ISLAMIC THEOLOGICAL CENTRE, KANO AN EXAMINATION OF ISLAMIC ARCHITECTURE WITH RESPECT TO CULTURAL AND ENVIRONMENTAL FACTORS

BY

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A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL, AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE (M.SC) IN ARCHITECTURE

DEPARTMENT OF ARCHITECTURE FACULTY OF ENVIRONMENTAL AHMADU BELLO UNIVERSITY ZARIA, NIGERIA

NOVEMBER, 1992

DECLARATION

I ABUBAKAR SHUAIBU BELLO, do hereby declare that this thesis entitled, ISLAMIC THEOLOGICAL CENTRE, KANO, AN EXAMINATION OF ISLAMIC ARCHITECTURE WITH RESPECT TO CULTURAL AND ENVIRONMENTAL FACTORS. Have been composed by myself and is a record of my own research/site work; it has not been accepted in any previous publication for a higher degree. All quatations are distinguished by quotation marks, and all sources of Information are specifically acknowledged by means of references.

_____ _____

Signature Date

DEDICATION

To my mother Hajiya Khadija S. Bello

To my brothers who have been the Financiers of my education. Ahmad S. Bello, and Alhaji Mohammad Jalo.

To my daughter Husna.

CERTIFICATION

This thesis entitled "Islamic Theological Centre, Kano, and examination of Islamic Architecture with respects to cultural and environmental factors", By Abubakar Shuaibu Bello 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.

Chairman, Supervisory Committee	25/7/93 Date
Member, Supervisory Committee	25/5/93 Date
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Dean, Postgraduate School	Date

ACKNOWLEDGEMENT

All praise be to almighty Allah (S.W.T) lord of the worlds, the creator and sustainer of all beings, under whose guidance and permission I was able to make this research work.

My sincere thanks and gratitude go to all those who helped and contributed in one way or the other that made it possible for me to this work a reality.

Similarly I must make mention my beloved parents under whose total support and utmost care throughout my life brought me to this stage.

My utmost thanks and gratitude go to my brothers, Ahmad S. Bello and Alhaji Muhammad Jalo for their total support in every way to see that I came to this position may Allah reward them all Amin.

I must make mention of my supervisor, Arc. Mas'ud Abdulkarim for going through my work and whose criticism and suggestion made the thesis a reality.

Also wish to render my thanks to some lecturers like: Arc. M.D. Ahmed, Arc. Qurix and the head of the Department of architecture Dr. O. Solenke for his fatherly concern over all the students in the department.

Finally, I wish to thank my humble wife Sa'adatu for her encouragement and constant prayer for my success. My friends whose support and encouragement could not be

measured are Mahdi Imam Muktar, Bashir Hassan Hanga, Anas Badamasi, Haruna Yahaya, Muhammad Lawal U/Gini add Sale Ibrahim Shehu. Others include my friends with whom we cruised through the hardships of academic life:- Isa Abdullahi Adam, Ismaila Bilyamin Usman, Ahmad Salisu Abba, Najib Habib (Yallabai), Mustafa Kure, Kudu Aliyu, Musa Ahmad, Muhammad S.N, Engineer Mallam Bala, and Amin Abdullahi Bello and a host of others whose names did not appear.

Wabillahi Taufiq. Thanks be to all mighty Allah.

ABSTRACT

Today, the muslims society is witnessing a deterition in Islamic teachings on morality and other injunctions Drought by the holy prophet (S.A.W). It has been observed in the previous years that it was because of lack of Islamic knowledge that all these immoralities are increasing in the society now that more than the number expected have acquired the basic Islamic knowledge out still the immoralities are there.

It is because of this, that, the idea of Islamic theological centre came into being. It is the aim of this thesis to design an Islamic theological centre which will be a medium to provide an architectural environment suitable both in form and content for the preservation of the muslim personality and dignity. It is hoped it will serve as a spiritual centre where all corrupted minds will be spiritualised Islamically.

Architecturally, on examination of Islamic architecture around the world will be made to see whether it is a history of form and style or it is a product of cultural and environmental factors, and an expressions of the way of life of the people it serves. Finally the center will be designed in the regional context of Hausa-land and architecture through the assimilation of Islamic architectural principles with Hausa architectural concepts and forms.

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CHAPTER ONE

1.1 INTRODUCTION

The idea of an islamic theological centre stemmed from the fact that there is an apparent disappearance of islamic thoughts in the muslim society. Some years back it was thought that, the immoralities and lack of justices in the muslims society, was due to the absence of islamic knowledge. Our ulama's (theologians) gave fatwas (instruction) for the seek of islamic knowledge and of course a lot of muslims have done very well and acquired average islamic knowledge, but the question remains, what about the immoralities and injustices in the society? It is still there! Therefore this centre is a body that is devoted to promoting and relying the message of islam to both muslims and non muslims in the country. It is also intended to solve certain problems, ignorance of the Authentic teachings of islam and lack of application of the teaching of the holy prophet Mohammad peace and blessing of Allah be upon him.

For attaining the honour of the true islam it is necessary for a good muslim to read and understand the books of islam. After attaining this honour, it is necessary for him also to live compatibly with what he has learned. And living compatibly with the shariat, in its turn, is again possible through wisdom. Following the shariat in every action requires consulting to wisdom. Working and struggling to attain comfort

and ease in the world and endless blessings in the next world, that is obeying the shariat, is like a true path that must be gone through in the dark. Going alone this true path at night without deviating into harmful ways requires having a light, a lantern, man's wisdom is like this lantern.

1.2 ISLAMIC ARCHITECTURE AND CULTURAL/ENVIRONMENTAL FACTORS

Our architectural treasury is full of traditional and cultural values and indigenous settlements of islam in the Hausa States, including the way its people, its cultural institutions and its adaptive ideas of place making.

The above statement is because of the alien forms, and concepts are being imposed without due regard to the socio-cultural and environmental factors prevailing in the different regions of the islamic world. One of the main characteristics of the islamic tradition is 'unity in diversity' the adaptation of existing cultural values with regional differentiations which lies in the willingness to adopt local materials and image, to respond to local climate and at the same time to hold on to the basic and binding principles of islam.

Thus in whatever country one finds islamic architecture as diverse as it may be, its islamic identity is always visible. This 'unity, in diversity or 'diversity in unity' became the hall mark of islamic architecture.

1.3 MOTIVATION

Islam is the birth of a religion in Arabia. A religion whose principles and doctrines add up to a way of life simultaneously gave birth to an architectural style distinct from other styles.

It evolved as a special architectural specie, which is that of civilization reflecting special qualities inherited in islam as a cultural phenomenon. It can be said to be as old as the religion itself.

