences between Ife and Benin Art.

There are differences between the Benin and Ife. Arnold Rubin has observed the absence of inlaid iron pupils in Ife works, whereas they are present in those of Benin. He also remarked that the range of objects in Benin art are corpus – plaques, bells, altars, groups, and so on – are absent in Ife. Furthermore, the small holes on Ife heads, supposedly used for the attachment of hair, moustache and beard, are absent from Benin bronze heads.

The concepts of sculpture in the two centres were different. Ife style is distinguished by individual portraiture, Benin art by its conventionalism. It also appears that Ife heads were made with portraits of persons in mind, however idealized, while those of Benin were made from imaginations. Furthermore, some Benin works seem to be impressive representations of spirits (only one such example is known from Ife) and have no individual character as human beings. Finally, there is evidence of evolution in the Benin bronzes, but not in Ife corpus. The one thing, however, which may link Ife and Benin, the Benin people probably, learnt the technique of *aire perdue* casting from Ife, but they did not adopt Ife's concept of art.

4.2 Benin Artworks:

Some ninety percent of Benin works are in bronze, the rest in ivory, brass, terracotta and wood. William Fagg has pointed out that the early bronze heads were comparatively thinner than the later ones, because the supply of copper did not become plentiful until the arrival of the Portuguese. Then the heads became heavier, more stylized and flamboyant.

The subject matter ranged from memorial heads of their kings, to figures of noble men and warriors. All of these various artworks can be categorized in two main headings according to their methods of production; carved works and metal castings.

4.2.1 The Art of Carving:

As the art of carving in ivory and wood had attained a fairly high stage of progress in Benin compared to any other part of the country it will not be out of place to devote a few pages especially to it. Among the variously carved objects discovered in Benin not the least curious are the huge carved tusks, of which large numbers were taken overseas when the punitive expedition had done its work during the colonial era.



Plate4.1: A typical Benin Ivory mask; one of the finest artworks of the early Benin Kingdom. Source: www.rebirthafrica.com

The art of carving will not be complete without making mention of the ivory masks carvings. The ivory masks show elaborate care in chiselling, and are noteworthy as examples of human European heads breaking into embryo scroll work. This appearance

may point its development after the advent of the Portuguese. The pupils of the eye of the mask are let in with metal, and the forehead are disfigured by the two coarse grooves once occupied by strips of metal; it has been suggested that the latter insertions are tattoo marks, but such can not be the case are similar insets are met with in widely different objects, as for instance metal caskets and boxes.

4.2.2 The art of metal casting:

The taking of Benin City opened up the knowledge of the existence of a hitherto unknown African craft, the productions of which will hold their own among some of the specimens of antiquity or modern times. “The Metal works" focuses on the impressive and diverse ways metal was forged, cast, hammered and embellished in traditional African sculpture, artefacts and building members such as columns, beams, lintels and doors. Cast pieces in bronze or brass range from Benin figures, relief, bells and royal leopards. The pieces served ritual or functional purposes and played important roles in their buildings and communities. Using metal required great technical skill, displaying a strong love for the material and a desire for objects of permanence. The metal works include; Bronze Heads, Bronze Plaques, Bronze Figures, Bronze Leopards and cast objects.

Benin Bronze Heads

The extraordinary bronzes of the Benin kingdom in what is now Nigeria exhibit a virtuosity and sophistication of style that has astonished the Western world since they were visited in the 15th Century. Their work was brought to Europe following a punitive expedition by the British in 1897, causing a great sensation. The people of Benin, called Bini, are descended from the Ife, also known for their remarkable bronzes. Almost all

Benin art was created to honor the king, or Oba**,** who has reigned, with his ancestors, from the 15th century. Styles have changed over the years. Although similar to many older works, these are all 20th C. pieces. Each is still sculpted by hand, and then cast in bronze by the lost wax process. Heads that do not depict the king show members of his court or the Queen.



Plate 4.2: Some bronze heads on display at the Detroit Institute of Art permanent collection. Source: www.hamillgallery.com

Benin Bronze Figures

Bronze pieces from the Benin kingdom are known the world over. Almost all their art was created to honor the king, or Oba**,** who has reigned, with his ancestors, from the 15th century. Styles have changed over the years. Although similar to many older works, these are all 20th C. pieces. Each is still sculpted by hand, and then cast in bronze by the lost wax process. Figures that do not depict the king show members of his court.



Plate 4.3: Some bronze figures on display at the Detroit Institute of Art permanent collection. Source: www.hamillgallery.com

Benin Bronze Plaques

Almost all Benin art was created to honor the king, or Oba**,** who has reigned, with his ancestors, from the 15th century. Styles have changed over the years. Although similar to many older works, these are all 20th C. pieces. Each is still sculpted by hand, then cast in bronze (or other copper alloys) by the lost wax process. The plaques were mounted on the walls of the Oba's Palace and record the history of the Benin kingdom. Most depict the king or warrior chiefs.



Plate 4.4: Some bronze plaques on display at the Detroit Institute of Art permanent collection. Source: www.hamillgallery.com

Benin Bronze Leopards

Bronze Leopards, a royal icon, were often used as royal water vessels. Water was poured from the mouth over the Oba's hands in cleansing rituals. They were kept on royal altars. All stand without bases. Many have minor holes, casting flaws.



Plate 4.5: Some bronze leopards on display at the Detroit Institute of Art permanent collection. Source: www.hamillgallery.com

Benin Cast objects

The varied objects on this page include two altar posts, each of which is fitted in the middle of two halves. There are three pieces that were placed on ancestral altars and two ceremonial swords, as seen held by the Oba on many figures and plaques. The cocks were placed on altars honoring past queen mothers.



Plate 4.6: Some bronze objects on display at the Detroit Institute of Art permanent collection. Source: www.hamillgallery.com

4.3 The Relationship between Benin Art and Benin Politics

More is known about the art of the kingdom of Benin than perhaps any other kingdom on the African continent. In an article titled Art, Innovation, and Politics in Eighteenth-Century Benin, by Paula Girshick Ben-Amos, she brings together an understanding of Benin Art and politics that is based on her own extensive fieldwork in Benin, which began in the 1960s with her collection of oral traditions. Considering Ben-Amos's huge body of relevant historiographic and archival information, with recent research by other Benin specialists, and with objects, including their intricate iconographical details. Using this extensive background, Ben-Amos questions to what extent art operates as political strategy, how objects acquire political meaning, and how the use of art enhances and embodies power and authority. Today the people of Benin see art as commemorative. It enshrines the past and captures images for posterity. But researches

show that during the early period of the Benin Kingdom, art in Benin was strategic-as much about how to attain ancestral and political legitimacy as about the legitimacy that was attained. Artistic creation included a complex of processes and performances involving its commissioning, production, and display. At each stage there were negotiations about meaning and outcomes.

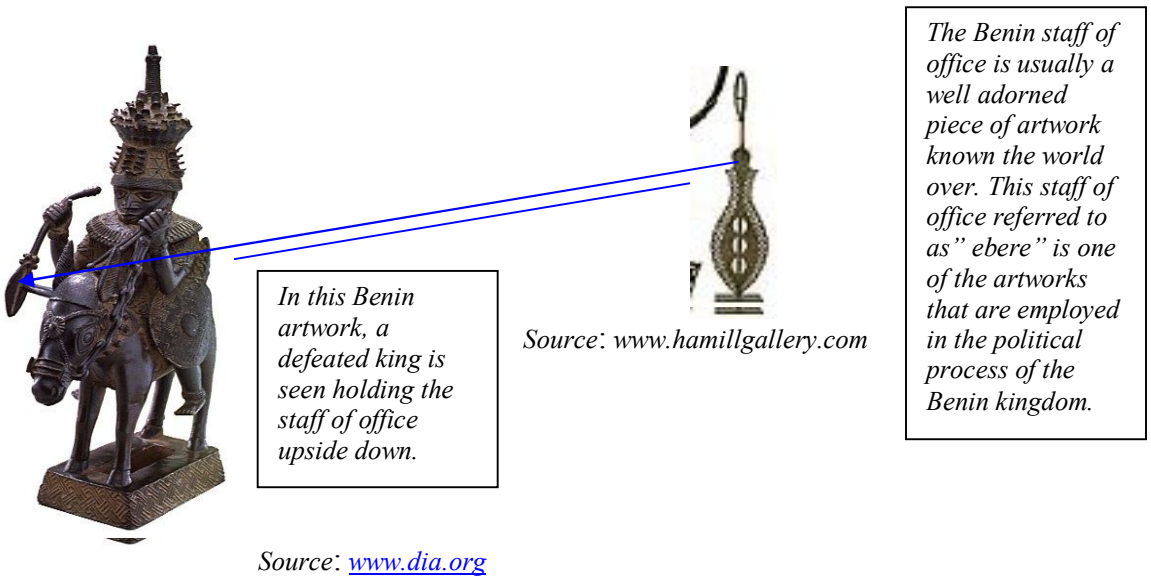


Figure4.1: An illustration showing the relationship between art and politics in Ancient Benin.

In the early periods, certain art forms and images were created and were employed in the political processes. Discoveries have been able to bring into limelight how art was created, allocated and used, by both kings and their powerful rivals, to control historical memory.

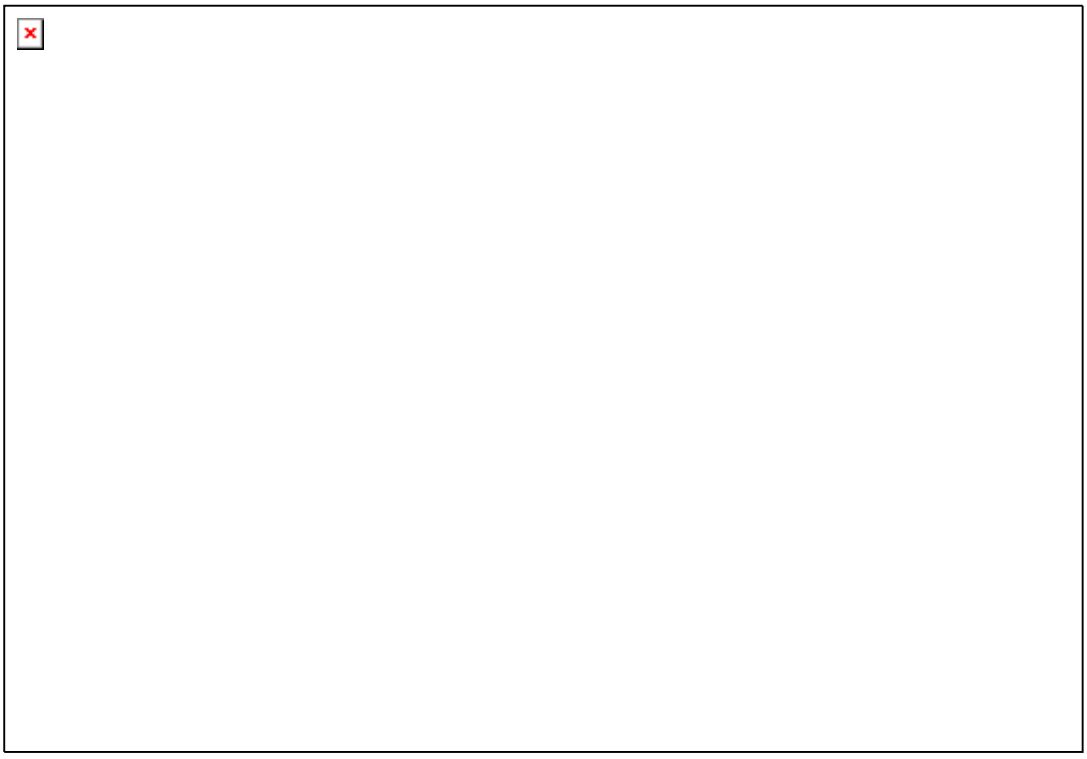
In the book "Art, Innovation and Politics in the Eighteenth Century," the author surveyed several art forms produced in the fifteenth to the seventeenth century and compares them with those made between circa 1690 and 1750. She discovered that the

function of art shifted from the glorification of military successes to an emphasis on the legitimacy of descent. Focusing on specific objects, the author suggests that much of the innovation in iconography had to do with a search for legitimacy. a careful investigation of specific objects-two brass altarpieces, a stool, and two brass masks-used in the reigns of three Obas; Ewuakpe, Akenzua I, and Eresoyen over a sixty-year span. The author discovered that there were variance in the prominence and "perhaps even the invention of the individuating mechanism of emblems".

In conclusion, it can be said therefore that in the early Benin Kingdom, art was seen as a political strategy. Robin Poynor a professor of art history and assistant director of the School of Art and Art History at the University of Florida. He is a co-author of the recently published book-A History of Art in Africa. Poynor was able to observe how art is used in political maneuvering, how it confers legitimacy, how it empowers those who used it to shape historical meaning. She asks, "What was it about art forms that made them so fruitful an arena for communicating royal legitimacy and power in the context of eighteenth-century political struggle?" (p. 10). Providing a brief backdrop of the study of ‘art and politics in Africa," she was able to emphasizes ‘art and social fulfillment," ‘art and social memory," and "the ambiguities of art as strategy."

A Brief Historical Accounts on Benin Architecture

The map shows the situation of states and towns in Western Africa around 1500 AD. Present Benin would be on the territory of Yoruba, between the Niger and the Volta rivers.



