COMMUNITY CENTRE, KANO AN EXPOSITION OF TRADITIONAL VALUES IN ARCHITECTURE

BY

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DECLARATION

I MAHDI IMAM MUKHTAR, do hereby declare that this thesis entitled, "COMMUNITY CENTRE, KANO An exposition of traditional values in Architecture" have been composed by myself and is a record of my own research/site work and it has not been accepted in any previous publication for a higher degree. All quotations and information are specially acknowledged.

Signature

10/9/91

Date

CERTIFICATION

This thesis entitled "COMMUNITY CENTRE, KANO, An exposition of traditional values in Architecture". by MAHADI IMAM MUKHTAR meets the regulations governing the Award of the degree of Master of Science in Architecture of Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

- To my parents Alhaji A.T. Imam Mukhtar and Hajiya Amina A.T. Imam Mukhtar.
- To Hajiya Sadiya Laulau.
- To Farida (Ni ima) Yahya Imam.

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ABSTRACT

It is clear that in the march towards economic and technological emancipation, a bustling city with different communities, interaction and socialisation amongst these communities is of paramount importance. Kano as a fast growing city that attract.; people of different kinds all over its environment needs agencies and facilities that will cater for these communities general and individual needs - A community centre.

Thus socio-traditional requirements of the people in the field of education, built environment, climate and in short their life style should be studied such that a well designed space proposed as the community centre is produced to meet their communal needs.

The increasing interest in the effect of climate on man and in the relationship between climate and architecture, the concept of this community centre will utilise traditional and modern styles, where necessary, so that a wonderful and new result adaptable to both the present and hopefully the future generations.

Kano city is a living monument of African history in the field of architecture and therefore

a duty bound, as a mark of respect, to preserve and build on its past achievements.

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1 CHAPTER ONE

1.0 INTRODUCTION

In rural or urban area, people have to live in communities. And the end result of this living togetherness is the obvious and inevitable need to communicate, share ideas and interact in all spheres of life common amongst them. Socialise, harmonise to have a united community for the development of all. As such, communal spaces that ranges from such little things as tree shades and sitting places are strategically located in the centre or otherwise of a town.

The rapid urban growth of Kano city over the last twenty or 50 years has been almost unparalleled in the history of any town in Northern Nigeria. And the city's "building boom" richly nourished by the market nature of the town and oil wealth of Nigeria, has had dramatic effects on the existing historic urban fabric. The speedy architectural and urban developments have indiscriminately disintegrated the anatomy and identify of the traditional city, eliminating its charming traditional architecture. Nevertheless, the prevailing design concept and architectural character inherent in many of the traditional buildings will be revived as much as possible in this community centre.

In Hausa land (which Kano is in its heart), where this project is to be located, the idea of communal space, Dandali in Hausa, comes from the concept of courtyard in dwellings, where socially it functioned as a dynamic space which people gathered to socialise in an open, but yet private living setting while environmentally the courtyard effectively modified climatic conditions.

This communal space is where boys and girls play, dance and sing at night to pass the time so that a sort of a ghost town is avoided at night. As this space becomes a focus of attention, it eventually develops into a centre of social, business and educational activities of the locality depending on the population and facilities available.

Any area with centralised facilities or services may tend to inspire greater communal and emotional attachment to that area that may even lead to greater local pride or symbolical identity.

These facilities will link the inhabitants through the sharing of accessible local facilities as well as services provided within a convenient walking distance from their respective houses.

1.1 MOTIVATION

Today we are at a particular crucial stage of a major revolution in human society. At this present phase of industrial revolution, industrialisation is reaching all parts of the world and human society is becoming urbanised on an international rather than national scale.

Traditional values in architecture are no more considered due to the industrial trend and thereby forgetting the importance of these values to our environmental comfort. Due to this, more and more problems are created and we are not that developed to meet the challenges of the industrial world - so the need to revive our traditional architectural values such that blending it with the modern values will give a wonderful result.

The ever growing population in Kano walled city is such that communal spaces to cater for social, recreational and educational needs are lacking and must be provided to avoid:-

- Poor and insufficient avenues for communities to solve problems that may arise amongst them.
- Idleness which results in robbery and vandalism.
- Promotion of tribalism and sectionalism which results in government loosing the confidence of

people in solving economic and social matters.

1.2 AIMS AND OBJECTIVES:

- To provide a conducive atmosphere for the promotion of social, recreational religious, traditional and educational tolerance.
- To facilitate communication between the government and the communities.
- To promote solving communal problems collectively.
- To provide a conducive design acceptable to the users and their climate.
- To provide employment as it will be a place of vocational training and revenue generating centre.

1.3 SCOPE:

The design thesis of this community centre will provide:-

- Administrative offices for the whole complex
- Socio-cultural complex (museum, exhibition area)
- Educational complex (library, lecture rooms and possibly workshops for vocational training).
- Recreational/welfare complex (multi-purpose hall, clinic and shops).

1.4 CONSTRAINT:

In this case, possible site and financial problems due to the hard economic crunch are envisaged even though time to carry out the research properly is also of great importance.

1.5 METHODOLOGY:

The method to be used in this thesis will be documentation of existing community centres and see how traditional values (especially architectural) of these localities were used in the design of the community centre, use of magazines, journals and other materials available.

1.6 USERS/CLIENT:

The facilities of this community centre will be provided in such a way that all categories of the community (young and old, male and female) could benefit, but in particular the people living within Kano walled city.

This project (thesis) will be made in such a way that the government and the community are the financiers so as to avoid failure in revenue generation and the desired goal of uniting the community if it were an individual affair.

CHAPTER TWO:

COMMUNITY CENTRE AND ITS EVOLUTION

2.0 COMMUNITY:

The word community defines an urban geographical entity within the city or town settings recognised by the urban designer/architect or planner as a part of the city or town where the inhabitants share certain facilities called public facilities and which invariably constitute the core of the community. The social scientist referred to a community as a settlement having the same socio-cultural background. A well planned and unplanned city or town is therefore supposed to be divided into communities - small and/or big units depending on the population size.

2.1 COMMUNITY STRUCTURE:

Having known the word community, a comprehensive structure that a community is supposed to have, using that proposed by the departments of Architecture and that of Urban and Regional Planning of Ahmadu Bello University, Zaria, for Zaria urban authority, as an example will be presented. After analysing the problems of Zaria and its future growth through research, the two departments proposed a hierarchy of community units. In principle, each of these units

are related to a certain facility or group of facilities which forms the core of the units.

The following community structure was proposed with projected population figures for the year 2,000 A,D,:

A	-	Household or compound	-	The family population
B	-	Housing cluster	-	750-1,000 inhabitants
C	-	Residential sub-sector	-	4,000-5,000 inhabitants
D	-	Residential sector	-	12,000-15,000 inhabitants
E	-	Community	-	40,000-50,000 inhabitants
F	-	District	-	120,000-130,000 inhabitants

2.2 FACILITIES AT LEVEL OF COMMUNAL UNITS:

As the research for Zaria urban authority shows, each level of communal unit is supposed to contain within its core some public facilities and are listed as follows:-

A. Household or compound - The sitting room or courtyard.

B. Housing cluster - Nursery and primary schools. Mix residential/commercial houses.

C. Residential sub-sector - Nursery and primary schools, health clinic, 4 shops, trading space for 110 kantas, a play field.

D. Residential sector - Nursery, primary and secondary schools, health centre, mosque/ church, community centre/Youth club, small shopping centre (10 shops), small market (50 stalls), a play field.

E. Community - Hospital, community hall and open air theatre or assembly, 2 comprehensive health centres, 2 cemetries/burial grounds, market (600 stalls), shopping centre (120 shops), sport centre (with stadium).

2.3 EVOLUTION OF COMMUNITY CENTRE:

In this civilised world, community centres came about from the desire of middle class citizens to do something for themselves socially. In some developed countries like the U.S.A, they are supported by religious, voluntary and civic bodies or groups while other countries like Canada and U.K., their support come from the local and national government agencies.

These centres are basically to provide some essential services like health, training in vocational skills needed for physical economic growth and survival and educating members of the community.

In the early evolution of community centres buildings were erected during world war I for recreational and social services to the soldiers. After the war, the buildings were then taken over by the communities for their communal use and were first established in the U.S.A in 1903 and later U.K in 1932.

The idea of community centres in Africa and Nigeria in particular, revolves around the traditional rulers palaces in large open spaces from where people congregate during spiritual and cultural festivities.

In Hausaland, community centre revolve round communal open space known as /"Dandali" within a settlement where young girls gather to sing and dance. This action naturally attracted their male counterparts who engaged in courtship with the girls, local boxing and wrestling, while some dance and sing in a circular form. These communal spaces are found in different locations within a settlement but where the population size is small, it is only found in front of the rulers palace. Thus, it serves as political, administrative and socio-cultural centre of that settlement.

With the coming of Islam, the "dandali" also serves as an educational and r· igious centre duet,6 to the introduction of the mosque into the centre. Again, smaller mosques were built in the different locations with smaller danlalis beside the main one in front of the rulers palace. This helps in having greater social interaction and communal unity, amongst individual.

The colonial rulers introduced western education which had its consequences in producing a new set of ruling class. The earlier concept of community centre was distroyed by creating a new civic centre with administrative, business and recreational centres away from the traditional town centre. This created class difference in form of the Government reserve· areas (G.R.A.) and clubs which results in less interaction amongst individuals. This kind of living should be avoided as the consequence may breed disunity.

Nowadays, there are various ways/approaches to the design of community centres as there is no guiding standard that have yet been developed. This could be due to the fear of the constant emerging new solutions to unprecedented communal needs, and therefore, the concept should be kept as loose to

allow the exchange of ideas and socio-cultural challenges. Community entres have to do with stimulating, maintaining and deepening a sense of communal belonging, the loss of which is universally lamented. It should be a place of creating variety of activities during leisure times.

2.4 DANDALI, A HAUSA COMMUNITY CENTRE:

Dandali in Hausa language means any open space within a city or town where young people and children regularly gather in the evening to play and where a small market may be held during the day. It can as well be referred to as a joint centre within a city or town where current issues, social problems and propaganda (information) are discussed or received. During political times, the Dandali serves as a campaign ground for the politicians. Older people usually gather after their commercial activities during the day (which may be within the same spot) to hold on their discussions while the young ones are engaged in their recreational activities like dara (draft), dambe (local boxing), kokawa (local wrestling) and so many recreational activities. The young girls are not left behind as they engaged in dancing and singing for their male friends with drummers playing some tunes for them. During hot times when the houses are extremely hot, most men

spend their evening outside and the Dandali serves as a breezing space for fresh air due to the trees around.

Other Hausa towns call dandali as "Makwalla" or "Kaswar yara", petty or children's market respectively, which basically have the same function as the dandali. For these kind of space, it is of paramount importance to have big trees around since even temporary structures are being restricted. In other words, fat tree trunks with wide shade forms the principal structure as this kind of market is located within access roads that converged towards the palace. It is market within the day and a recreation area at night.

In small towns that do not have so many open spaces, it has been the tradition during the dry season to stage the recreational activities in a big open space just outside the town due to bright cloudless night and cleared environment. But during the rainy season, the recreational activities take place within the town, due to cloud cover, darkness and bushy environment for the purpose of security of the young ones and for easier access to homes once rain starts.

The most important point to note is that both commercial as well as the recreational activities are carried out side by side in about the same scale with difference only at the time each activity is being carried out most. Commerce in the day and leisure at night. Goods from food stuff (perishables and non perishables), clothing materials and electrical appliances are sold in the dandalis.

POST COLONIAL DANDALI

In recent times, some temporary structures are erected within the dandali in form of kiosks and sheds which are concerned with selling of snacks, cooked food and soft drinks. This makes it more convenient for people to even stay longer than necessary. Any traveller that was so unfortunate to arrive the town very late have to go to the dandali for food and accommodation otherwise he/she will be stranded. Praise singers, dancers, comedians, magicians and drummers are the other attractions that keep people moving at all times in the dandali.

As time goes by, more activities gain ground into the dandali. When a young man got married to a young girl, both being their first marriage, his friends, as a recent development, gathered and congratulate him by way of jisting, playing cards,

monopoly, ludo, draft etc. from early evening till late at night or till day break. This is for the friends to show their happiness to the bride as he weds and throughout the stay, food and drinks are being served to keep people alive.

During festivities, the dandali in front of the palace is packed full as people from all walks of life converge for one activity or the other. Most of the activities that take place are either done annually or done only during such occasions. This is the main dandali and the smaller danlalis around the town are not left behind as skeletal activities do take place during this festivities. Thus, we have two types of Dandali, the small one serving the local environment and the grand one serving the whole community on occasions beside the activities on normal days.

2.4.1 HEIRARCHY AND USE OF OPEN SPACES IN KANO

LOCATION	OPEN SPACE TYPE	TYPE OF ACTIVITY	
-Residential Unit (Compound)	Family Private Court Yards	Household Activities General Indoor Activities And Relaxation	Purely Private
-Residential Cluster Unit	Group Private Space	Social/Religious Activities	Semi Private
-Neighbourhood	Group Semi Private Space	Social, Religious, Educational, Commercial and Recreational activities	Semi Private
-Ward(Community)	Urban Semi Public Space	Social, Religious, Educational, Commercial and recreational activities	Semi Public
-City Unit	Urban Public Space	Social, Religious, Educational, Commercial, and Recreational Activities	Public

These are the natural open space types found in Kano city and the activit es that goes on in the spaces. Thus, the location of the space portrays the kind of structural form and activity that goes on. As it is seen, the bigger the more accessible/ or open to the general public, i.e. the spaces loose its privacy as its size increases which means that the intensity of activity increases as the open space increases.

2.5 TYPES OF COMMUNITY CENTRES:

The civilised world, the western world as they call themselves, put community centres into groups to which they could be approached in terms of design. We have:-

2.5.1 VILLAGE CENTRE - The nucleus of the community is the multi-purpose hall round which all other activities are carried out. Expansion takes place by simply adding a building to the centralised hall.

2.5.2 NEIGHBOURHOOD CENTRE - Two approaches; (a) Central courtyard to serve as the focal point of all activities and (b) a situation where all activities are under one roof. An example is the Dronten Agora, Holland which is under a glass enclosure that is heated and ventilated mechanically during winter and summer respectively.

2.5.3 COMMUNITY CENTRE - Consists of enclosed space around a central open courtyard of different activities. It is the integration of the two approaches in the neighbourhood concept.

2.6 AN IDEAL COMMUNITY CENTRE:

This should be a place for stimulating architectural form, in the sense that the structural outlook is appealing to the minds of the community. There should be as many institutions as possible such that it acts as an easy transition from passive to many kinds of active involvement so that it becomes a place where everyone of the community can go to when he/she feels like and is in the mood to meet other people. Fittings and equipment should be kept to a minimum and flexible such that no sharp boundries between the various activities if at all they do exist.

CHAPTER THREE

EXPOSING THE TRADITIONAL VALUES IN ARCHITECTURE

3.0 TRADITIONAL VALUES:

The values of traditional architecture of forms and concepts ranging from socio-cultural and environmental factors are now being relegated, picking international concepts by architects who are short sighted in their architectural vision which are busy cutting away from the roots of their traditional heritage in their pursuit of illusionary ideas under the shadow of technology. Time is now ripe for young visionary and brilliant architects to break a new system by attempting to resolve many of the dilemmas in these architectural misfittings using our architectural treasury which is full of traditional and cultural values. In Hausaland, it includes the life style of the people, its cultural institution and its adaptive ideas to environment which will eventually leads to the discovery of the buried treasure of the mastermasons for a better and visionary architectural future equal to the technological capability.

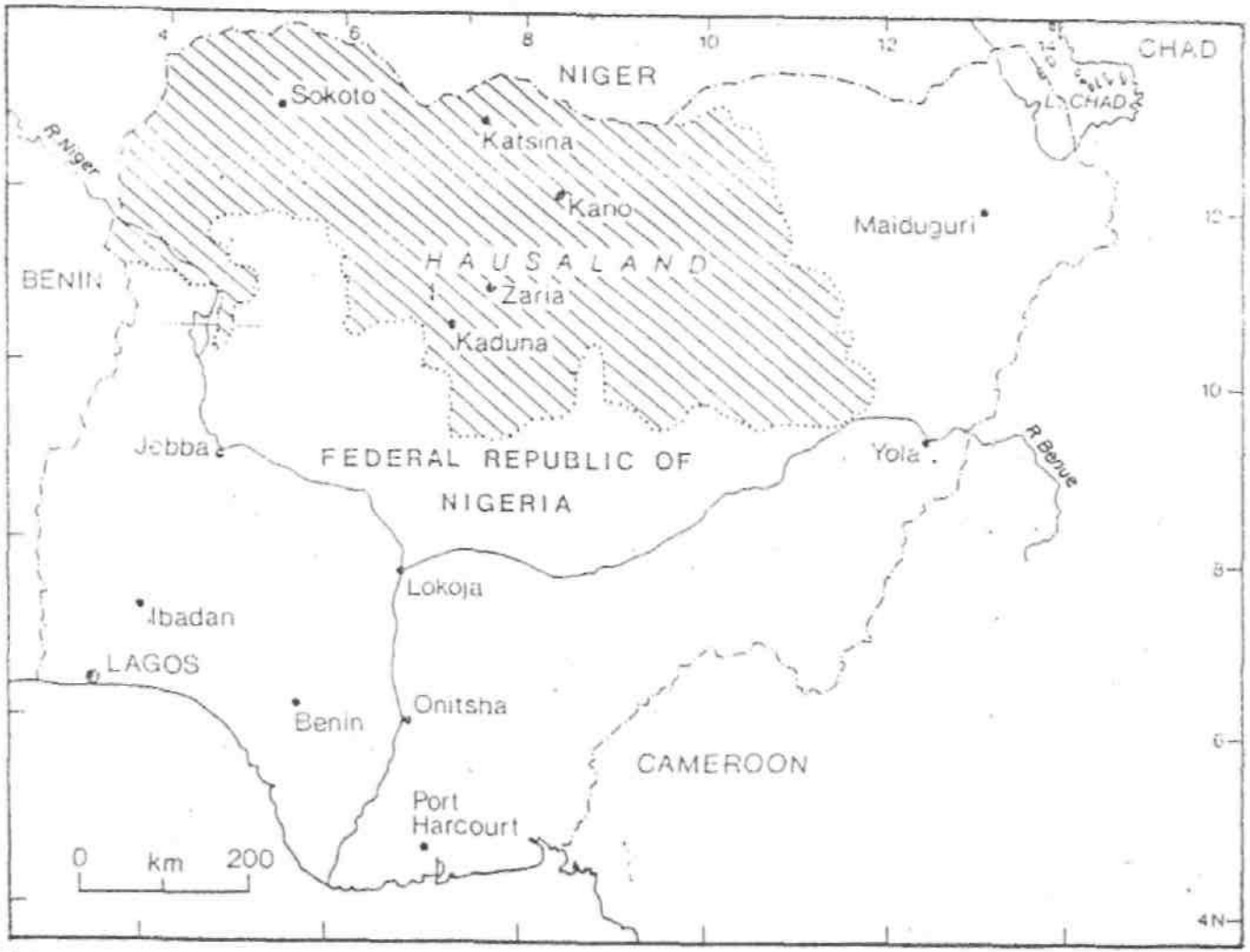
A precise definition of architecture had been quite difficult but one broad meaning is that

It is probably not difficult to understand why traditional buildings had not been given much architectural recognition - their non monumentality? Earlier concept saw nothing monumental in traditional buildings or worthy of reference even though Nikolaus Pevsner, an architectural historian, did not limit his acclamation of architecture to monumentality but says "that which evokes sensation by the treatment of surfaces and details". Traditional buildings are therefore more than instinctive creations because they were developed from a conscious effort to create functional space borne out of social needs within an aesthetically satisfying form.

Anything short of glass and concrete as the building component is never term architecture by the western world and to which these materials do not tally well with the environment without technological additives i.e mechanical gadgets that will control the environment.

3.1 HAUSA SETTLEMENT:

This proposed thesis will be in Hausa community and therefore the need to know where Hausa society is located and there architecture. Thus, Hausa states



3.0 The Location of Hausaland

lie inbetween the confluence of rivers Niger and Benue in Nigeria and to the sourthern part of Niger Republic. It is the geographical region between the sahelian and savanna regions and extended approximately from latitude 3.5^{o} east to 11.0^{o} east or 844 km and from longitude 10.5^{o} north to 14.6^{o} north or 400 km in Nigeria (Figure 3.0).

The Hausa-Fulani cities of northern Nigeria have the common characteristics of a dual urban structure which resulted mainly from the influence of British colonial rule. Deliberate effort was made to preserve the traditional walled cities and the socio-cultural values of the inhabitants from the influence of the colonial administrator and his western ideas.

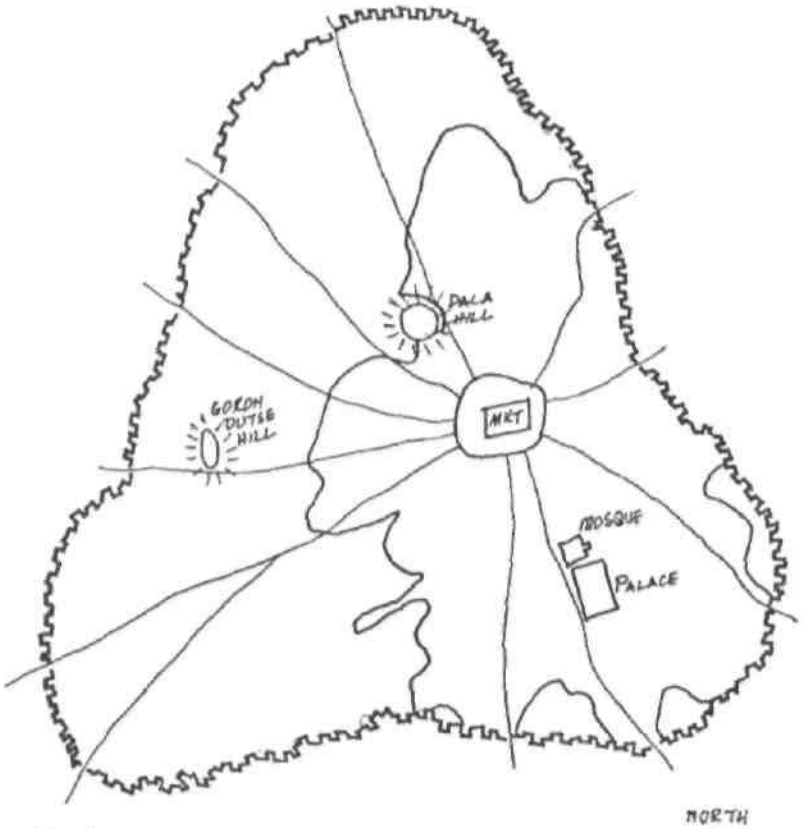
When the northern region was conquered in 1900, provincial headquarters were set up in each of the emirates and this attracted junior administrative staff and traders most of whom were from the south. But the British administrator, his staff and traders that came to provide supportive services were regarded by the indigenous population as "strangers" so were not allowed to reside within the traditional walled cities. Thus, new towns (Sabon garis) developed along side the walled cities, which have different planning and layout concept with the old cities.

Islamisation of the Hausa states gave rise to a concept of space which to some extent coincides with the traditional Hausa perception. Muslims orientation towards the qibla, east Mecca, coincides with one of the major traditional axis for structuring the Hausa physical world. Islam introduced concepts of space and its use. Hierarchy of spaces for worship and community gathering such that the dandali, a vast place for public gatherings, the palace, and the Friday prayer mosque are sited adjacent to each other at the centre of the city and together symbolises islamic law and government, state and community solidarity (Figures 3.1).

3.2 HAUSA ARCHITECTURE:

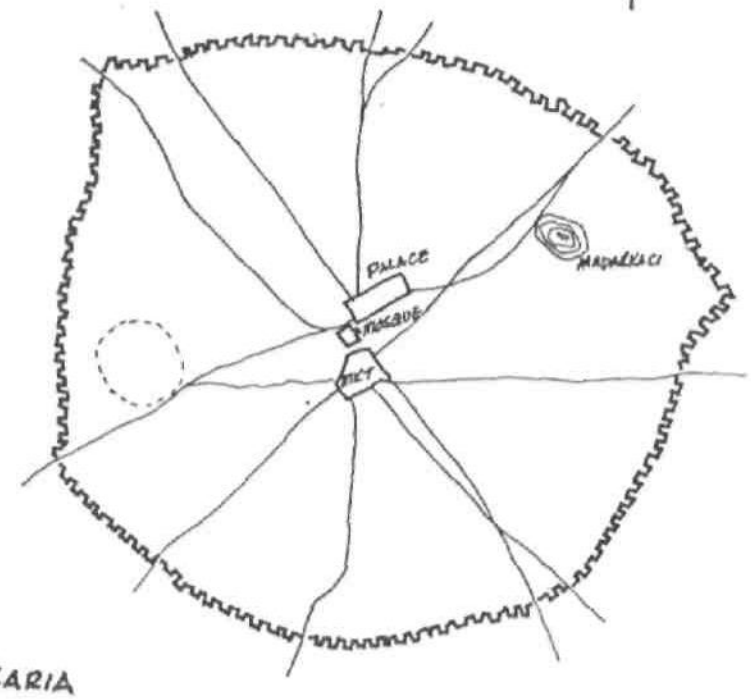
Earth or mud architecture, which is the tradition of most societies of the world is also the tradition of the Hausas to which Kano, the site of this thesis proposal is part. It is often described as impermanent and therefore an inferior material, forgetting its magnificent engineering feat in the construction of the great wall of China, great Ziggurats and the pyramids in Egypt.

The sophistication of mud technology reached the highest level of development in the Hausa vault and dome which are based on structural principle.



KANO

NORTH



ZARIA

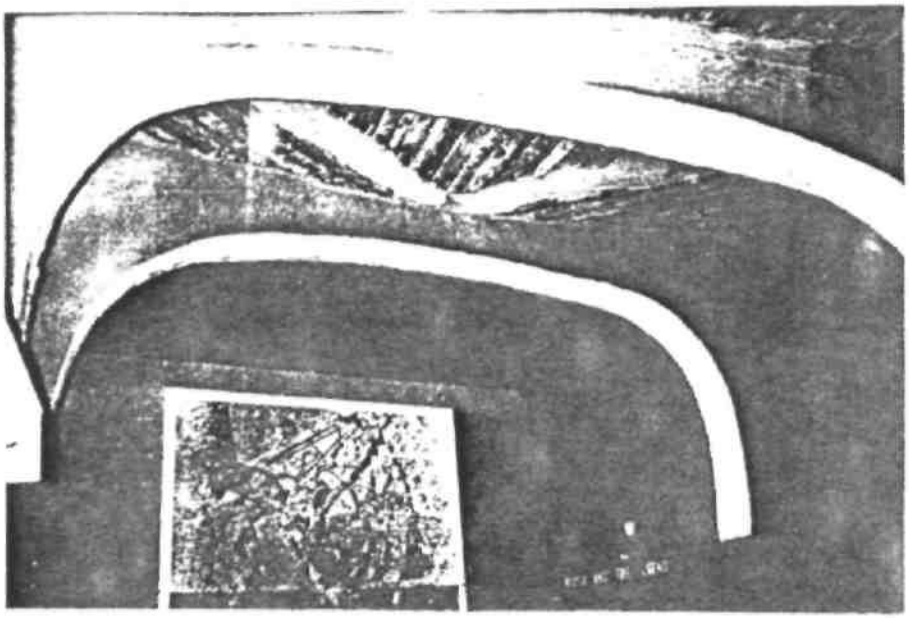
3.1 CITY STRUCTURE OF HAUSA/FULANI TOWNS WITH THE PALACE, MARKET AND MOSQUE AS THE FOCUS OF THE TOWNS.

This allows the roofing of rooms of large dimensions without the use of internal supports. Zaria Friday mosque is today a living example (Plate 3.2 and figure 3.3).

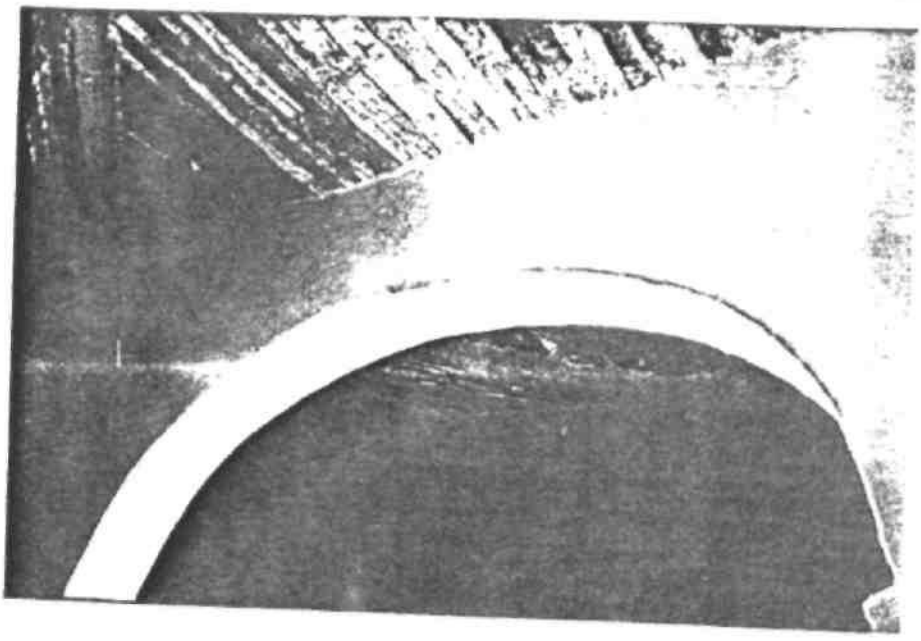
It is in the architecture of the compound that Hausa traditional culture and social organisation finds the greatest expression to an extent that the house form is created to suit the occupants as it is based on the peoples vision of an ideal life which even climate and materials are not considered to be the determinants.

3.2.1 THE HOUSE:

The Hausa house plan follows the traditional African pattern of rooms within or surrounding a courtyard such that it provides security and privacy for the dweller. The system of extended family within the Hausa-Fulani society is given form and continuity through the formation of new cells or huts for the ever growing family. This cellular nature of the architecture gives it an organic architectural form in perfect harmony with its purpose. Islamic influence on house form provides some degree of privacy necessary for the segregation of sexes (Figures 3.4).