It is thus obvious then that such a term as "islamic Architecture should exist" however, since islam is not static, that is it is not for one particular area or a particular people, it is a wide spread religion. It is expected that the Architecture may vary a little from place to place due to the infiltration of the various cultures and indigenous Architecture of the various society. But wherever seen throughout the world, Architecture of islamic buildings has a striking similarity because certain elements through time have became part and parcel of islamic Architecture.

In this design of islamic theological centre, a look will be made into the past and present islamic Architectural styles in various nations with a particular attention to the regional style especially the Hausa traditional Architecture. After looking at that a compromising style both in form and function will be attempted in this design.

1.4 AIMS

After looking into the deteriorating muslims society, it is the aim of this thesis to design an islamic theological centre which will be a medium to provide an Architectural environment suitable both in form and content for the preservation of the muslim personality and dignity. It is also hoped that it will serve as a spiritual centre where all corrupted minds are being spiritualised islamically.

1.5 OBJECTIVES

The realisation of the aim of this thesis can only be achieved through a careful research on principles of islamic Architecture with a particular attention to a regional Architecture especially Hausa traditional Architecture.

1.6 STUDY AREA AND LIMITATION

The Architecture of islamic buildings is a vast and broad area, as it relates to almost all types of buildings in muslims lands. Therefore this thesis will be limited to only those of Architectural relevance to this particular topic (islamic theological centre). But when necessary a brief look of some buildings will be made.

The thesis also aimed at bringing out the influence of the traditional Architecture in our islamic buildings, in the West African sub-region especially the Hausa lands.

1.7 RESEARCH METHODOLOGY

Through the process of analysis by means of case studies, field work and literature reviews, this thesis research came into being. Though research findings are subjected to intellectual analysis and consultations with other experts in the field. Thus coming out with a reliable and viable data. This will however not limit personal initiations and creativity when deem necessary

1.8 CONCLUSION

Finally the research with a proposal for the design of the islamic theological centre taking into cognizance standards

expected of Architectural design for islamic theological centres and the findings of the research.

It is hoped that this thesis will at last bring out a synthesised hybrid of traditional islamic Architecture. Thus creating an Architecture based on islamic principles of Administration, Education and societal living with a better understanding of islamic Architecture.

CHAPTER TWO

2.1 EMERGENCE OF ISLAM

The word islam literally means 'wilful submission to the will of Allah (God). In the Quran it is made clear that from most ancient times the word islam has been used by all divine messengers and their followers as the name for their religion.

Though it had been said or mentioned in other holy books that there is going to be revealed to the whole of mankind an ultimate religious doctrine lead by the final and last of all messengers of Allah, (prophet Muhammad, S.A.W) it was not really evident or the impact felt until, around 571 A.D when the Holy prophet S.A.W. From childhood evidences of His prophet hood were apparent.

Muhammad ibn Abdullahi boundless salutations to him and endless benedictions, was born in the year 571 A.D. to Aminah, a widow who had just lost her husband, Abdullahi. He belonged to the famous family of Hashim amongst the Quraish Arabs. His mother died when he was six years old and his grandfather Abdul Mutallib was to take care of him and on his death, his uncle Abu Talib.

As a young boy, his refined manners, honesty, humility and respect for elders earned him the title of Al-Amin

(The trustworthy).

As he grew up he began to visit a cave on a Hill, Hira, outside mecca to engage himself in meditation. Muhammad peace be upon him was to receive his first prophetic call at the age of 40 in the year 610 A.D while in the cave of Hira, a voice commanded him thus: "Recite though in the name of thy lord" and cherisher- who created man, out of cangealed blood: proclaim and thy lord is most bountiful,- He who taught (The use of) the pen,- Taught man that which he knew not" (Holy Quran). These words became the first revelation of the Quran.

Within 23 years of his prophetic mission, he was transformed the conscience of man was aroused, the inclination towards well doing was created, men became ascetics by night and horsemen by day and came to recognise the lordship of only one God and master, the supreme and almighty Allah.

Islam is thus a way of life, aimed at remoulding man's nature to enable him to became what he is eternally in the divine presence, and transforming the manner of man's doing and making to bring them in conformity with role as God's vicegerent in this world and with his ultimate destiny as a being made for immorality.

In two short years after the prophets death, on 8th June 632 A.D four Caliphs, the Khulafa'arashidun. The rightly guided Caliphs were to rule the muslim world successively- Abubakar, 'Umar, 'Uthman and 'Ali. From then islam spread to all parts of the world from Arabia to Spain through North Africa, from central Asia to the far east through India and

then into black Africa.

2.2. ISLAMIC PRINCIPLES

Islam as we have seen arose through the awesome prospect of facing Allah alone as the one supreme and transcendent Deity who is in complete control of the universe. Through His providence, He has communicated the prophetic revelation sent through prophet Mohammad to mankind, as laid down in the Quran and Hadith. The former being the word of God and divinely inspired in both form and meaning and the latter being the prophet's commentary and extension of the teachings of the Quran. It is from these two sources that all principles of knowledge and action, which embrace a multitude of regulations concerning individual and social life are drawn. They, the Quran and Hadith are therefore the fountain head of all that is islamic.

2.2.1. ISLAMIC THEOLOGY

Figh, islamic theology is defined as 'knowledge of the rules of God which concern the actions of persons who are themselves bound to obey the law respecting what it is wajib (required), mandub (recommended), makruh(disapproved), mubah (permitted). The above definition of theology is according to the ulama of Zahiriya. That is the theologions other than the sufi ulama.

According to the sufi theologians, theology is the knowledge of knowing God and purification of the heart from the shaytan. Every responsible person must learn enough of this science to enable him to acquire praiseworthy qualities and to keep him from blame worthy qualities. This is achieved by four things:

1. The first is to seek refuge with Allah from shaytan, and to reject the thought which occurs.
2. The second is to remember Allah with the heart and the tongue.
3. The third is to reflect on the proofs of the people of the sunna.
4. The fourth is to question one who knows the sunna.

2.2.2. THE ISLAMIC FAITH AND THE PILLARS OF ISLAM

The islamic faith is the last monolithic religious faith sent to the whole of humanity through prophet Muhammad (S.A.W.). Muhammad (P.B.U.H.) defined islam as:-Islam is to acknowledge that there is no god but Allah and that Muhammad is his messenger, to perform prayers, pay the poor tax (zakkat), fast the month of ramadan and perform the pilgrimage to the holy land of mecca if possible. This revelation on analysis shows the complete way of life for true muslim.

However the articles of faith of islam are:

(i) Belief in Allah

(ii) Belief in His Angels

(iii) Belief in scriptures

(iv) Belief in messengers.

(v) Belief in the last day

(vi) Belief in premeasurement of good and evil

(vii) Belief in life after death.