4.2 Map of West Africa around 1500 showing the Benin Empire

Source: architecture-identity.de

The palace of the Oba of Benin is probably the best single example of Edo monumental architecture, and has been described from the earliest times both on Benin art works and by European merchants, sailors and lastly soldiers; Dmochowski (1990). It has most of the features of traditional Benin architecture and more importantly they are painstakingly preserved. Its existence is more important when one takes into consideration the fact that it is difficult to find true examples of Benin architecture with the prevalent

preference for modern western styles of architecture. The palaces of Chiefs Ezomo, Eson, Oshodi, lyase and Ogiame also serve as interesting examples of Edo architecture although the distinguish Benin architectural features are being gradually eroded by renovations that do not adhere to the spirit of the original style as well as out right replacement of the existing buildings. In this study, the Oba's Palace will be considered as representative of Benin Architecture.

Benin architecture provides a very interesting topic of study because of the plentiful document existing on the subject. Of the ancient Kingdoms of what is now Nigeria, do s one of' the few that still maintains its cultural identity. Apart from oral tradition handed down through the generations, much *in formation* is recorded on art works, the quality of which Benin is famous, Dmochowski (1990). A lot of written documentation also exists since the fifteenth century when the Edo people came in contact with the Europeans.

The earliest contact with Europeans was with the Portuguese sailors reputedly Ruy de Sequira (1427). Since then successive travelers to the Kingdom chronicled their experiences there, from the Portuguese, Dutch, and French to the British who finally brought about the collapse of the Kingdom.

According to Dmochowski (1990), the first available account of Edo architecture was signed by "DR.", a Dutch, in 1602:

The king's court is *very* large, having many large squaw places within, surrounded by galleries and courts wherein watch is always kept. This court is so large that the end is not to he seen, and when one thinks one has come to the end, one sees through a gateway other places or courts, and one sees many stables.

The same impression of grandeur is developed further by Dapper in his record of 1602: The king's court is square, and stands at the right hand side when entering the town by the gate of Cotton (Gwato), and is certainly as large as the town of I Harlem, and entirely surrounded by a special wall, like that which encircles the town. It is divided into many magnificent palaces, houses and apartments of the courtiers, and comprises beautiful and long square galleries, about as large as the Exchange at Amsterdam, but one larger than the another, resting on wooden pillars, from top to bottom covered with cast copper, on which are engraved the pictures of their war exploits and battles, and are kept very clean.



Figure4.3 View of Benin City with Oba's Palace in the background. Published by Olfert Dipper in 1668. Source: architecture-identity.de

Lieutenant John King RN. Who visited Benin sometime between 1815 and 1821 stated that in one of the facades they entered, there where three doors of which the chief was in the middle, having rows of eight or ten elephant tusks curiously carved with the points turned towards the wall, on each side. According to him the centre of the façade had a pyramid about thirty to forty feet high, on top of which was fixed a copper serpent whose head reached the ground and body as wide as a man's. Also "the ceilings were flat and the

beams which crossed them were covered with various designs Captain J. Fawckner in 1825 said "The palace of the King is a large building of wood, not unlike our British shot manufactories, having a tower or steeple at one end; the rest of the building consists only of one storey."

In 1897 a British punitive expedition, in retaliation for the massacre of a British trading party, resulted in the destruction of a large part of the city and the reckless pillage of its art treasures. The official Foreign Office report reads in part as follows

A broad avenue runs through the centre of the town and ends on the west side in the Gwalo road. It forms a main division of the town, on the southern side the king's and chief's compounds, and to the northward those of the lesser chiefs and people.

The houses are built of red mud and thatched with palm leaves, the only iron roof~ being those of the palaver house and a portion of the king's house.

The king's compound consists of the king's house, palaver house, ju-ju houses and compounds, and living houses for the king's people, also ruined houses, probably the burial places of former notable people. The front of the compound was protected by a mud wall about twenty feet high, with a sloping roof to the front. On entering the compound the first places met are two large juju compounds and in the centre are unique bronze heads, each head supporting a carved ivory tusk... Five large ju-ju compounds were close together in the king's compound.

Commander R.H. Bacon, in his book, *Benin, the City of Blood,* 1891 and Dr P N Roth surgeon to the punitive expedition both made interesting observations of the city and recorded valuable information about the king's palace some of which have been discussed in previous paragraphs.

4.5 Peculiar features of Benin architecture:

Entrance Gate

The first thing one notice on approaching the Oba's Palace is the celebrated entrance gate *unuogwa.* It is nothing compared to that described by the Europeans who visited in the city when the original palace still stood but it is a commendable attempt to let the visitors know that he is entering an important building. This is also a feature of all palaces in Edo and indeed the rest of Nigeria.

Turrets:

Certainly the most striking and characteristic architectural features of the Benin traditional architecture, were the turrets erected above the gates of the palaces and galleries. Nyendael an explorer speaks of the palace gates 'adorned at the top with a wooden turret like a chimney, about sixty or seventy feet high'. Other explorers have described it as a pyramid, a tower or a steeple.



Plate4.4 Brass casket representing the Oba's palace with turret roofs.
Photo: courtesy Museum for Volkerkund. Berlin

To summaries, a structure that coifed the Benin entrance gates was referred to as a 'turret ending in a point' or as a 'tower' or a 'steeple', or simply as a roof; it was also compared with a chimney, and with a short tower. Of these definitions the last two seem to best describe this feature.

It seems reasonable to accept the Benin bronze plaques as the most reliable records of the turrets. The plaques were obviously made by men familiar with the objects they were representing; these craftsmen not only the general form, professionally comprehended, but also included structural details, shown in a slightly different manner, gave their artifact the character of a document. They also depicted the front of the turret as a narrow, symmetrical trapezoid whose short upper horizontal side formed the ridge of the structure. Seen from a different angle, the turret resembles a saddleback tower roof.

There are three notable features in the presentation of the turrets. They are all covered with wood (shingles or short planks): they carry large copper snakes incarnated in a zig-zag fashion along the axis of the front surface of the turret; and they are crowned on with birds with outspread wings.

Plan Forms

The Oba's Palace is based on the most prevalent feature of Edo buildings, which is the rectangular plan. The buildings are either rectangular in plan or composed of several rectangles linked together, usually with courtyards. The origin of the form is not very clear, but one can assume that it was adopted because of its simplicity. Also there seems to be a tendency to use straight lines as is evident from straight roads arranged perpendicular to one another.

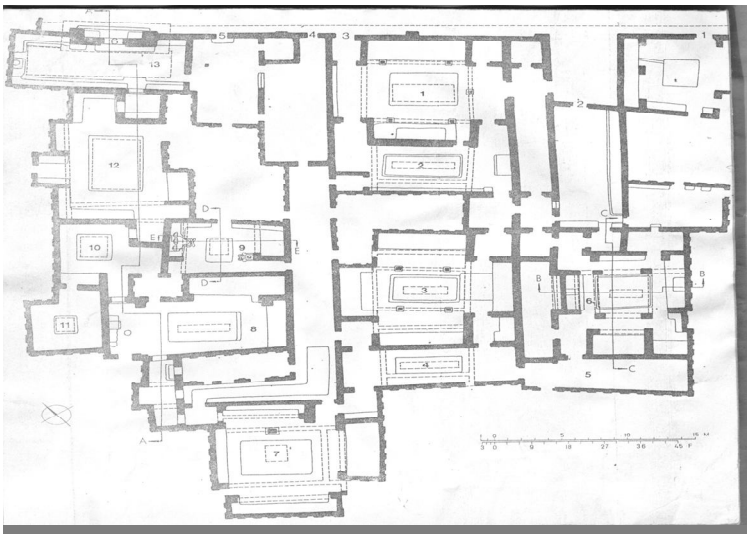


Fig. 2.2 *Oba s Palace, Plan showing the common feature of Benin architecture; the courtyard.*

Extensive Foregrounds

On entering the palace one immediately sees the extensive palace foregrounds *uzamokon,* which are very necessary during traditional ceremonies. The facade of the palace is more than 50 metres long giving an idea of the size of the fore court. The foreground can hold several thousands when full. Again its area is greatly reduced in comparism with what it used to be in the original palace as surrounding developments have encroached on the palace grounds.

Ornamentation

In African architecture, ornamentation was a constant feature, which allowed impressing the outsider, but also promoting the morale, pride and solidarity of one people.

In Benin, architectural decorations were passed on through generations, and evolving towards "purified" motifs every time.

One technique was the carving of walls, creating visible contrasted patterns in the

Bronze birds and snakes used to ornate the high towers (turrets), the bird presumably protecting against lightning, and the snake representing the power of the oba. This is can be seen in plate 4.2

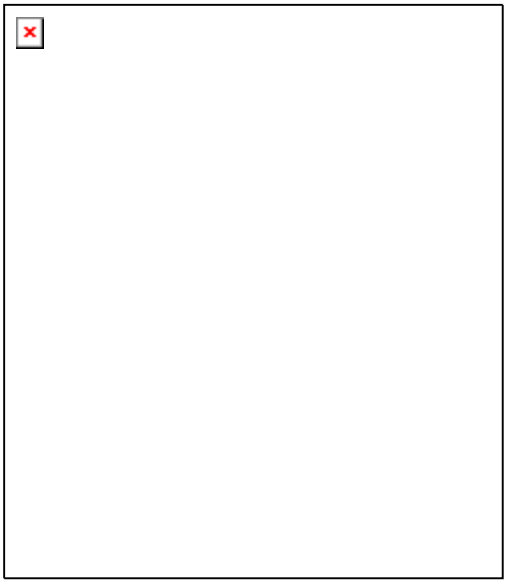


Plate 4.7 Roof showing extensive ornamentation of a tower with bronze and motifs. Source: architecture-identity.de

Edo architecture places heavy emphasis on ornamentation from carved iroko lintels, doors, and roof members to brass statues, relief and sheathing. Almost all objects have aesthetic value. As in most African cultures, art and religion are inter-related. Carved ivory used to symbolize ancestors is of very high quality. The palace is filled with art of outstanding quality and apart from their aesthetic value they record past events and architectural styles in detail.

Courtyards

Courtyards, *ugha* are another common feature of Edo architecture. It must be understood that *ugha* in Edo means room or chamber and the area surrounding the courtyards were actually the spaces.



Figure 4.6 Oba 's Palace, Courtyard Showing an impluvium.
Source: architecture-identity.de

They range in size from just small opening to the sky spaces to very large spaces able to hold thousands used for ceremonial functions. The courtyards usually had *impluviums* set into the floor into which rainwater collected and was drained through underground channels. The roofs slanted inwards forming a *compluvium*.

Courtyard houses were common. They were built with four buildings facing each other, forming a closed space in the middle. It was in fact a water-collecting device, called impluvium, which was justified by the scarce waterfalls during the dry season.

Horizontally Fluted Walls

The walls especially the external ones usually have a horizontal fluting resembling that of the Greek Ionic column. This greatly enhances the aesthetic of the building as well as thermal insulation properties of the wall, which is of *eken,* a building earth known for its structural strength.

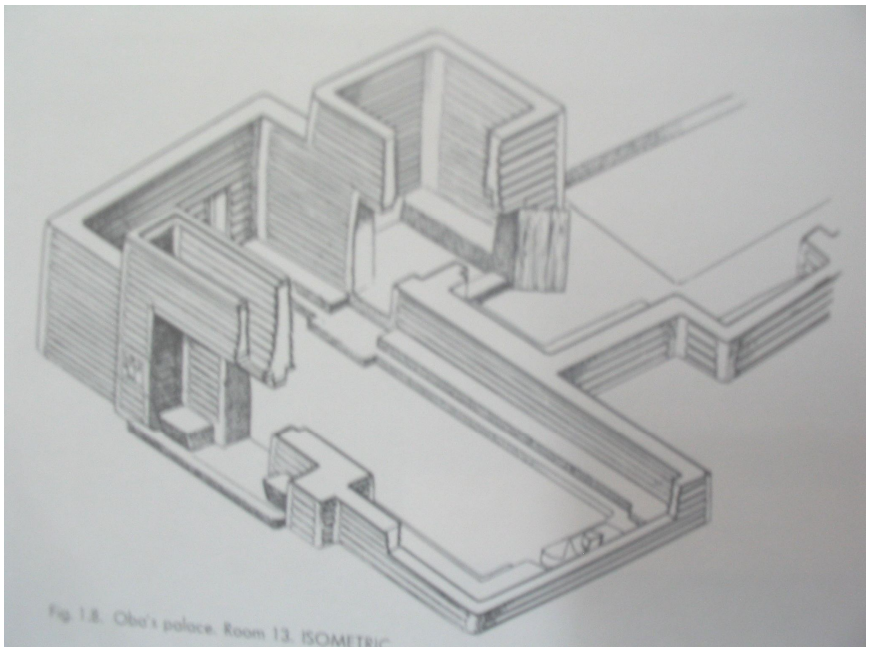


Figure 4.7 Oba's *Palace, Isometric view showing flute wall construction.*

The projections of the fluting put the recesses in the shade thereby reducing the amount of heat conducted to the interior of the palace.

They were built in layers or courses usually five and above in the palace with the chiefs houses having five layers and the commoners building no higher than four layers. The walls became progressively thinner towards the top. In the past only the Oba's Palace and those of specially favoured chiefs had fluted walls. The walls are also well polished and shone to a high degree and according to Dapper they were" as shining and smooth by (1960).That they are like minors." Fawckner also stated that they were "like marble."

Carved Timber

Carved timber lintels made from *iroko* were used for doorways. The timber was carved by die royal woodworkers, *onwina* after being split by another group of workers called *inwagha.* Other building components like doors and roof members were also made of carved timber. The carvings showed decorative motifs or depicted human and animal figures at important times in their history.