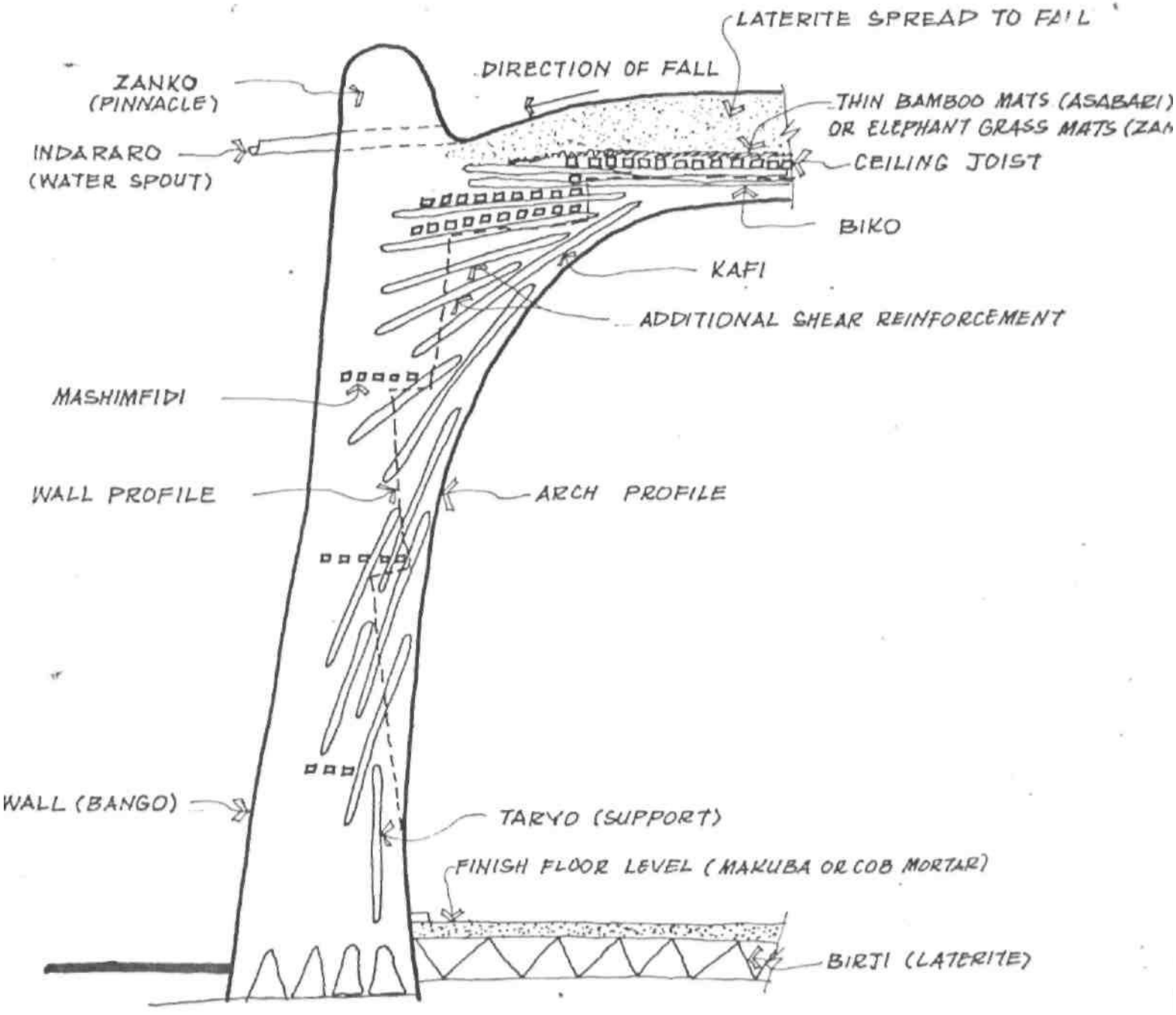


a. semi arch roof support with exposed underneath and plastered arch profile



b. wall to wall arch support to roof

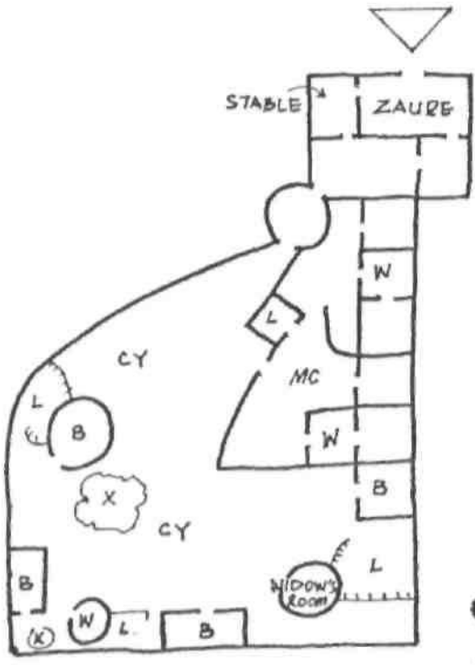
3.2



SECTION THROUGH AN ARCH

3.3

Source: J.C. MOUGHTIN (1985): HAUSA ARCHITECTURE

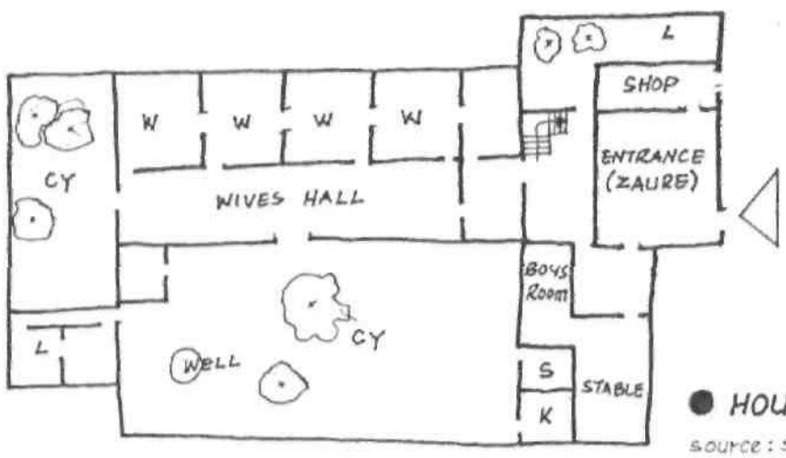


● HOUSE AT KAZAURE

SOURCE: J.C. MOUGHTIN (1971) HAUSA ARCHITECTURE

MC = HEAD'S COMPOUND
B = BROTHER AND WIFE
CY = COURT YARD
S = STORAGE
K = KITCHEN
L = LATRINE
W = WIFE





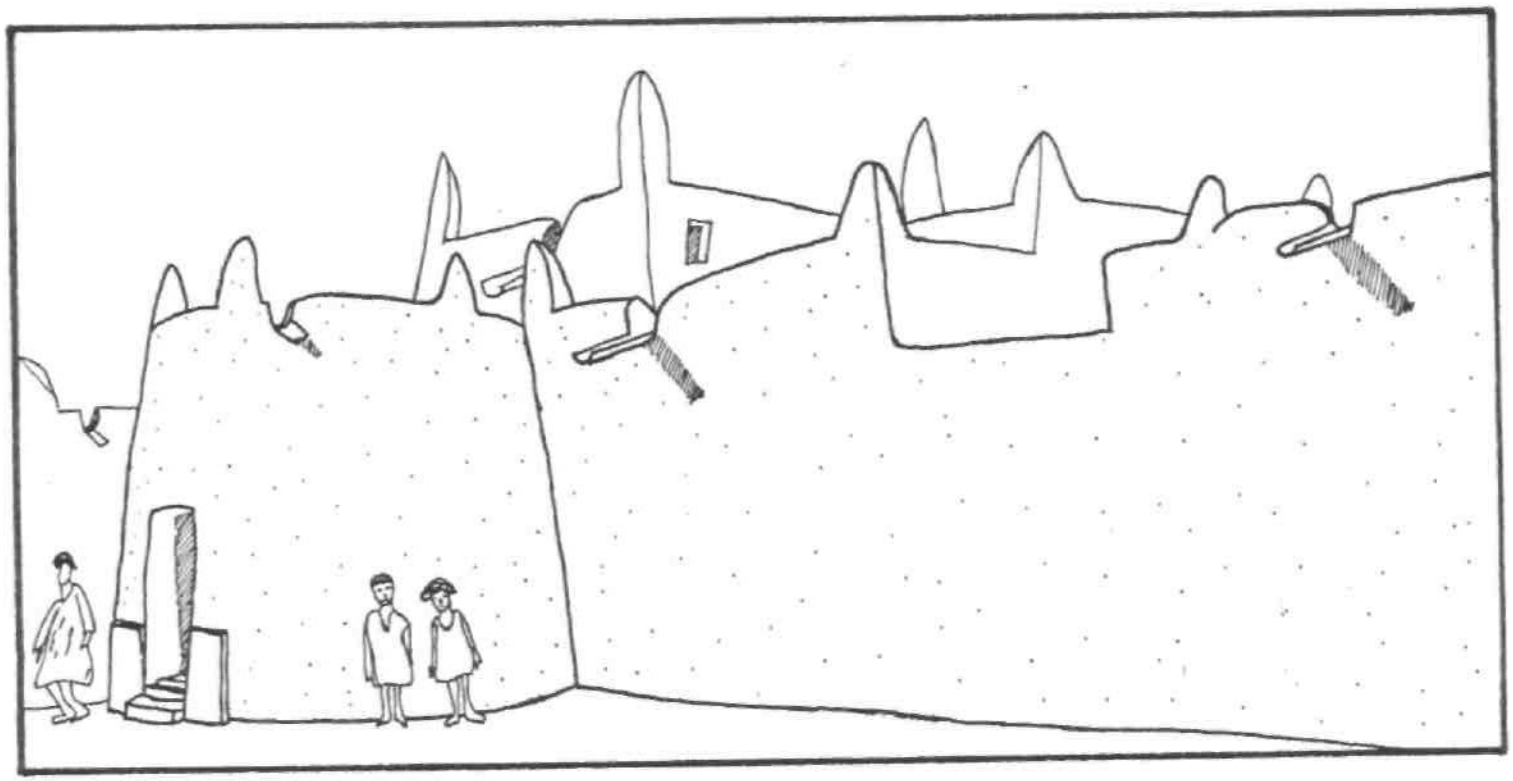
● HOUSE AT KANO

SOURCE: SUSAN DENYER (1978) AFRICAN TRADITIONAL ARCHITECTURE

3.4 Typical structure of Hausa House plans

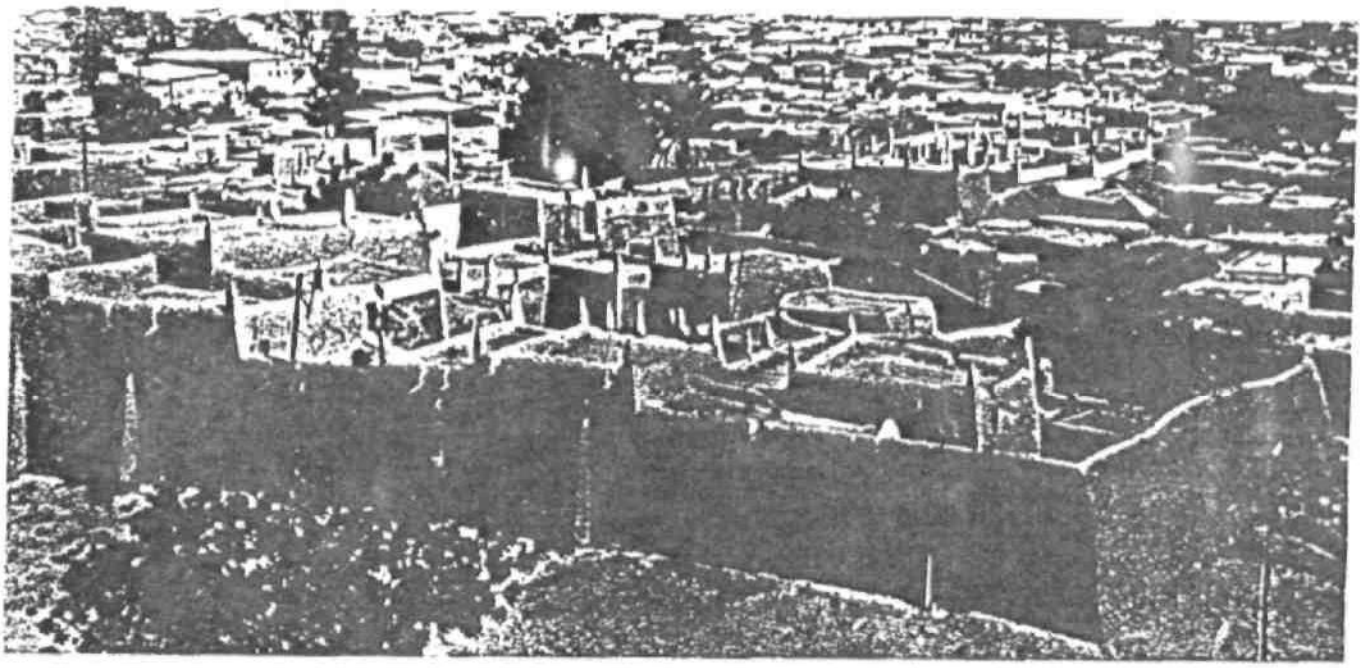
The courtyard in the house is an important element that plays a vital social and environmental role. Usually, there is one in the male quarters and another in the female wing. Socially, it functioned as a dynamic space where people gather to interact in an open but yet private living setting and environmentally, it effectively modify climatic conditions. It permits outdoor activities while providing a significant level of protection against wind, dust, solar glare and heat characteristics of the climate. It also provide a cool and breezing space for sleeping during hot months.

Roof is another important part of the house where parapet is extended to produce what is known as pinacle (zanko) which looks like rabbits ears. Various interpretations had been given to these ears like but the most popular is that it represents the two ears like on the turban of the feudal chiefs and to which in itself was as a result of islamic influence. All the same, the pinnacle gives the massive blank mud construction a lighter and more appealing appearance (Figure 3.5 & Plate 3.6). It is also to this parapet that water spout project out to discharge water from the roof.



3.5 A TYPICAL HAUSA/FULANI TOWN HOUSE WITH PINNACLES (ZANKWAYE), THE WATER SPOUT (INDARARO) AND THE ROUND ZAURE, ENTRANCE HALL, AS THE MOST COMMON FEATURES.

SOURCE: J.C. MOUGHTIN (1986), HAUSA ARCHITECTURE



3.6 A typical Hausa/Fulani town. The pinnacles and water spouts are the most common features in Hausa architecture

SOURCE: M. CROWDER (1975): ANCIENT TIMES

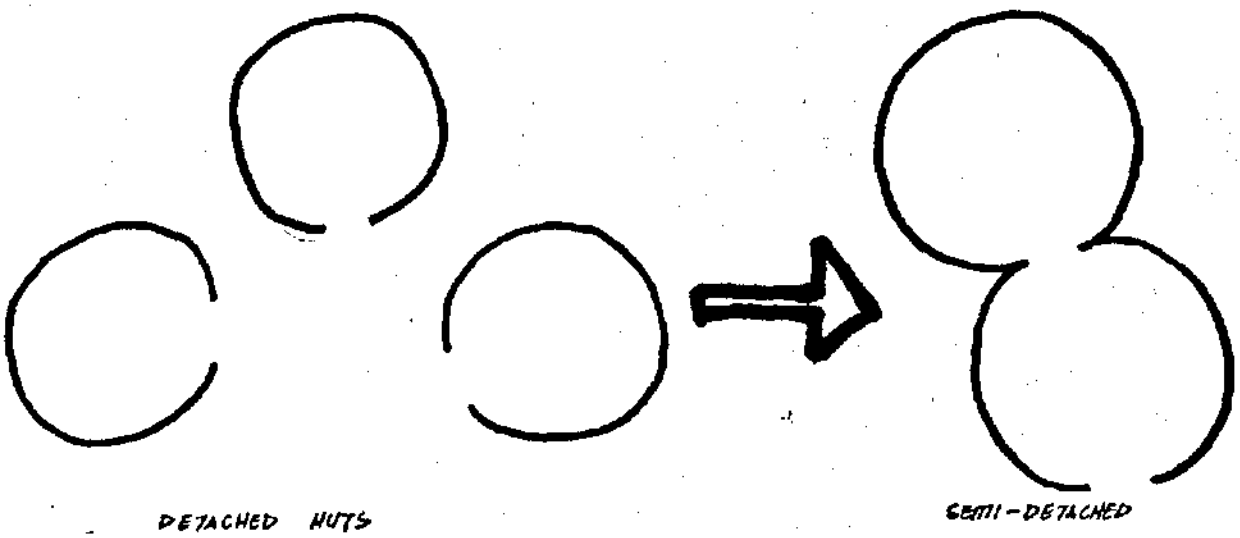
3.2.2 PLANNING AND STRUCTURAL FORMS:

In the Hausa architectural tradition, just as it is the case in the African tradition there is a lack of rhythm in the geometric composition of built up forms. The dominant geometric elements are the quardrilateral (square and rectangle) and the predominant circular forms. These forms are together used indiscriminately to give a variety of shapes (Figure 3.7)

Very often, Hausa architectural planning has been linked with the islamic culture and thus, the many design features of the houses was the cultural concept of separating male and female quarters in the notion of privacy and security.

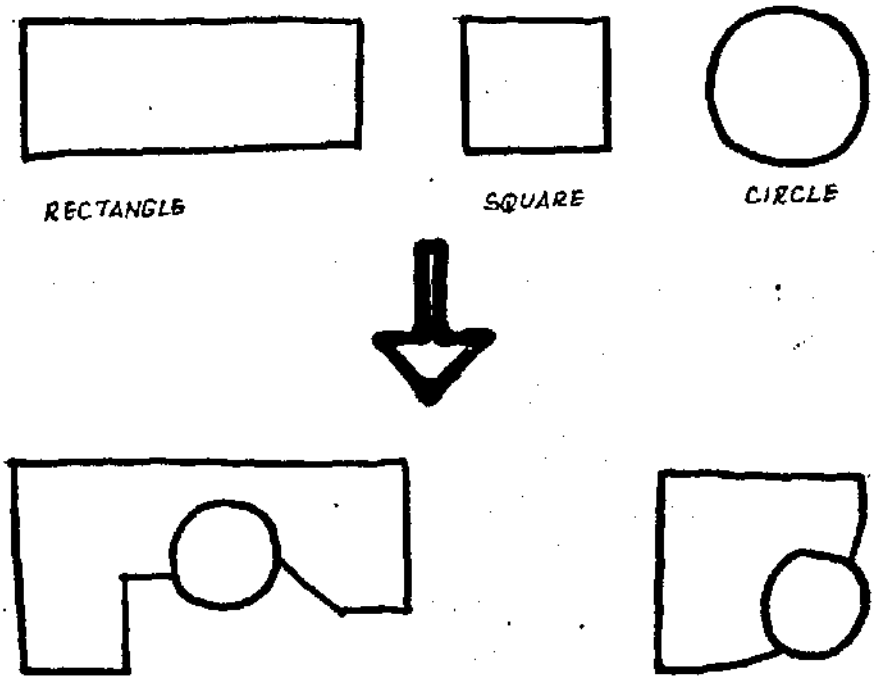
Structurally, forms used in residential and commercial buildings vary with those used in public buildings. Thus, simple construction and structural systems are employed in residential/commercial buildings while complex and grandual in public buildings.

The arch (which will be discussed later) and the column are the main structural systems. The column (ginshiki) is used to reduce span and is constructed the same way as the wall, though normally built to support roofs and failing walls. Thus, deleb



DETACHED HUTS

SEMI-DETACHED



COMPOSITION OF GEOMETRIC FORMS

ANOTHER TYPE

3.7 GEOMETRIC COMPOSITION OF HAUSA BUILDING PLANS.
NOTE THE INDISCRIMINATE USE OF VARIOUS GEOMETRIC SHAPES.

palm timber trunks are inserted in the colum to increase its carrying capacity bonding with ob mortar found in drying ponds (plate 3.8a). Another type of column is the buttressing type used externally to support tall slender walls called "engaged column" (Saad, 1981).

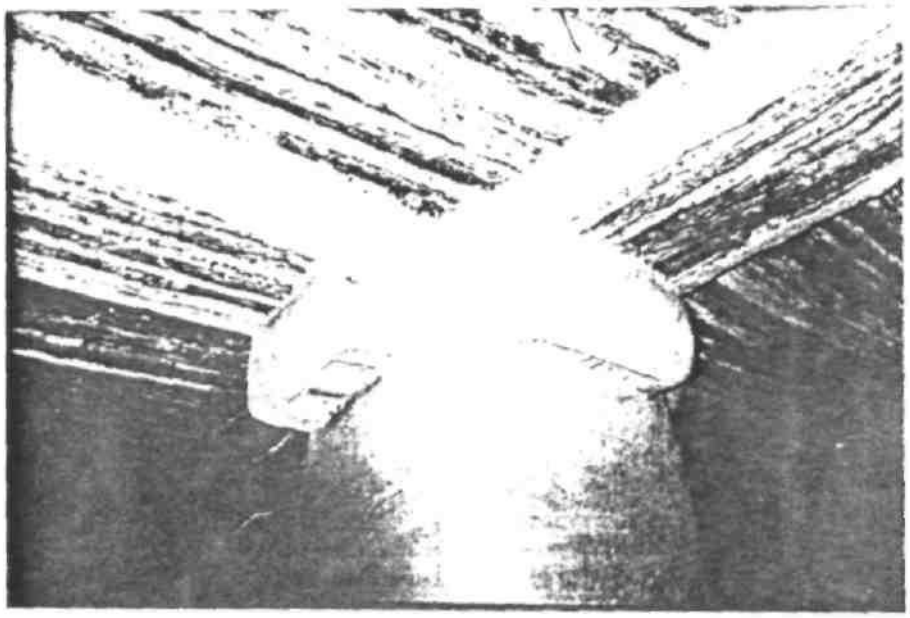
3.2.3 THE ART OF DECORATION:

Decoration always plays a very important part of architecture in Hausaland. Highly modelled decorative patterns of varying degrees of boldness have long been used to enhance architectural forms (figure 3.9). Pre-islamic symbols of living things in decoration were replaced with islamic symbols resulting to a synthesis of all the varied influences and a reflection of the individuality of the culture from which it sprang - Islam. (figure 3.0.1).

3.2.4 SYMBOLISM:

Traditional architecture wherever found is full of symbolic expressions which have been incorporated into the architectural language in form of structural elements and decoration.

In Hausa architecture, symbolism is strongly tied with religious concepts, the case of the Zanko (pinnacle) and the Tulluwa (dome) shows this concept.

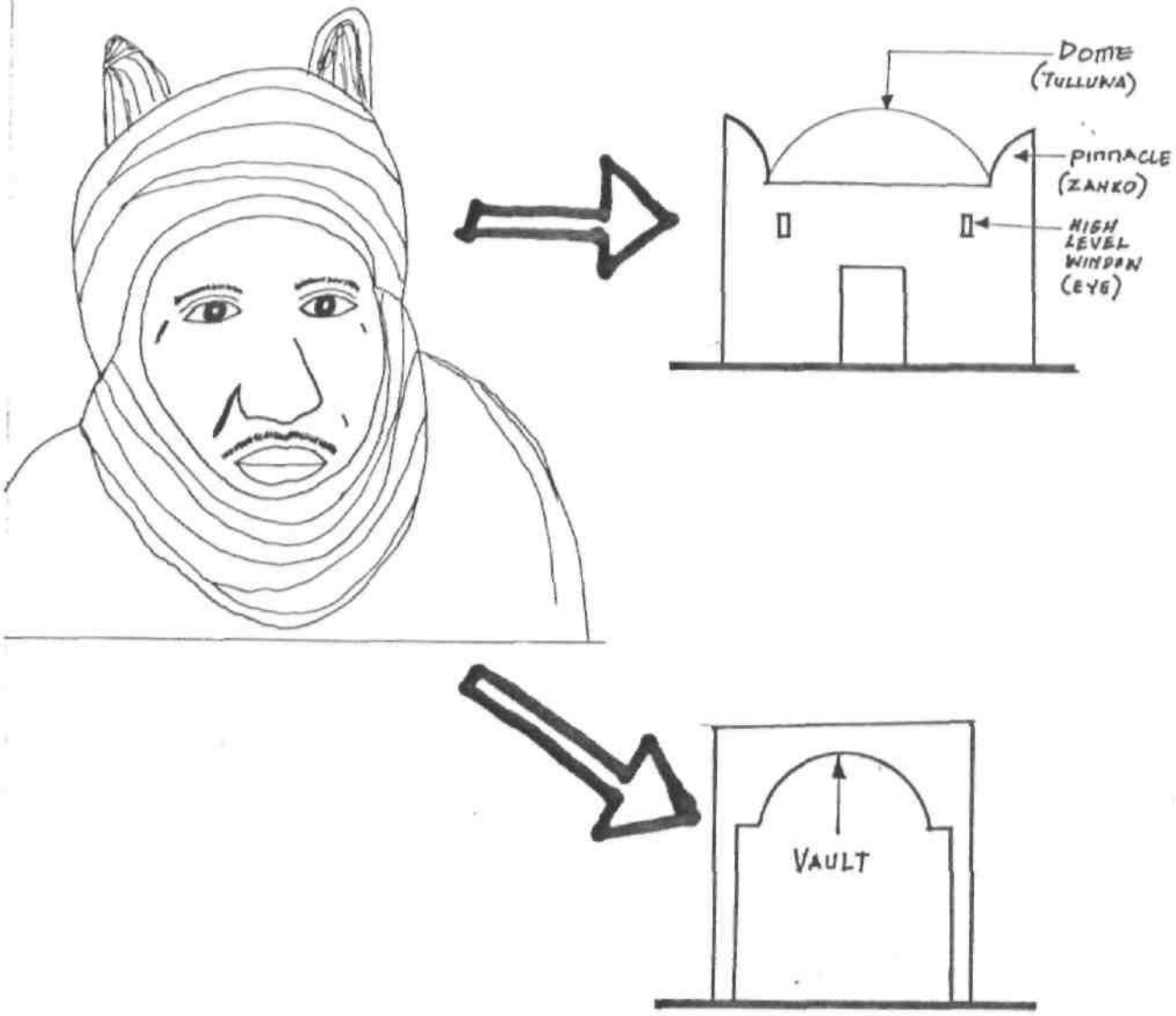


a central column with four-way corbels supporting roof structure

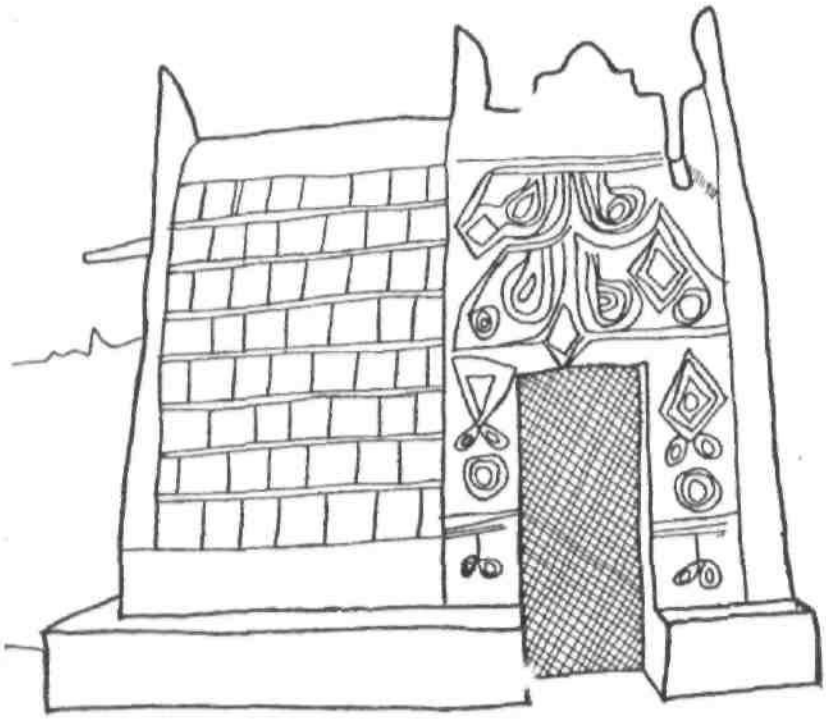


b. Dome roof support

3.8



3.9 HAUSA TRADITIONAL ARCHITECTURE WHENEVER FOUND IS FULL OF SYMBOLIC EXPRESSIONS. THE CASE OF DOME (TULLUWA) AND PINNACLE (ZANKO) PLUS THE HIGH LEVEL WINDOW (EYE) ABOVE.



A DECORATED HOUSE IN ZARIA

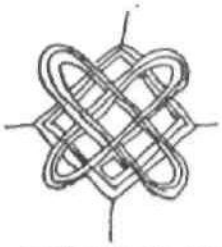
SOURCE: S. FRIEDRICH (1981), HOUSING IN ZARIA



A DUCK



SLATE FOR WRITING



WISEMAN'S KNOT



NICHES



SHEEP SKIN



STAR OF DAVID

SOME PATTERNS AND MOTIFS OF HAUSA/FULANI DECORATION

SOURCE: SAAD (1981), BETWEEN MYTH AND REALITY

3.0.1

clearly. The feudal chiefs turban is architecturally symbolised in the pinnacle and the dome which together have become the most visible elements expressing the identity of Hausa-Islamic architecture.

3.3 CONSTRUCTION PROCESSES AND ITS ACTIVITIES:

Traditionally, the art of building was not a professional skill but those who needed building design and lay them themselves as architects of their structure either by neighbourhood communal effort or by a collective family kinship responsibility. The houses therefore reflect the true architecture as a vision of an ideal life, simply because its designers and often builders were its users and know best what they needed and how to come by it.

To build a new or even expand an existing house, one has to notify his recognised builder who receives a verbal brief from the client on seeing the area of land. The house is then marked according to the wish of the prospective owner and the revised views of the builder.

Mud which is the principal building material is dug out from burrow pits, free of charge, within the neighbourhood. This resulted in the ponds (kududdu fai) scattered all over the town that gave birth to

the present open spaces between clusters of houses.

Tubali, conical brick, and Bulo, rectangular brick, are made from mud which inspite of modern materials and technology, except for government agencies and some commercial buildings, most construction works were still from them. This gave Kano a unified architectural composition - forms, which expresses the social and spiritual needs of the community through the symbolic use of the form and and the spaces they create (plate 3.6). Other building materials found locally beside mud include deleb palm timber (azara) bamboo mats (asabari), thatch (bumu), elephant grass (zana) and chopped straw.

Construction process of mud building is a long one and time spent in preparing the materials or in the construction have effect on the strength of a building. The longer the processes, the more economical when it comes to maintenance. It begins at the beginning of the dry season to the onset of the rainy season since there is no way of speeding up and no technique of building with mud under rain.