2.3 EDUCATION IN ISLAM

It has already been made clear that the holy Quran which is the fountain head of islam has not left any aspect of the needs of mankind without explaining how it should be handled. A result of this reason it has provided the shariah as an instrument for handling any aspect of the needs of mankind. The only way to know this islamic law must be through the acquisition of knowledge and education. It is no wonder then that islam has made education the most important discipline in the life of mankind. There is no doubt that it is because of the importance of education that the first revelation sent to themessenger of Allah in chapter 96 of the holy Quran is on education.

This thus explain from the very beginning that islam is a religion of knowledge and light and certainly not that of ignorance and darkness.

The Quran has these to say on education:-

(i) "Read! in the name of your lord, who has created (all that exist). Has created man from a clot of blood.

Read! and your lord is the most generous who has taught by the pen. He has taught man that which he knew not" Quran. sura 96 verse 1-5.

(ii) Are those who know equal to those who know not? sura 33, verse 9.

(iii) "Allah will exalt in degree, those of you who believe and who have been granted knowledge".... sura 58, verse 77.

(iv) "And say; my lord, increase me in knowledge" Sura 20 verse 114.

An extracts from the sayings of the holy prophet Muhammad (S.A.W.) on education has this to say:-

(i) "Learning is obligatory upon every muslim be he a man or a woman"....Hadith

(ii) Whoever follows the road to knowledge, Allah will show him the road to paradise... hadith.

(iii) "Educate your sons. They must line in a time different from yours".... hadith

(iv) "Humanity is two men; the teacher and the taught. There no good in anything besides these".....hadith.

These few out of very many quotations from the holy Quran and hadith of the holy prophet Muhammad (S.A.W.) has made the position of education in islam very clear. However, it is important to know that in islam, education has to be within the frame work of devine guidance. As far as islam is concerned, there is a division between the so called secular matters and religious matters. This is because the religious moral training is the essence of islamic education, and the acquiring

of good character is its true aim and objective.

It becomes crystally clear therefore that the essence of islamic eduction is not to stuff the minds of the students with facts, but refine their morals, educate their spirits, propagate virtue, teach them propriety, and prepare them for a life full of sincerity and purity. Every teacher must consider religions ethics above anything else.

As a conclusion one must say that the essence of is far from the accumulation of knowledge, but is aimed at the spiritual and moral upliftment of the individual and the society as a whole.

2.4 DISCIPLINE IN ISLAM

If we reflect back to some of the quotations made in the holy Quran, it would be found that discipline has been covered by the islamic law (shariah), which makes absolute submission to the will of almighty Allah, obligatory. We could thus say that the shariah is the instrument of inculcating discipline. It is found in islamic law, a system of rules affecting conduct or action which self-disciplined muslims must follow. At the same time, there are available provisions in islamic law which will make control gained by enforcing obedience or order. About discipline the Holy Quran has this to say:-

(i) "There are those who, if we give them power in the land, offer prayer perfectly, give obligatory charity and enjoin right and forbid wrong. And with Allah rests the end of all matters"...sura 22, verse 41.

(ii) "O you who believe! Obey Allah and obey the apostle (Muhammad), and those of you in authority and if you differ in anything among yourselves, refer it to Allah

and his apostle, If you believe in Allah and the last day, that is better and more suitable for final determination.

Sura 4, Verse 59.

Also about the discipline in Islam the holy prophet Mohammed (S.A.W) has - these to say:-

i. "who so obeys me, obeys Allah, and who so disobeys me, disobeys Allah; and who so obeys a ruler a obeys me, and who so disobeys a ruler disobeys me". .....Hadith.

ii. "It is necessary for a muslim to hear and obey orders in what is pleasing and displeasing to him so long as he is not ordered to commit a sinful act, there is no hearing and obeying to such an order".....Hadith.

From the above quotations, it can be seen that the question of discipline hinges to a large degree on Faith in almighty Allah and accetance of his message through his apostle, Muhammad, (S.A.W). The messanger also states the demand that the constituted authority who rule in conformity with obedience to almighty Allah must be obeyed. To really talk about discipline in Islam, one has to consider certain key factors:

1. Knowledge
2. Accountability
3. The Shariah - the real key to disciple.

With knowledge, no one can understand Allah himself and his message to mankind. It is by means of education that man can realize the obligations placed upon him by his creator and have absolute Faith in him and his injuctions.

The Islamic religion has placed great importance on accountability to almighty Allah by man. The part played by the belief in the hereafter in the institutions of accountability is very vital. This is because if man believes that he will be accountable for his actions in the life hereafter, such a belief will certainly be a great incentive for one to be disciplined. However, those affected most are those in positions of constituted authority. Such constituted authority see to it that daily prayers are performed, poor dues collected and distributed to the rightful recepients and implement the Islamic law, by commending the right and forbidding the wrong.

The success or failure in discipline of the community to a large extent depends on the way they carry out the responsibilities which almighty Allah has

placed on their shoulders.

The application of Islamic law on the muslims is the only way of inculcating lasting discipline on them because it is the only law obigatory on them.

2.5 ISLAM IN NIGERIA

It cannot be categorically stated when Islam came to Nigeria, but it would only be right to say that the impact was first strongly felt with the advent of that 'great' Jihadist, Shehu Uthman Dan Fodio in the 1804.

However, we could trace the history a little further back. The message of Islam First spread around 610 A.D. From Arabia, the home of the prophet (S.A.W). Because of the various caliphs and their commanders, Islam came to Africa via North Africa, before spreading southwards toward west Africa and Nigeria due to the influence of the North and Nigeria due to the influence of the North African trade route.

As a result of Othman Danfodio's wars, Islam was spread southwards towards the Benue valley. Since then, Islam has had a great influence on the 60% or more of the population in Nigeria.

The Jihadist-Uthman Dan Fodio, after forming his emirate placed some of his chosen followers to be kings in parts of his emirates, thus most of the traditional

institutions in Northern Nigeria. Being a muslim in other nations. They share the same ideals, beliefs and goals. Like wise the places of worship all over muslim land in Nigeria are basically the same with little variation.

Islam in Nigeria has always,been faced with a lot of obstacles. If an investigation is to be carried out, the constitutional, political, legal, educational, social and economic system must be examined in order to see if they are designed in the interest of the Nigeria muslim populace. To understand the background of the present situation in Nigeria, one must go back to it's history of the present situation. One could say the situation in Nigeria is a replica of the colonial heritage.

In a clear manner, one can say that almost in every respect, the Nigerian feature is christian in fact and out look. The reason for this is simple and that the British who colonised Nigeria and then gave it independence in 1960 are Christians who, wherever they went were accompanied, by Christian Missionaries. So when the British ruled this country, they Christianised every system of running this country when they left, they left behind this legacy which is still unable to change even though it calls its consitition a Federal constitution.