Brass Casting

Brass relief and plaques were usually used to face timber members in the palace. Brass sheathing was nailed to timber lintels, doors, rafters, *and itue.* Brass sculpture of birds, *oghudu* and snakes, *omwasomwa* were used to crown roofs as was meticulously recorded by the European Explorers. Brass casting was carried out by a group of workers called *iguenromwon.* In the past they were only allowed to work for the Oba.

Ancestral Shrines

Shrines dedicated to ancestral worship are also present in the palace as well as in all Edo buildings. The shrines are in the form of whole buildings, rooms or corners in the buildings. These shrines usually had altars, on and around which were placed various objects pertaining to worship, as well as space around for worshippers. In the palace before 1897 there 15 huge walled compounds containing altars to past Obas but in the present one there are altars to the last four and a collective one for the rest. Outside this compound are separate altars for three famous kings of the past.

4.6 Materials Employed in Construction;

Earth

Earth, *eken,* was the only material used for building walls in Edo traditional architecture and it was the material employed in the palace. It was used because of its abundance, structural strength and excellent thermal insulation. It was quarried from pits often of considerable depth at the end of the rainy season i.e. September, with hoes, *aho* and spades, *ovbeve.* The earth was mixed with water and after thorough trampling was put in piles, covered with palm leaves or elephant grass, and kept for four to six weeks. Finally it was mixed with water again, and used for building.

Timber

Timber in the form of *iroko, ohun, oghohen,* and *umo* (camwood), *Pterocarpus Osun* was used extensively in Edo buildings for the construction of lintels, doors, roof members and shingles. However in the palace *iroko* was the timber of choice although camwood was used for wooden pillars in the palace. The building components were made by craftsmen *onwina* (woodworkers), who made beams, rafters, lintels and doors; *igbesamwan* (woodcarvers), who carved architectural parts and other wooden objects; and *ibekhue* who nailed shingles to roofs, snakes over shingles and birds to ridges of roof turrets. The Oba used *iroko* almost exclusively, although some of his chiefs were also given the privilege of making use of it. All other chiefs and commoners used other types of wood e.g. *oghohen.*

Metal Products

Metals like copper, iron, and brass, bronze were used in Edo architecture extensively, mainly as ornamentation in form of statues, plaques, relief and sheathing. Iron was used as fasteners and hinges for doors.

4.7 Spatial Arrangement

Usually Edo buildings are entered from a forecourt, a gate way into the forecourt being optional and a measure of the affluence of the householder. The buildings have covered verandahs in front raised three or four steps above ground level. There is a main door leading into the house from the verandah. The rooms in the house-are arranged around courtyards with the walls recessed equal distances forming a Greek cross.

The floor of the courtyard is depressed forming an impluvium and the roofs slant inwards forming a compluvium that drains into the impluvium, from were underground drains evacuate the water.

The rooms usually had doorways without doors and almost never had windows. The rooms were arranged so that the householder had his own apartment with those of his wife or wives and children separate. Storage space for personal valuables and agricultural produce was provided within the building.

The kitchen and conveniences were always situated at the backyard, away from the main building. The kitchen was usually in the form of a shed with wooden posts and thatch roof with one or more earth tripods for cooking

4.8 The Art Ornamentation in Benin Architecture

Ornamentation is an integral aspect of Benin architecture. Sculpture, brass casting, plaques, relief and carvings were used to produce beautiful works of art that served functional, decorative and religious *purposes.* The fluting of walls constituted both ornamentation and functionality. It produced a unique and pleasant feature as well as provided thermal insulation.

The timber parts of the building like roof members; lintels, beams, doors and posts were all exquisitely carved using very durable wood like *iroko.* The carving showed decorative motifs as well as recorded important events in Edo history. Brass casting was a speciality of Benin craftsmen and for which they are internationally recognized. Brass was cast into solid figures, plaques and sheathing for timber. Ivory carving was very well developed in Edo architecture and was used for religious purposes especially ancestral worship.

4.9 Local Variations

As will be expected, minor variations exist between the architectural features found in the different Edo areas. Benin had a more metropolitan variety, having buildings larger in size and having richer finishes. Benin buildings displayed all the features so far discussed.

Roads in Benin were broad, straight and laid perpendicular to one another. The buildings were arranged regularly along the roads.

Further in the hinterland among the Esan, Owan, and Etsako, the horizontal fluting was almost absent. The buildings were much smaller, and arranged closer to one another. The rural and agrarian life style of the people greatly influenced the variety of architecture

developed in these areas. Ornamentation in these areas was very limited and consisted of carved wooden objects like masks of religious significance. Bronze casting and ivory carving was not existent. Also not easily found were carved timber, posts, beams, lintels, doors and roof members.

4.10 Conclusion

This chapter has attempted to review existing literature in order to obtain a solid historical background of the Edo people, their way of life and most importantly the features of their monumental architecture. From the brief history of their art, architecture and politics it has been gathered that there is a strong relationship between Benin Art and the Benin Politics. And also a strong relationship exists between the Benin Art and the Benin Architecture.

This established fact therefore goes to say that there can be no meaningful discussion of Benin Art without also discussing the architecture and the politics of the people under study. This therefore justifies the research topic-An Attempt at reflecting Benin Art and Architecture in Contemporary Buildings. A liaison office is usually seen as a political establishment therefore it makes a whole lot sense to make such building-Edo State Liaison Office Complex Abuja, a medium for expression of Benin art and architecture.

Lastly and most importantly the features of Benin Art and Architecture have been highlighted as a foundation on which to base a proposal for the Edo State Liaison Office Complex, Abuja.

CAPTER FIVE

CASE STUDY: THE SEARCH FOR DESIGN CRITERIA

5.1 Preamble

The importance of case studies in a thesis write up can not be overruled; case studies serve as a means to towards effective and total understanding of the subject matter at hand. It also serves as a tool for brief development and as a guide towards providing a near perfect solution of to the problem statement. For the purpose of the research area of this thesis, the case studies that were considered were such that provided room for comparison. Asides the case studies considered, kin interest in the case were on identifying the problem areas, design concept, facilities provided, merits and demerits, site constraints, physiological needs of the users and most importantly the attempts made towards the reflection of regional architecture and cultural expression.

5.2 Edo State Government House, Abuja. (Existing Situation)

(a) Project Data:

Location: located along Samora Michelle Street in the Asokoro District of the Abuja metropolis.

Building Type: Converted residential building**.**

Function: To serve as the state's governor's guest lodge as well Edo state Liaison office.

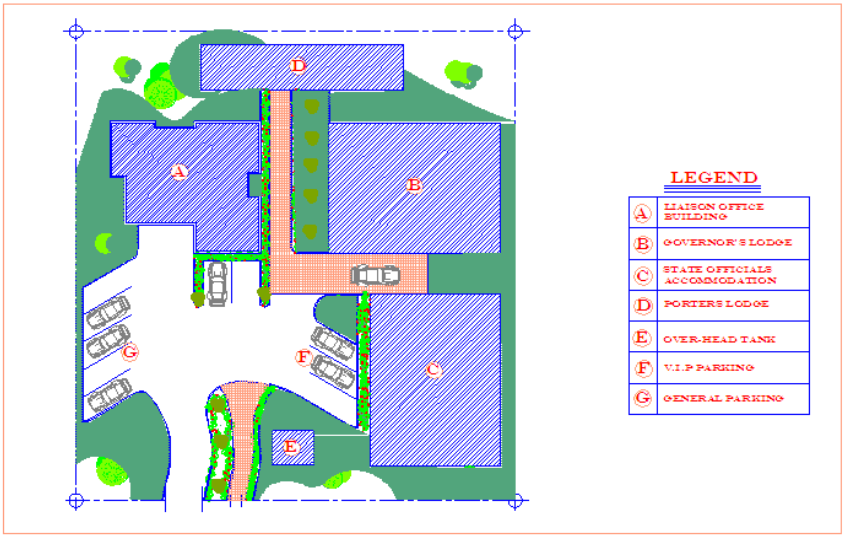


Figure 5.1 Site plan of the existing Edo state Government house showing the liaison office complex.

(b) Existing Situation:

The site is almost square in shape. It consists of three duplex one of which has been converted to what now serves as liaison office. The other two serve as accommodation for the state governor and other government officials on official duties in the federal capital territory.

Inferences:

Merits:

- Simplicity in the building design.
- The governor's lodge is located separately from other units hence ensuring proper security and privacy.

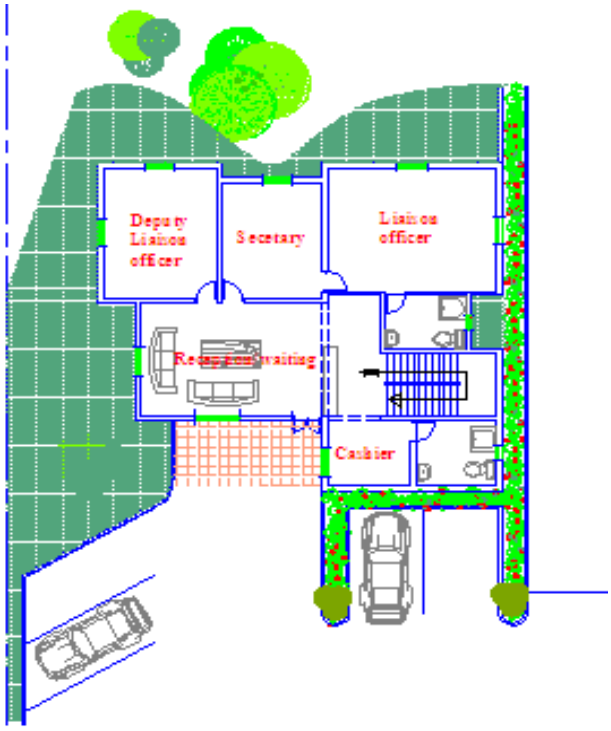


Figure 5.2 Ground floor of the existing liaison office complex

Demerits:

- The building design does not meet the functional requirement of a liaison office complex.
- The building is not big enough to meet the liaison office space requirements.
- The whole complex does not reflect the status of the state.
- The existing building does not portray any features that can easily be associated with the state.

5.3 Lagos House

(a) Project Data:

Location: located along Ralph Shodeinde Street in the central business district of Abuja metropolis.

Building Type: Office building.

Function: To serve as Lagos state liaison office and to provide letable office spaces for commercial purpose.

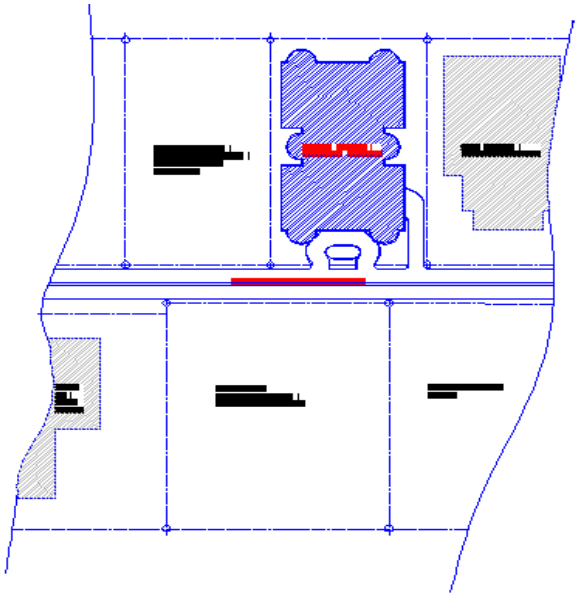


Figure 5.3 Site plan of Lagos house Abuja

(b) Design features:

(i) The Site: The site which is rectangular in shape is bounded on one side by the Oyo state house complex. The access road (Ralph Shodeinde Street) runs along the shorter side of the site. The longer side is in the north-south direction. There are two entrances into the site. One of the entrances is for the liaison office complex staff and public the other is for the V.I.P.

(ii) The Plan Concept: the plan is also rectangular in shape. Clearly visible are the six circular units. Four of these circular units are staircases.

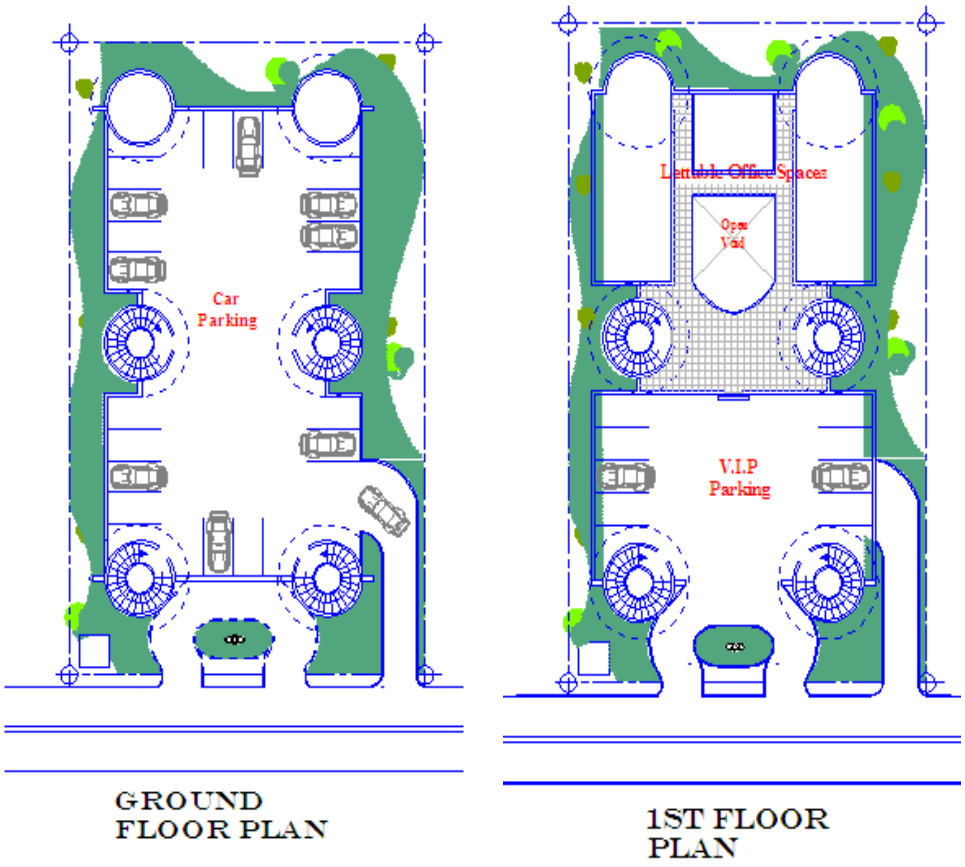


Figure 5.4 Floor plans of the Lagos house

The staircases are located at four corners of the building plan while the remaining two units are located at the mid point of the longer side of the rectangular plan. No provision was made for lift services but however, the vertical movement is greatly enhanced by use of staircases.