Laterite (Birji) dug from a ditch is soaked with water for about a day (24 hours), trampled and kneaded

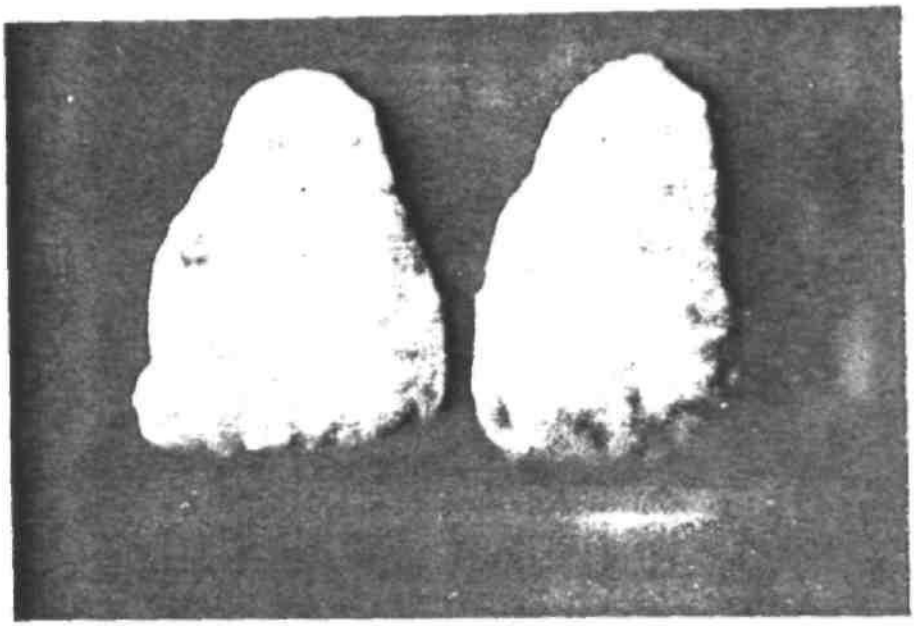
to prepare it for bricks. This process is repeated several times before being rolled into brick: The conical brick is upto 15cm rolled with bare hands while the rectangular type is in the range of 30cm x 20cm x 10cm made with wooden formwork. They are then left to dry for about 7 - 10 days, i.e when they are strong to carry load (plate 3.0.2).

Mortar as a bonding material is made the same way with that of bricks but after soaking and trampling, it is covered with animal manure and chopped straw left for some days before being mixed thoroughly together.

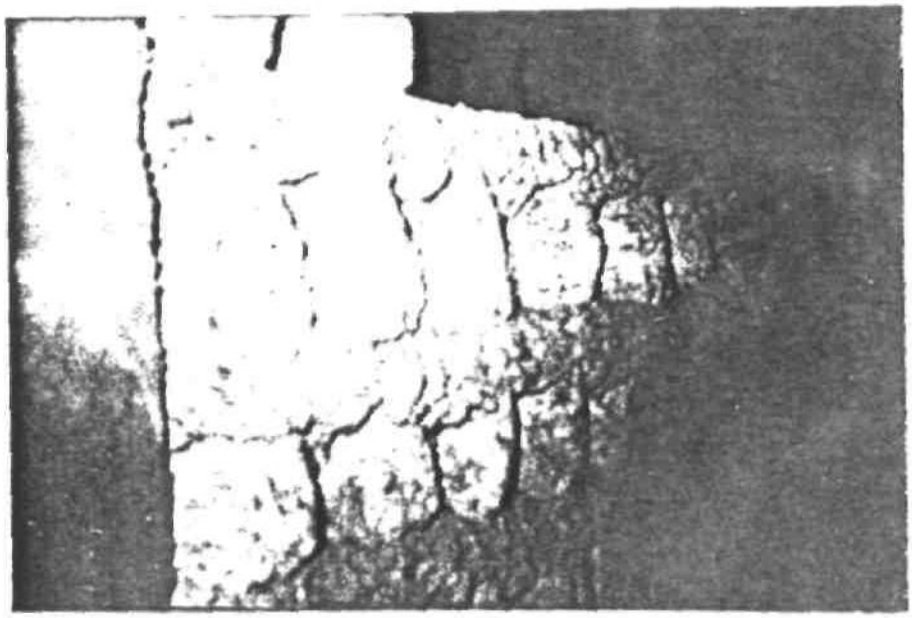
3.3.1 WALL CONSTRUCTION:

Stones, vegetable matter and top soil in uncleared surfaces are removed. Foundation is of one type with difference only in the thickness of the wall from the bottom and the material used based on the status of the personality involved. Mud foundations, not more than a foot, without footing are constructed in the trenches with important buildings being protected from erosion by the use of stones at the base.

Only two or three courses of bricks (tubali) are laid in a day and every time the bricks are laid or arranged, the spaces between them are filled



sun dried bricks (tubali)

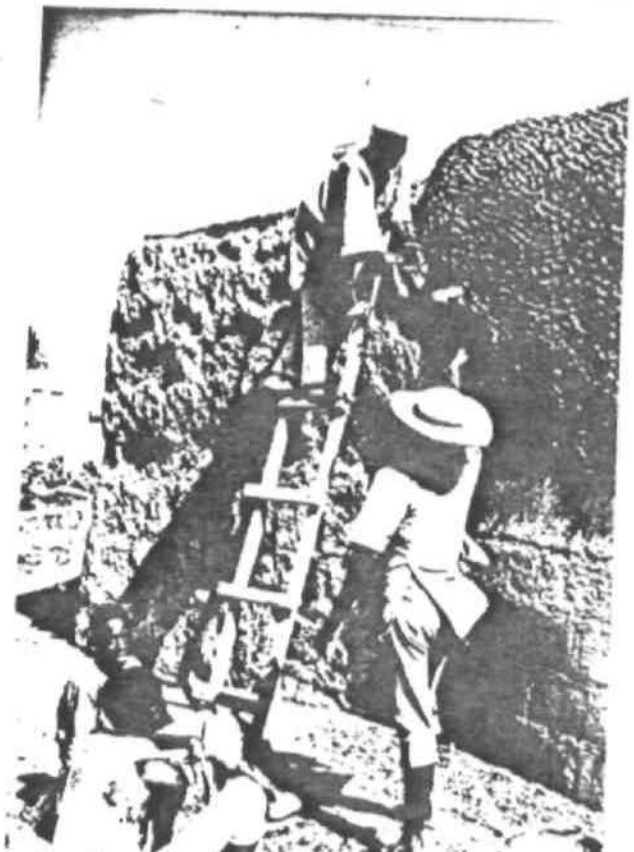


Bricks laid in courses

3.0.2



a. Thatch roof on mud circular zaure



b. maintenance work

Thatch roof is the most common roof type for most African traditions. In this part of Africa and Kano in particular, it is constructed using fronds of raphia palm (kwangwala) which is a little expensive and normally used as the main rafters with guinea corn stalks in between as joining frame members. Where the roof is of small diametre, the whole roof is made on the ground including the thatching and then lifted to position while it is only the frame structure that is made where the diametre is large.

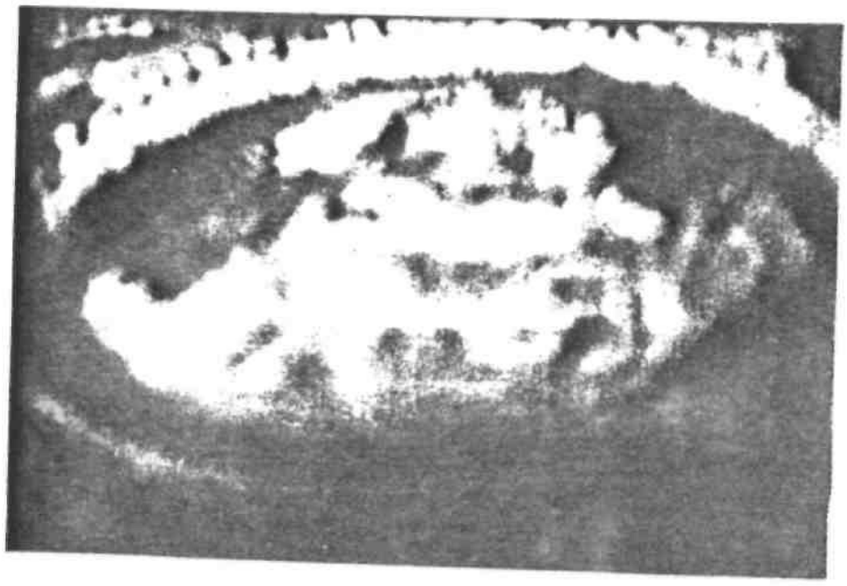
The wall plate for the roof frame which is made from raphia palm or guinea corn stalk is made first and it is to it that the thickest ends of the rafters, pointing downward, are fixed while the thin ends, pointing upwards, meet at the top to make what is called "Danboto", apex (plate 3.0.3a). The corn stalks frame members are tied to the sloping rafters at close spacing while the thatch which is brought in bundles is unrolled to roll round the frame from the bottom towards the top tied with rope to the frame, each layer of the thatch overlapping the one below it. Corn stalk is normally embedded at the top of the mud wall to serve as ring beam with rope loose at both sides of the wall and then later used to tie the roof frame work so as to avoid wind blowing up the roof. At the apex of the roof, the thatch tail is criss-crossed and then tied with rope to prevent

rain gaining access into the roofed space.

Economically, thatch roof has the advantage of keeping rain away from eroding wall plaster through driving rain and when it got a good construction, can last upto three years without any need of maintenance which is done in-situ.

3.3.3 MUD ROOF:

Flat mud roof is the simplest form of mud roof by spanning a space with deleb palm timber joist as the main roof structure. The economic span of this joist is 2.0m to which no intermediate support is required. It is used to place these timber beams less than two inches apart, but for economic use, intervals could be upto four inches, with bamboo sticks placed over them at right angle to the main span. It is then covered with elephant grass or thin bamboo mats on which the covering mud rests. To prevent water into the interior, the laterite is spread in such a way that it slopes towards the water spout where the water is carried away from the building. Cob mortar and broken ram fur (plate 3.04q, courtesy of Gidan Makama, Kano) are sometimes used to increase the imperviousness of the mud used to cover the roof (figure 3.3).



a. Broken sheep/ram fur



b. Earth trampling to make mortar

3.0.4

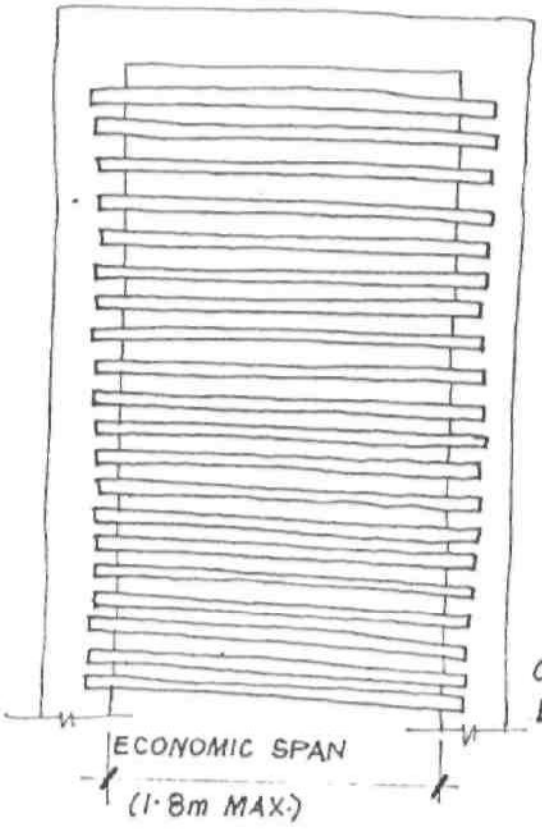
Knowing the structural limitations of this imple roof leads to analysing and interpreting this form of traditional architecture from the simplest cell to the most complex roof patterning used by master builders. Spaces larger than the economic span of deleb palm timerr joist, two metres, may be roofed by a complex system of cobelling, use of pillars or arches (figure 3.0.5a-c, and plate 3.0.6 a-d, 3.2 and 3.8).

Corbels are reinforced with several layers of deleb palm timber projecting upto half a metre from the wall's face at a height a little above door level. The space between the corbel is spanned by several number of azara joist span across to the other wall, like a bridge, in the economic span. This system allows an interior space tobe increased in dimensions (figure 3.0.5b).

For larger rectangular rooms above two metres, deleb palm timber is placed diagonally across the corners of the space which create triangular platform from where additional beams span parallel to the walls. Repeating this process will create spaces after being bridged by the joist that is gradually reduced to the economic span (figure 3.0.5c and d).

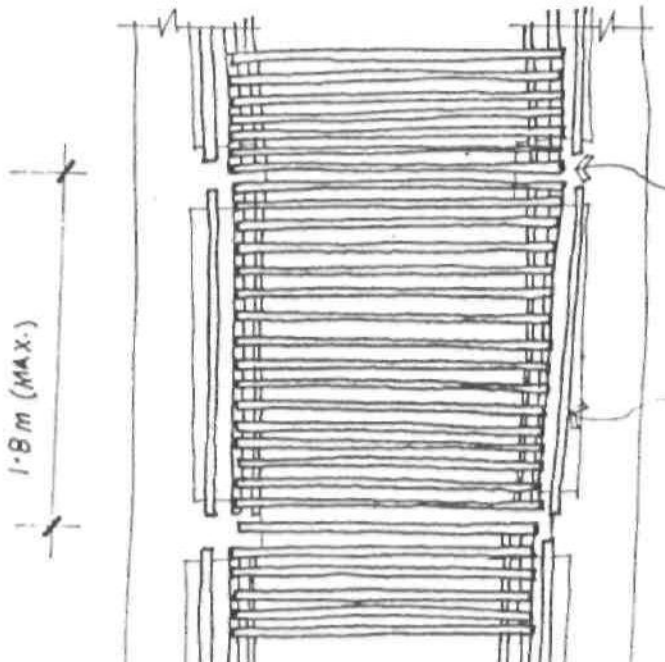
Roof may be supported on a series of columns connected by beams in case of very large rooms. The

VARIOUS ROOF ARRANGEMENT

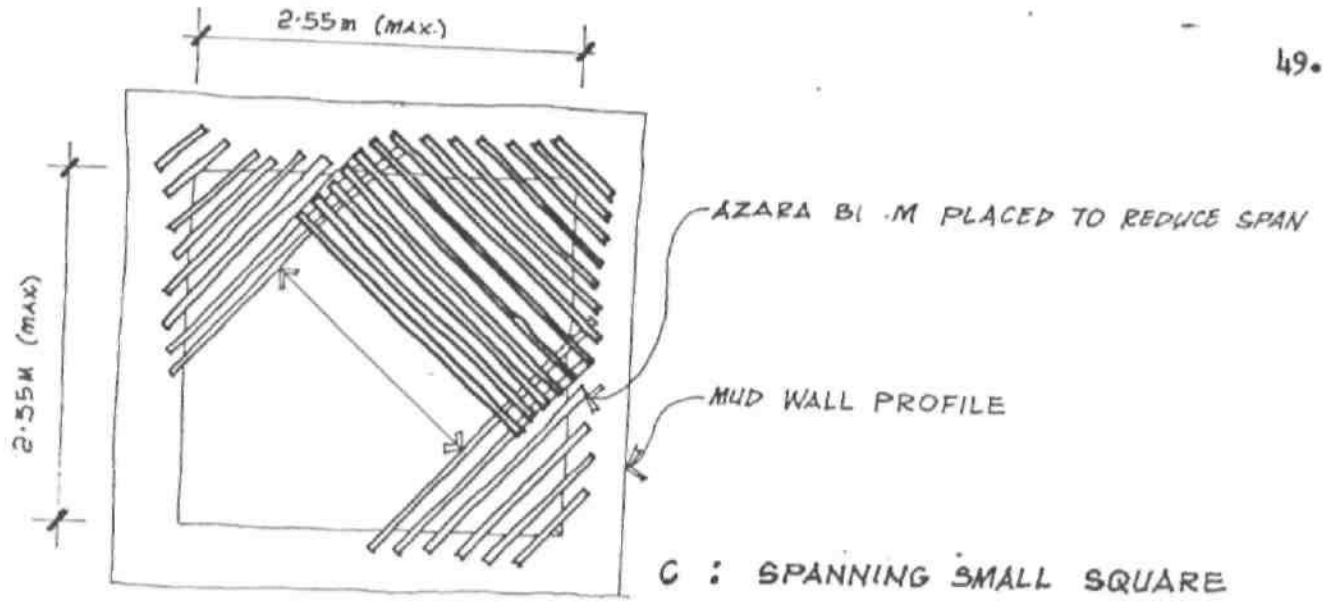


a : ROOF SPANNING A SIMPLE ECONOMIC SPACE

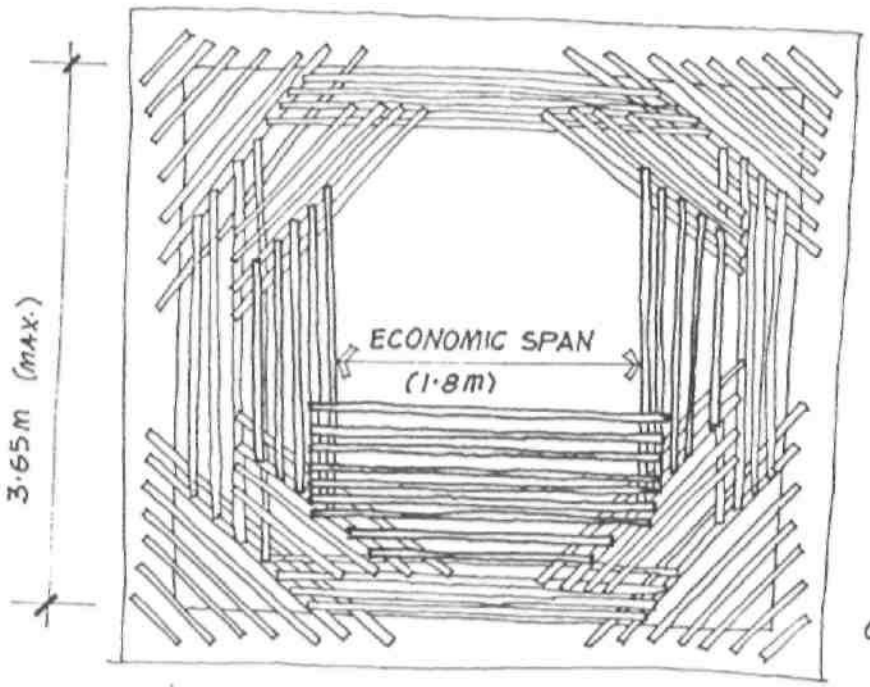
3.0/5



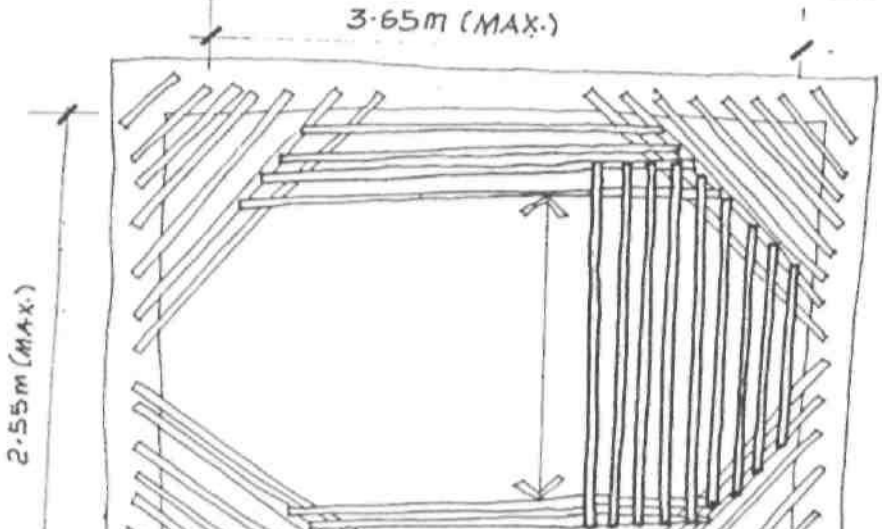
b : ROOF SPANNING

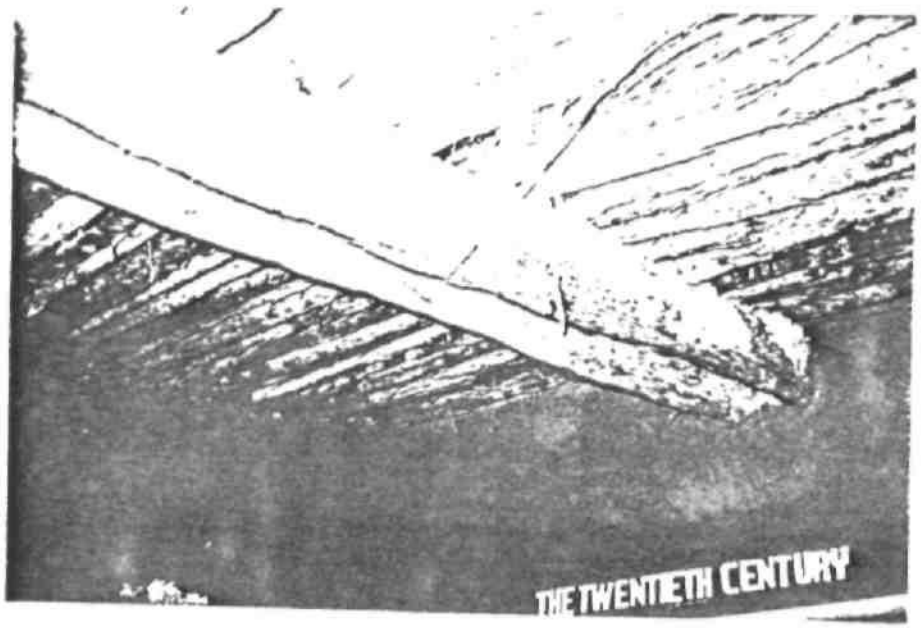


c : SPANNING SMALL SQUARE

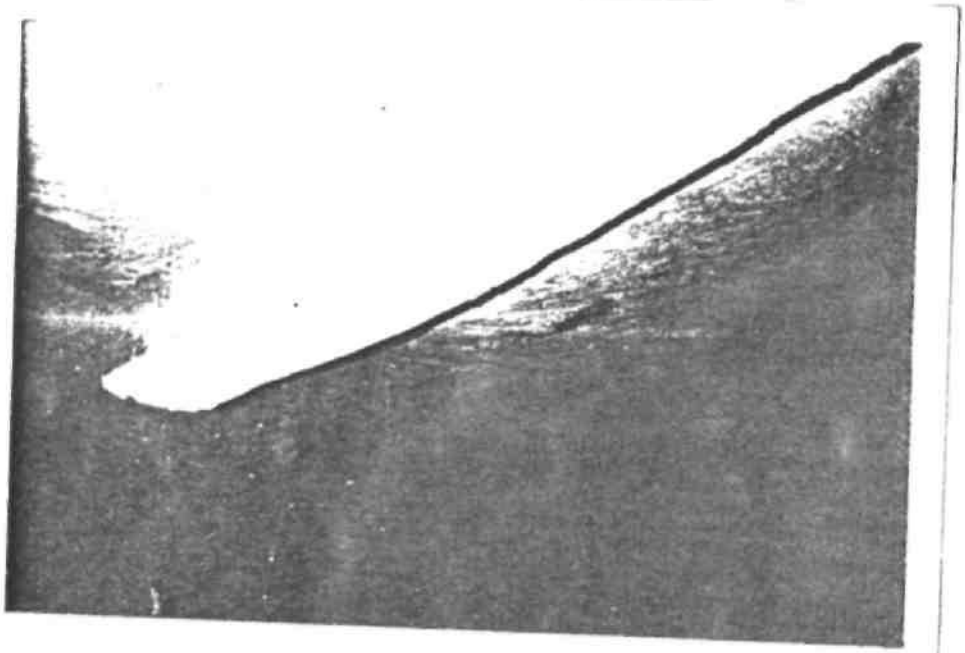


d : LARGE SQUARE

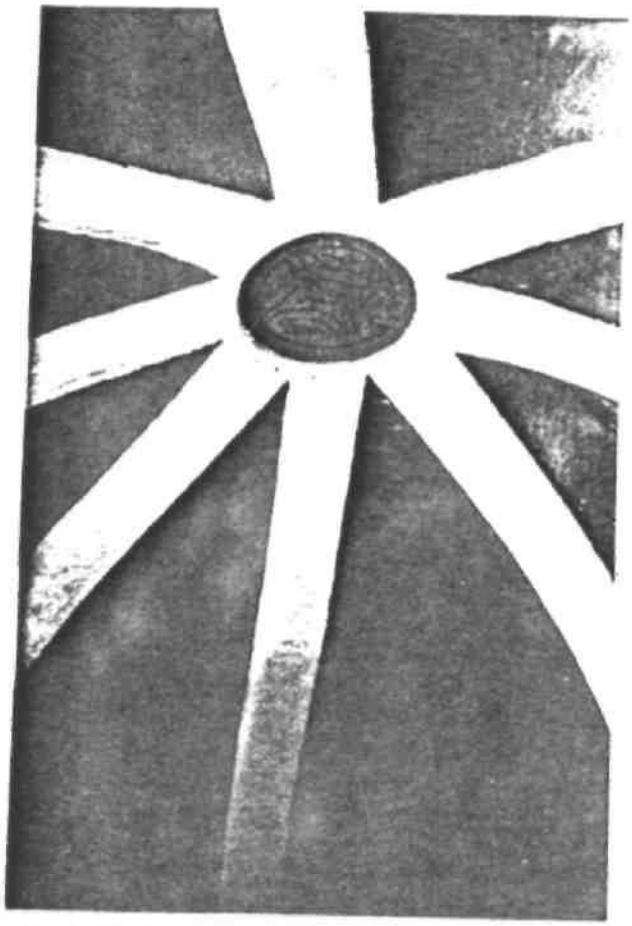




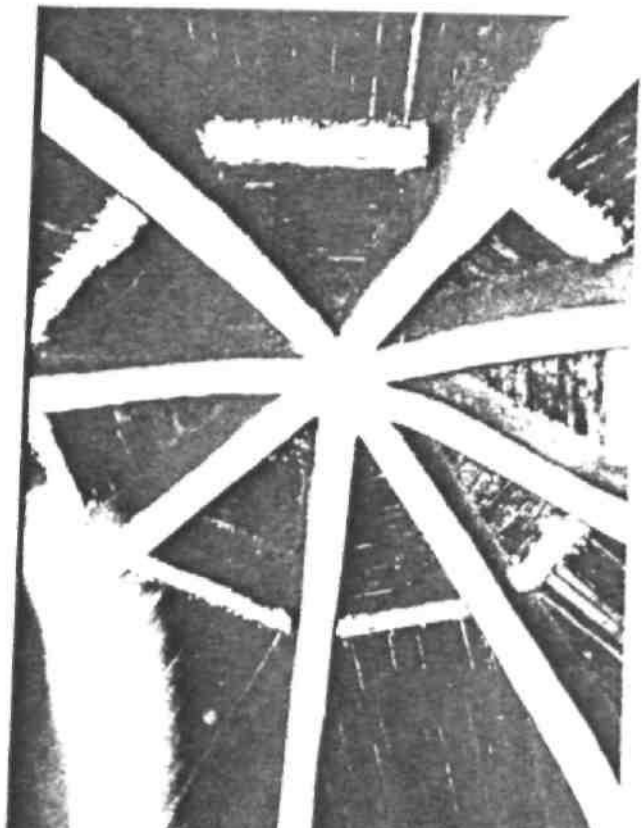
a. Beam support to roof structure



b. same as above but with plastered surface



c. Daurin guga arch construction

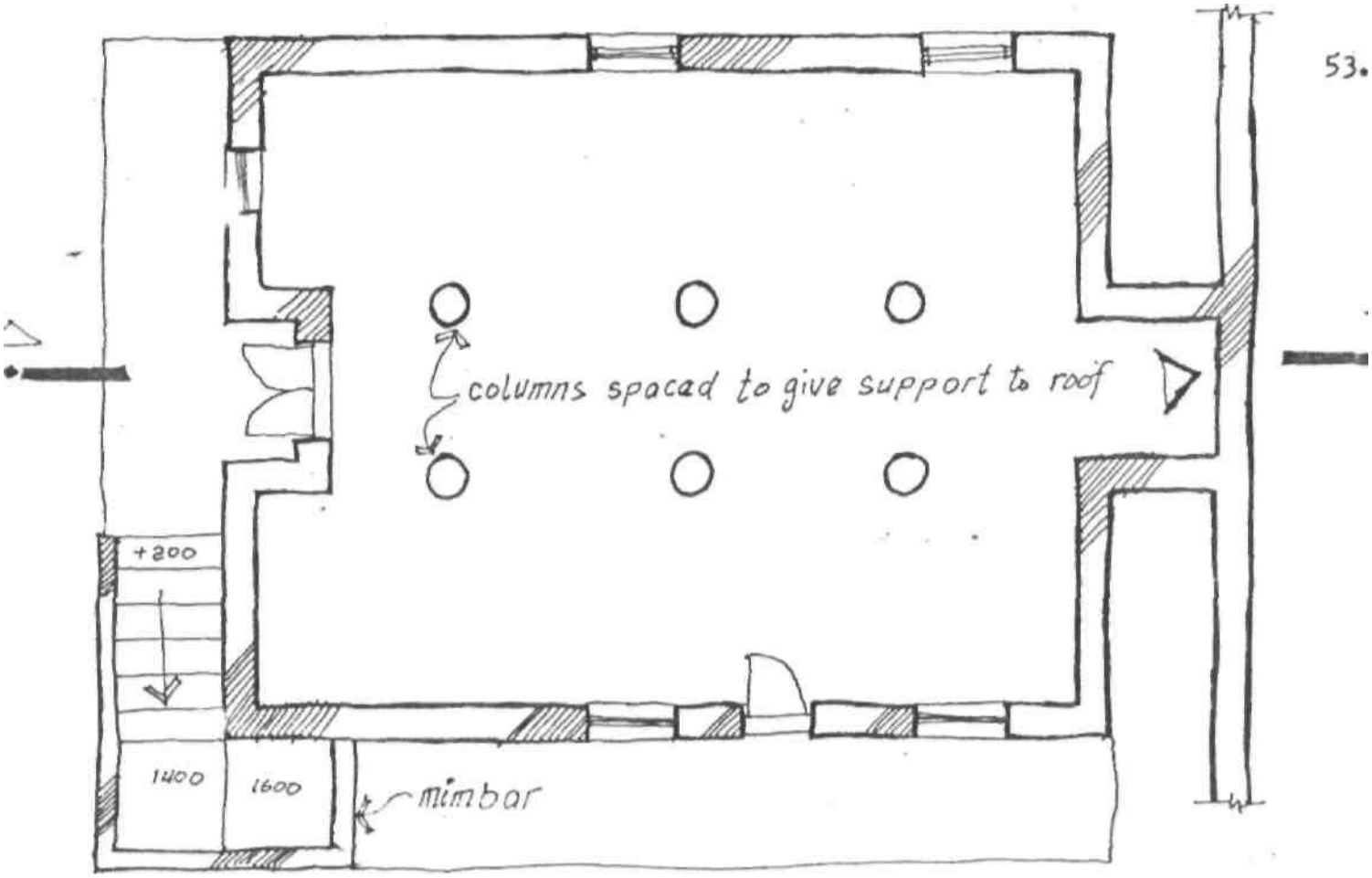


d. Kafin Laima type

column is usually surmounted by a simple capital, consisting of two or four corbels which made it possible to increase the spacing between columns from economic span to almost one and a half times which is spanned by beams and reinforced with azara while the roof joist spans between the beams (figure 3.0.7).