In addition, it is unfortunate that in Nigeria, the teaching and propagation of Islam has been left in the hands of the few learned individuals called Mallams. These Mallams normally establish schools at their door or interior court yards and scholars come to them for guidance. However, the teaching method has now become obsolute and inadequate for the needs of the Nigerian muslims.

CHAPTER THREE

3.1 WHAT IS ISLAMIC ARCHITECTURE

Viewing Architecture from the cultural perspective, it became Islams most vital manifestation as well as practical servant. Some claim that Islamic Architecture is static and unevolving, but looking at Islam which is a universal religion with a universal culture, it becomes easier to understand why Islamic Architecture became a distinctive Architectural specie.

What even may be the case these controversies can be put at rest if we recognise and accept that Architecture is not a history of form and style, rather it is a product of cultural and environmental factors and an expression of the way of life of the people it serves. The Arabs though they had their own Architecture, it was'nt in the form of the present day Islamic Architecture. However due to the nature in which Islami spread, that is by conquering different nations or people in the Jihad (holy war) took them and they were furtunate to gain victory, they adopted some form of their Architecture.

The universerlity of Islam which derives all its laws from the holy Quran and saying of the holy prophet Muhammad (Peace and blessing of Allah be upon him) made it possible for all islamic buildings no matter where they are placed to look similar. But whever the

Architecture of Islam exists it is the mosque that truly represent it; the mosque being the first building to evolve out of Islam.

3.2 PRINCIPLES OF ISLAMIC ARCHITECTURE

Islam being a unifying religion in that no matter what part of the world one is from, or at, must abide by Quranic injuction, this shapes the character and ideas of its followers. This quality inherited by Islam found its way to the Architecture of the muslim environment, where it laid down guiding principle regarding its forms orientation details spaces and their relationships.

3.2.1 PRIVACY

Confidentiality, reservation and seclusion are different terminologies that define what privacy is; the english saying that an english man's home is his castle, suggests a certain amount of exclusiveness and defiance. The conventions of propriety and privacy are essential to a refined life of goodness and purity.

The Quran - the supreme commandment of almighty Allah as well as the hadith of the prophet have both emphasized the need for privacy in Islam.

It is stated in the holy Quran that:-

> "O ye who believe! enter not houses other than your own without first announcing your presence and invoking peace upon the flock there of. That is better for you that ye may be heedful" (Quran).

This fact has greatly affected the Architecture of Islam, which believes that anything done has to be within the frame work of devine guidance. Privacy is much valued in terms of the Architecture, especially in the design of muslim houses normally achieved through the provision of bent entrances; court yards and the physical or psychological demarcations between the public, semi-public and private zones.

3.2.2 FORM AND FUNCTION

Muslims building serving a specific function can adopt many forms. The early mosques built. Served apart from prayer centre for learning, meetings and Administration that is both religious and political activities. At this Junction the question of form and function arises. Does form dictate function? or does function dictate form? To this question our answer may be that; "Form is a function of the individuals and groups in a society as well as of its buildings. Thus a building may serve different functions and adopt many forms, depending on the muslims need and familliarity with their buildings.

3.2.3 SYMMETRY AND CENTRALITY

The desire of achieving Symmetrical, mommental and inpersonal proportion with stadond relations in Islamic Architecture can be easily observed in Islamic buildings corpled with semmetry a sense of centrality is strongly achieved as can be seen in Islamic town layouts. Semmetry both in plan, elevation has been a hall mark of Islamic Architecture.

3.2.4 FORM AND COLOUR

The perception of form depends largely on factors, viz:-

i. The intensity and direction of light

ii. The three - dimensional concept

iii. The constancy of shape

iv. The orientation of the object

v. Movement, variety of direction

vi. Dynamic of obligeness and tilt.

The visual perception of a plane rectagular shape for instance is based on retinal projections which are roughly shaped like shadows on the wall. Depending on relative positions of objects. On the other hand, the situation is quite different with three - dimenssional objects - forms. Their shapes cannot be defined or reproduce by any two - dimensional projections.

In Islamic Architecture, colour is used to emphasize the character of a building, to accentrate its form and material, and to explain its dimensions. The use of colour is usually based on different theoritical aspects, about which many experimental researches have been carried on to explore the light natural sources on one hand and the colours physiological and psychological aspect on the otherhand.

3.2.5 ADOPTATION TO LOCAL MATERIAL

In the Arabian deserts for example the most important shelter is the tent, while in sub-saharan African we find mosques having sculptural qualities with heavily buttressed walls due to the plastic quality of mud. The dome which is Byzantine creation was consciously developed in turkey and elsewhere to span larger areas and coner extensive spaces. Thus the Architecture of any culture at any period in time has depended greatly on the structural materials available at that period and their potential limits in creating spaces.

3.3 ISLAMIC DECORATION

The representation of natural forms were prohibited by passages from the holy Quran. Thus the muslims devised

Water

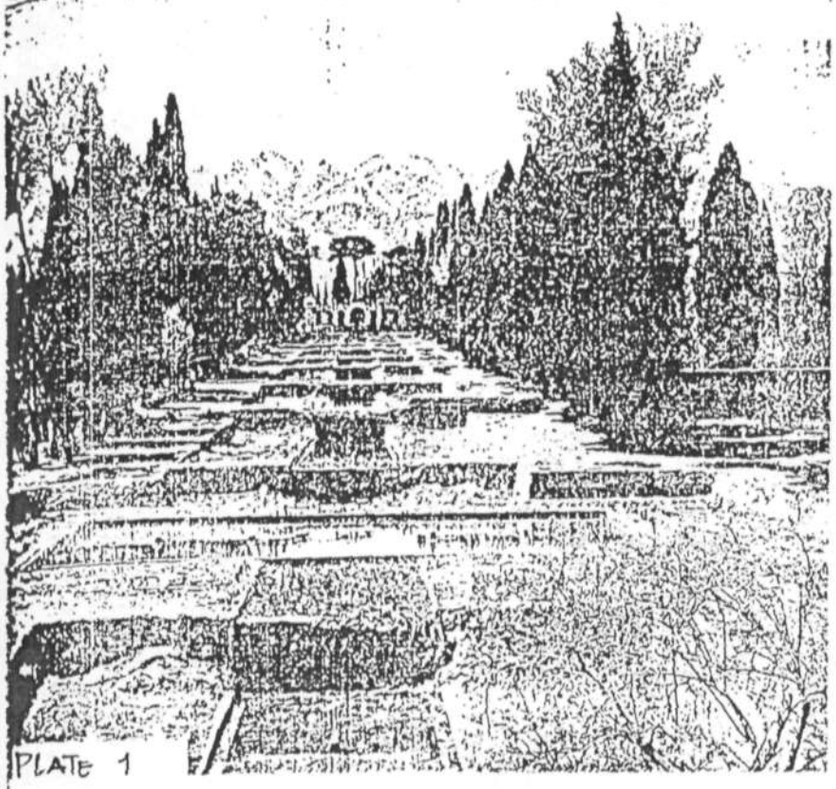


PLATE 1

Wealth, fertility and coolness are all associated with water, which is an essential part of Islamic architecture. Channels and pools are the most important elements of Islamic gardens. Originally necessary for irrigation, they were developed for their visual beauty and incorporated into elaborate architectural schemes. *Above*: a private garden near Mahan, Iran. The trees produce a sense of enclosure from the landscape. (35)