(ii) **The Elevation:** The conception of the elevation is indeed the most spectacular aspect of the whole complex. You may need not to be told on approaching the building that the building represents Lagos state liaison office. The elevation clearly reflects the well known 'Eyo' masquerade of the Lagos culture. This was achieved by the six circular staircases as sculptural piece of the 'Eyo' masquerade. Also at the entrance enclave is a life size statue of the same 'Eyo' masquerade.



Plate 5.1 Approach elevation and side elevation

(c) Inferences:

Merits:

- There is dramatic interplay of space and form.
- There are plenty of circulation spaces which are basic requirement in office building design.

- The appearance of the building reflects a cultural aspect of the state it represents.
- The building stands out amongst equals.
- There is an attempt made towards creating an architectural identity.



Plate 5.2 Side elevation

Demerits:

- There is site constraint.
- The spatial organization is poorly designed.
- There is not enough provision for letable office spaces.
- There are no provisions for future expansion.

5.4 The Nigerian Embassy, Saudi Arabia.

(a) Project Data:

Location: the Nigerian Embassy building is located in the Diplomatic district of Riyadh in Saudi Arabia.

Architects: The building was designed and built by Multi-Systems Nigeria, in association with Omrania of Riyadh.

Function: To serve as an embassy building for Nigerians in Saudi Arabia, and also as residence for the Nigerian ambassador.



Plate 5.3 Approach elevation of the Embassy complex

(b) Design Features:

The Nigerian embassy complex comprises of two main units the embassy chancery building and the Nigerian ambassador residential building. The elevation of the building is a typical northern Nigerian architectural style. The building is also characterized by the use small openings as seen in the northern Nigerian architectural style.



Plate 5.4 Approach elevation of the ambassador residence

Also prominent on the building elevations are what seem like wall fluting that are engraved into the wall in form of inscriptions which are also a common aspect of the traditional Hausa architecture.

(b) Design Critique:

The architect was criticized by various politicians and architects especially from the southern part of Nigeria. The criticism was on why the architect chose only to represent the northern traditional architectural style of the Hausas in an embassy building that represents the interest of the entire country.



Plate 5.5 The residential complex of the embassy building

The architect however in his own defence stated that Nigeria is endowed with various architectural styles and that an attempt at reflecting all the various architectural styles in one building will be conflicting chaotic. He went farther to say that an embassy is a political structure that helps foster diplomatic relations and creates a common ground for interactions. Hence an architecture that can best blend into the host country's style of architecture should be adapted. And from all clear indications the northern architectural style in Nigeria best serves this purpose.

5.5 Katsina House



Plate 5.6 Approach Elevation of the complex

(a) Project Data:

Location: located along Ralph Shodeinde Street in the central business district of Abuja metropolis.

Building Type: Office and accommodation complex**.**

Function: To serve as Katsina state liaison office and to provide letable office spaces for commercial purpose.

(b) Design features:

The site is rectangular in shape with one of the shorter sides having both the ingress and outgress points.

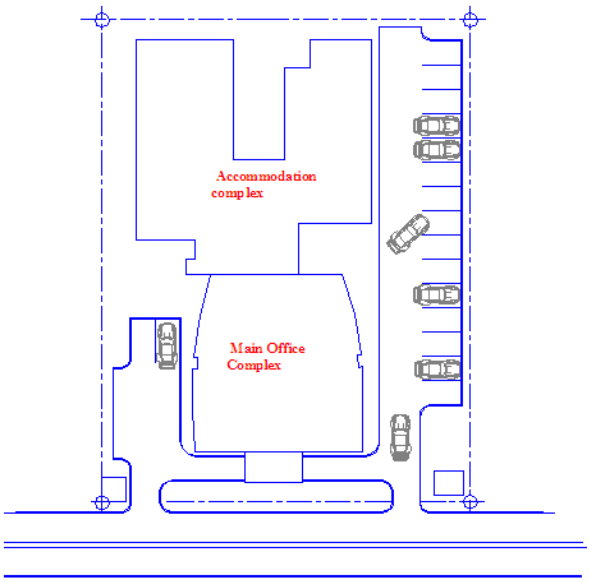


Figure 5.5 Plan layout

The plan is basically of two units- the accommodation unit which has a U-shape and the office complex which is roughly rectangular in shape but having the two longer sides curved outwards.



The elevation has a typical office building appearance i.e. like a bank building. A few traditional elements were introduced in the elevation to make it depict the traditional architectural style of the northern part of the country.

Plate 5.7 Front elevation.



Plate 5.8 Side elevation showing the residential wing

5.6 Oba Akenzua Cultural Centre, Benin City.

(a) Project Data:

Location: located in the central district of the Benin township of the popularly known ring road.

Building Type: It is a multipurpose complex

Function: To serve as a memorial for the late Oba Akenzua of the Benin Kingdom. The building also meets the socio-cultural needs of the people by providing auditoriums for various cultural activities.

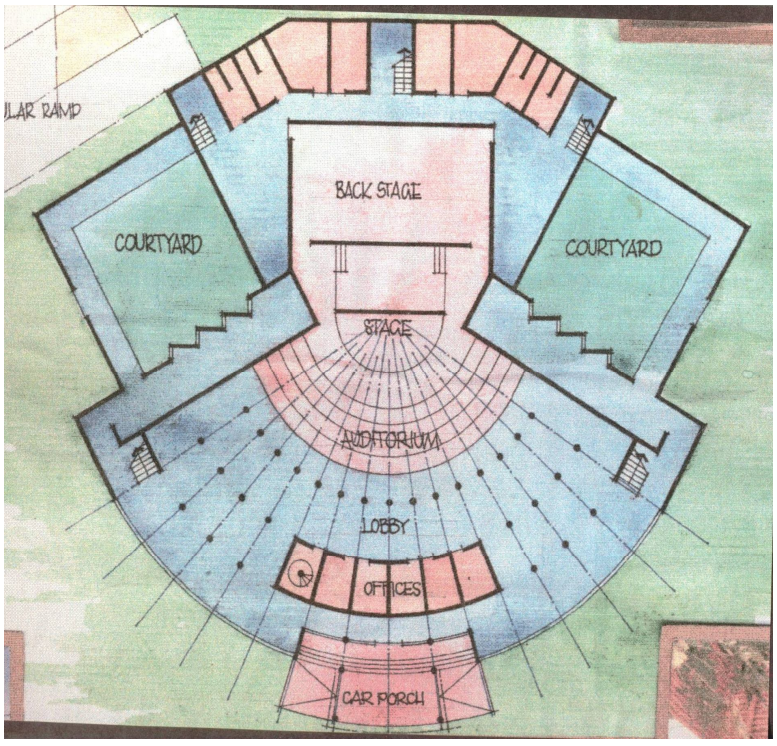


Figure 5.6 Ground Floor Plan

(b) Design features:

The site is rectangular in shape and it is located in the central area of the city.

The plan is semi-circular combining both rectilinear and curvilinear forms in its composition. The auditorium which is the most prominent feature of the centre is shaped in form of a quadrant. Also prominent in the design of the centre are the two prominent courtyards that flange the two radii of the quadrant (Auditorium) there are two floors that are very much identical in form.

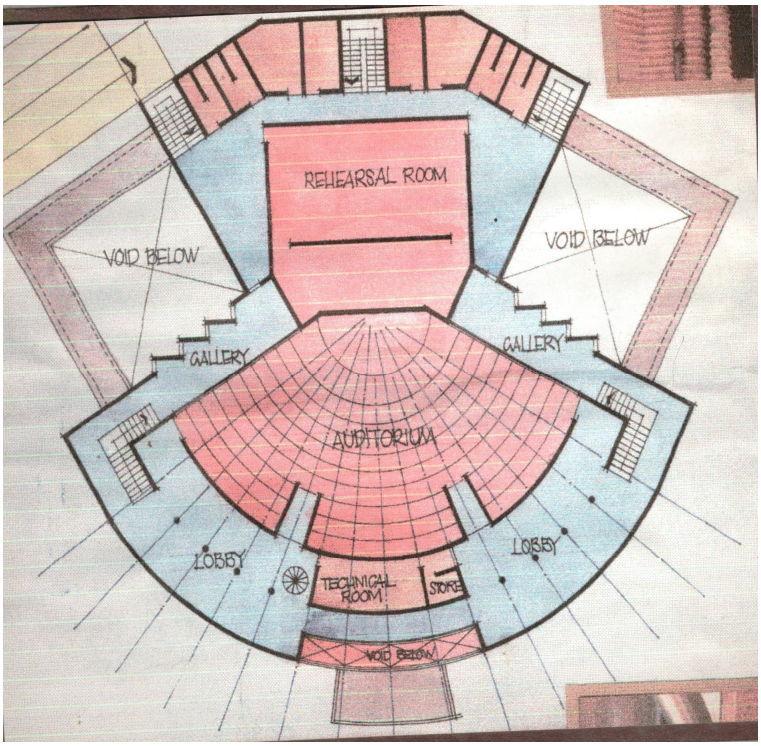


Figure 5.7 Upper Floor Plan

The elevations have the typical Edo monumental architectural look. The choice of the finishing is very much commendable as it goes a long way to portray ornamentation. The choice of materials used depicts the traditional artwork rhythm of the Benin craft

masters. Fluting of the walls was well attended to especially on the internal faces of the walls.

Merits:

- There is a good interplay of forms- a near perfect combination of rectilinear and curvilinear forms.
- There is a good use of material-the use of wood for columns
- There is an attempt at reflecting Benin architecture.

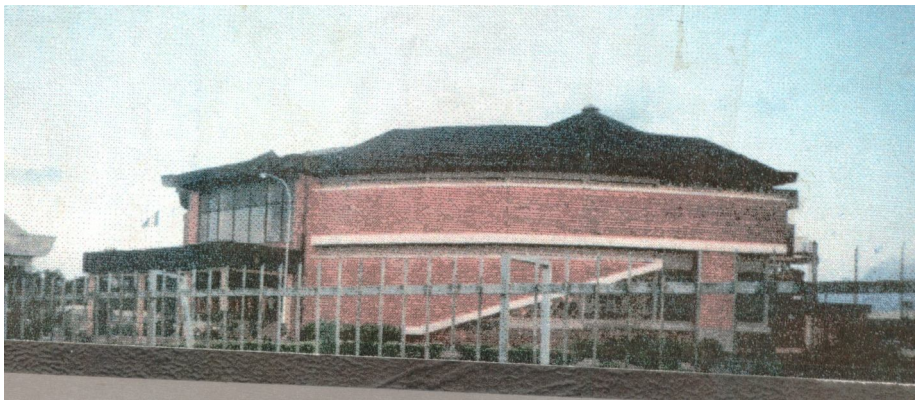


Plate 5.9Approach Elevation



Plate 5.10 Left Side Elevation



Plate 5.11 Right Side Elevation

Demerits:

- The spatial organization is poorly designed.
- There is not enough auxiliary facilities provided.
- There are no provisions for future expansion.

5.7 Summary of case study findings

It can be concluded from the case studies that, liaison offices essentially provide offices, conference hall and guest accommodation facilities. However, one of the aims of this thesis is to widen the scope of the design of liaison from what is obtainable from the current case study to a more multi use complex.

The location of the site and the prevailing drive for revenue are two factors that call for this approach of making most of the usable areas of the complex as public spaces.

The studies conducted shows that there are new trends in high rise office building design. Some of these new trends came up following the advent of september 11. After the incident, many office building owners have gone in search for better security measures for their buildings. Many of these new office design trends have been discussed in chapter three of this thesis. A list of some these trends are as follows;

- Safety and security
- More bandwidth, smarter buildings i.e. to keep pace with tenants who require more power and bandwidth for information systems infrastructure.
- Earth-friendly, green building designs.
- More light, air and space i.e. fewer columns, reduced glass-to-core depths, and more glass.
- Leisure space in the office.

A summary of findings can be drawn from the studied liaison office buildings; comparing their accomplishments and their failures.