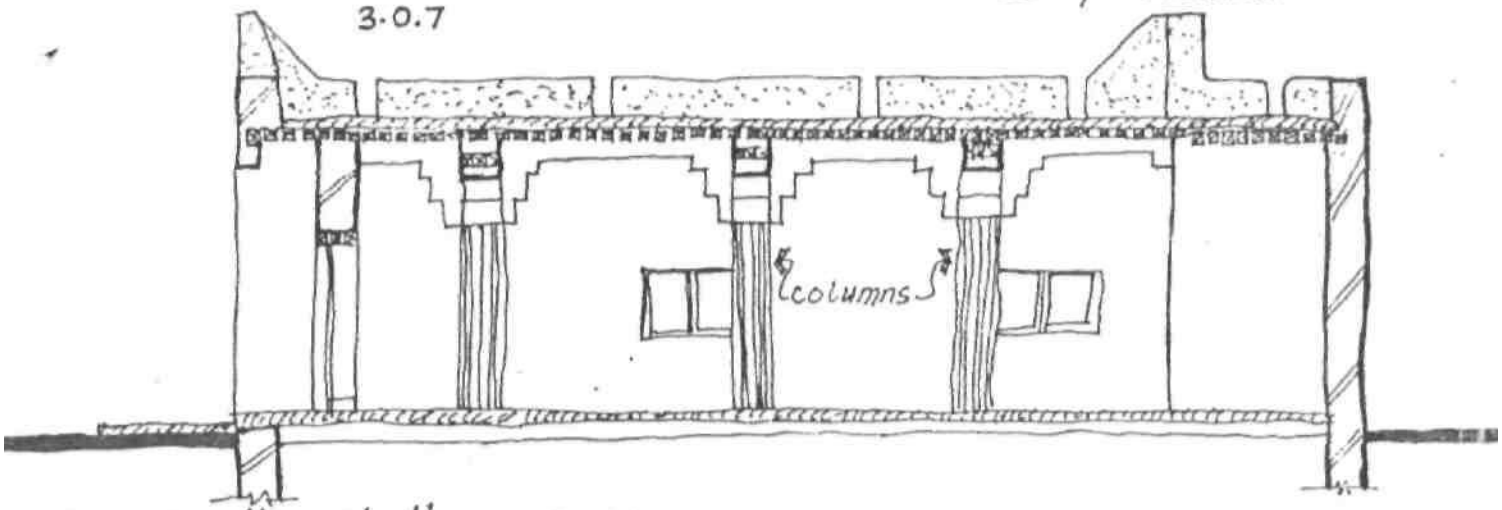
Spaces larger than three and a half metres require the use of the mud arch dome (baka) which made it possible to have rooms eight metres. It is but a series of reinforced mud corbels placed one on top of the other until they meet at the centre coated with mud mortar to take the dome shape. Thus, it has to start quite low since the corbel cannot cantilever more than a foot and a half (figure 3.3).

Each layer of reinforcement is tied back to the proceeding one beginning from sides working upwards and outward towards the centre of the room. When the gap between the two halves of the so called arch is small, horizontal layer of deleb palm timber is used to complete it. Small piece of the deleb palm timber is placed at right angle to the wall and projected into the body of the arch for sheer reinforcement with length of the piece placed at right angle to the arch for thrust distribution over a large area to prevent

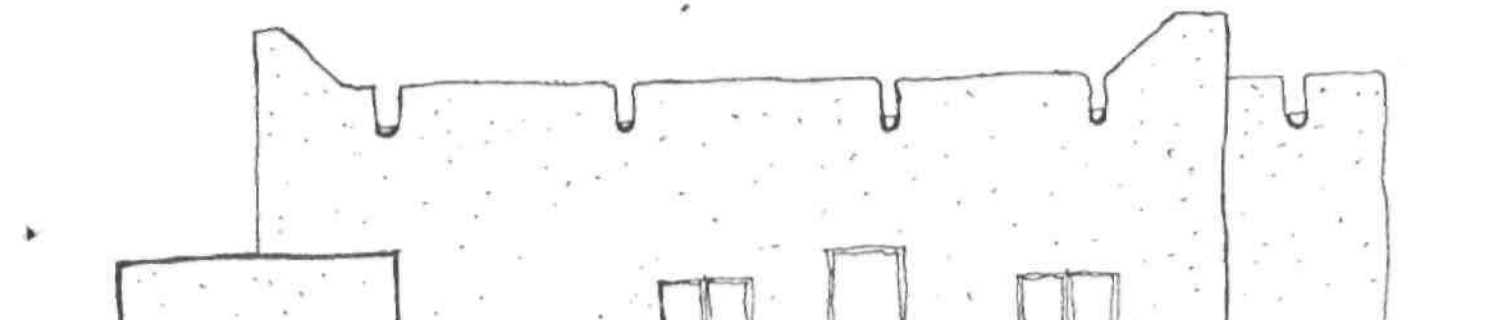


: Masallachin Galadanchi supported on series of columns

3.0.7



SECTION through the mosque



cracking. In rectangular rooms, simple arches span across the room parallel to the shortest possible side (plate 3.2b).

Arch construction could be in three ways:

a. Spanning of arches from wall to wall passing through central point like circular tent construction (plate 3.2b).
b. Internal columns with arches spanning from them to other columns or walls.
c. Arches spanning from wall to wall but all being parallel to one or other wall (plate 3.2a).

3.3.4 FLOOR:

Using a special laterite, which is normally reddish or creamy soil, it is mixed with a liquid solution of "Makuba" derived from the shells of locust bean tree (Dorawa) to give the required binding nature of the floor. This makuba plus the clay and old ant-hill sticky clay give a glossy surface that when protected from weather elements, especially rain, lasts long.

3.3.5 FINISHES:

These are mainly to promote life span and enhance visual pleasant aesthetic effects which are applied on top of a previous mud plaster work. Externally,

the most durable is the "chafe" in which fine gravel (tsakuwa), shell of locust bean tree (makuba), Egyptian minosa (gabaruwa) and manure dust (taki) are mixed at different intervals. The finish is usually black or grey though other colours are obtained by adding the correct materials. The chafe is believed by builders to last upto a hundred years (Ahmed, 1988).

Internally, smooth plaster finish for wall is obtained with red clay known as "Jangargari" or "Jarkasa", red soil. Locally obtainable lime white wash (farar kasa) is used as a final coat finish over the red clay and local paints comprising tiny particles of silica/rocks mixed with sieved mat, ashes and gum arabica (karo) to increase bonding effects.

After analysing these values one will believe that traditional architectural elements have meaning in such a way that they serve the individual needs without too much expenses and within reach. Thus, traditional architectural values portray the individual behaviour who in turn determine the social pattern of the community - simple or complex.

At this juncture, it is important to realise and modify some of these values while designing where they can be expressed.

CHAPTER FOUR

CASE STUDIES

4.0 INTRODUCTION:

In order to arrive at a useful and acceptable design for a community, a prototype of such a project built elsewhere was studied. This will enable the designer to improve on where the project under study went wrong and where it excel. Furthermore, this study will enable the designer to establish functional relationship between spaces of the intended design and will help in solving some problems encountered previously in projects of similar scope. This chapter is therefore concerned with the case studies of existing community centres in traditional Kano city, elsewhere in Nigeria and abroad from where a concept, choice of materials and facilities that could be accommodated may evolve.

4.1 KANO CITY CENTRAL DANDALI:

African cities and settlements, to which Kano is part, developed on a different pattern with the western world in all aspect. Both social and physical problems which necessitated the provision of a well designed and centralised community centres in western Europe and America have not been experienced here. Rapid urbanisation and escalated expansion of cities

in Nigeria is quite a recent development which was as a result of oil discovery. Communities here are much more socially cohesive with traditional African cities having social and architectural focus centred on the rulers palaces, markets and religious buildings. People meet daily and weekly with the neighbouring wards and villages in markets and religious buildings of a major town to exchange ideas and other informal activities. Generally, life is communally oriented with little marked difference in terms of status as the foundation of any community is the individual. Thus, the behaviour of the individual, strength and weakness determine the social, pattern of the community.

However, this traditional pattern of community life has over the years gradually been losing its significance. This is due to the emergence of the colonial rule in Nigeria and hence the shift in political, economic, social, and educational pattern that lead to the emergence of a new generation. The remains of these traditional community life could only be found in the traditional community centres - Dandali and so the need to study this central Dandali.

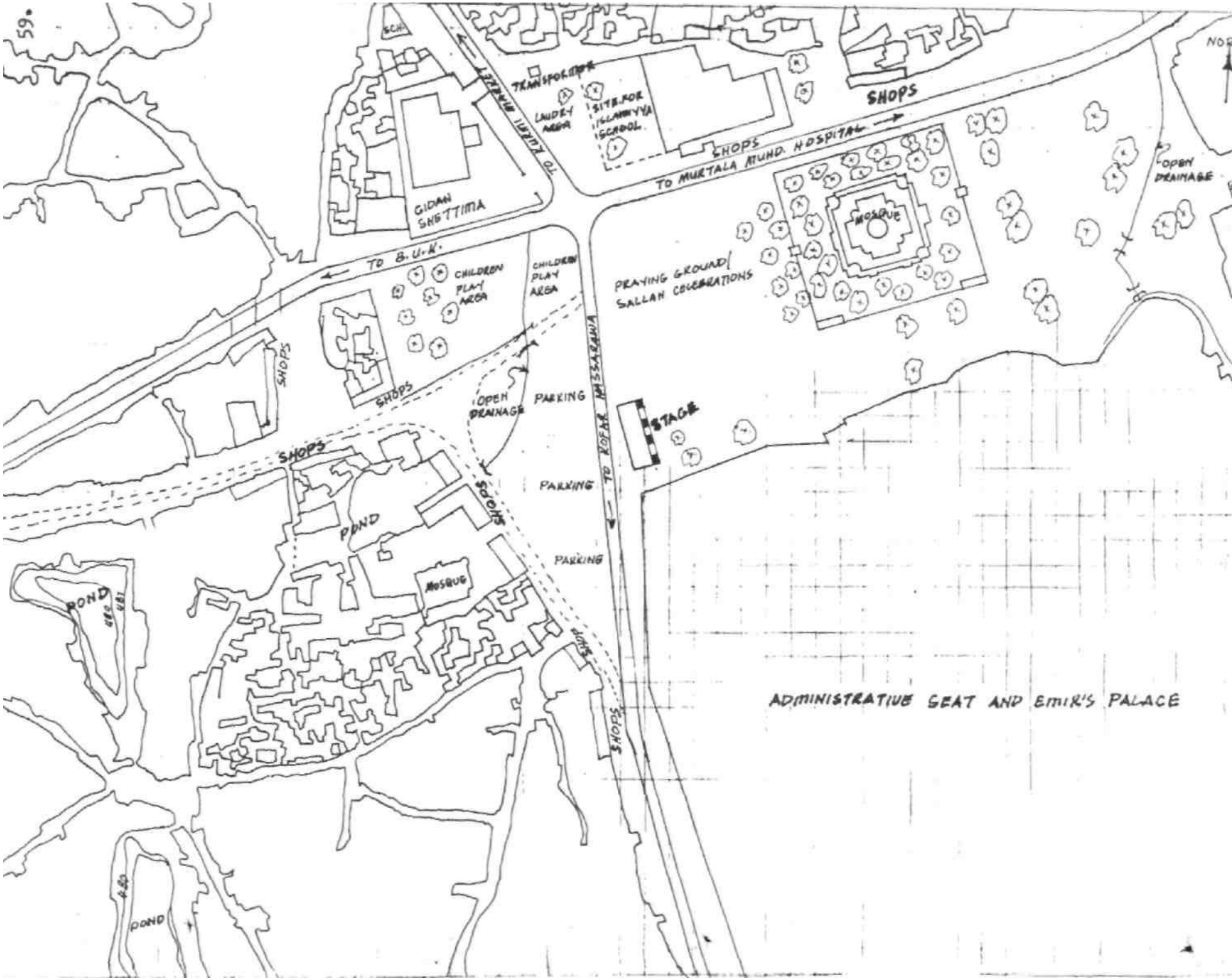
This Dandali is located to the northern side of the Emir's palace, west of the Kano central mosque and to the south of Gidan Shettima, an administrative

building. It is criss-crossed by a four junction roads with one leading to the famous Kurmi market towards north, one to Murtala Muhammad specialist Hospital towards east, one to Sani-Mainagge and Kabuga towards west and the last one leading to Kofar Nassarawa towards south (figure 4.0).

The Dandali is as old as the emir's palace and is bordered to the east by Kano central mosque, emir's palace to the south, series of shops and some residential houses to the west and administrative, residential houses and another series of shops to the north (plates 4.1a-d)

4.1.1 FACILITIES:

The facilities here are children play ground, trading space, and parking space to the west, stage and an open space as praying ground on Fridays, used for horse racing during sallah celebrations to the east and trading space and laundry services to the north. There are two Islamiyya schools around the dandali vicinity. One on the east in Rimin Kira quarters and the other to the north at Soron Dinki quarters with almost a dozen local koranic schools. The parking and the trading on the western part of the dandali is more pronounced at night while the laundry services on the northern part is done during the day (plate 4.2b). All these activities are in the open space.


SCH.
TRANSPORT OFF.
LADIES AREA
SITE FOR ISLAMIYYA SCHOOL
SHOPS
TO ZARIA MARKET
GIDAN SHETTIMA
TO MURTALA MUHD. HOSPITAL
OPEN DRAINAGE
MOSQUE
PRAYING GROUND/ SALLAH CELEBRATIONS
TO S.U.K.
CHILDREN PLAY AREA
CHILDREN PLAY AREA
SHOPS
SHOPS
OPEN DRAINAGE
PARKING
TO KOFAR HUSSAINA
STAGE
SHOPS
SHOPS
POND
PARKING
MOSQUE
POND
PARKING
SHOPS
POND
ADMINISTRATIVE SEAT AND EMIR'S PALACE



a. North view of Kano city central Dandali



b. East view of Kano city central Dandali

4.1



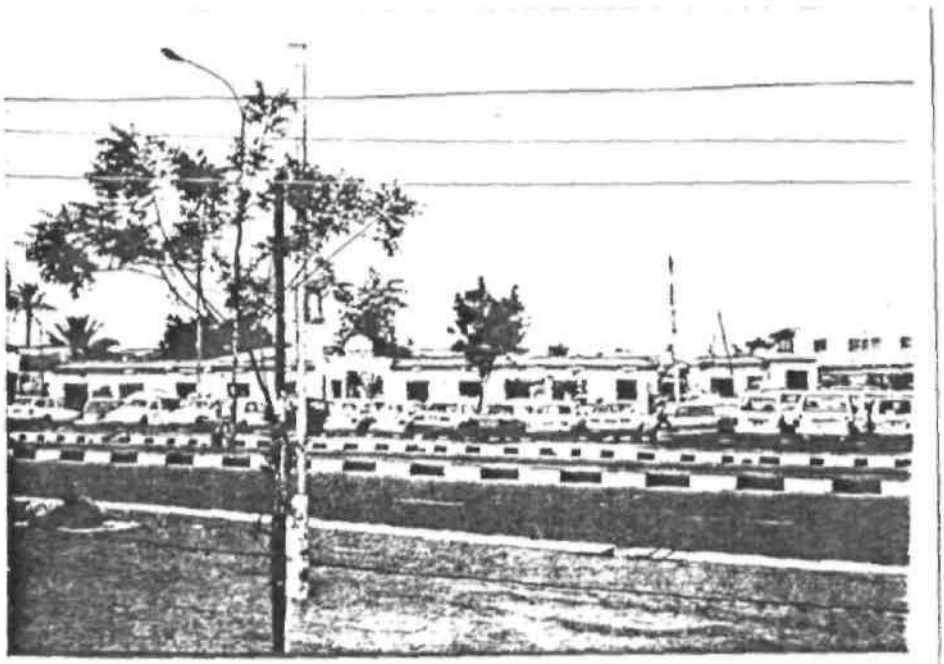
c. South view of Kano city central Dandali



d. West view of Kano city central Dandali



a. children play area

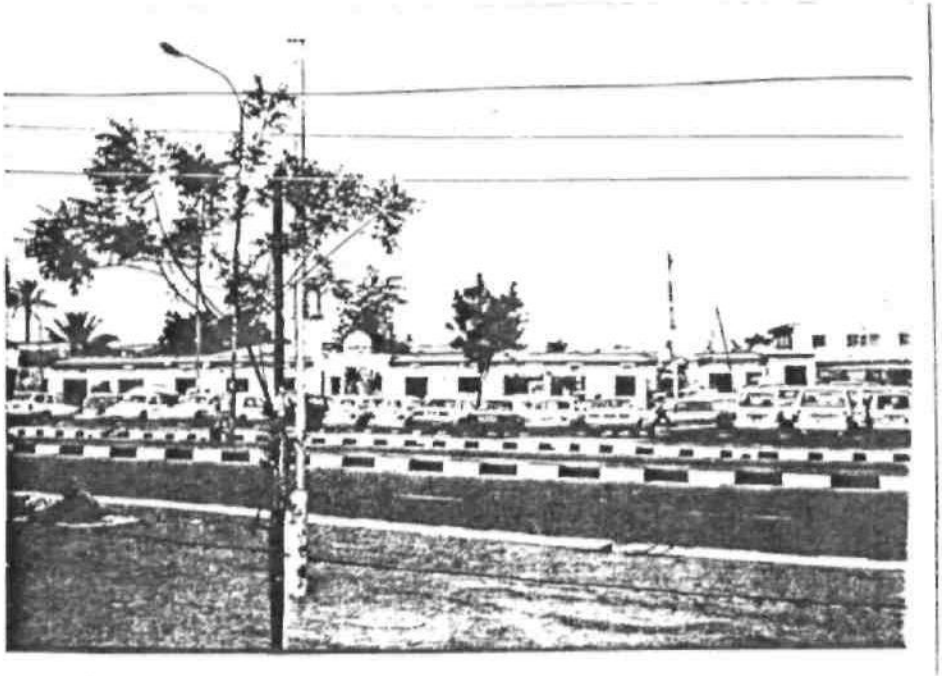


b. parking area

4.2



a. children play area



b. parking area

4.1.2 STRUCTURE/CONSTRUCTION MATERIALS:

There is no permanent structure but temporary timber structures or under tree shed due to multi functional activities at different times of the year. During sallah celebrations tubular steel frames structures are erected on the stage and then covered with taupauline (plates 4.3)

4.1.3 APPRAISAL:

ADVANTAGES:

1. The Dandali is flexible in such a way that many activities take place at different times and seasons.
2. The open nature of the dandali depicts a court-yard concept in a modern design such that ventilation is enhanced considering the climate.
3. The dandali is a costless community centre as activities are either simple/temporary structure or under tree shed.

DISADVANTAGES:

1. Lacks integration of activities.
2. During harsh climate, day or night, activities are forced to the barest minimum or to zero level.
3. The recreation space is not well defined and not for all ages and sexes.



4.3 VIEW OF STAGE AND DANDALI DURING SALLAH CELEBRATIONS

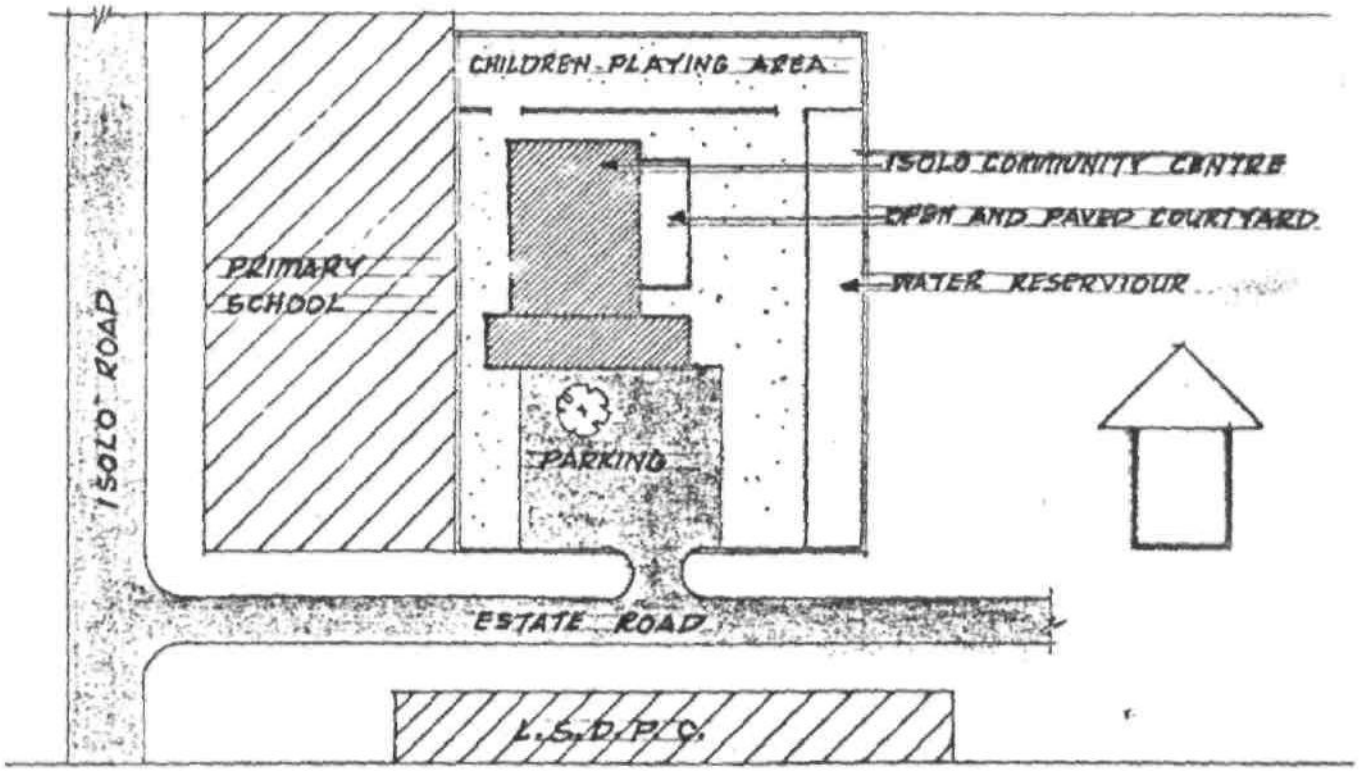
4.2.0 ISOLO COMMUNITY CENTRE, LAGOS:

This community centre is a project donated by the Rotary club of Ikeja to provide an avenue for the recreational and cultural development of Isolo community so as to achieve mutual understanding amongst the residents. It was completed in 1977 and by 1980, the building, facilities and equipment provided were valued at ₦150,000.00. The centre is situated along Lagos state property Development Corporation (L.S.P.D.C) Estate road off Isolo road.

4.2.1 FACILITIES:

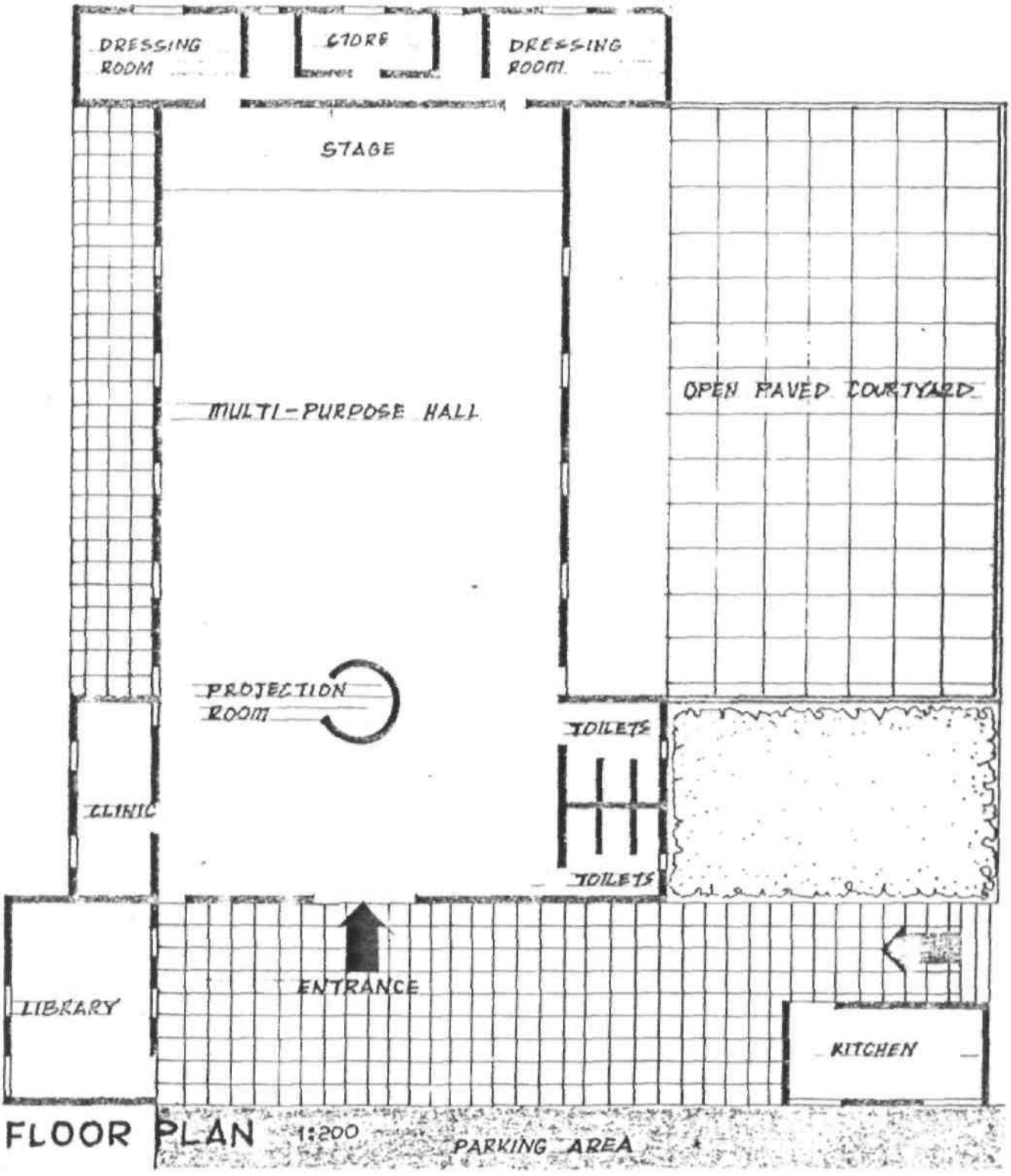
a. Multi-purpose hall with projection room, toilets, dressing rooms, store and clinic attached.
b. Library.
c. Kitchen.
d. Open paved court-yard.
e. Children play-ground.
f. Parking area.

The centre is opposite the Lagos state Property Development Corporation, borders a primary and Isolo village to the left, water reserviour to the right and some development at the back.



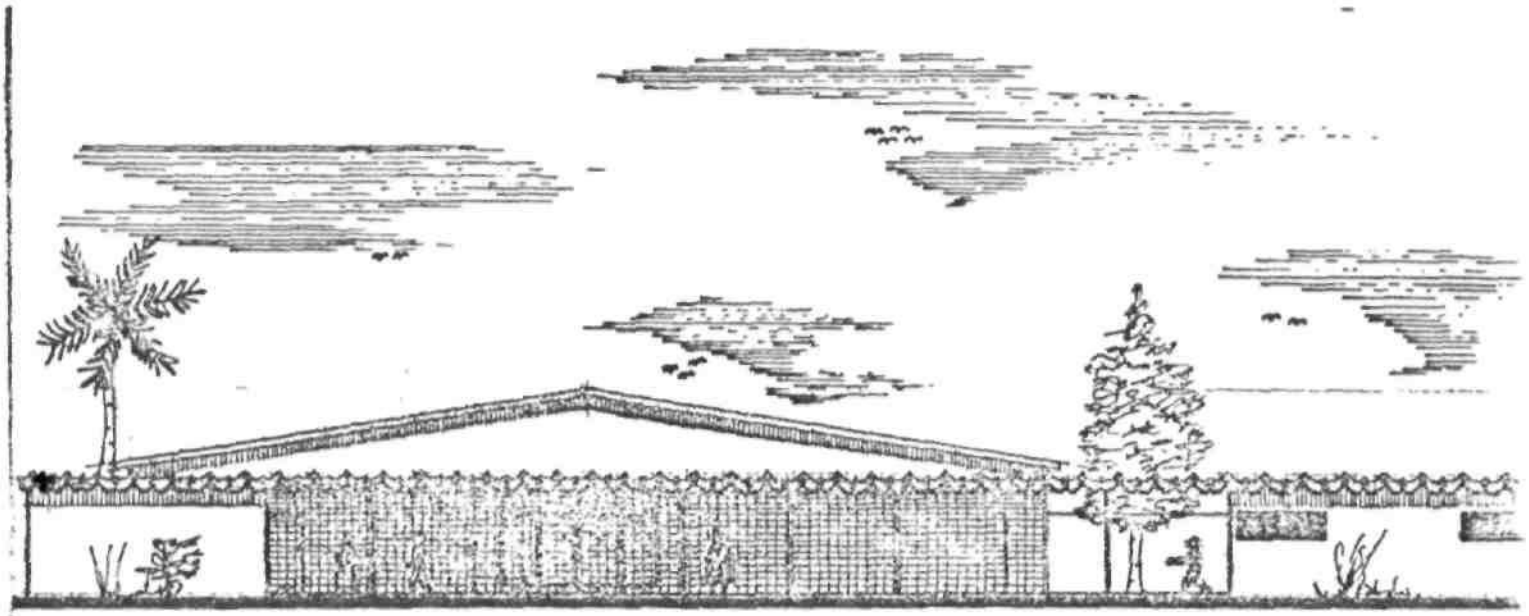
SITE PLAN 1:1000

4·4·



FLOOR PLAN 1:200

4.5



4.6 APPROACH VIEW, ISOLO COMMUNITY CENTRE 1:200

4.2.2 STRUCTURE/CONSTRUCTION MATERIALS:

A simple construction of locally obtained building materials of concrete blocks, timber roof trusses and asbestos roofing sheets. The bungalow structure of about 5.0m high has the main building frame composed of sandcrete blocks panel with concrete columns and beams as required.