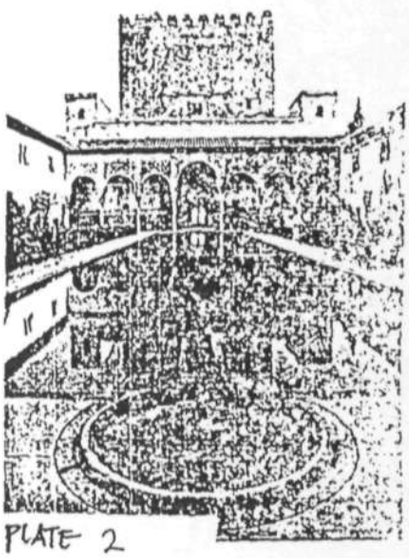


PLATE 2

Pools gave a sense of repose and openness to the enclosed courtyard. In the Court of the Myrtles, in the Alhambra at Granada, water becomes part of a formal, rectilinear composition. (36)

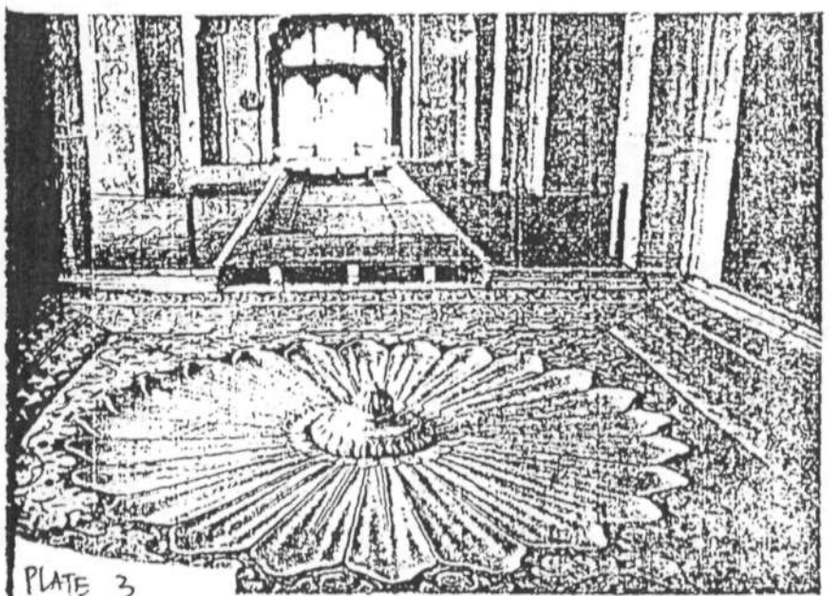


PLATE 3

Water enters buildings. In some of the most opulent Islamic palaces, water flows through marble channels from room to room, here and there expanding to fill basins and descending in cascades from one level to another. In the Red Fort at Delhi, water originally covered this inlaid and carved marble lotus, creating soothing sounds and continuously shifting patterns through its transparent motion. (37)

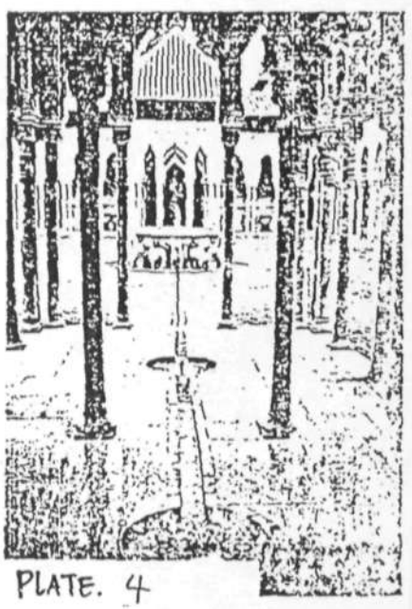


PLATE. 4

In the Alhambra, too, water emphasized the axes of the buildings, linking the various spaces in a directional sequence. Here we look through a series of arcades into the Court of the Lions. (38)

and perfected a system of decoration in which geometry was a ruling factor; floral form , and calligraphy were employed. Skillful manipulation of the building materials like stones, brick glazed tiles, stucco and marble gave nice decorative pattern.

3.3.1 CALLIGRAPHY

Calligraphic inscriptions are found incorporated in the decoration of almost every Islamic building. Arabic writtings were mostly used on building it was used alone or in combination with geomatrical or floral notifes... The inception are usually passages from the holy Quran.

3.3.2 ARABESQUE

Arabesque serves as a rejection of images in Islamic decoration. It includes ornamentation in stylised plant forms and geometrical interlacing work. It is a practically perfect visual transcription of rhythm and is crystallint in nature. The two forms of arabesque are geometry and foliation.

i. Geometry - A major art form using the circle as the basis for the generation of different patterns while applying the principles of symmetry, repetition and rhythm to achieve a variety of bewildering effects.

ii. Foliation - This is a repertior of living forms, ranging from tendrils, flowers to the abstract art of the arabesque.

3.4 PRINCIPAL FEATURES OF MOSQUES

The mosque (Masjid) is a building erected around a horizontal axis, the gibla, by which one related himself to the vertical axis as represented by the ka'aba in makka. Many features came to be associated with Islamic Architecture, mosque in particular display the most visual forms externally and distinctively recognised features internally.

3.4.1 THE DOME

tThe dome as a Islamic symbilism serves as a cosmic symbol which represent the heavenly vault in the same way as the garden prefigures paradise. It defines the Qibla wall externally and light the interior of the mosque sactionary. The Dome was First used by the Byzaitines. It was incorporated into the Islamic Architecture After they were conquered by the muslim Jihadist. It signifies power.