A summary is tabulated below for comparison

	Edo State Government House, Abuja	**Lagos house, Abuja**	**Katsina House, Abuja**	**Nigerian Embassy, Saudi Arabia.**	**Oba Akenzua Cultural Centre, Benin**
Activities	Political activities and accommodation	Political activities	Political activities and Residential	Political Activities residential, research and recreation	Cultural, commercial and recreation activities.
Regional architectural impression	The buildings portray no particular regional architectural impression.	The building has no regional character except that of A Symbolic architectural character.	Though not very notable but an attempt at regional architecture can be seen.	Attempts at reflecting traditional Hausa architecture can be seen.	An attempt at reflecting Edo monumental architecture can be seen.
Peculiar Architectural character	There is really no peculiar architectural character as the building was a converted residential building.	There is an attempt made towards creating an architectural identity.	A near perfect attempt was made towards integrating residential complex with office complex.	The peculiar architectural character of this building is the successful attempt made towards portraying a Nigerian architecture on a foreign land.	This building can be said to possess a peculiar architectural character because of the details given to ornamentation- a peculiar feature of traditional Benin architecture
Existing infrastructures	Governor's lodge, deputy governor's lodge, five room duplex for officials, boys' quarters and the liaison office section.	Admin area, two floors of lettable office spaces, staff lounge and exhibition unit.	Admin area, two floors of lettable office spaces, staff lounge, banking hall and a 24 room self contained apartment.	Ambassador residential compound, ten self contained room apartments and the ambassador's office building.	Exhibition room, rehearsal room, auditorium and gallery.

Table5.1 Summary of case studies table.

CHAPTER SIX

THE SITE

6.5 Study area

Abuja, (FCT) covers an area of 8,000sq.kms. It is located 505km to the northeast of Lagos the former capital of the Federal Republic of Nigeria. Abuja is located in the guinea savannah regions of the middle belt. Four of the 36 states of the federation bound the federal capital. To the north, the capital city is bordered by Kaduna state, Nasarawa to the east and south east, Kogi to the southwest and Niger to the west.



Fig.6.1 Map of Nigeria Locating Abuja

Source: Encarta Encyclopedia

The U-shaped territory is about 1,100km by road from Lagos and about 2.5 times the total land area of Lagos. Placed in the northeastern quadrant of the territory, is the crescent-shaped city of Abuja proper characterized by the Aso Hill, a mere 3 percent of the entire federal capital territory.

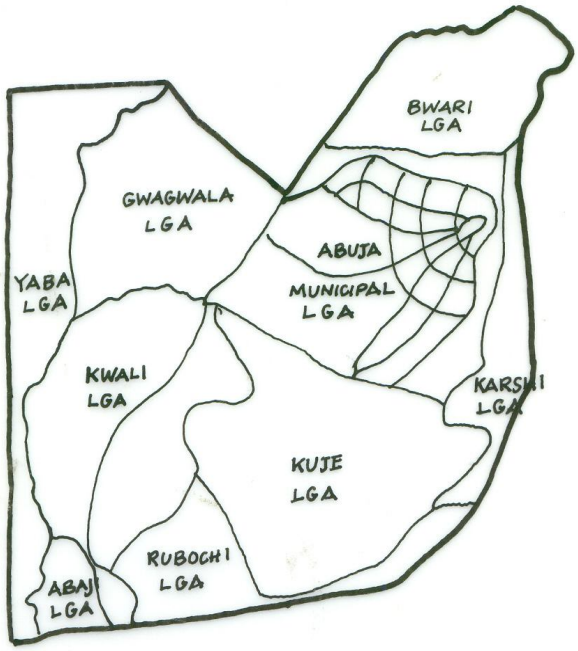


Fig.6.2 The Abuja Map showing the area councils.

The federal capital territory itself consists of a tilted plain rising from an elevation of 70m in the southwest corner to above 760m at the north- east corner. Rising out of this tilted plain are numerous rocky knolls. The hills either occur as clusters or form long ranges. The most famous of these include the Gawu range in the north west, The Gurfata range south – west of Suleja, the Bwari – Aso range in the north east, the Idon – Kasa range north west of Kuje and the Wuna range north of Gwagwalada.

Like in other parts of the country, the FCT records its highest temperatures during the dry season months, which are generally cloudless. This falls within temperature range

30^0c and 37^0c. During the rainy seasons, there is dense cloud cover and temperatures could drop to as low as 7^0c.

6.2 Abuja city planning

The Abuja master plan borrows wings from Lucio Costa‘s airplane plan for Brasilia and utilizes the circulation pattern from Tokyo city.



Plate 6.1 Abuja master plan

The two major concentric rings of high ways that mark the outer perimeter of Abuja plan is in the form of drawn bow with the outer ring, the expressway, the bow, the inner ring distributor as the string and the total city centre an arrow aimed at Aso Hill.

The city is planned in six phases, each with ITS design proposals for city planning, functions and projected population. The phase currently under development – the Central Area, is divided into seven districts namely:

Garki I district	**Wuse II district**
Garki II district	**Wuse II district**
Wuse I district	**Asokoro district**
	Maitama district

Central area

The central district area is for diplomatic structures and low-density residential areas. The central area (core) has been planned to host the following:

a. the three arms: the national assembly, the presidential complex and the Supreme Court Building.

b. the ministerial and state government liaison offices

c. The national hall square

d. The cultural spine: the national conference, national archives, national museum, Mosque, cathedral, and library.

The central business district is for commercial and economic activities the central market, the national sport complex.

The other six districts are for high-density residential housing and supporting facilities for both public, private ownership and prospective developers. The necessary

infrastructures road, water telecommunications are provided for, by the appropriate service organization.

Elements of the master plan:

Central Area

- **The symbolic and physical focus of the city and the nation. The core or heart of the city which gives Abuja it's most distinctive character as a world capital.**
- **Axis towards Aso hill is the most important factor in the urban design of the area and extends to form a central development spine around which the organisational structure of the city master plan is based.**
- **Comprises the 3-Arm Zone (National Assembly, Presidential Complex and Supreme Court) Ministries Zone, Cultural Zone and CBD Zone, with complimentary provisions, open spaces and landscaping.**
- **Comprehensive transportation provisions and other services / infrastructure.**



Plate 6.2 Central Area Photograph.
Source: AUA Summit 2005 Publication

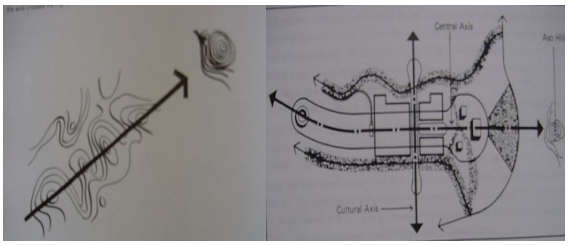


Fig. 6.4 Axial Relationship of the Central Area with Aso Hill.
Source: AUA Summit 2005 Publication

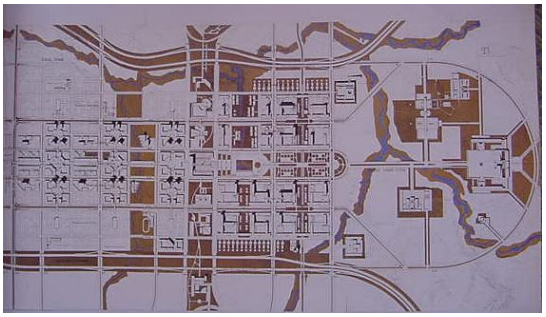


Fig 6.3 Central Area Plan.
Source: AUA Summit 2005 Publication

6.3 Site location

After careful considerations and examinations of various alternatives within the Abuja master plan, a site was selected for the project. The site was selected based on several considerations including accessibility, availability of land, relations to surrounding facilities and vistas.

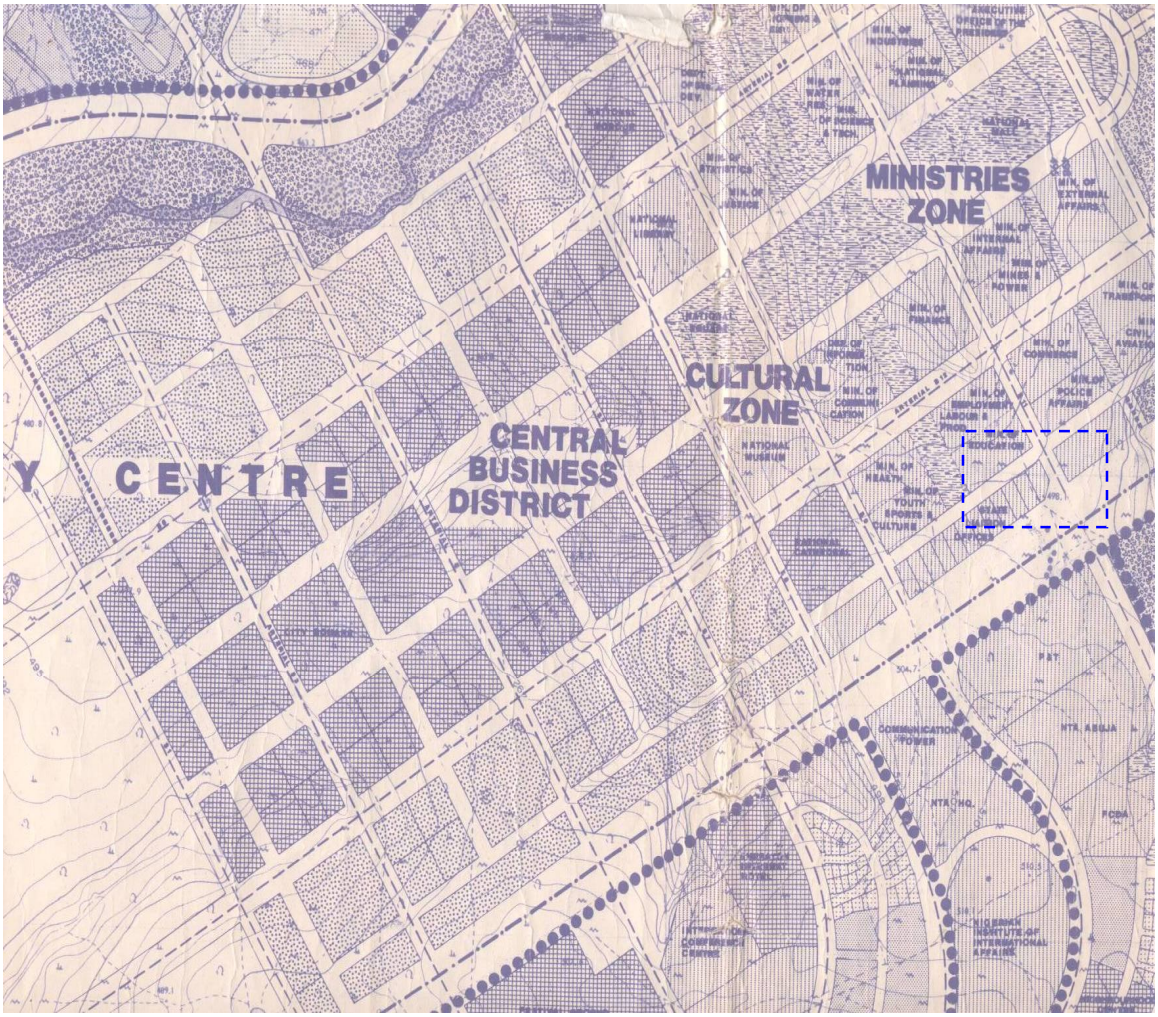


Fig 6.5 Master plan of the Central Business District showing the location of the site area in the blue box.

The chosen site is situated some distance away from the National cathedral and the National Action Committee on Aids Building. This selection stemmed from the cognition of the inherent site potentials and is based on the "major land use map" The site is bound on its south –west boundary by a dual carriage vehicular artery, from which an access would be tapped.

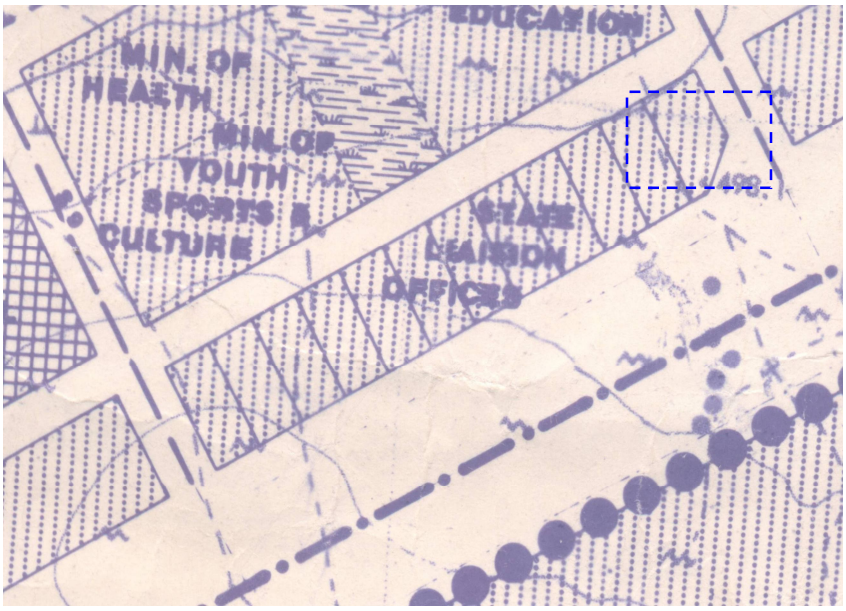


Fig 6.4 Plan showing the location of the site area in the blue box.

6.4 Site analysis

6.4.1 Physical characteristics and Existing site situation.

Topography

The site is located on an elevated plain that is virtually flat. It offers an opportunity for showcasing a cultural identity statement. The vertical interval between the highest points and the lowest point on the site is 2.5m. This offers an opportunity for height variation in the buildings elevation composition. The site is devoid of any rock outcrop, landforms or natural water body. Its

landscape exhibits a gentle gradient from its centre plain to its boundaries with an intermediate depression across the plain.