4.2.3 APPRAISALS:

ADVANTAGES:

1. Proximity of the centre to the Isolo village, i.e the people it is serving.
2. Adequate openings for proper lightening and ventilation.
3. Wide entrance porch to multi-purpose hall to cater for large crowd and for easy access to other facilities.
4. Use of locally obtained building materials and simple construction reduce the cost.
5. The open paved courtyard can help boost activities at the centre.

DISADVANTAGES:

1. The improper positioning of projection room can cause circulation problems.
2. The positioning of toilets which directly leads into the multi-purpose hall looks unhealthy.

Buffer zone should be provided to avoid ugly view and exclude bad odour.

3. Arrangement of activities are in chaos as library is positioned in a noisy zone, clinic hidden and the kitchen exposed.
4. Lacks escape route in case of emergency.

4.2.4 CONCEPT:

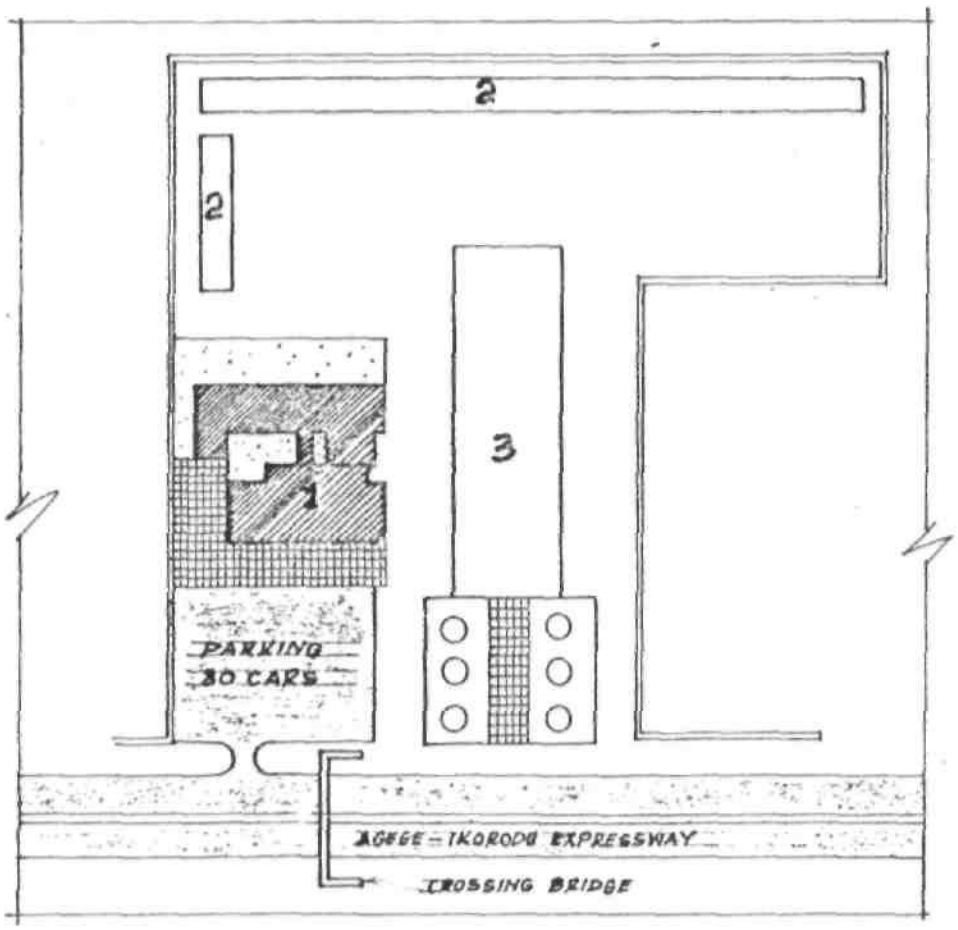
Has a single block form concept as all activities with the exception of children play and parking areas are under one roof. This could be due to the rainy nature of the location and the limited number of activities. It has a total area of 1,791.0m^2.

4.3.0 YABA COMMUNITY CENTRE, LAGOS:

This community centre is a project executed by Saint Dominic Catholic Church, Yaba and German partners for Yaba community and designed by architect (Professor) O. Adeolu. It was valued at ₦300,000.00 at the time of its completion. Built along Agege-Ikorodu road near Yaba College of Technology and bordered by Saint Doninic Church and Saint Patrick Catholic primary school.

4.3.1 STRUCTURE/CONSTRUCTION MATERIALS:

The building is constructed of column and beam frame with sandcrete block panel, timber trusses and aluminium roofing sheets. The multi-purpose hall has reinforced concrete as the roofing material.



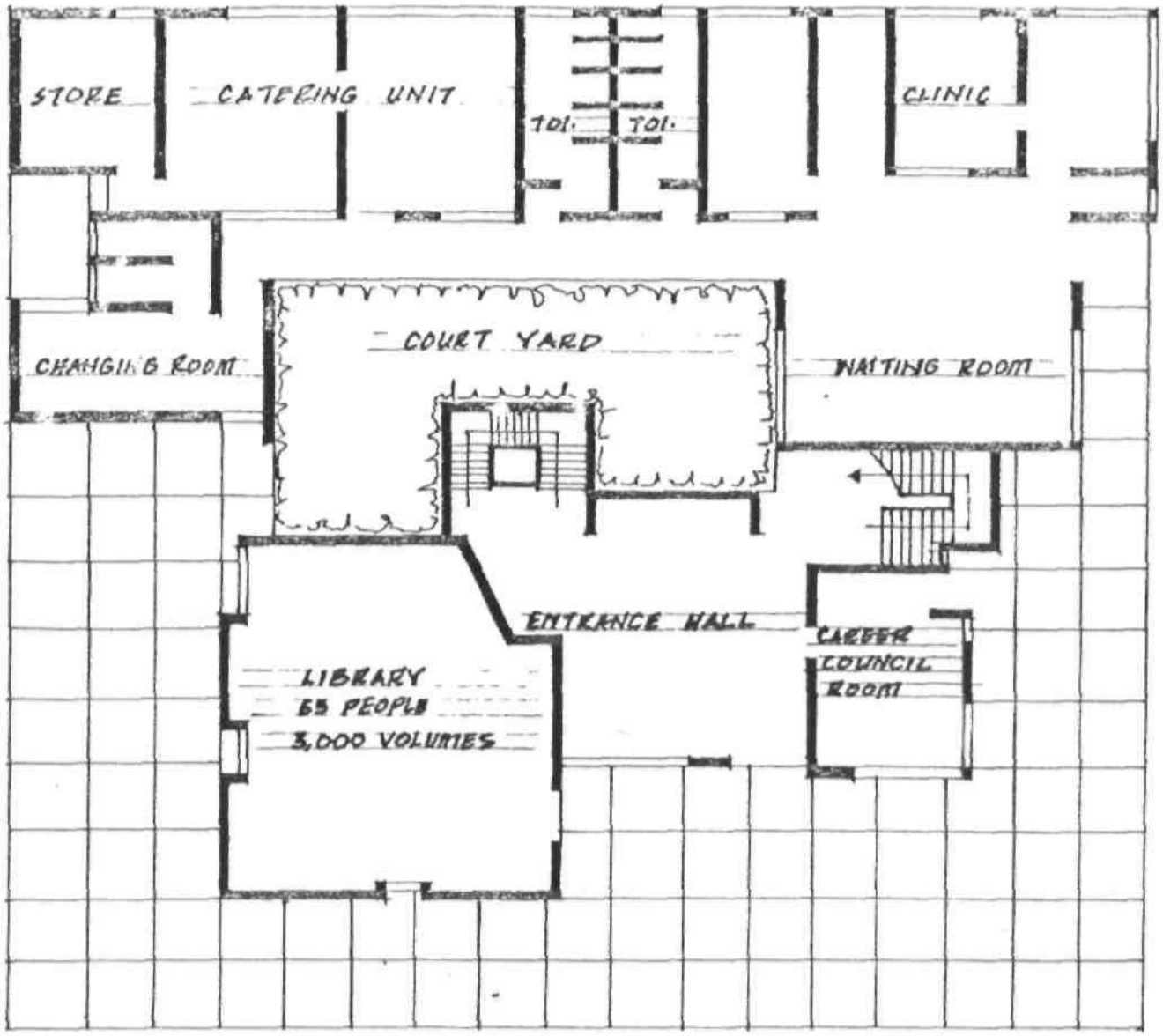
SITE PLAN 1:1200

KEY

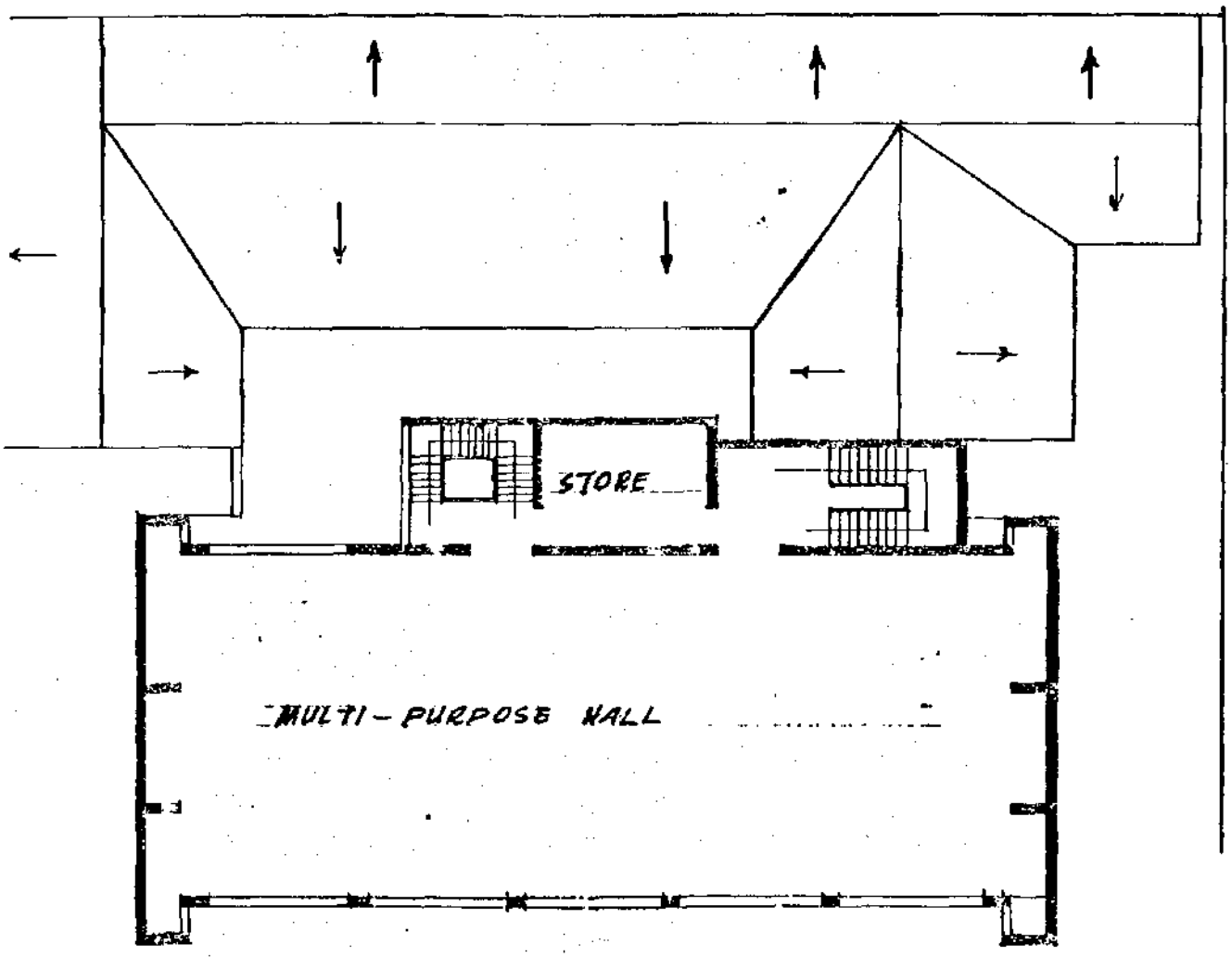
1 — COMMUNITY CENTRE, YABA

2 — PRIMARY SCHOOL, YABA

3 — ST. DOMINIC CATHOLIC CHUR



4·8 GROUND FLOOR PLAN, YABA COMMUNITY CENTRE 1:200



4.9 UPPER FLOOR PLAN, YABA COMMUNITY CENTRE 1:200

4.3.2 APPRAISALS:

ADVANTAGES:

1. Good planning as there is no comflict of activities
2. Located within reach by the community.
3. Use of locally obtained building materials help reduce cost.
4. The placing of the multi-purpose hall on the upper floor help reduce noise.
5. Adequate lightening and ventilation in all rooms.
6. Large entrance porch to cater for large crowd.

DISADVANTAGES:

1. Lacks toilet facilities upstairs which may result in noise production as people are moving up and down.
2. No consideration was given to noise due to positioning of the library and the clinic at noisy and quiet zones respectively.
3. Courtyard not adequate.
4. Lacks adequate parking space.

4.3.3 FACILITIES:

a. Library
b. Offices
c. Clinic.
d. Catering unit.
e. Multi-purpose hall.

Note that only the multi-purpose hall is located on the upper floor. The ground floor has a total area of 1,037.00m^2 while the upper floor has 326.50m^2. The total area stands at 1,363.50m^2.

4.3.4 CONCEPT:

This is a courtyard concept consisting of an upper floor housing the multi-purpose hall and the ground floor housing other activities which surround the courtyard. The structure has two entrances with one at the main approach and a side entrance through the clinic.

4.4.0 COMMUNITY CENTRE, HOLSTEBRO, GERMANY:

This community centre was executed by Holtebro local community and the town council and was designed by Dall and Lindhardtsen. It was designed to accommodate the town's library activities which include art exhibition, film shows, concerts, topical displays, debates and seminars. It is also to serve as the meeting hall for the town councillors. Thus, it is an educational and administrative centre of the town.

4.4.1 FACILITIES:

LIBRARY:

1. Main entrance
2. Entrance hall.

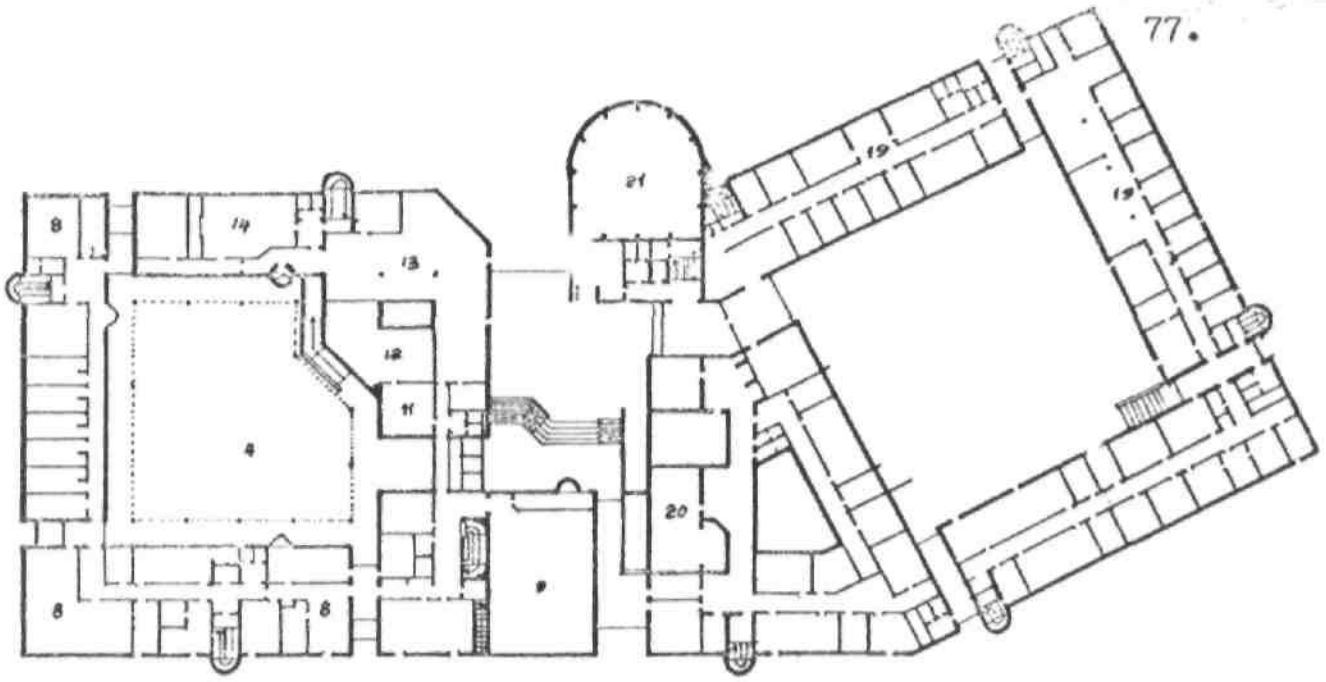
3. Counter
4. Lending and lounge area.
5. Children's lending area.
6. Periodicals.
7. Study area
8. Offices.
9. Library hall with stage.
10. Storage.
11. Meeting room.
12. News area.
13. Music library.
14. Little hall.

TOWN HALL:

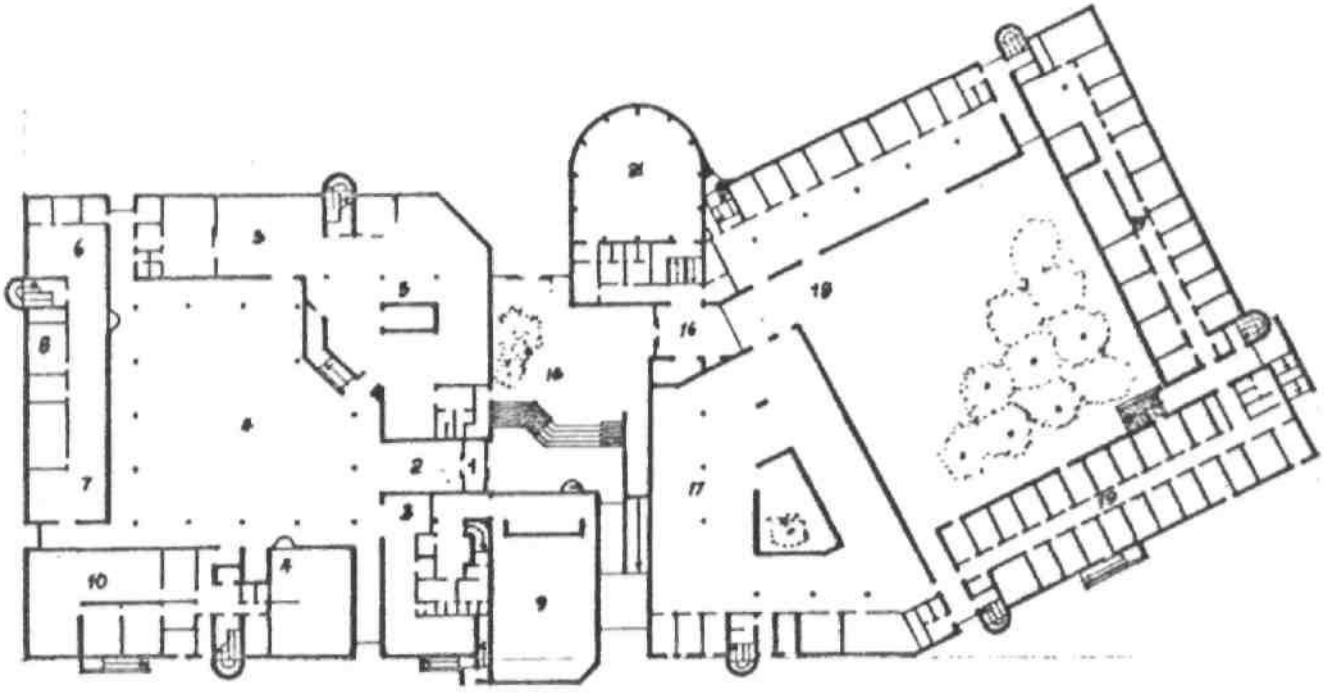
15. Glass covered square.
16. Entrance hall.
17. Waiting areas.
18. Counters.
19. Administration.
20. Meeting rooms.
21. Town council hall.

4.4.2 CONSTRUCTION/CONCEPT:

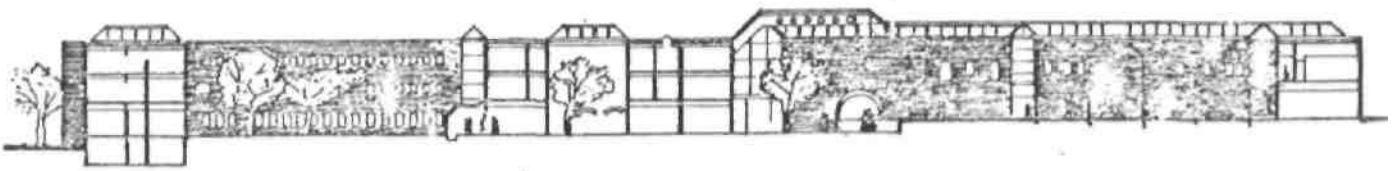
The complex is built up as a concrete structure clad in brick laid with thick, rough mortar joints. The general philosophy of the interior space and the plan concept has a rigid outlook that gives it a military touch.

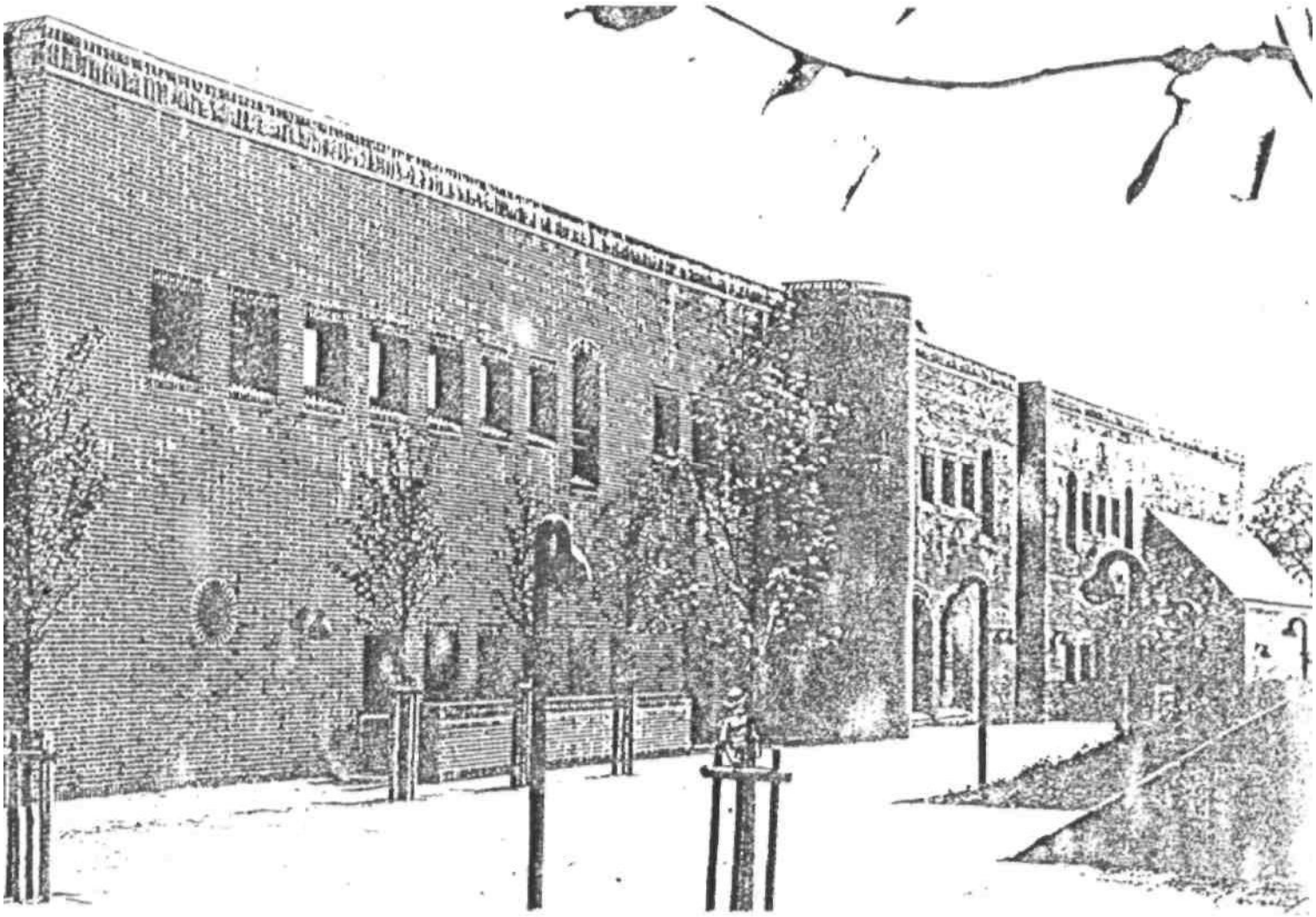


FIRST FLOOR PLAN 1:800



GROUND FLOOR PLAN 1:800





4.0.2 APPROACH VIEW OF HOLSTEBRO COMMUNITY CENTRE

4.4.3 APPRAISALS:

ADVANTAGES:

1. The use of locally building materials reduce cost.
2. Exclude winter winds and capture warmth of the sun.
3. Sensitive of its time in form of the general idea and the overall layout.
4. The sculptured staicase in the central space attracts one's attention from the ground floor to the first floor.

DISADVANTAGES:

1. The site is detached from the town centre.
2. The centre is totally removed from and out of scale with the town's small houses.
3. Lockers, public telephones and lavatories are not given much consideration as lavatory rooms are unproportioned and poorly lighted.

4.5.0 CONCLUSION:

From the analysis of the above case studies, a conclusion could be drawn to the facilities, building materials and construction, and even the approximate sizes of the various units.

CHAPTER FIVE

GENERAL PHYSICAL FACTORS, DEMOGRAPHY, SITE ANALYSIS AND SCHEDULE OF ACCOMODATION

5.0 LOCATION:

Kano, the capital city of Kano state is the largest town in northern Nigeria and the third largest town in the federation after Lagos (country's capital) and Ibadan (Oyo state capital). It borders Borno and Bauchi states to the east, Bauchi and Kaduna states to the south, Katsina to the west and Niger Republic to the north and lies between latitude $10^{o}30'N$ and $13^{o}N$, longitude $7^{o}40'E$ and $10^{o}35'E$ and covers an area of 43,070 square kilometres. An unofficial estimate puts metropolitan Kano's population at more than two million by 1981 (Figure 5.0) Map showing the location of Kano state).

5.1 GEOLOGY AND SOIL:

The whole area is underlain by granites, schists and gneisses of the basement complex. The basement rocks are over-lain by a thin sheet of lateritic iron stout, with young chadic sediments covered by soil and wind-blown sands and there are rarely any surface exposures.



5.0 map of Nigeria showing the location of Kano state

5.2 TOPOGRAPHY:

Kano state lies between the Sudan and Guinea vegetation zones. Urban Kano is about 500 km from the perimeter of the sahara and is about 450 - 500 metres above sea level.

The state is generally undulating, sloping to the north-east and has a uniform and monotonous flat landscape broken only by Dala and Goron Dutse hills which rises to a height of 525 m and 510m respectively above sea level.

5.3 CLIMATIC FACTORS:

It comprises of wind, temperature, raifall and humidity. Generally, the state has a composite climate characterised by a considerable changes of temperature during the day. Thus, there are two seasons in a year, the dry season lasting from November to April and the wet season from May till October.

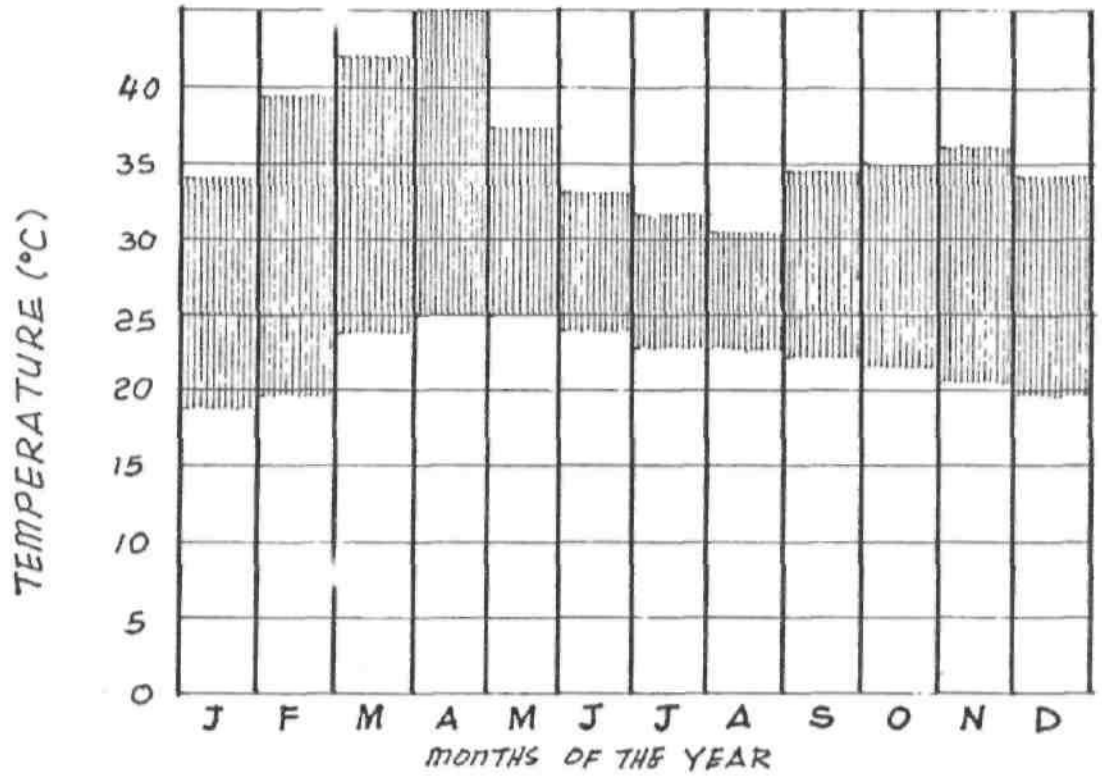
5.3.1 WIND - The wind nature is essentially responsible for the difference in climate in the state. North-east trade winds, tropical continental air mass blows during the dry season across the desert covering the whole area. It is the harmattan winds which is strong, dusty, dry and accompanied

with cold air mass. The dust is as a result of surface turbalance aused by wind difference in temperature.