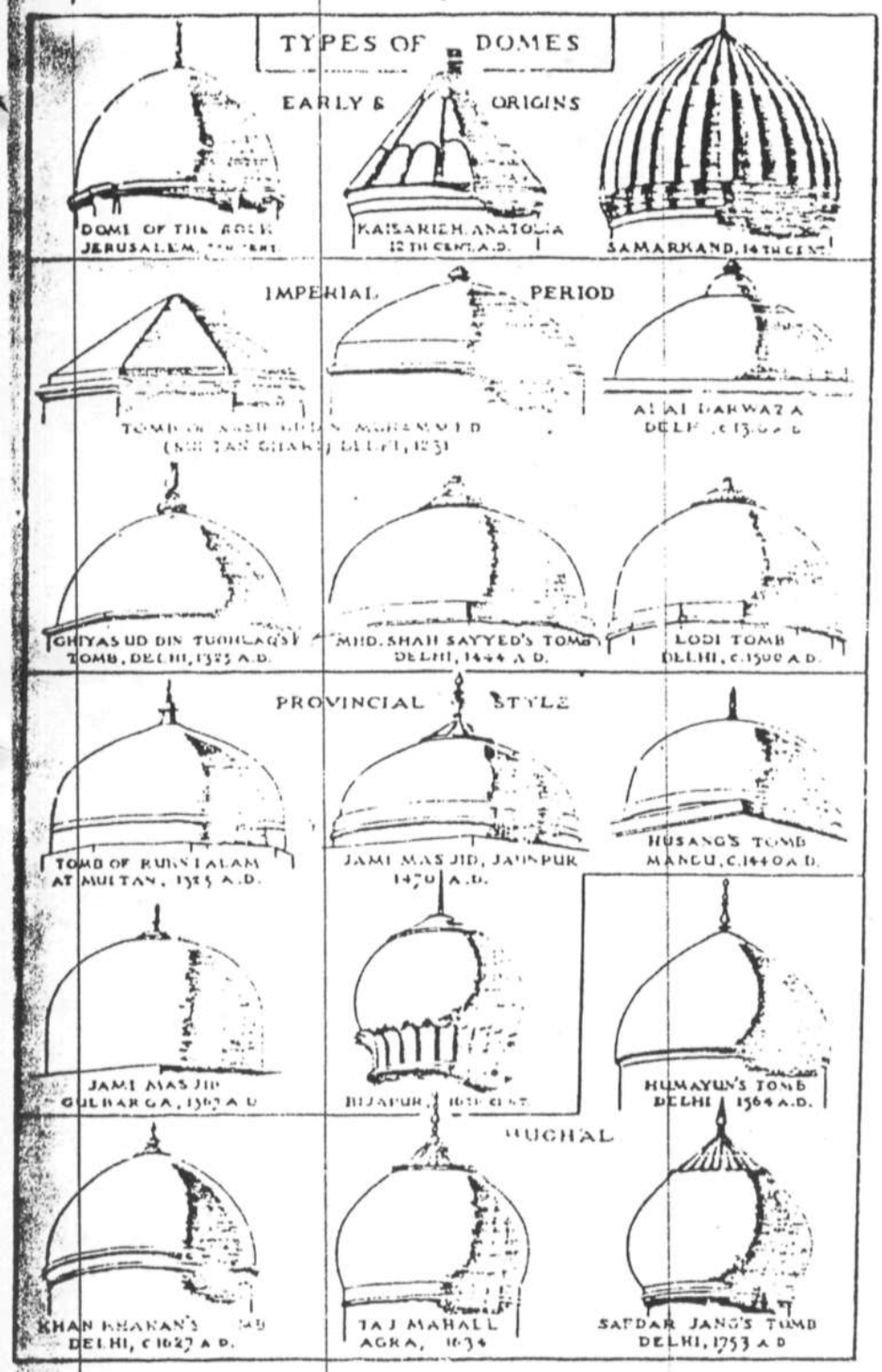

TYPES OF DOMES
EARLY & ORIGINS
DOME OF THE ROCK JERUSALEM
KAISARIEH ANATOLIA 12TH CENT. A.D.
SAMARKAND, 14TH CENT.
IMPERIAL PERIOD
TOMB OF SHAH RUKN-I-ALAM MULTAN, 1320 A.D.
ALAI DARWAZA DELHI, C.1300 A.D.
GHIYAS UD DIN TUGHLAQ'S TOMB, DELHI, 1325 A.D.
MHD. SHAH SAYYED'S TOMB DELHI, 1444 A.D.
LODI TOMB DELHI, C.1500 A.D.
PROVINCIAL STYLE
TOMB OF RUKN I ALAM AT MULTAN, 1325 A.D.
JAMI MASJID, JAUNPUR 1470 A.D.
HUSANG'S TOMB MANDU, C.1440 A.D.
JAMI MASJID GULBARGA, 1367 A.D.
BIJAPUR, 16TH CENT.
HUMAYUN'S TOMB DELHI 1564 A.D.
MUGHAL
KHAN KHANAN'S TOMB DELHI, C.1627 A.D.
TAJ MAHALL AGRA, 1634
SAFDAR JANG'S TOMB DELHI, 1753 A.D.

PLATE 5

3.4.2 THE MINARET

Minarets began as low square masonry towers far before the advent of Islam. The need for wide coverage of MUAZZIN'S call to prayer made Islamic Architects to make them higher initially in form of stepped storey construction. The common forms of the minarets they developed begun as a square, charged in the next strey to a polygon and then to cylindrical main shafts. The balconing was constructed of light wood or cantelevered on brackets of superimposed niches. The top of a minaret formed another storey and it was then crowned by a dome or conical roof.

The stability of the minarets was achieved by the system of superimposed storeys of decreasing size and also by the use of stair case construction to tieing the outer skin of each minarets to its central care. The treads and landings of staircase were either of stones or bricks.

3.4.3 THE ARCH

Apart from their structural importance, the Arches were basically used in Islamic Architecture to give the buildings some sense of aesthetic balance.