Geology

The major rock units underlying the site are synonymous with the parent city and are in three categories metamorphic, igneous and sedimentary rocks. The majority of the rock types include granite, gneiss and biotic granite, which are not expected to present any serious engineering problems, but should provide suitable foundations for engineering structures.

Soils

The soil type is predominantly laterite and does not present any subject for critical consideration especially considering construction requirements. Studies carried out shows that it has an average thickness of about 30m - 40m. This makes it suitable for building purposes.

The soil is deep and well drained and is supportive of ornamental plants that could be employed or integrated into the identity scheme.

Flora

The entire Federal Capital Territory falls within the Savannah, region. Shrubs characterize this vegetation with occasional densely wooded areas interspersed with vegetation, which is characteristically found along the riverbanks located further inland.

The vegetation cover of the site is predominantly of sparse tree cover, shrubs and farm waste. The cover reflects years of extensive over cropping of the site by farming activities.

6.4.2 Climatic characteristics and attendant design imperatives

A comfortable living environment will depend on maximizing the aspect of the environment, which reduces heat and the effect of humidity and protects from rain and dust.

Planning with climate should take place at all scales. Climatic parameters and planning implications for the project under study are discussed below.

Temperature

The FCT records its highest temperatures during the dry season when there is little cloud. Changes in temperature of as much as 17^0c have been recorded between the highest and lowest temperature in a single day. During the rainy season, the maximum is lower due to the dense cloud cover. Diurnal range is also much lower, sometimes no more than 7^0c in July and august.

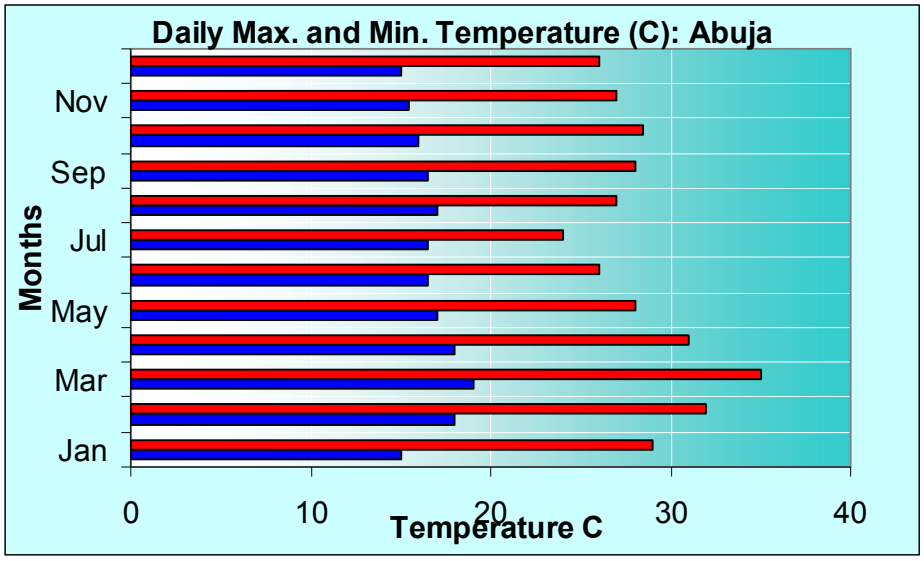


Fig.6.5 The temperature distribution pattern in the federal capital territory.

Prevalent wind

The tropical maritime air mass and the tropical continental air masses dominate the climate of the FCT. The tropical maritime air mass is warm and moist, forming over the Atlantic Ocean moving inland, in a Southwest to Northeast direction. The tropical continental air mass is developed over the Sahara desert, therefore warm and dry and blows in the opposite direction northeast to southwest.

Sun and cloud cover

In Nigeria, there is a general increase in the total hours of sunshine further north from the Atlantic coast. The mean monthly sunshine duration shown in the figure below is a critical issue. During the dry months, the variation increases from over 275hrs on the city. It declines during rainy season. Its peak is in august. at this time there is actually an inversion in the city site area where there is less sunshine hours than in the southern part of the FCT.

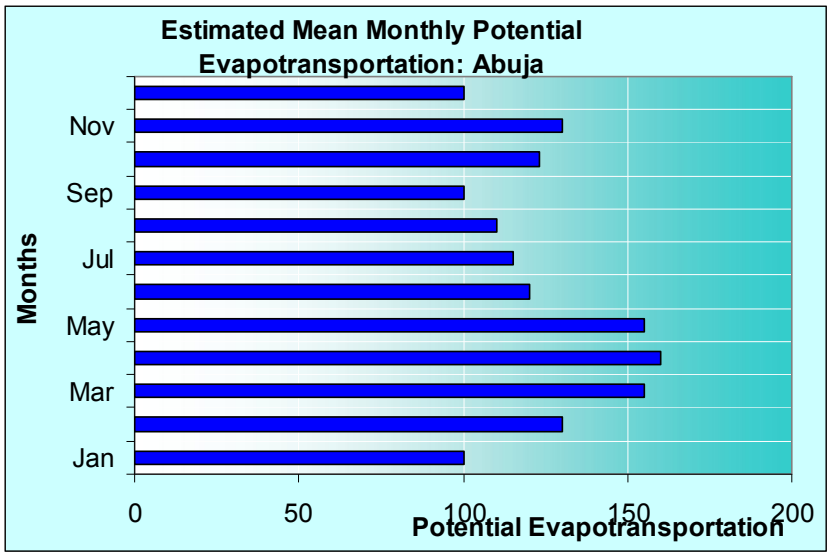


Fig.6.6 The Estimated Mean monthly potential Evapotransportation for Abuja

Maximum daily sunshine hours and minimum daily sunshine hours are experienced in December and August.' respectively with the corresponding figures of 8.06 and 4.10 hours. More sunshine hours are experienced during the dry season between November and April. There is however, an increase in cloud cover during the rainy season and a decline in the sunshine hours occur. Increase in temperature ranges have been subject of discourse in recent times. Here the architect is expected to make cogent decisions combining both passive and active measures in reducing the effect on human comfort. Major decisions that could affect the identity scheme are most probable here.

Relative humidity

Human sensibility to temperature is greatly affected by Relative Humidity. During the dry season, it falls in the afternoon to as low as 20%. In the rainy season, the relative humidity is much higher, reaching as high as 95%. In the morning hours, these extremes are not within the comfort zone of between 30- 70 % hence, solutions to arresting such in buildings have to be worked out by the architect. This could lead to major identity statements.

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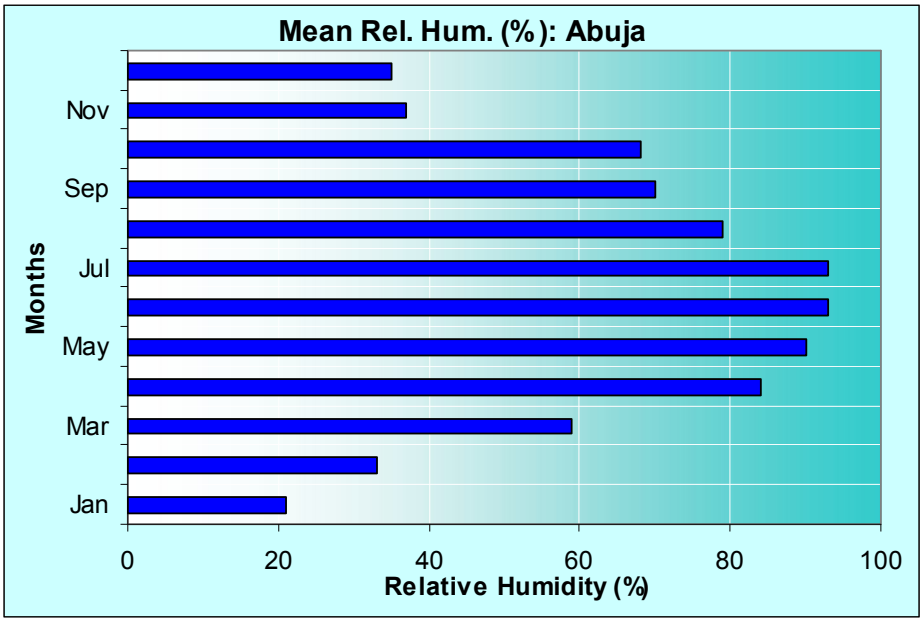


Fig. 6.7 Average monthly relative humidity for Abuja

Rainfall.

The start of rainy season is around March in the southernmost part of the territory to about April at the Northern limits. The duration of the rainy season therefore varies from about 240 days in the southern part to about 190 days in the northern part. The total annual rainfall varies considerably from year to year between 1632mm and 1403mm. It is normally concentrated in the

months of July, August and September. This concentration of rainfall shows the need for drainage systems that can handle large volumes of water very quickly. The site gradient provides for easy site drain.

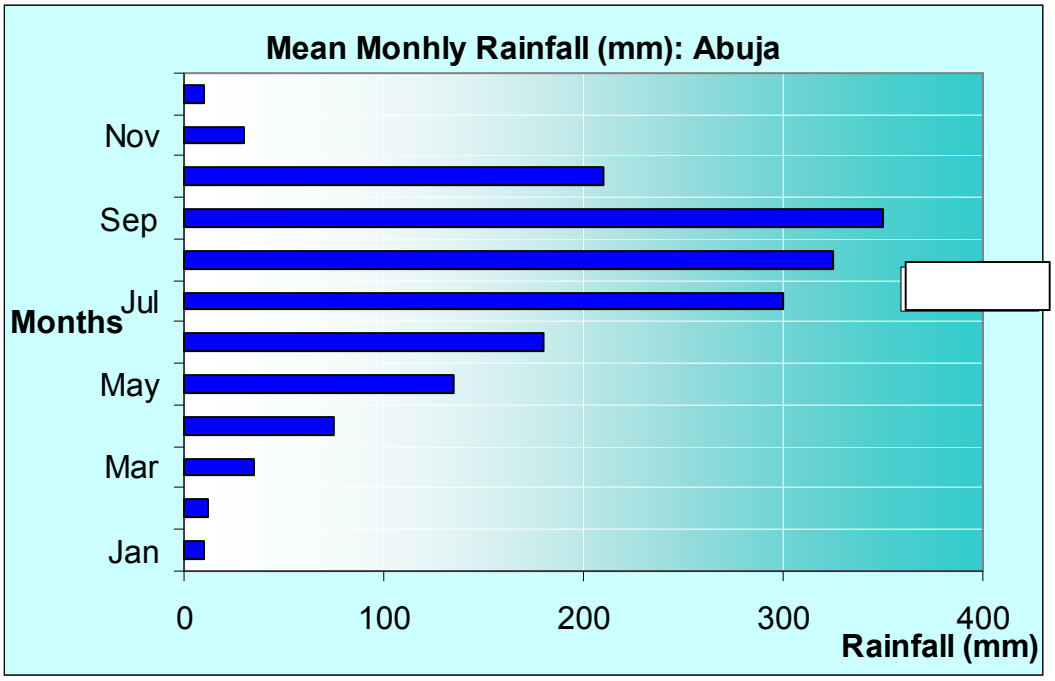


Fig. 6.8 Average monthly rainfall for Abuja.

6.5 Site suitability

After a careful consideration and examination of various alternatives with the Abuja master plan, a site was selected for the project. The site chosen is situated some distance away from the National Cathedral and the National Action Committee on Aids Building.

Choosing a site for any project depend on various criteria, which defines suitability for the project. However, the criterion to examine varies with the type of project. In this proposal the following site selection criteria have been considered.

Accessibility

This examines the ease of getting to the site. The site is accessible from the dual carriage way road (Ralph Shodeinde Street) on the south-west boundary of the site.

Availability of land

The proposed site has an area measuring about 11500 meter square. It is devoid of existing structures except for an existing fence wall around the site. This adequately meets the requirements of the design brief.

CHAPTER SEVEN

THE DESIGN

7.1 Preamble

This design is based on a comprehensive research into Benin Art and Architecture. Based on this research, a platform for the concept evaluation was achieved.

Before the evolution of an idea, certain determining factors were arrived at from the pre-planning data studies, they include:

- In ancient Benin, rectangular and circular building layout/planning were common.
- Artistic and traditional ornamentations were highly incorporated into their architecture by means of bronze castings, timber carvings, sculpture and ivory carving.
- Many of the Benin artworks studied reflected to some great extent the architecture of the place and vice' versa.
- Ancient Benin architecture employed the ring beam structural system in courtyards and large spaces.
- Courtyards and extensive foregrounds are very common spaces in Benin architecture.
- The courtyards were usually defined by the use of impluvium in drainage of water from the roofs which usually slant inwards to form a compluvium.
- The use of high vertical elements called turrets above an entrance to emphasize hierarchy in important buildings such as the Oba's palace were common features in ancient Benin kingdom.
- In ancient Benin, the Benin art and politics were inter-dependent but today, the people of Benin see art as commemorative, but according to Ben-Amos the author of "*Art, Innovation, and Politics in Eighteenth-Century Benin"*, Amos suggests that during the period that is the focus of this book, art in Benin was

strategic-as much about how to attain ancestral and political legitimacy as about the legitimacy that was attained.

The above mentioned factors have been some of the determining factors for the conceptualization of the design.

7.2 Design Brief

First and foremost, the proposal for a liaison office complex that would showcase the Benin art and architecture at the federal level was made possible as a result of the immense contribution made by Benin to African Art. The design scheme is therefore as a result of the need to retrieve this internationally recognized Primitive Art Style in an attempt at immortalizing them. Therefore the design project (Edo State Liaison Office Complex, Abuja.), serves as a medium to achieving this goal.