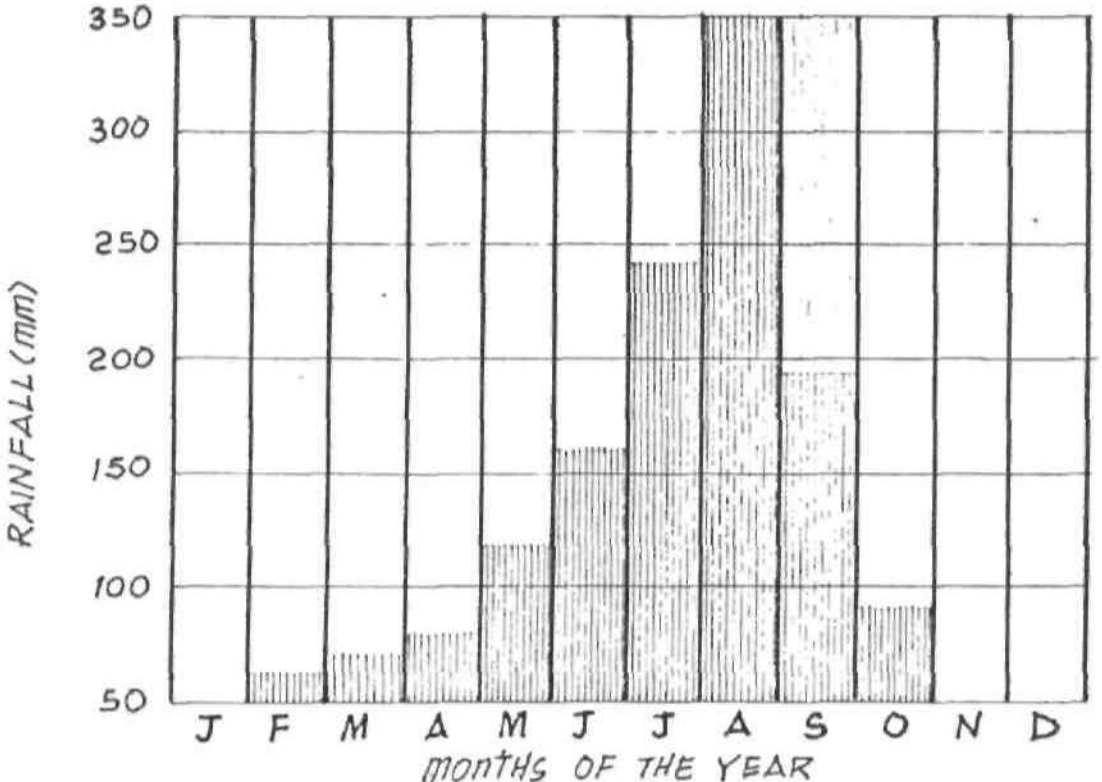
South-west trade winds, equatorial maritine air mass, coming to the land from the Gulf of Guinea brings the wet season. It reaches its peak in July to August and with velocities averaging 3.75mls.

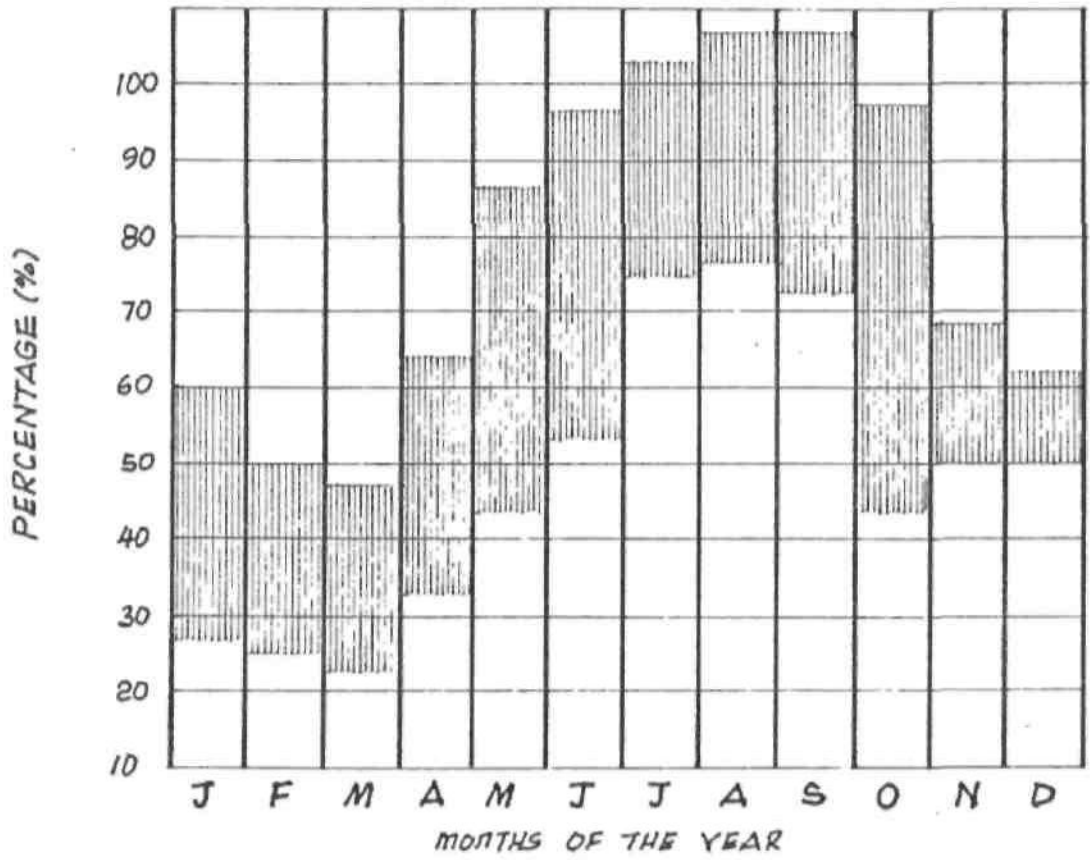
5.3.2 TEMPERATURE - Extreme values occurs during the dry seasons which can range from a mere 18°C in January to a high 40°C in April. Moderate Temperatures, cooled and with high humidity occur during the wet season. Mean maximum temperature is about 33.5°C or 92.3°F and mean minimum at 19.5°C or 67.0°F while mean air temperature for every three hours daily stand at 25.9°C or 78.6°F.

5.3.3 RAINFALL - The mean annual rainfall amounts to 862mm and occurs mainly between May and September with a peak in August. Hardly any rainfall from November to February. Rainfall is usually scanty during the months of January to March or no rain at all. Average rainfall stand at 0.4mm with the heaviest of 277.5mm in August.



a. ● TEMPERATURE CHART





C. ● RELATIVE HUMIDITY CHART

○ NOTE THAT THESE CLIMATIC ELEMENTS ARE AVARAGES FROM 1985 TO 1990, AND ALL CAIME FROM THE SAIME SOURCE

5.3.4 HUMIDITY - Fairly high during the wet season (60-80%) and remains around 30% during the dry season with daily maximum at 70% in the morning and 13% minimum in the afternoon. Average humidity for the first quarter of the year is around 25% due to the Harmattan and upto 47% in the second quarter as wet season is approaching and with the highest of 80% in August of the third quarter. During the last quarter, there is a sharp decrease to about 38% as dry season approaches.

5.3.5 VEGETATION - Climatic conditions dictate the vegetation pattern and occupation of an area and Kano's is no exception. Characterised by the orchard-bush, low level trees of medium height sparsely distributed and vast area of grassland, it falls within the sudan savanna.

5.4 HISTORICAL BACKGROUND AND DEVELOPMENT:

Kano city has a continuous history of over 1,500 years with Dala as the site for the first settlement and which formed the nucleus for the peopling of the area. Though it is an ancient city, it is not the oldest in the region as historical evidence indicates the existence of communities at Chalawa area by 2,600 B.C.; in Kazaure, Wawan Rafi by 2,400, and Gaya which oral tradition indicates

was a source of the earliest migration into Kano. Other settlements at Fanisau, Santolo and Fangwai also predate Dala.

Beside being a major source of iron ore in Kano region, Dala hill provides security which attracted skilled craftsmen that are well versed in the mining techniques, smelting and iron working that later grew and developed. This technical know-how and the waves of migration of people from different places into Kano formed the basis of its further economic and social development. Other important professions that were developing by this time were agriculture, leather works, building construction, weaving and various types of chemical processing such as dyeing.

The period between the 6th to the 9th century A.D saw the formation of the community and the emergence and development of various economic activities. During this period the location of the community was mainly in the surrounding areas of Dala Hill constituted in the form of separate local clusters called wards such as Makafin Dala and Rijiya Biyu.

A clear cut leadership whose territorial and political powers extends over other communities as

far as Fanisau and Santolo emerged between 10th and 13th century. External relations with other people and long distance trade became features in the development of the society. This led to the becoming of Islam and commerce a significant aspects in the state; and lead to the establishment of wards like Soron Dinki, Mandawari and Jarkasa all from 14th to the 19th century.

During the colonial period, starting from 1903 new settlements and public places emerged. These include: Nassarawa, Fagge, Sabon Gari and Brigade as residential areas while places like Kantin Kwari, Railway station and Bompai industrial Estate as public places. This process continued up till today with the establishment and expansion of residential places like Gyadi Gyadi, Hotoro, Tarauni as well as Sharada Industrial Estate.

After Nigeria got her independence in 1960, it was divided into three parts, East, Western and Northern regions for easy administrative convenience. Kano falls within the northern region and was further divided into provinces which later became states in April of 1968. Politically, Kano is structured into four emirates of Kano, Hadejia, Gumel and Kazaure. These emirates give birth to the Kano state's 46 local government councils.

5.4.1 HABE DYNASTY:

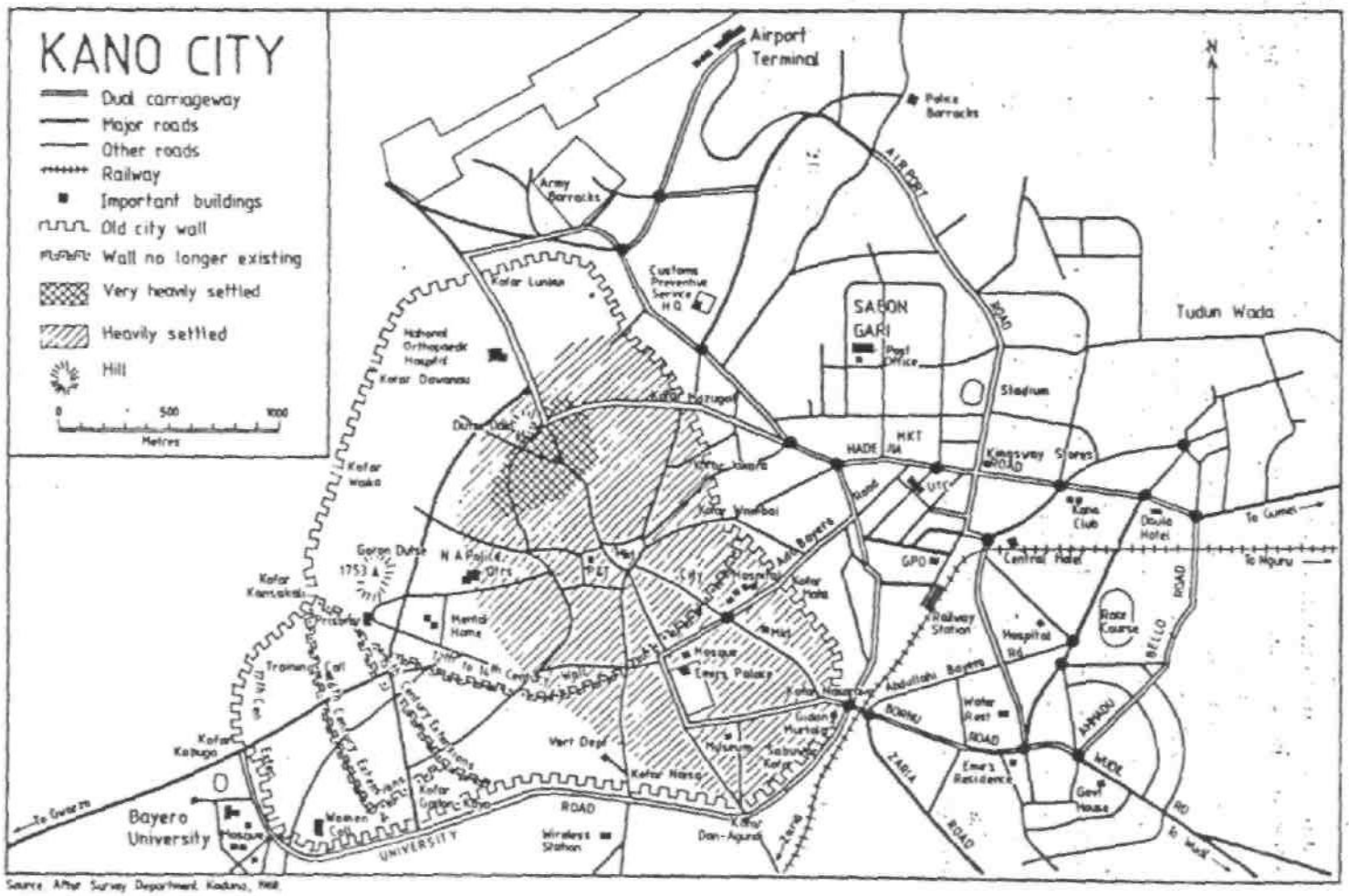
Among the communities that migrated to Dala Hill side was the "Habe community" and whose leader was Bagauda from Daura.

On coming to Kano, Bagauda and a large number of his followers immediately dislodged the local community and established the long line of Habe dynasty. During his reign as the first king of Kano, Bagauda demarcated Kano city, but the actual demarcation was done by his grandson, Gijimasu (1094-1134) who built the Kano wall and to which became the first step of Kano architecture (figure 5.2).

5.4.2 COMING OF ISLAM:

It was during the reign of Tsamiya (1307-1347) the nineth ruler in the Habe clan, that Kano paved the way for the spread of Islam when the Tsumburbura shrine was destroyed and its followers sent out to the outskirts of Kano.

During Sarki Yaji's reign (1359-1385), a significant following was recorded as he was the first ruler to accept Islam brought by the "Wangarawas" from Mali under the leadership of Abdulrahman Zaite and Sheik Mandawari. They came through the trans-saharan trade route to which Kano at that time serves



Source: After Survey Department, Kaduna, 1968

Kano City

5.2

as the southern terminus and second in importance only to the famed West African town of Timbuktu. Yaji, otherwise known as Ali, commanded his subordinates to also embrace Islam.

The reign of the famous twentieth Habe ruler of the fifteenth century, Muhammadu Rumfa (1463-1499), saw Islam and koranic traditions to their peak due to the contact with a great Arab scholar, Al-Maghili of Tlemcen from present day Algeria. His decedants still occupy Sharifai quarters in Kano minicipality.

Muhammadu Runfa is referred to as the greatest ruler in the history of Kano as having concern on strengthening the general infrastructure as well as solidifying its islamic character. He made Islam a policy of the state administration, built Kurmi market, Friday Mosque and introduced the institution of purdah (kulle), which governs the mode of residential planning that exist uptill today - Separation of house wives from the public zones by Zaure, a courtyard (visitor's yard) and the shigifa. He built gidan Makama museum as his residence before building the present palace, moving away from Madabo area near Dala Hill. To further enhance the general peace, law and order, sharia courts and the institutions of Islamic learning were established.

DEMOGRAPHY:

5.5 POPULATION AND ITS DISTRIBUTION:

Kano state is the most populous state in Nigeria with an estimated population of over 10 million. This was according to the growth rate of 1963 census. which was the only recognised census till date. An unofficial record put metropolitan Kano as having an estimated population of over two million which are predominantly peopled by Hausa/Fulani ethnic group.

In the nineteenth century Kano, before the forming of the boundaries of the moden city, the old city's population was bisected by the Jakara stream from west to east into north and south. The southern area was mostly inhabited by the conquering Fulani Jihadist while the northern area was mostly the original Hausas. Other peoples predominant in the city, which had an estimated population of about 40,000, where a mixture of Nupe, Kanuri and a good number of Arabs. With the influx of foreigners passing through or staying temporarily, the population is often projected to 60,000.

Like most towns in northern part of West Africa, the Hausa/Fulani culture of the past has today been almost completely replaced by Islamic traditions due to inter-marriages and cultural intermingling.

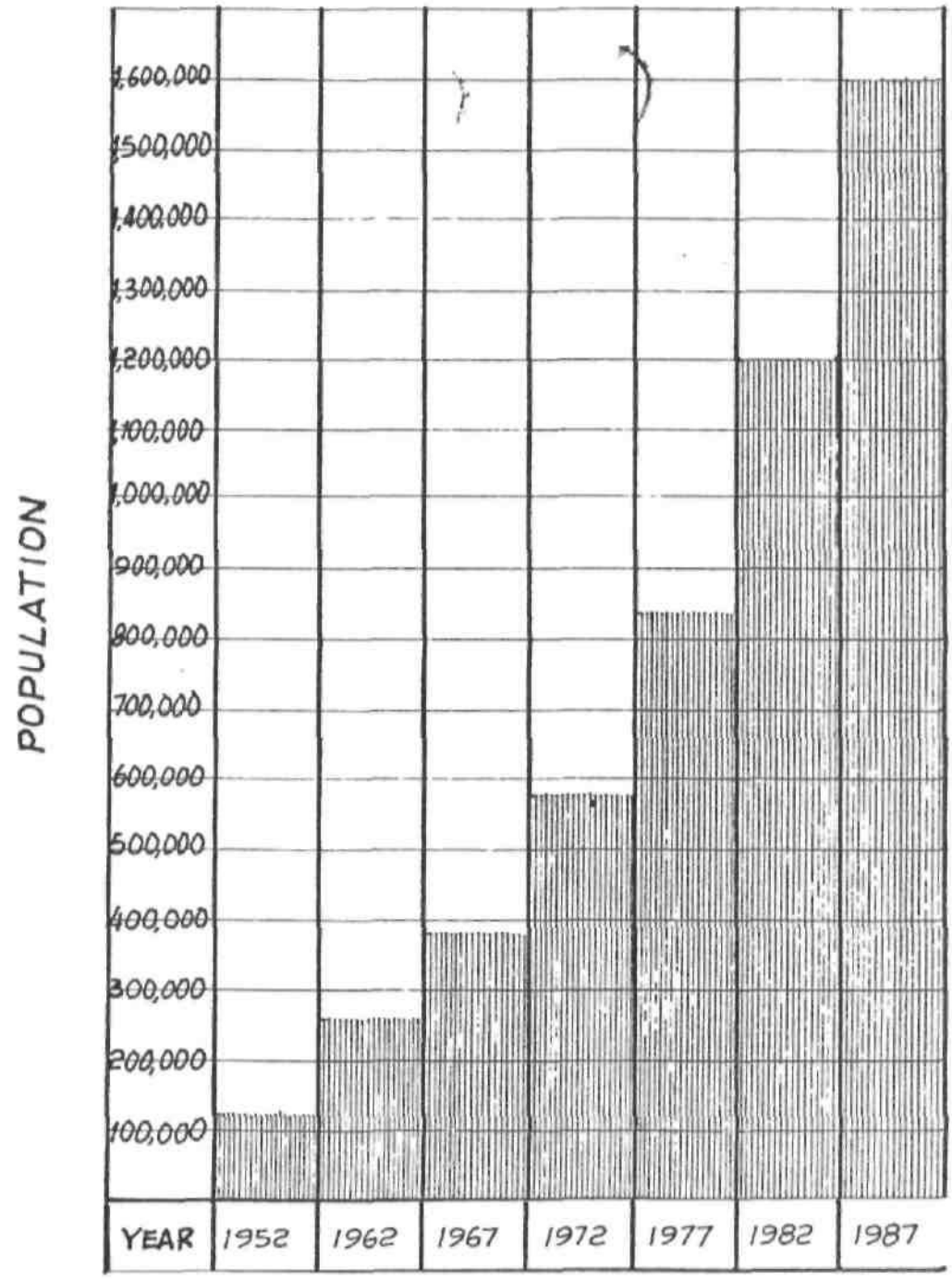
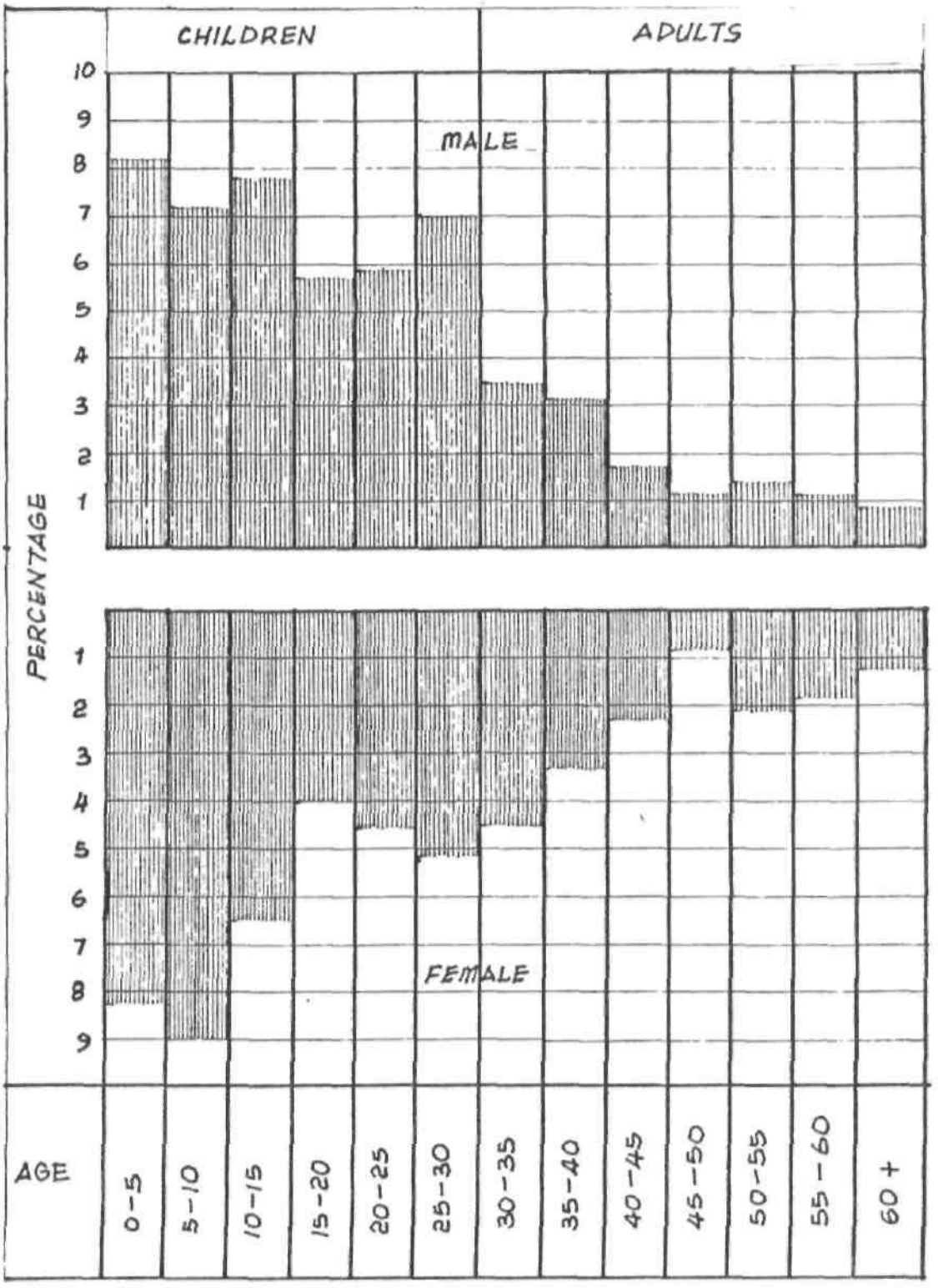


FIG 5 ● POPULATION GROWTH OF KANO CITY
BASED ON 11·5% GROWTH RATE



● AGE DISTRIBUTION OF KANO CITY

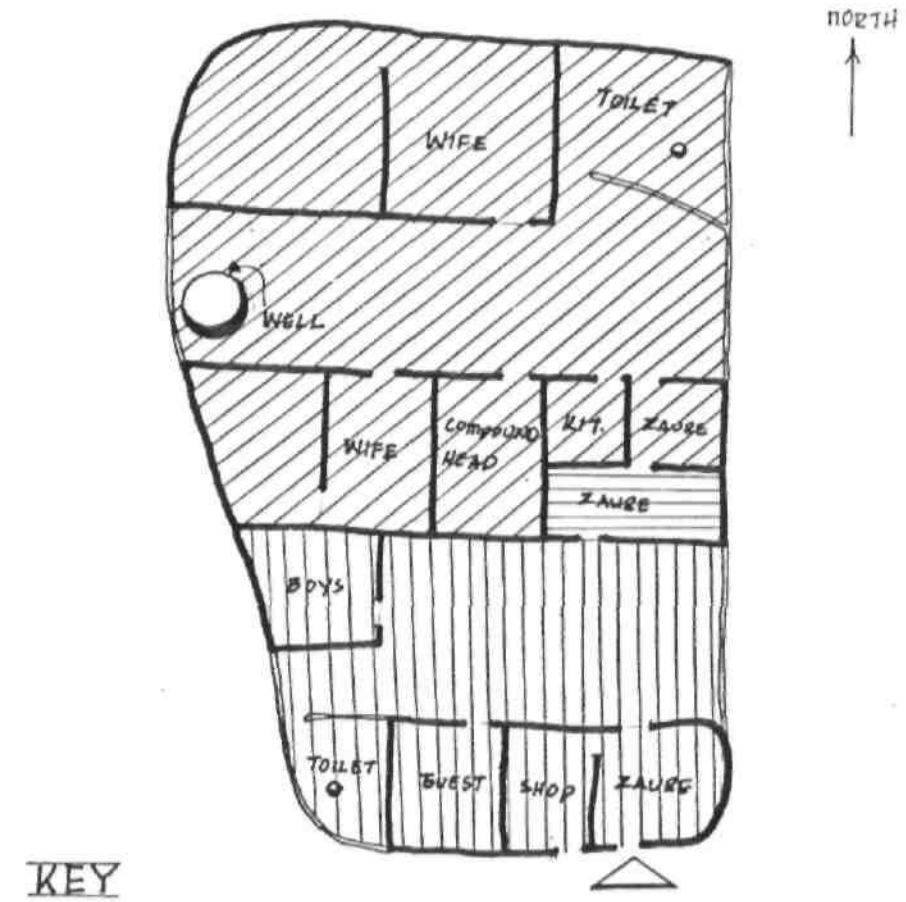
Apart from the major Hausa/Fulani ethnic group, almost all the other peoples of Nigeria are found to some extent in Kano with the Yoruba and Ibo ethnic groups clearly following the Hausa/Fulani majority.

5.6 FAMILY STRUCTURE:

Generally, most compounds in Kano city consists of a number of houses whom the owners are blood related. Extended family of father, mother, sons/ daughters and in most cases dependants are the basic unit of the society that normally stay in a large compound divided into sections according to individual requirements. The father or the eldest son is the head of the compound with religious beliefs stressing the basics of life - respect for old age. This Hausa/Fulani family structure is a good reflection of the whole society. Thus, individual houses depicts islamic concept of spaces to which the high regard for privacy produced a hierarchy of spaces of public - semi public and private zones (Figure 5.6)

5.7 OCCUPATION AND ECONOMY:

For long, Kano has been known as a centre of trade and industry which have attracted many skilled strangers and absorbed them - people from Borno, Ghadames in north Africa, Tuareg and Wangarawa, Maude



5.8 HEIRARCHY OF PRIVACY IN HAUSA HOUSE PLAN

speakers, mainly concerned with the gold trade. This mixture greatly enriched the business traditions of the city and made Kano traders to travel to places like Gonja (modern Ghana), the region now called Gabon, and the Mediterranean World. Kano was above all centre of industry - the highly skilled smiths, the famous 'Moroco' leather which originated in Kano, the dyeing industry with its famous indigo dyed cloth with which it was believed to clothed most people of the Sahara. Domestic crafts like basketry and pottery were well developed as well.

The cloth industry depended on cotton and the city people require food and so, agriculture is another highly developed industry and with some few crafts including war as dry season occupations. This shows that the people of Kano are for long medium income earners and which is reflected in their moderate way of living.

5.8 SITE ANALYSIS:

SELECTION CRITERIA: The selection of a site for any particular project is based on certain criteria. A site selection has to be conducted by consulting the bodies concerned for urban planning, provision laws and regulations, master plans and urban maps. Through this, options could be got for the site using the following criteria:

5.8.1 ACCESSIBILITY - The site should be easily accessible to both pedestrians and vehicular traffic using the little possible effort to reach the centre to encourage maximum utilisation.

5.8.2 AVAILABLE LAND - There should be need for ample land to allow for flexible design that will contain as many activities as possible and for future expansion.

5.8.3 TOPOGRAPHY - There should have a good topographical features such as elevation that will allow proper drainage of the site. The site should have a strong soil to ensure minimum cost in the construction of foundation.

5.8.4 SERVICES - The site should be close to services lines like electricity, telophone, water and drainage lines. This will allow easy tapping to the site and will eventually reduce cost of bringing these services.

5.8.5 PROXIMITY TO OTHER FACILITIES - Other facilities such as educational, cultural, recreational and administrative centres could be of great importance as they will help in the smooth running of the community centre.

5.9 THE SITE:

LOCATION:

This site is located along Malam Aminu Kano Way which is at the western part of Kano walled city. The immediate neighbour to this site is the Malam Aminu Kano commercial college adjacent and to the north, access road to the east with shops and houses across, Juvenile court adjacent and to the south, and a Muslim cemetry to the western part of the site. Across the access road and almost opposite this site is the open air theatre that serves as a cultural centre for local boxing and wrestling manned by the Kano state history and culture Bureau.