The interior walls of court yards and the interiors of mosques were normally lined with a series of Arches

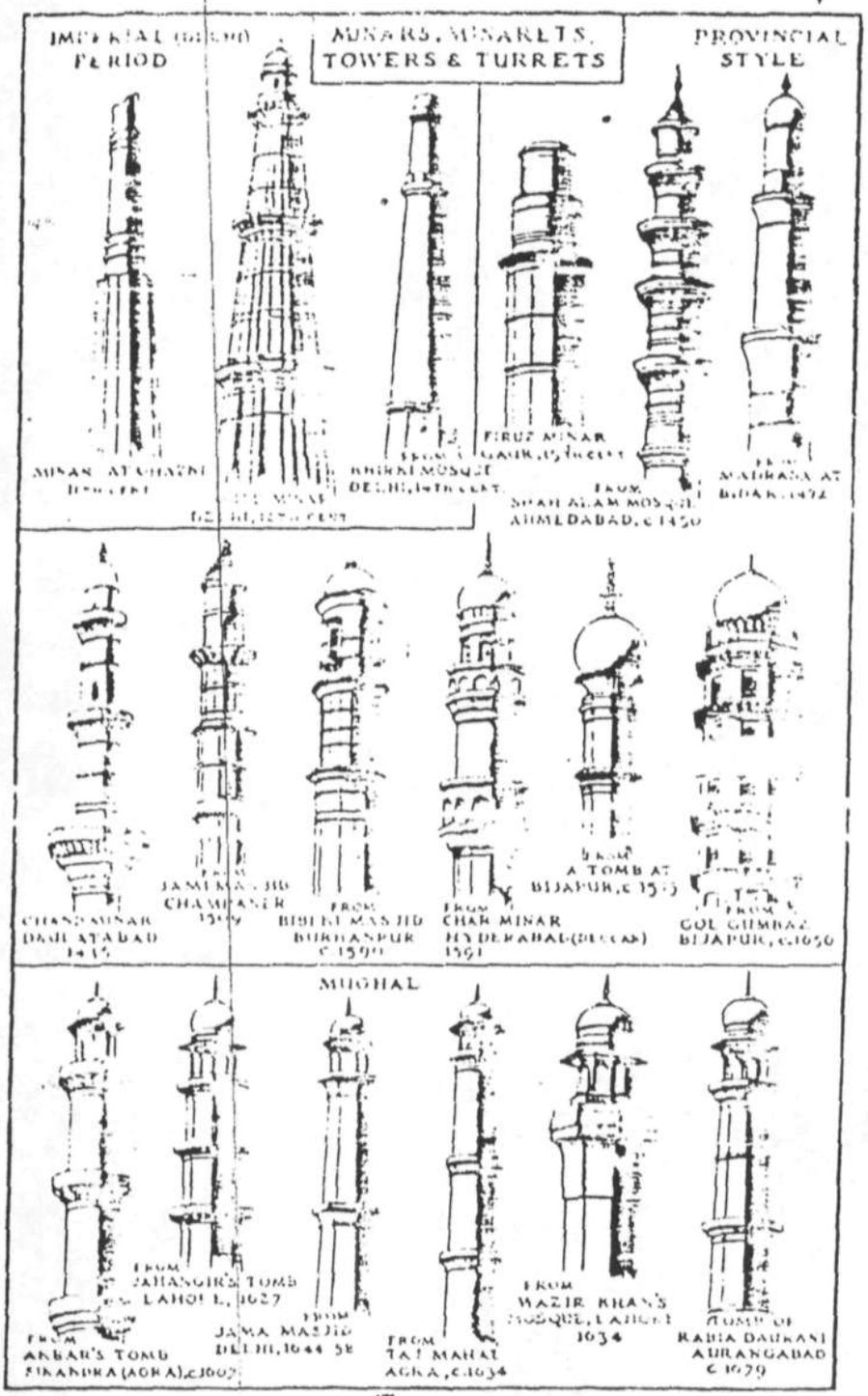

IMPERIAL (DELHI) PERIOD
MINARS, MINARETS, TOWERS & TURRETS
PROVINCIAL STYLE
FROM MADRASA AT BIDAR, 1472
FROM A TOMB AT BIJAPUR, c 1535
FROM GOL GUMBAZ BIJAPUR, c 1650
MUGHAL
FROM TAJ MAHAL AGRA, c 1634
FROM WAZIR KHAN'S MOSQUE, LAHORE 1634
TOMB OF RABIA DAURANI AURANGABAD c 1679

PLATE 6

to form an arcade (i.e. a parade of arches).

The arch, was probably invented in syria. It was with Time developed to a high degree in all muslim styles with variations from nation to nation.

3.4.4 THE COLUMN

Columns as found in any architecture are used as structural members to support load imposed upon them in Islamic architecture their principal function is to support arcades. However, due to their rhymical occurance inside mosques, they tend to merge into the congregation of worshippers thereby emphasiging the vertical axis of the enclosed space. Many types of columns have been assimilated in Islamic architecture thus we find: Roman Corinthian and classical persian columns used in mosque. The dome, the arch and the column have been described as 'the trinity of Islamic Architecture'.

3.4.5 THE MIHRAB

The mihrab is a small indentation produced at the far wall towards the Qibla axis. It serves as a visible representation of the liturgical axis and also a place where the Imam stations himself to lead congragational prayers. It was produced for the first time at medina and later became the standard means of indicating the

Qibla. It also serves as an accoustic device that reflects the voice of the Imama while magnifying it at the same time. Various types of mihrabs have been developed due to regional influences.

3.4.6 THE MINBAR

The minbar was introduced into the mosque as a result of the need for the Imam to preach and be properly heard by the congregation. Hence it was to assume the double role of being an accoustic elevation as well as a symbol of authority for the Imam Khatib (preaching Imam) and is only found in Friday or Jami' mosques.

The minbar (Pulpit) and the mihrab (niche) together express the spiritual and temporal power of the Imam.

CHAPTER FOUR

4.0 ISLAMIC ARCHITECTURE IN DIFFERENT NATIONS

4:1 ARABIA

Pre-Islamic Arabia though they had there own form of architecture cannot be termed as Islamic architecture. However, things started having a different look at the on set of Islam in 1610.

The Mosque of the prophet (S.A.W.) at Medina represents in a very simple form, the prototype of the congregational mosques, used in the early years of Islam.

The plan of the principal mosques of the first century of the muslim era consisted of a central rectangular court supported by columns, utilizing the plan of Muhammad's mosque as an inspiration.

When the prophet fled to medina in the year 622, He decided to build a house of his own, and left the decision of site selection to his camel; that is where ever it felt like stopping without his influencing its decision; this just means that there was no actual criteria used in the determining of the site.

The house the prophet (P.B.U.H) built had a court of about 50m square, enclosed by about 3m high walls. The prophet's wives had rooms attached to the building

The Qibla which was important since the time of the prophet, it is the direction to which every muslim Faces

whenever he is praying to his lord. Whoever, before the revelation which commanded the muslim to face the direction of the ka'aba, the Qibla was in the direction of Jerusalem. It normally took the Form of a small roofed niche supported on trunks of palm trees.

Due to the climatic conditions of Arabia, the companions of the prophet complained of the effect of the sun and the fact that there is there is so much glare while they were saying the prayers or while conducting meeting. As a result of this complaint, the architecture then took another form. Roofs and walls were then introduced by the use of palm branches smeared with clay on the outside. The simplicity of construction as well as in choice of materials was adopted by most of muslim in Arabia. Since it was also used by the prophet (S.A.W), However, in later years, palaces, madrassas and religions buildings started evolving as grandeur buildings.