The proposed liaison office is expected to be a complex that will incorporate administrative functions such as office spaces, accommodation, cultural and recreational functions.

7.3 Concept Evolution

The idea of the planning concept was derived from basic shapes of some important and well known artworks of the ancient Benin kingdom. The plan of the entire complex is born out of the combination of two traditional fans and the Oba's staff of office called the *'Ebere'*. The ebere is a highly ornamental peace of artwork that was always in possession of the ruling Oba. The traditional fans are usually used by slaves on both sides of a seated king to fan the king in most African Palaces. In Benin these fans are usually considered as

artifacts as they are highly carved and ornamented by the *Court Art Artists*-artists that are hand-picked by king to work only him.

The concept of the elevations is the result of an attempt at reflecting Benin art and architecture. This was achieved by incorporating some well known artifacts into the building elements. Some of these building elements include columns, parapets, fins, fenestrations and walls in general were made to take the form of well known artifacts instead of the conventional forms.

7.4 Components of the Design

The proposed project is divided into four major sections which are:

- Liaison office section
- Accommodation section
- Let-able office section
- Recreational section

7.4.1 The Liaison Office Section

This section contains the necessary units that control the whole complex. These units includes; administrative Unit, political and counselling unit, and cultural unit.

Administrative unit: This unit has the director general as the over all head of the complex. He is assisted by the assistant director general. The administrative unit comprises of all offices on the first floor with some on the ground floor. The departments under the admin include accounts department, personnel department, information department, audit department.

Politics and Information unit: This unit is responsible for all political, legal, state, and local government activities. The departments under this include the local government affairs department, political affairs department and information department.

Cultural and entertainment unit: This unit is responsible for all cultural promotion activities. It includes departments such as the exhibition departments, research library, internet cafe and restaurant.

Accommodation section

This section is responsible for providing accommodation for all government officials on official duties and also for the general public on commercial bases. It is divided into three basic units the administrative unit, the reception and service unit, and the suites.

The administrative unit comprises of the accommodation officer, accommodation clerks, and porters lodge. A total of 75 suites have been provided to cater for both official and commercial purposes.

Let-able Office section

This section is the largest section. It is a seven storey tower that rest on a two storey podium-the liaison office section. This consists of one service floor and six typical upper floors that are designed to be flexible in order to suit various company needs.

Recreational and Public Facility Section

This section provides such facilities that help to relax the individual after a hard day's job at the office. This section is also fully commercialised. The recreational section consist of an indoor games hall, club house with lounge and bar, gymnasium, squash and

lawn tennis courts, multipurpose halls, public toilets and large green areas with landscaping elements.

Schedule of Accommodation and Spatial Requirements

7.5.1 The liaison office section (all dimensions in metre square)

I. Administrative Head Unit

Director General's Office and Toilet……...45

Secretary to D.G……...30

Private Waiting Area…….……...20

Conference Room.…….55

Asst. Director General's Office and Toilet ……..……...40

Secretary to Asst. D.G……...30

Private Waiting Area…….……...20

General Office and Stationary Store (Admin)……..60

Executive Lounge and Bar……55

4 No. Intermediate staff offices.....48

Executive officer Personnel.....30

Secretary.....20

General office Personnel.....40

Executive officer Audit.....30

Secretary.....20

General office Audit.....40

4 No. Intermediate staff offices.....48

Accountant's Office.....30

Computer Room.....20

General office Accounts.....40

Cashier and Waiting.....15

Cash Room.....9

745

II. Politics and Information unit

Executive officer politics and counselling.....30

Secretary/waiting.....20

General office Politics and counselling.....40

Executive officer Local Govt. Affairs.....30

Secretary/waiting.....20

General office Local Govt. Affairs.....40

Information officer.....24

General reception and waiting.....64

Main Office and General Information.....30

Political Conference and Auditorium.....320

618

III. Cultural and Entertainment unit

Exhibition Hall.....64

Cultural promotion Officer.....20

Archives/Store.....20

Research Library.....80

Library Staff.....12

Store.....8

Internet Café.....80

Café Staff.....12

Store.....8

Restaurant.....64

Kitchen.....24

Kitchen Store.....9

Kitchen Staff Room.....15

Kitchen Yard.....15

Toilet.....4

435

Accommodation section

Accommodation Officer.....24

General Office Accommodation.....36

Porters Room.....15

Reception/Check-in and Waiting.....45

Laundry Services.....40

3 No. Common Rooms.....90

42 No. Executive Suites.....1260

33 No. Suites.....660

4-Room Boys' Quarters.....60

Conveniences (Boys' Quarters).....42

2272

Let-able Office section

6 Floors of Let-able Typical Office Spaces.....5520

Service Floor.....920

6440

Recreation and public service section

Multipurpose Hall.....320

Open Air Pavilion.....400

Lounge/ Bar.....80

Kitchen and Store.....30

Kit. Yard.....25

Gymnasium.....110

Equipment Store.....12

Indoor Games Hall.....90

Equipment Store.....24

Squash Court.....60

Spectators seating.....24

13 No. public conveniences.....40

Lawn Tennis Court.....253

Banking Hall and Waiting.....46

Bank Manager's office and Toilet.....36

4 No. Cashier Cubicles.....18

General Office.....50

Customer Services and Special Operations Office.....18

Cash Room.....9

Strong Room.....9

1654

Total Area = 12,164

Plus 20% Circulation = 14,596.8

Approximated Total Area of Design Project = 14,600 Metre Square

CHAPTER EIGHT

CONCLUSION

8.1 Preamble

The Central philosophy of this study envisages man as specie in an ecological framework. This ecological framework consists of man's own artefact. His buildings must therefore be regarded as species in the ecosystem he finds himself. Just as plants and various animals co-exist in an ecosystem, we must therefore think of the society as an ecosystem with a dynamic course through time.

True regional architecture can not be developed through romantic approach by an adaptation of newest local fashions of different regions. However, this study is not to be conservative. It does not preach total discarding of modern change. Rather it envisages a healthy synthesis of traditional and modern styles.

8.2 Summary

In the first chapter of this thesis work we were introduced to the main topic of the research. The topic which is Edo State Liaison Office Complex is derived from the need to integrate many functional units within a complex. For this reason, an office unit, an accommodation unit, a recreational unit, and a commercial lettable office spaces were brought together to form a complex.

The next chapter went further with intensive literature review on both the main and the subtopic. The definitions of some important terms were brought to lime light. The importance of using liaison office as a medium for expressing regional character came under discussion. In Nigeria, most liaison offices do not reflect the regional character of the

states they claim to be representing. However in Nigeria, liaison offices are seen in different context compared to other parts of the world. This provided the bases for understanding the trend of liaison offices in the Nigerian context.

In the following chapters three and four, further literature review of the subtopic (an attempt at reflecting Benin art and architecture) were conducted to acquaint ourselves with the research area. Regionalism is the major theme of the research area and this is very much lacking in Nigerian. Many Nigerian public buildings and infrastructures are ill-adapted to the surroundings in which they are positioned. Some existing examples of regional buildings in Africa and the world over were also analysed to again acquaint ourselves with the concept of regionalism. These were followed with case studies in the following chapter. The case studies conducted helped to provide a common ground for the designing the liaison office in question.

8.3 Conclusion

This thesis research was born out of the immense contribution of Benin Art in the Nigerian Art history and by the need to retrieve this internationally recognized Primitive Art Style in an attempt at immortalizing them. Facts have shown that in the early Benin Kingdom, a great relationship existed between Benin Art and Architecture. This is contained in- an article titled Art, Innovation, and Politics in Eighteenth-Century Benin, by Paula Girshick Ben-Amos, she brings together an understanding of Benin Art and politics that is based on her own extensive fieldwork in Benin, which began in the 1960s with her collection of oral traditions. Considering Ben-Amos's huge body of relevant historiographic and archival information, with recent research by other Benin specialists, and with objects, including their intricate iconographical details. Using this extensive

background, Ben-Amos questions to what extent art operates as political strategy, how objects acquire political meaning, and how the use of art enhances and embodies power and authority. These historical backgrounds have provided the platform for many of the forms used in the design.

The thesis has been able to reflect to some extent some of the cultural heritage of the Benin people. This thesis design may not be a perfect regionalist approach but it has been able to justify the research area.

8.4 Recommendations

Bearing in mind, the complex nature of any society usually of a high heterogeneous nature, one must therefore find design expressions peculiar to a region which truly reflects the spirit of a place and the essence of the people in its architecture.

The problems that exist with public buildings in Nigeria are that of cultural identification, architectural regionalism and cultural assimilation among the citizens all these have not been given proper recognition in existing public buildings.

As part of the author's recommendations, the author will now leave you in the words of Labelle Prussion which says that. *"An Architecture that satisfies the physical comfort may also create social discomfort. If architecture of the future is to serve the former and avoid the latter, it must take cognizance of the significant social relationship in the live of those who inhabit the space it provides".*