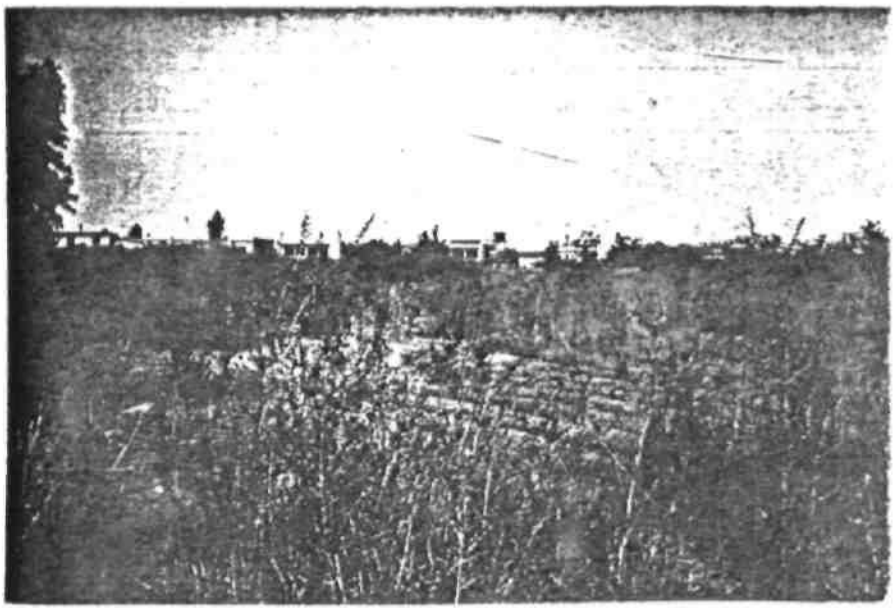
5.9.1 SITE FEATURES:

These are those element like the topography, drainage, vegetation, prevailing winds and the sun-path relative to the site. This will guide the designer to properly position the intended structure so as to exclude unwanted excess rain water, capture good views, achieve proper ventilation and avoid unnecessary heat.

5.9.2 TOPOGRAPHY/DRAINAGE - The site slopes gently towards the western direction giving a differenceo of about 0.5 - 1.0m along the east-west length.



a. North view of the proposed site



b. East view of the site



c. south view of the site



d. west view of the site



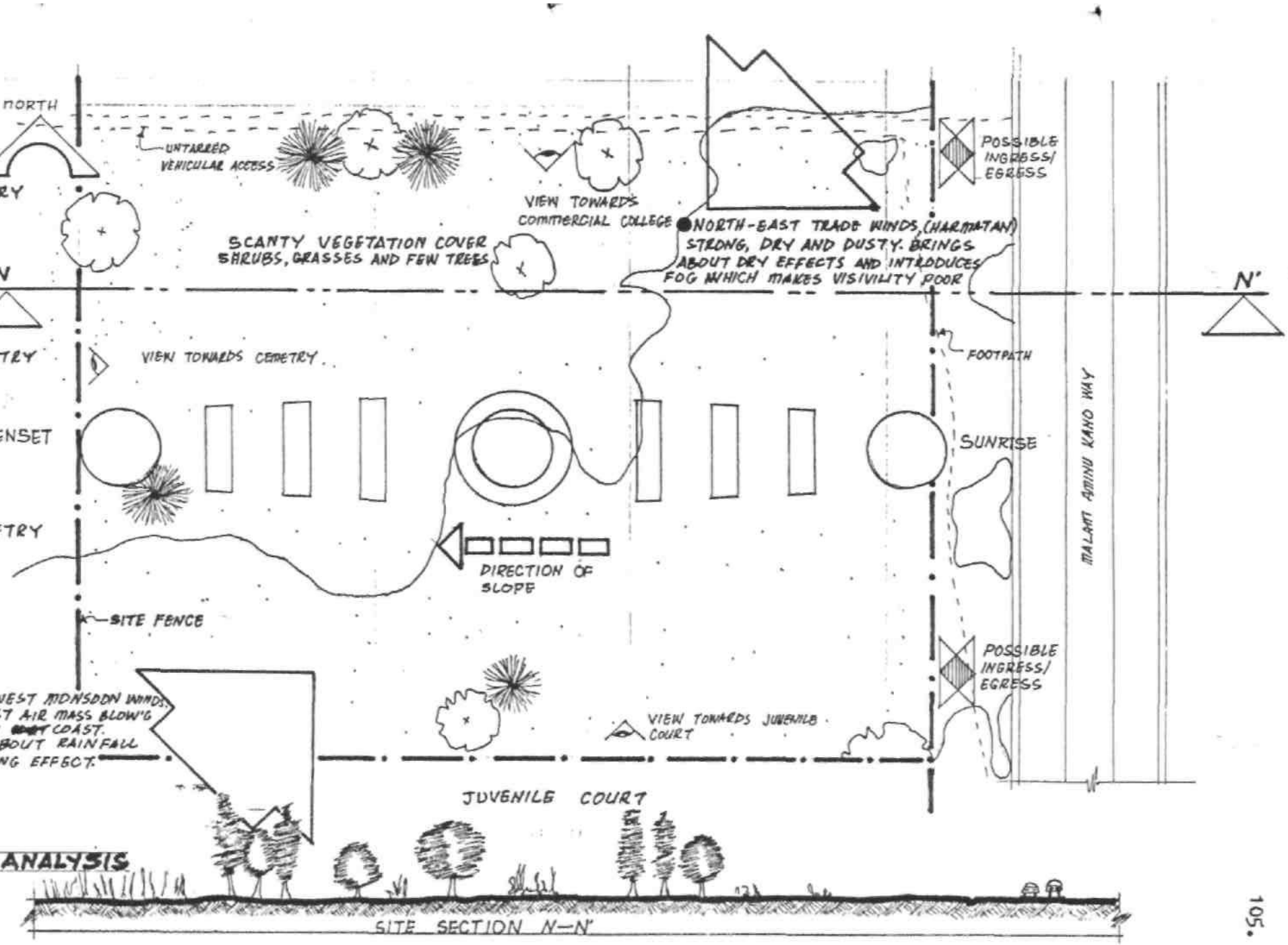
PART OF THE SITE ALONG MALAM AMINU KANO WAY WITH GORON DUTSE HILL AT THE BACKGROUND. COMMERCIAL COLLEGE AT THE FORE GROUND.

This gives a natural slope for drainage on the site towards the west direction and which is serviced by a drainage at the back of the site joining the one from the cemetry.

5.9.3 VEGETATION - There exists scanty vegetation cover on the site except for the part towards the drainage line on the western part of the land. The rest of the land is covered by shrubs and grasses which will cause no problem to clearance.

5.9.4 PREVAILING WINDS - There are two prevailing winds predominant in Kano and blow at different periods. The north-east trade winds which is strong, dry and dusty blows across the sahara desert from October to April. As it is not blocked by any structure, well planned and proper planting can check the menace of the wind - harmattan. The south-west monsoon wind on the other hand is almost the apposite of the north-east winds. It is relatively cool, moist and blows across the ocean and brings about the rain. This wind should be fully used for an effective ventilation as it is not blocked by any structure. Blows from May to September.

5.9.5 SUN PATH - During the harmattan period, i.e October - April, the sun-path moves along the east-west direction facing south. This makes the northern


NORTH
UNTARRED VEHICULAR ACCESS
VIEW TOWARDS COMMERCIAL COLLEGE
POSSIBLE INGRESS/ EGRESS
NORTH-EAST TRADE WINDS, (HARMATAN) STRONG, DRY AND DUSTY. BRINGS ABOUT DRY EFFECTS AND INTRODUCES FOG WHICH MAKES VISIVILITY POOR
SCANTY VEGETATION COVER SHRUBS, GRASSES AND FEW TREES
N'
VIEW TOWARDS CEMETRY
FOOTPATH
MALAM AMINU KANO WAY
SUNRISE
DIRECTION OF SLOPE
SITE FENCE
POSSIBLE INGRESS/ EGRESS
VIEW TOWARDS JUVENILE COURT
JUVENILE COURT
ANALYSIS
SITE SECTION N—N'

plane warmer than the southern plane. During hot season however, the movement changes to face north along the normal east-west and making southern plane warmer than the northern plane this time around. All the same, Kano being in the northern hemisphere, the period of heating on the northern plane is considerably less than in the southern plane and hence the northern plane has greater advantage in terms of cooling.

5.9.6 SERVICES - Services lines pass in front of the site. The water main from the water works is almost behind the site while the 33kv overhead cable electricity and the telephone lines run along Malam Aminu Kano Way on which the site is located. Other services like roads link the site from almost the four cardinal directions.

5.9.7 SITE FEASIBILITY AND VIABILITY:

A survey on different locations within Kano city itself and other areas have shown that there is no better site than this one and to which it had been earmarked for community development. The site has revealed an interesting dimension with respect to its accessibility and visivility which when combined together will enhance its utilisation. As a communal building, the question of exposing its traditional

value is of paramount importance and thus, the strategic location, its e sy access, its nearness to institution of learning for easier and proper reference and its being situated at a low density residential area are factors that strongly suggest the feasibility and viability of the site chosen.

5.10 SCHEDULE OF ACCOMMODATION:

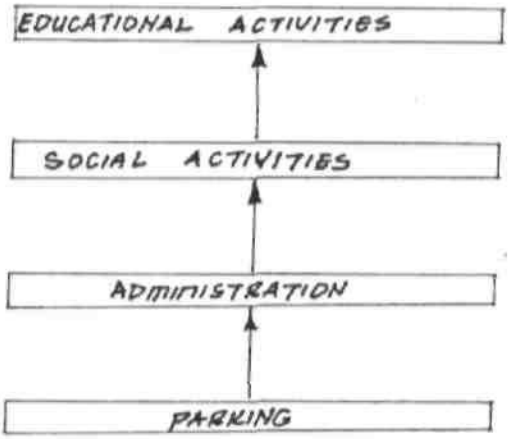
BRIEF - Community building consists of live activities and by definition subject to continual change. It is a process that thrives on the involvement of many people with many skills.

Designing for such therefore, is the deliberate process of giving visible shape to a community by creating its physical environment. This community centre for Kano walled city is intended to consist of administrative, educational, social, recreational and welfare units such that activities are not necessarily thought of as sequential but as interactive and continuing.

5.11 FUNCTIONAL ANALYSIS:

Function is defined as the human activity taking place within a defined space while the functional analysis of a complex is the relationship between the units of that particular complex. The activities

of this community centre can be represented/related as shown diagramati ılly below:



5.12 SPARTIAL ANALYSIS

For a proper accommodation of any activity, the dimensional requirements of spaces must be determined considering the number of persons that will be engaged in the activity. There are two ways of determining the spaces:-

A. ACTIVITY ANALYSIS - This is a crude or rather most accurate way of determining spaces where by the space in question is drawn out in scale, based on the activity taking place in the space showing the furniture arrangements, circulation and other requirements for that particular activity.

B. OBJECTIVE RATIONALISATION - In this case, there are standard dimensions of spaces of various

activities found in architectural and design books used to provide the established space required for particular functions.

In this community centre, which leaned more towards traditional concept, both type of the spartial analysis will be employed taking into consideration the wind of change that is blowing across the world.

5.13 SPACE REQUIREMENTS - From the analysis of the various case studies and size of the proposed site, the following functions are proposed for this centre:-

PARKING - This will be provided to serve the users of the centre and possibly the surrounding residential houses for parking at night even, though less attention will be given to them, the surrounding being a new layout with parking consideration unlike the organic nature of the inner old city. Both the staff of the centre and the public users may park at a central parking pool as the site size may not allow for separate staff parking. Each parking will be two and a half metres wide and five metres long unless otherwise.

5.023 ADMINISTRATION UNIT - This is the overall co-ordinating unit of the whole centre that takes

care of the smooth running of other activities.

5.023 EDUCATIONAL UNIT - One of the most important unit of the centre as it attracts people of all categories and enhance closer ties between individuals as they are enlightened through the studies. The unit is devoted to educating and training the community in their daily activities.

5.024 SOCIAL UNIT - This too is important as it attracts people of all categories so as to socialise. Activities such as traditional wedding ceremonies, club meetings, symposia, lectures, cocktail parties, film shows, indoor games, commerce in form of shops that sell writing materials, snacks, take-away foods, soft drinks and etc are carried out. Other activities include local boxing, drama and wrestling.

5.025 RECREATIONAL UNIT - Thisis inform of children play area and relaxation area for the adults. It serves to freshen ones mind. This could be an open space with benches under tree sheds and equipment for children's play.

5.026 WELFARE - Amenities such as clinic, restaurant and bar are provided so as to boost the maximum utilisation and revenue generation of the centre.

These amenities are meant to serve the in-house guest and the neighbouring community. Other facilities such as welfare and community development offices are also provided.

SCHEDULE OF ACCOMMODATION

DESCRIPTION OF ITEM	NUMBER	AREA (M^2)
ADMINISTRATION		
-Entrance porch	1	56
-Reception	1	80
-Information office	1	32
-Security office	1	16
-Central office	1	48
-Accountant office	1.	32
-Legal adviser	1	32
-Secretary/waiting	1	32
-Director's office with toilet and store	1	48
-Conference room with tea room and toilets	1	64
-Social welfare office	1	32
-Tea room	1	16
-Carrier guidance office	1	32
-Community development office	1	32
-Extra offices	2	84
-Cleaners office	1	16
-Stair cases	3	48
-Toilet facilities	2	64
TOTAL	22	764
CLINIC		
-Waiting/records	1	32
-Consultation room	2	26

DESCRIPTION OF ITEM	NUMBER	AREA (m^2)
-Passage	1	10
-Waiting for pharmacy/treatment	1	32
-Pharmacy	1	11
-Treatment	1	11
-Store	1	5
-Toilet facilities	1	32
TOTAL	9	159
COMMERCE		
-Art and crafts shops	2	70
-Other shops	6	208
-Toilets facilities	1	32
TOTAL	9	310
MULTI-PURPOSE HALL		
-Main lobby	1	247
-Side lobbies	2	182
-Ticket offices	2	12.5
-Ground floor gallery plus circulation area of 520 persons at $0.5m^2$/person	1	374
-Stage	1	95
-Male changing room with 1 store and 2 toilets	1	26.5
-Female changing room with 1 store and 2 toilets	1	26.5
-Upper floor gallery plus circulation area of 156 persons at $0.5m^2$/person	1	91.5
-Projector room plus balcony	2	23.75
-Staircase	1	11.25
TOTAL	13	1090

DESCRIPTION OF ITEM	NUMBER	AREA (m^2)
AUDITORIUM/DANDALI		
-Main lobby	1	174
-Ticket offices	2	32
-Offices	2	24
-Store	1	48
-Clubrooms	2	192
-Ground floor gallery with circulation area of 276 persons at $0.5m^2$/person	1	288
-Stage	1	72
-Backstage	1	55
-Female changing room with 1 store and 2 toilets	1	51
-Male changing room with 1 store and 2 toilets	1	51
-Upper floor gallery with circulation area of 560 persons at $0.5m^2$/person		
-Upper lobbies	2	150
-Projector room	1	9
-Lighting control room	1	6
-Security post	1	6
-Offices	2	12
-Stair cases	4	119
-Side lobbies (ground floor)	2	144.5
-Toilet facilities		60
-Stage to Dandali	1	221
-Main Dandali Arena	1	1584
TOTAL	28	3396.5

DESCRIPTION OF ITEM	NUMBER	AREA (m^2)
MUSEUM		
-Store	1	15
-Office	1	30
-Display hall	1	82.5
TOTAL	3	127.5
EXHIBITION HALL		
-Store	1	15
-Office	1	30
-Display hall	1	82.5
TOTAL	3	127.5
RESTAURANT		
-Changing rooms, male & females	2	15
-Store/passage	1	15
-Kitchen area	1	30
-Eating lounge of 30 persons at $2m^2$/ person	1	75
TOTAL	8	135
BAR		
-Store	1	15
-Servery	1	15
-Office	1	9
-Drinking lounge	1	85
TOTAL	4	124
EDUCATIONAL UNIT		
-Materials stores	2	84
-Workshops	4	432
-Classrooms of 25 persons at $2m^2$/pers	6	324
-Two staff room and two offices		
-Anciliary services (2 staircases		

DESCRIPTION OF ITEM	NUMBER	AREA ($^{-2}$)
PARKING		
-Parking for vehicles; 71 vehicles parking and 9 vehicle parking lots for cycles	1	1800
-Services bay	1	690
TOTAL	2	2490
GRAND TOTAL		10,069.5

CHAPTER SIX

DESIGN CONCEPT AND REPORT

6.0 FUNCTIONAL ORGANISATION:

Considering the importance of a well functional organisation in the design of a community centre, the functional organisation of this proposal is therefore directed towards achieving a well co-ordinated and controlled environment that will ensure a good communal belonging.

Thus, the various units should be linked together in the most desired manner possible through a free and simple flow pattern.

6.1 SITE ZONING CONCEPTS:

In order to arrive at a suitable zoning concept, it is necessary to analyse the various zoning factors so as to achieve utmost functionality in the complex. Thus, zoning as regards to Hausa society could be viewed from three important aspects of site zoning:-

a. Noise

b. Privacy

c. Functional relationship.

6.1.1 NOISE ZONING:

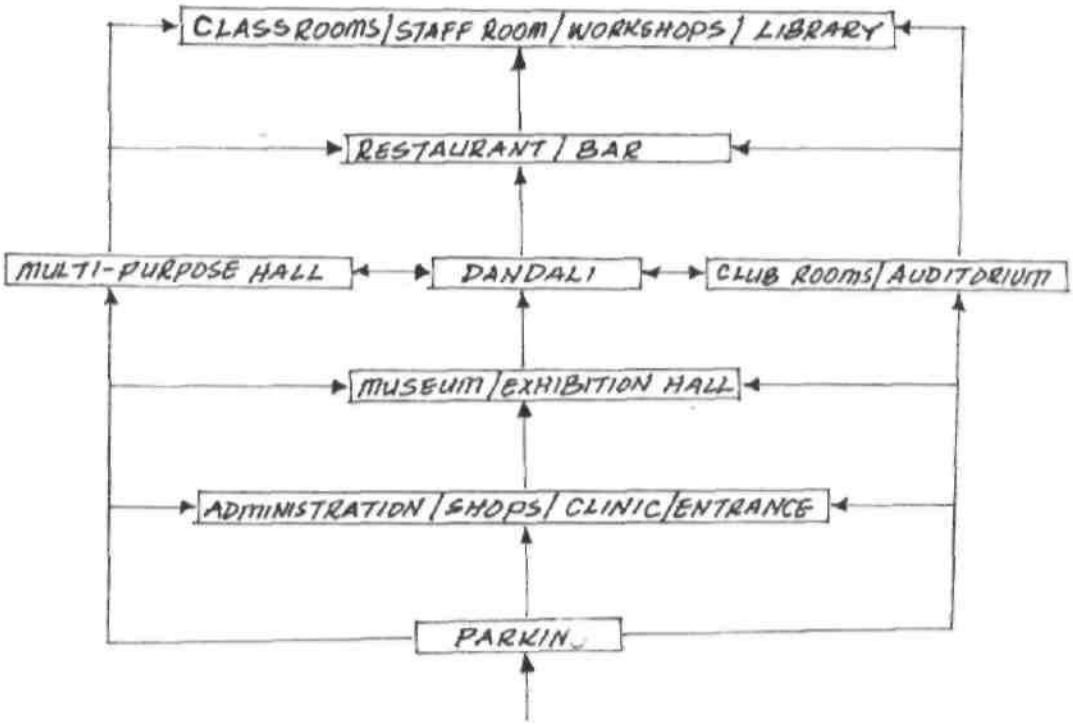
NOISE ZONES	NEUTRAL ZONES	QUIET ZONES
-Dandali	-Restaurant	-Classrooms
-Shops area	-Administration	-Library
-Auditorium	-Bar	
-Multi-purpose hall	-Museum/Edhibition	
	-Clinic	

6.1.2 HIERARCHY IN PRIVACY:

PUBLIC ZONES	NEUTRAL ZONES	PRIVATE
-Dandali	Administration	Classrooms
-Shops	Restaurant	Workshops
-Auditorium	Bar	Library
-Multi-purpose hall	Museum/exhibition	
-Clinic	hall	

6.1.3 FUNCTIONAL RELATIONSHIP:

The different functions of each unit could be related such that they form a complex whole in which each unit is seen as an essential part of the remaining whole such that the concept is well suited to this design.



6.2 DESIGN CONCEPT: PLANNING PRINCIPLES:

The eventual purpose of any good design is the satisfaction of its users, visitors and spectators alike. This proposal, a community centre, will aim at creating an environment which can absorb all (male, female, young and elderly) through the use of maximum number of activities.that will lead to the eventual deepest sense of belonging to the community.

In the hope of creating an architecture that reflects environment, cultural and public values of the Hausa people, the design concept is an adaptation and abstraction of traditional and indigenous concept

of the research matter and so lead to the evolution of the whole progr me. It is based on the need to philosophise the design approach towards a rational and scientific architecture that it based on traditional continuity, traditional values and elements which can subsequently relay historical continuity. This will improve the continuity of Hausa traditional architecture, ensure its growth in the contemporary scene of architecture which will facilitate and fulfil the fundamental necessity - exposing the traditional values.

The analysis on Hausa architecture previously (chapter 3) has shown that there exist some dominant and definite architectural forms in Hausaland and these therefore should serve as the guiding principle in this design proposal.

6.2.1 SITE CONCEPT:

The site concept, the bedrock/backbone of the whole design is based on the principle of organising harmoniously essential parts to form a complex entity thereby enhancing educational growth, efficient administration and communal interaction.

The function and personality of building should be well reflected visually and psychologically. The visual unity which should be well understandable to

the human eye and animate the community.

Traditional concepts of space organisation based on heirarchy, security, massing and celebration of dominant spaces is adopted in the conception of the site as these are fundamental principles used in Hausa planning.

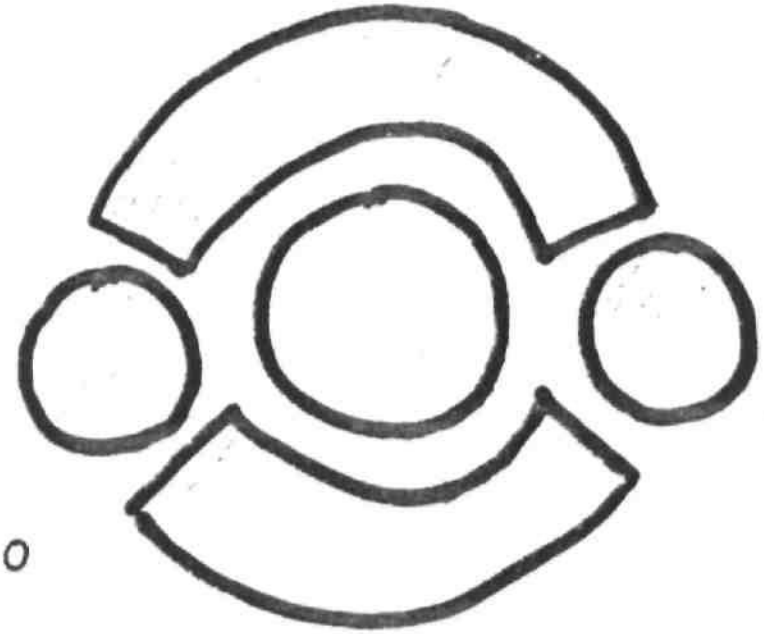
Considering the configuration of the site accessibility factor, and the need to respect the site within environmental and social context, the following concepts were proposed and the last one was adopted after a critical and careful analysis (figure. 6.0) For its advantages, potentials and expression of the principles already outlined.

6.2.2 FORM CONCEPTS:

The concept of forms in architecture had thus been tied to utility, materials and construction techniques and not based on the object of philosophy. However, in Hausa architecture forms have been developed out of symbols (symbolic forms) and objects that relay the much desired identity in buildings which had been the case in the African building tradition.

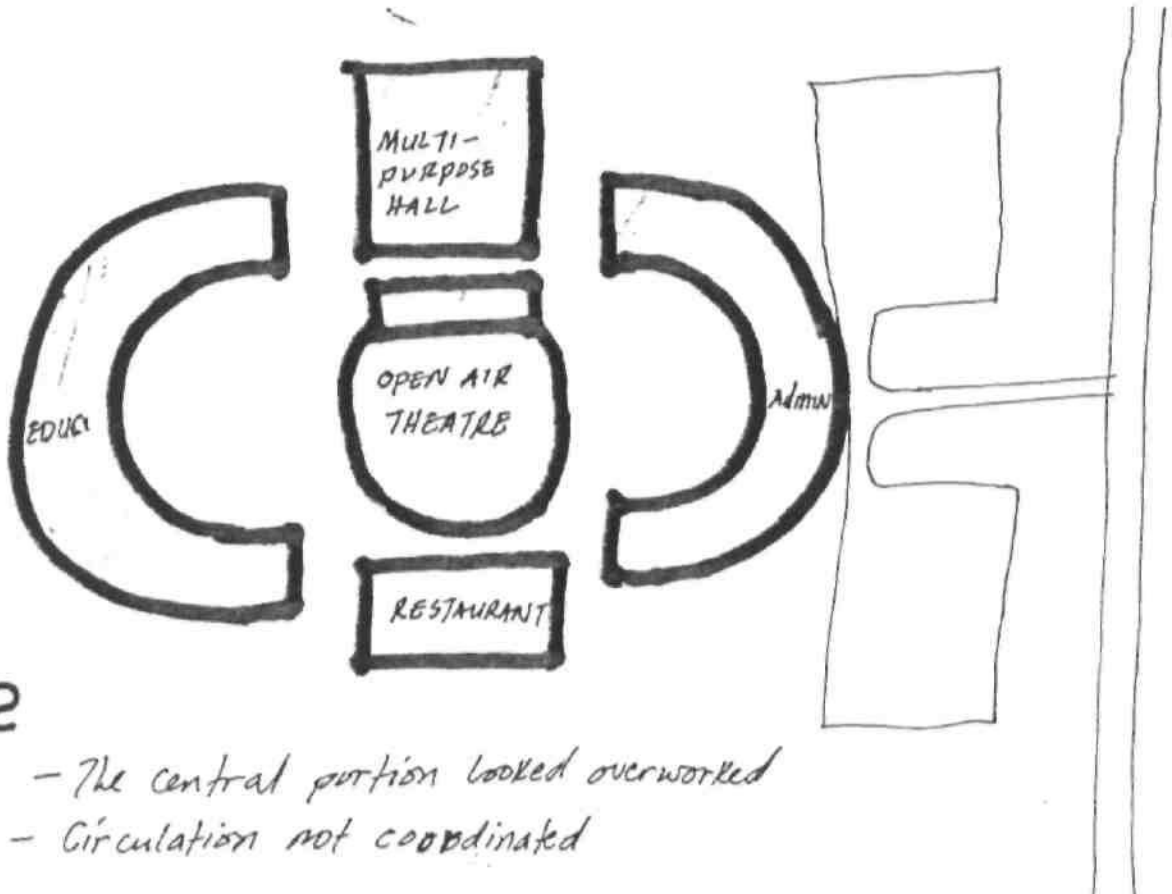
Towards this end, forms that have been developed over the centuries can now be used in the various units of the complex depending on their functionality

CONCEPT DEVELOPMENT



6.0

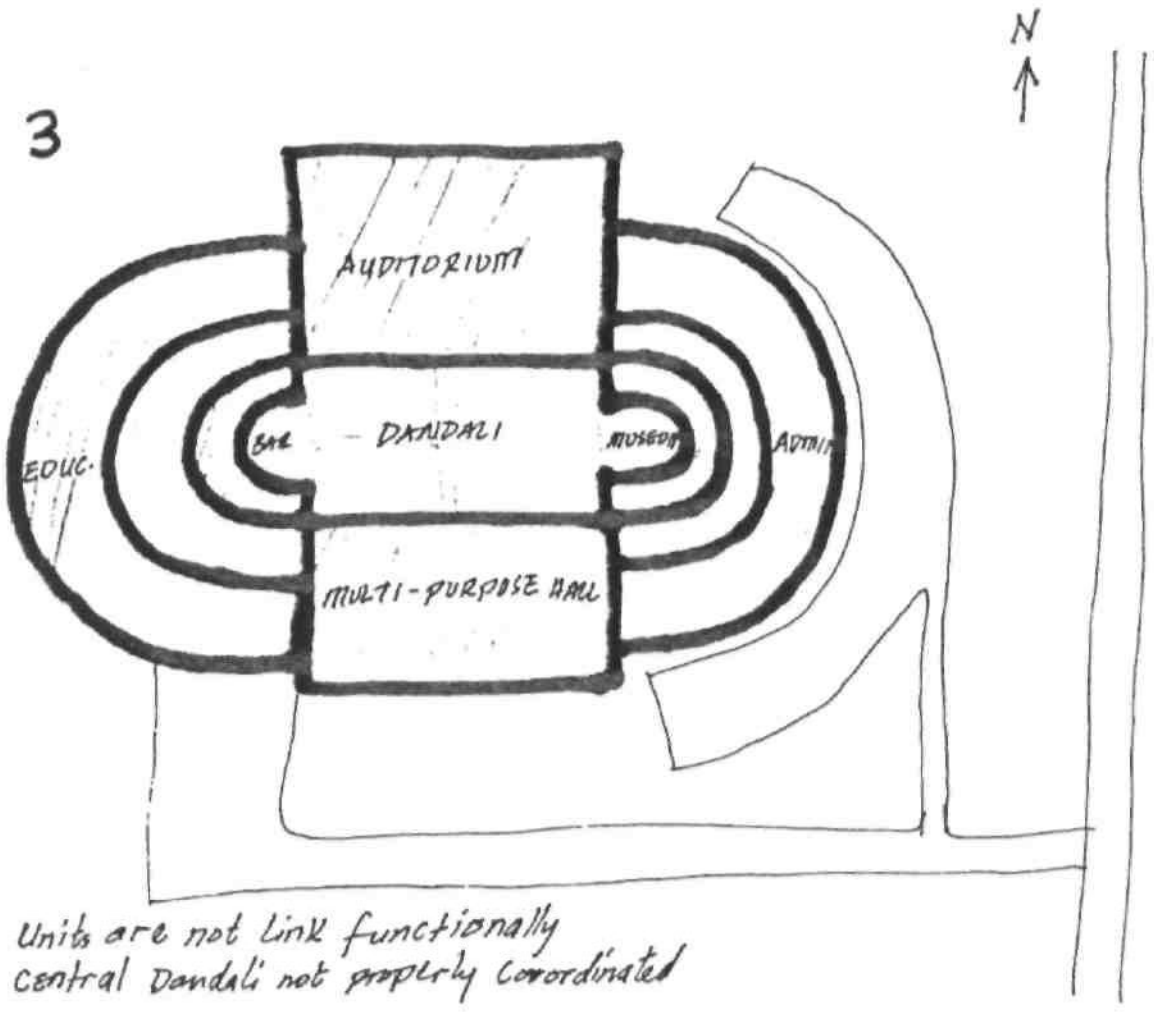
1. TRADITIONAL CONCEPT
— everything revolving round a central core



2

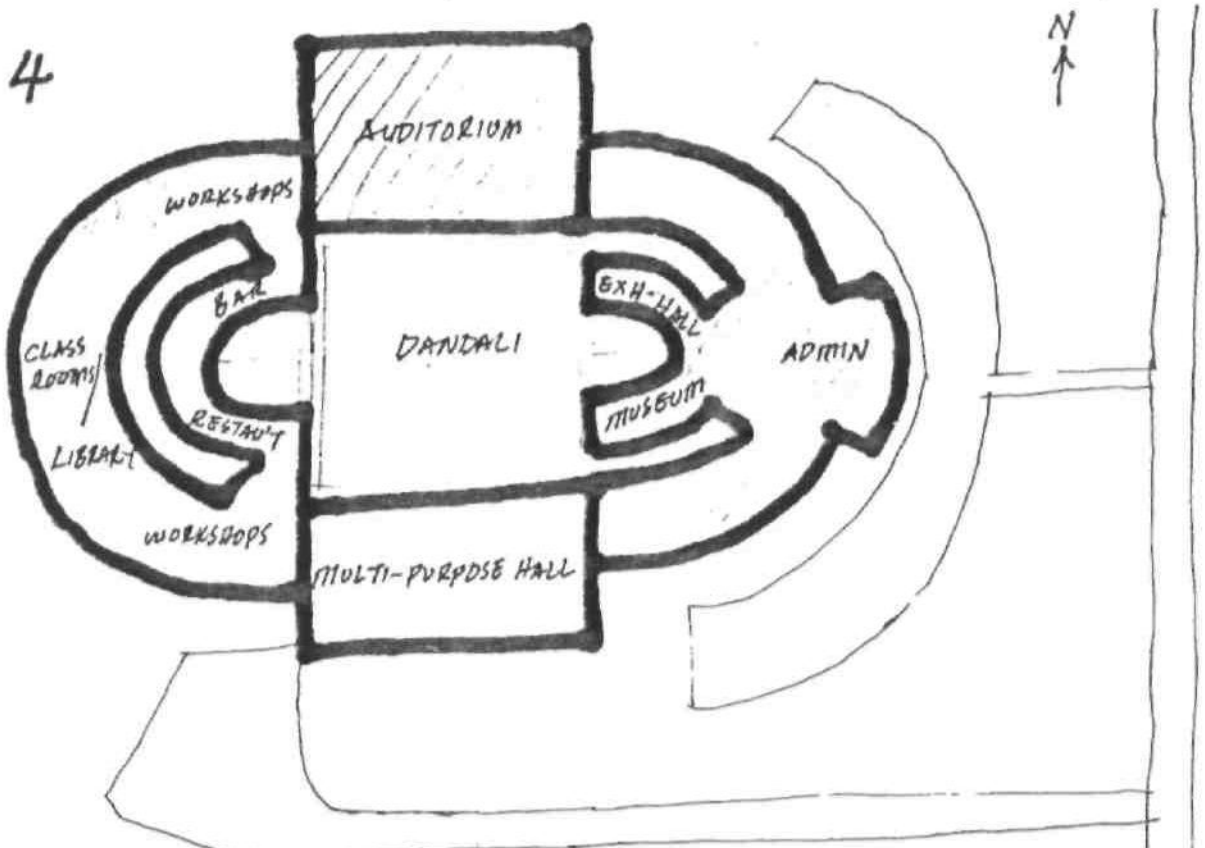
- The central portion looked overworked
- Circulation not coordinated

3



- Units are not link functionally
- central Dandali not properly coordinated

4



in the building. Pinnacle (zanko) and dome (tulluwa) in Hausa architecture are few examples of form expressions that have visual and psychological impact on the people.