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DESIGN DRAWINGS



Plate I Site Plan

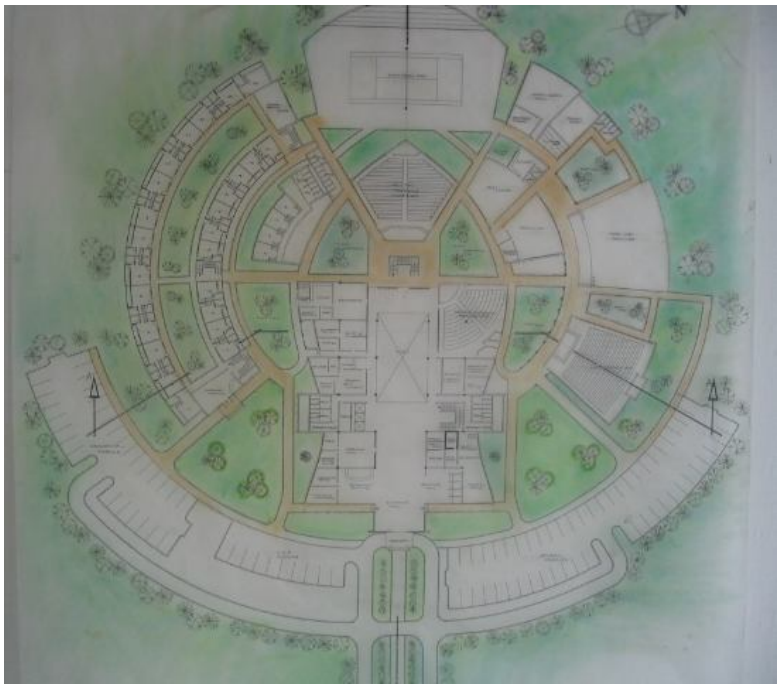


Plate II Ground Floor Plan

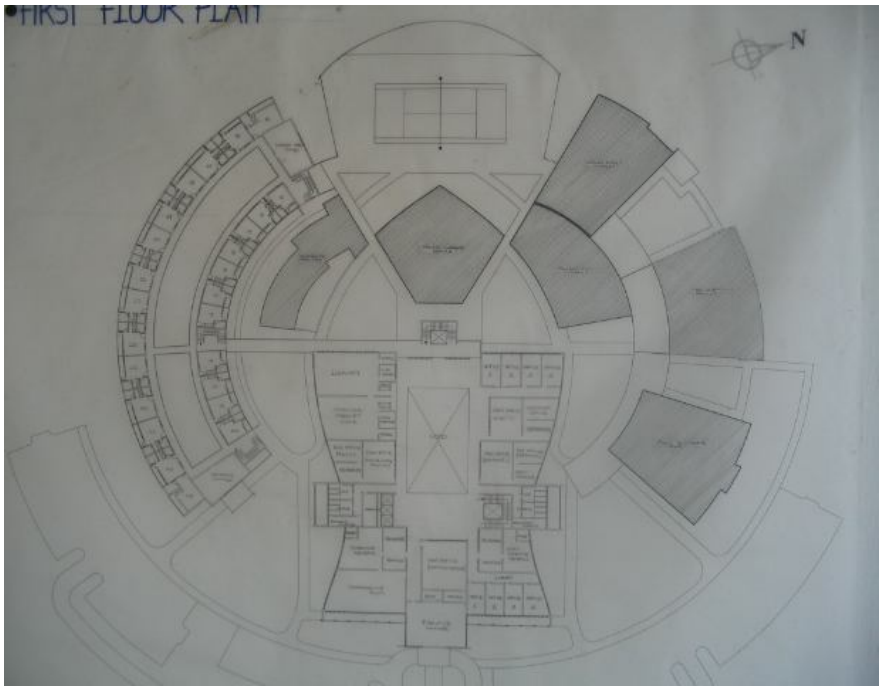


Plate III First Floor Plan

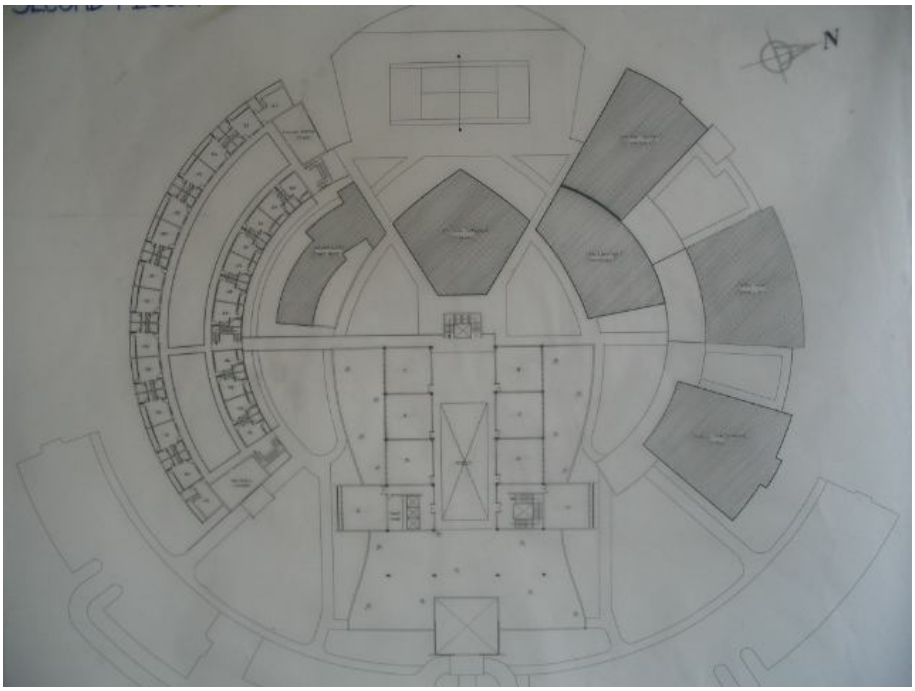


Plate IV Second Floor Plan

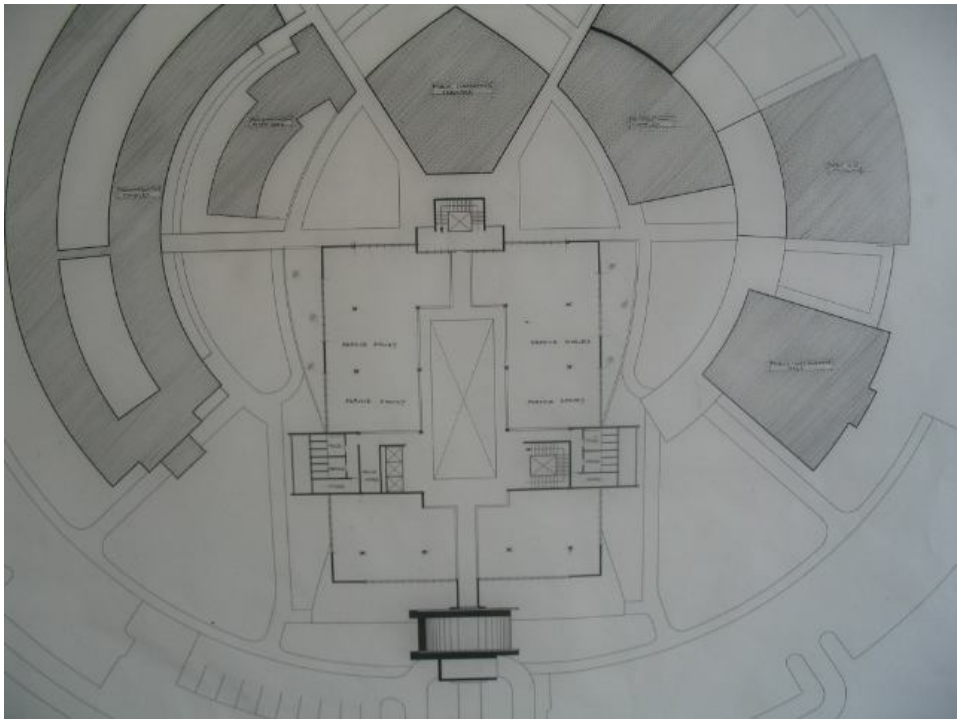


Plate V Typical Upper Floor Plans

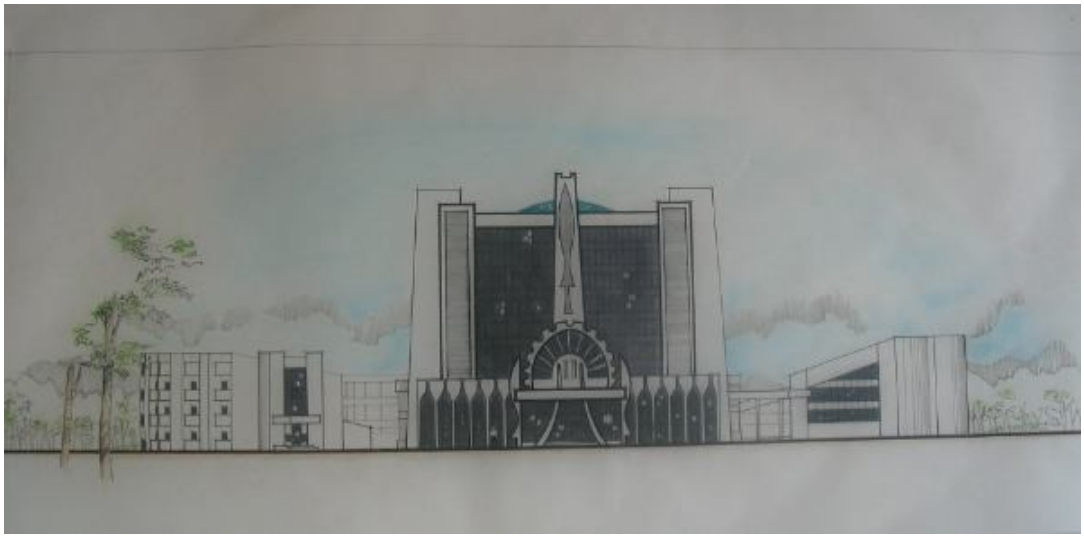


Plate VI Approach Elevation

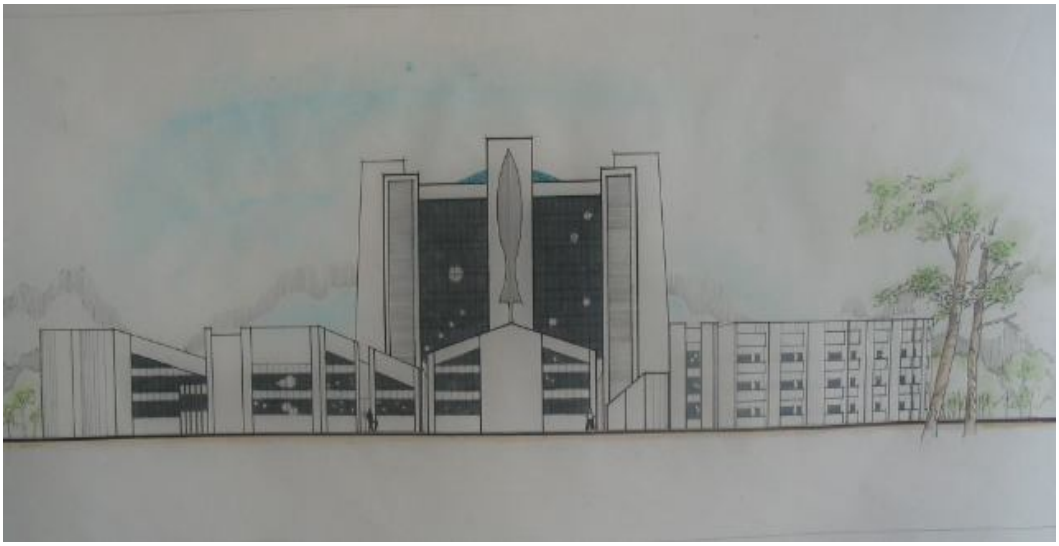


Plate VII Rear Elevation

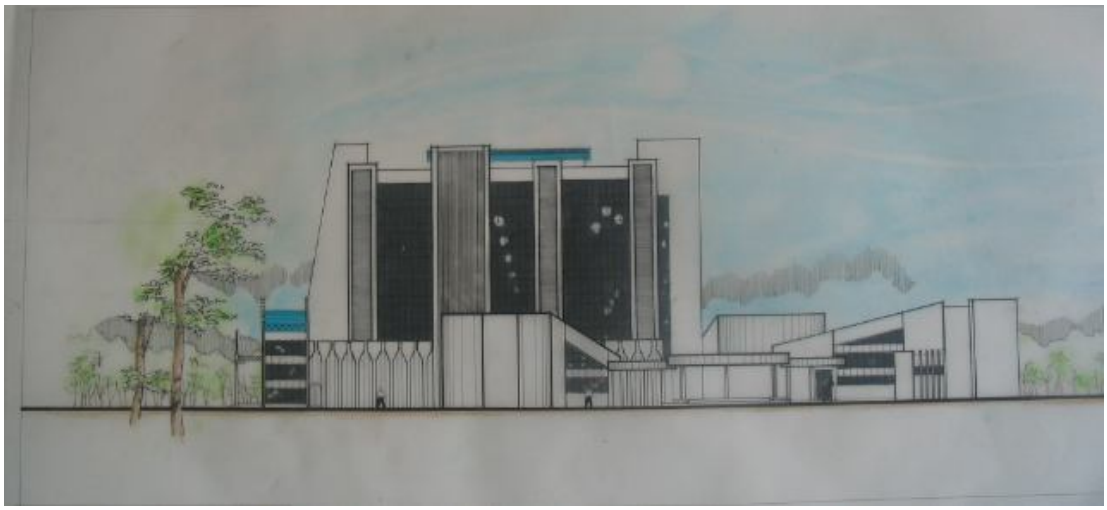


Plate VIII Right Side Elevation

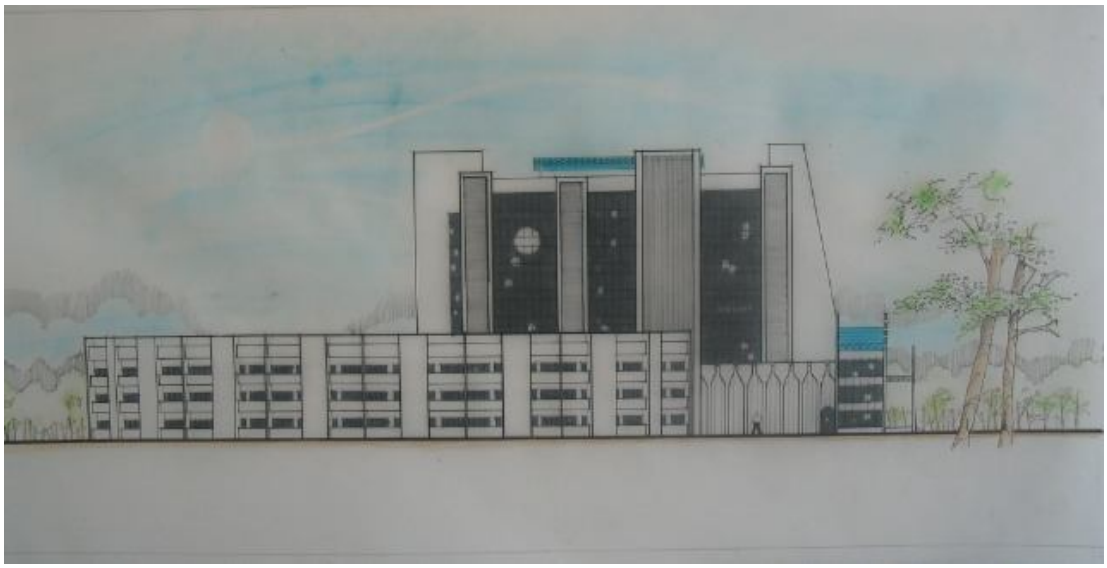


Plate IX Left Side Elevation



Plate X Sectional Elevation (Section A-A)

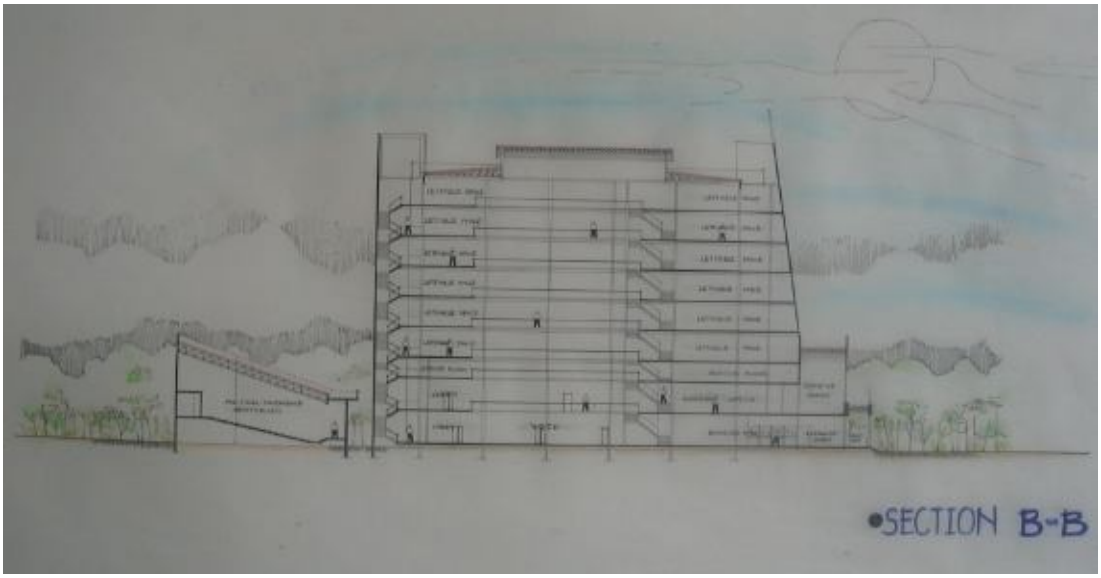


Plate XI Sectional Elevation (Section B-B)

MODEL PICTURES



Plate XII Approach View



Plate XIII Right Side View



Plate XIV Arial View of Model



Plate XV Arial View of the Entrance Façade.