For the purpose of achieving the provisions of physically adaptable to its functions, culturally understandable, visually impressive and inviting of the exterior, certain symbols and objects of use in Hausa architecture are employed in the design. Such symbolism will enrich the content and expand the scope of the architecture to include meaning as well as expression in its form.

6.3 DESIGN REPORT:

This is the description of the various units of the community centre such that the thesis gives an indepth outlook of the complex without looking at the plans. Thus, it is done in such a way that even a layman who cannot read architectural plans can easily perceive the centre.

6.3.1 ENTRANCES:

The site has two entrances; one leading to the service bay at the far left side of the site and another which is almost at the centre of the site that serves as the main entrance into the site. The main entrance into the complex that leads to all sections/units is directly facing the incomer such that there will be no mistake about it as both the vehicular and the

pedestrian walkway directly leads to it. It has a very wide semi-circula flatform entrance porch about three flights high approached by steps on the front side and ramps at both sides. Beside the only pillar at the centre edge of the entrance porch flatform to add tast to the elevational outlook and structural stability, there is no any obstruction.

At the far right and left wings of the complex, there are direct, beside the main entrance, separate entrances to some units due to the nature of their activities. These entrances are those that lead to the auditorium and the dandali to the far right and the one to the far left that leads to the multi-purpose hall and also the dandali.

Beside these entrances, there is another one at the other end of the complex along the main entrance axis and others at the sides of both the auditorium and the multi-purpose hall for the purpose of discharging large crowd easily in case of emergency. In all, there are six wide entrances/exits of not less than two metres each.

6.3.2 ADMINISTRATION UNIT:

This is located at the main approach to the complex. Apart from the reception area and few offices,

the majority of the offices are at the upper and only floor s as to give the administrators some degree of privacy but at the same time within reach and also allowed to overlook the whole complex inwardly and outwardly.

There are three accesses from which one can reach the administration. One directly from the reception while the other two at the ends of the length of the carved shape block.

The ground floor of the administration block has series of shops and a clinic for the community's use. They could be reached either from the main entrance or the side entrances previously described. Besides the stairs that leads to the upper floor are toilet facilities for both separate male and female of which the same facilities are provided for the uppor floor users.

6.3.3 MUSEUM AND EXHIBITION HALL:

These too are also in a semi circular form making a smaller curve compared with the outer one, the administration block, with exhibition hall to the right, museum to the left and the two divided by a wide passage. Both one floor high and can be reached from the main entrance or the sides. Their

frontage are facing the inner complex, i.e the Dandali while the back faces the administration block.

In the museum, artefacts of historic background are displayed so that the tradition of the community is promoted and known widely. Any new found item could be brought for display. The exhibition hall in another hand could be used to display improved manufactured items so that their use are promoted. The exhibition hall could even be used to promote cultures of another community different from the one known for proper understanding among communities.

6.3.4 MULTI-PURPOSE HALL:

A rectangular shaped structure with its longer axis facing north-south is located at the centre of the far left side of the complex of two storey high. It can be approached from the main entrance as its sides entrance, through the side entrance of the complex as its main entrance and all leading to the building's lobby. The stage is on the western and facing the audience at the eastern end and who are backing the entrance lobby to the hall. The upper floor houses a smaller gallery the projection room and both served by a staircase from the main lobby of the multi-purpose hall.

Internally, the hall faces the Dandali while externally it faces the service road that passes to the services bay. Some activities that take place in the hall include:-

a. Dramas
b. Dancing and discos.
c. Parties.
d. Film shows.
e. Public lectures and meetings.
f. Indoor games (table tennis, judo).

6.3.5 AUDITORIUM:

Located exactly at the opposite side of multi-purpose hall, it is approached from the main entrance to the complex as its side entrance and vice versa with its side entrance, all leading to the auditorium's lobby. It is raked to make two floors high building such that below the upper floor, offices for tickets and administration of the unit and club rooms for club meetings, playing of cards, ludo, draft, chess etc among clubs are located.

At the stage side, facing south, there is a back-stage, changing rooms, and equipment stores for performing artists with their separate entrance. Toilet facilities for the audience are located at the edges of the stage without calling audience

attention for both male and female separate use.

Generally, the auditorium is used to supplement the use of the Dandali to some percentage during difficult times or when their is the need.

6.3.6 RESTAURANT/BAR:

A replica of museum and exhibition hall structure, they can both be approached either from the complex main entrance or side entrances, either being equal. The restaurant can serve thirty persons at a time while the bar upto forty persons considering two metres square per person. At the end of the curved shape, the building is linked by way of providing stores which serves the education unit.

6.3.7 CLASS ROOMS, WORKSHOPS AND LIBRARY:

This is the educational section of the community centre and located at the end of the complex, i.e western end. It is the replica of the administration block on the opposite side but a little bigger in width due to the activities concerned. The whole unit is placed such that some degree of noise level is achieved. At the edges of the curved shaped form, workshop, classes were provided as high level of noise is not a great problem. This has provided a buffer to the classrooms which are in-between the

stair cases and toilets facilities. Staff rooms and offices were located at the ground floor while the library is located at the upper floor for greater level of noise control and serviced by two staircases. There are two reading rooms with librarian office, book store and a wide attendants counter at the centre.

6.3.8 DANDALI:

This is the focus of the community centre which is open to the sky with stage at the northern end backing up the auditorium. All accesses converged to the Dandali with smooth flow pattern. Thus, all socio-cultural activities take place in this space. Some of the functions include:-

a. Local boxing.
b. Local wrestling.
c. Mini trade fair.
d. Drama.
e. Public rallies, lectures and mobilisation campaigns.
f. Musical concerts.
g. Fulani sharo (whipping).

6.4 ELEVATIONS/SECTIONS:

These are the general physical outlook of the community centre which are positioned into North, East, South and West elevations. Thus, the elevations were drawn in such a way that they portray the traditional

outlook. Sections are drawn to show some internal dimensions and d ails that were hidden.

6.4.1 NORTH ELEVATION:

This is the right side of the community centre looking at it from the approach view. On this view, the administration block is to the left, auditorium at the centre and the dominant of the other units while the educational facilities are to the right.

6.4.2 EAST ELEVATION:

The main approach view to the community centre with administration block domineering over other units. At the far right of the complex is the auditorium while to the left is the multi-purpose hall.

6.4.3 SOUTH ELEVATION:

Located to the left of the approach view, the dominant feature being the multi-purpose hall which is centrally positioned has the administration unit to its right and education unit to the left.

6.4.4. WEST ELEVATION:

The back view, it is dominated by the educational unit and flanked to the right by the multi-purpose hall, while the auditorium is to the left.

6.4.5 SECTION A-A

Th s has been cut across the centre along south north direction. It cuts through the multi-purpose hall from the south going towards the north across the Dandali and finally through the auditorium. Thus, restaurant and bar units are seen which have not appeared on any of the elevations and details such as how spaces are roofed are exposed.

6.4.6 SECTION B-B

Cut across the conference room and reception area of the administration block, through museum/ exhibition hall, cut across the Dandali and through the restaurant/bar units and finally through the educational unit across the library and the staff room.

6.5 SITE PLAN:

The site is oriented in such a way that the longer axis is facing north-south direction for greater ventilation efficiency. The east-west elevations have been adequately shaded to provide the needed ventilation adequately.

The site planning concept is done in such a way that expansion is given more emphasis to the western and northern sides due to the fact that to the east,

a clear space is required while to the south there is a court which does not like crowd for its ef cient running. But to the north is an educational building with open space such that in case of expansion beyond space requirement in the community centre, it could be negotiated. The site has been pushed to the western end because the adjacent site at the back is a cemetry and with time, it could be used for building and as such be negotiated with government to acquire the land for expansion.

6.6 SERVICES:

These are the blood vein of the community centre without which the level of activities may come to a standstill. These facilities include:- access, parking, electricity, water, drainage and circulation.

6.6.1 ACCESS:

The vehicular access into the site is provided from the now only possible entrance into the site, i.e Malam Aminu Kano Way. In the site, the road is diverted to both right and left of the community centre. Towards right is the auditorium and cycles parking lot while to the left is the staff and multi-purpose hall parking lot with separate vehicular access at the far left of the site.

The pedestrian walkways are also taped directly from same Malam Aminu Kano Way into t e site on both sides of the vehicular access so as to avoid congestion.

6.6.2 PARKING

Cycles plus sixty eight parking spaces were provided to the centre consideing 2.4% coming with vehicles at the peak hour. Thirty one parking spaces on the right side and forty on the left side for users were provided with nine parking lots on the left side for staff and an equal size of staff parking space for cycles parking on the right.

6.6.3 ELECTRICITY:

Taped directly from Malam Aminu Kano Way into the site from the power line, just along the road. A surface pole line distribution and which the same was used into the complex.

6.6.4. WATER:

Since there is a water main along the access road, water was taped from this main into the site and taken round the complex. At the entrance porch, the water pipes were passed through bigger pipes specially made to serve services lines. Same system was used where necessary.

6.6.5 DRAINAGE:

For soiled water, septic tanks were provided at three points so that blockage problem is avoided due to long distance if it were a central collection point.

For storm water, water spout with pipe was provided to drain the water down to avoid spoiling the elevational view due to driving rain. At the ground level, proper drainages were provided round the whole community centre and then discharged towards the western part of which the natural slope is directed.

6.6.6 CIRCULATION:

Circulation is arranged within the community centre in such a way that one can go round the whole of the community centre on a property paved and covered walkways. The pattern of circulation will make the functional components accessible easily and the traditional concept of revolving round was depicted on the whole complex.

CONCLUSION AND RECOMMENDATION

The main aim of this study viewed man, i.e. an individual, as a specie in an ecological framework. This framework consists of the individual's own artifacts, his building therefore should be viewed as specimen in the general concept of his environment. The concept should therefore be seen as a dynamic course through time and the future of which is a function to some level of its existing state.

As technological advancement is altering our environment at an alarming rate, often in ways which are to our disadvantages, the questions still remain, are we to continue on the same ugly way once travelled to its ends by the so called developed nations or are we to choose the only route that will lead to disaster and catastrophe?

Since culture is dynamic, traditional architecture cannot develop through direct copying or by an adaptation of the newest local fashions of different traditions. All the same and due to the wind of change in all aspects of life world over, an equal synthesis of the concept as an examplary philosophy for architectural design with freedom of the choice of the use of various approaches offered by modern civilisation with respect to specific traditions is suggested.

Finally, it is the wish of this study to recommend the use of communal efforts from the jobless members of the society with skilled supervision in the construction process of this community centre so that at the end of the day, some percentage of the community's unemployed populace must have acquired the knowledge of building and in future could be the source of their livelihood.

Thus, the community centre, if this recommendation is implemented, will be viewed from the onset of it as an effective way of keeping every member of the community busy since the unskilled labour is from the unemployed members thereby eradicating crimes that will eventually lead to peace and love in the community. The community centre therefore, is not only concerned with the promotion of cultural and traditional values alone but also social understanding amongst individuals of the community.

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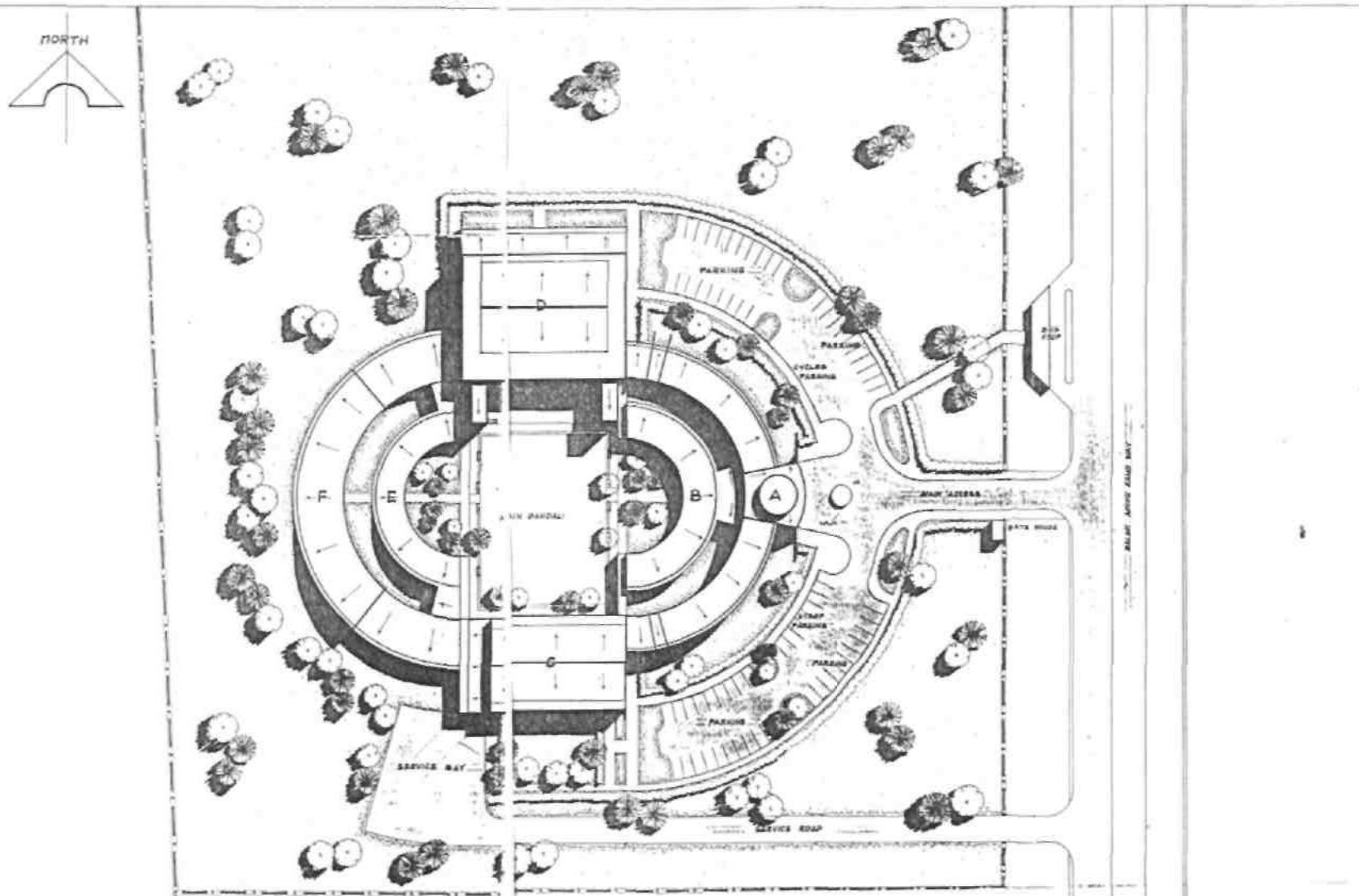
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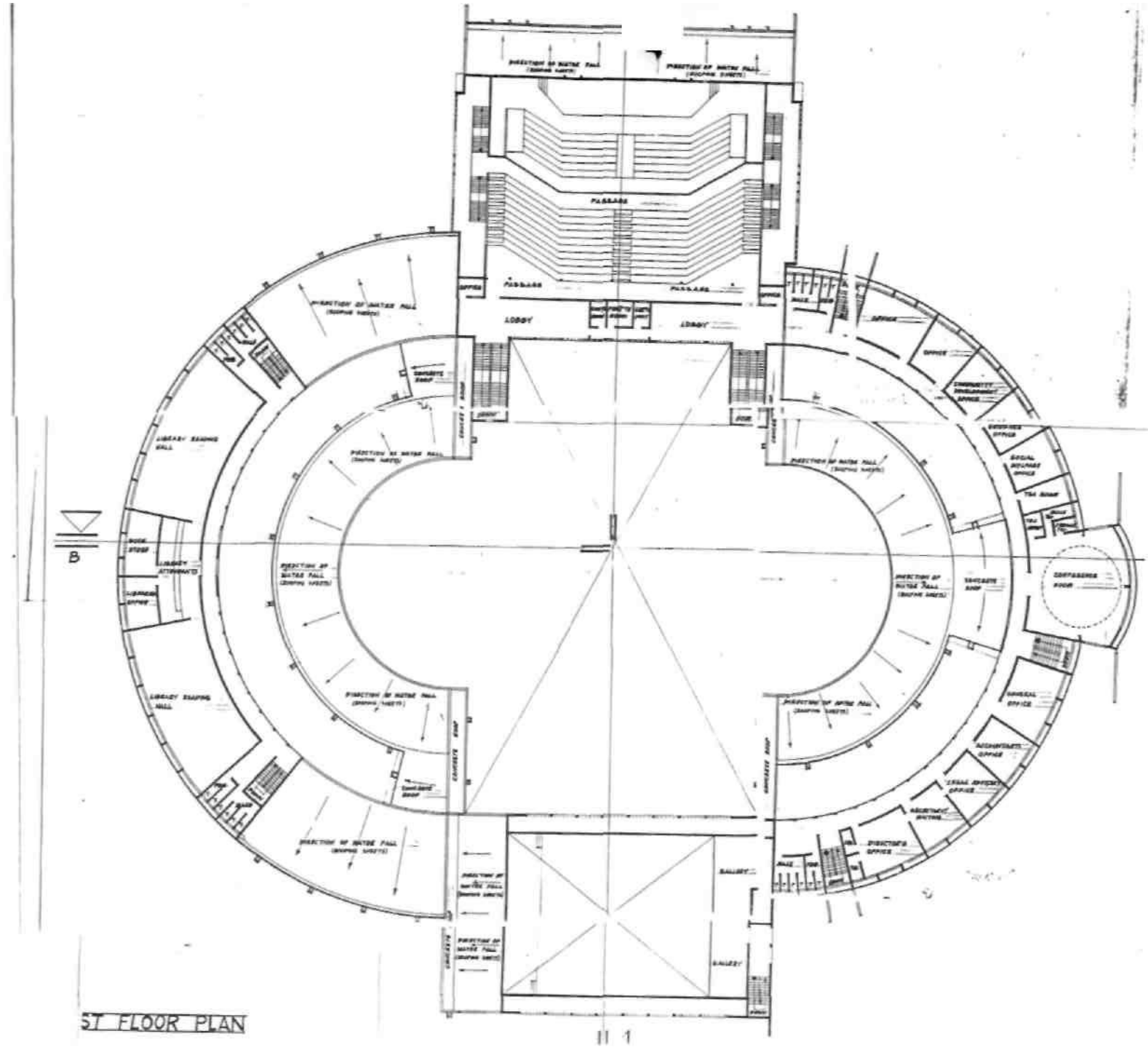
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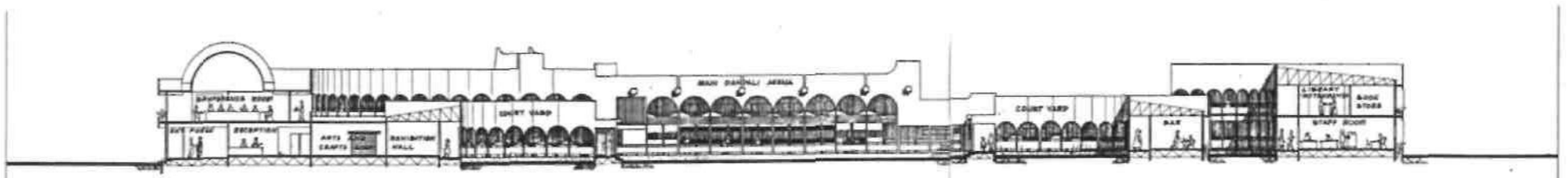

NORTH
PARKING
PARKING
CYCLES PARKING
MAIN ENTRANCE
BUS STOP
STAFF PARKING
PARKING
PARKING
SERVICE WAY
SERVICE ROAD
D
C
A
B
E
F
LEGEND
A ADMINISTRATION / CLINIC / SHOPS
B MUSEUM / EXHIBITION HALL
C MULTI - PURPOSE HALL
D AUDITORIUM / CLUB ROOMS
E RESTAURANT / BAR
F CLASS ROOMS / WORKSHOPS / LIBRARY

SITE PLAN

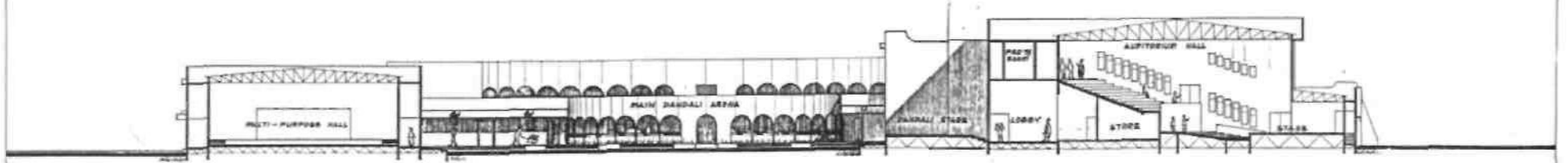
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B
MAIN BASKETBALL ARENA
MULTI-PURPOSE HALL
LOBBY
STAGE
CLUB ROOM
STORE
CLASS ROOM
GROUND FLOOR PLAN



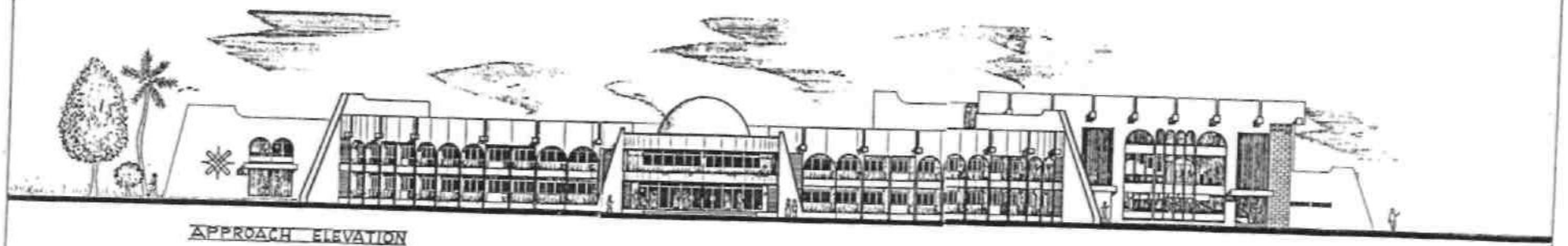
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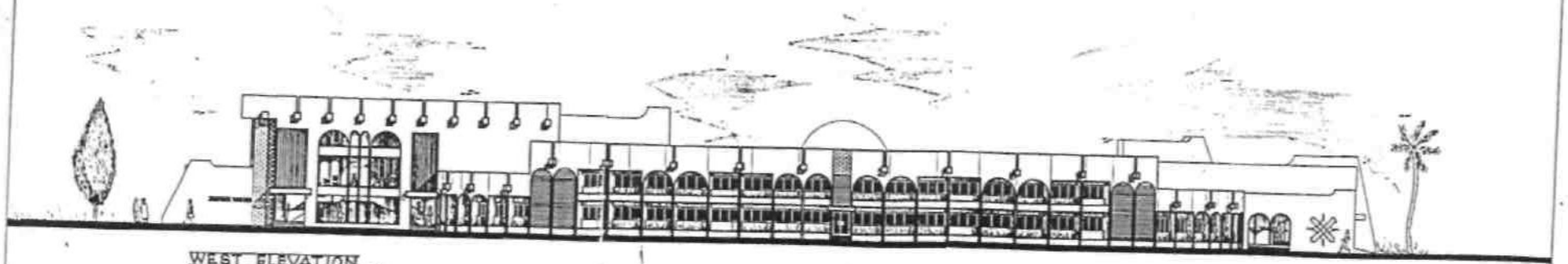
SECTION B-B'



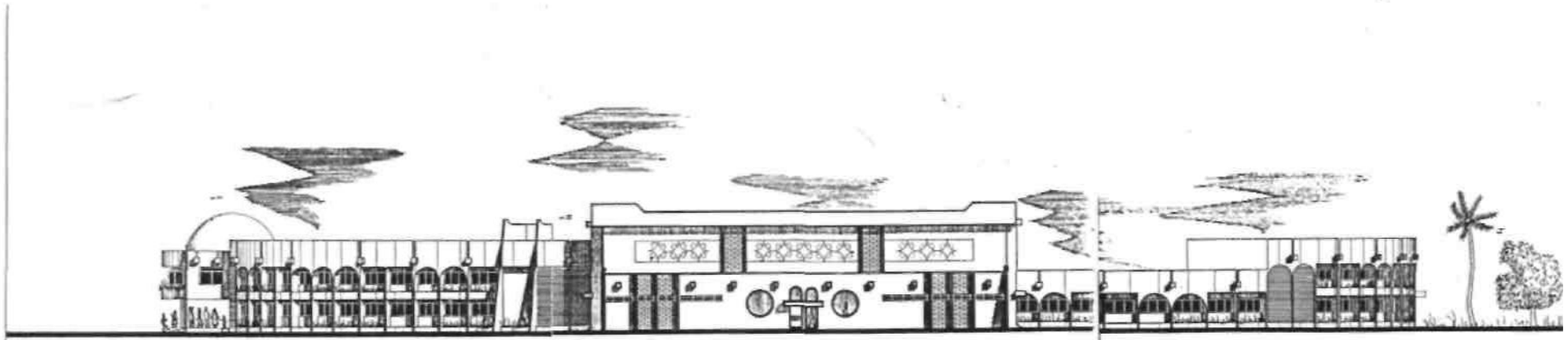
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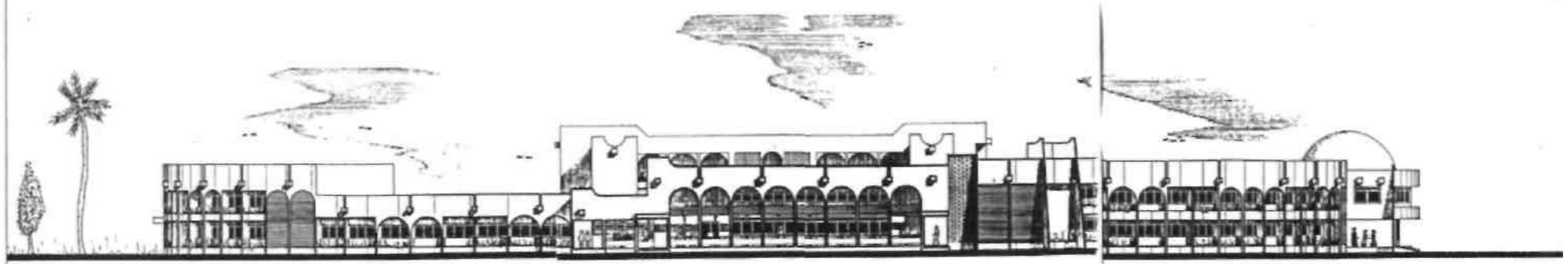
APPROACH ELEVATION



WEST ELEVATION



NORTH ELEVATION



SOUTH ELEVATION