The mosque of the prophet underwent a lot of renovations under caliph Umar in 63%. It was necessary because it had become too small for the ever increasing Umma. A considerable part was pulled down, and a new and large structure erected, consisting of a walled enclosure with a cobble pavement and six entrances. As time went on, a lot of renovations under different leaders were implemented on the basic mosque form which the

prophet had built. Though the basic layout still remains the same, mosques, palaces, madrassas and house form dwellings have taken new turns.

Another important feature in the Arabian Architecture is the ka'aba. The Ka'aba which means square house, stands in the centre of a quandranghe in the famous mosque at mecca. Before its reconstruction, in the year 605, it consisted merely of four dry stone walls, about 2m in height without a roof. At a later date, it gained more importance and become sacred, housing a black stone said to come from the sky. It was protected by two coverings; one of silk, and the other of wool.

As time went on, various caliphs (successors) of the Holy prophet) each had his own reconstruction and atterations to do, always enlarging it.

Ibn Zubair, a pilgrim who went to Mecca in 1183 and saw the ka'aba describes it as follows: It was a cuboid about 15m in height, 12m in length and 10m breadth. The walls were about one metre thick, and constructed of stone courses accurately laid. The black stone was built in the outside angle on the East. Within the walls were lined halfway up with part coloured marbles, while the upper half was covered with plates of silver gilt. The pavement was also done with marble. The ceiling which had a covering of coloured silk stuff, was supported

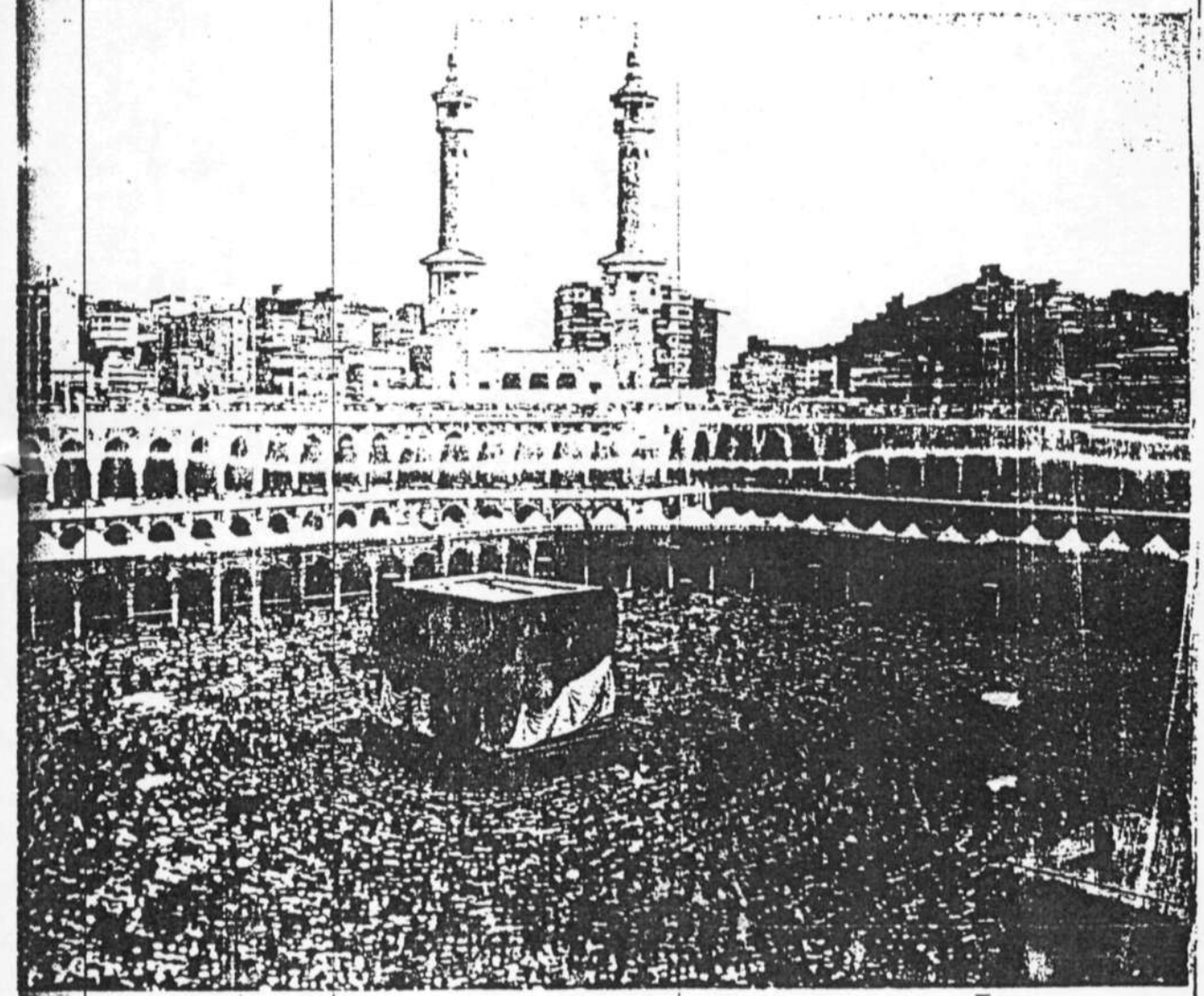


PLATE. 7 THE HOLY HOUSE OF KA'ABA.

on three pillars of indian wood standing on the axis of the building. The exterior was draped with veils of green silk mixed with cotton wrap, showing at the top a band of red silk bearing, inscriptions light came from five windows of stained glass, and there were two entrances.

4.2 INDIAN STYLE

This style of Islamic architecture is displayed in the mosques of the indo-pakistan sub-continent, malaysia, Indonesia and Sri-lanka. India is another vast land of ancient civilisation that closely follows Egypt and mesopotamia. And therefore when Islam was introduced into the Sind province (Pakistan) in 710 A.D and muslim started ruling India in the First quarter of the eleventh century; it came into contact with a established Hindo tradition with its 'silpa sastcas', hence the development of indo Islamic' architecture was very slow, due to the contrasting building skills of the muslim and the Hindu; the simple muslim mosque and the carned and growed Hindu temple. The Hindu buildings involve much sculpture, symbolic expressions and relationships and above all, it is 'iconoclastic' as against Islam' However, after a long period of trial and error a synthesis was finally achieved between the two giving birth to the genious of

of Indo-Islamic architecture.

Building styles were developed through the blending of Islamic architectural forms with Hindu architectural tradition. One of the finest examples of early Islamic architecture is the Qutbminar in Delhi. Built in 1199-1200 A.D. it shows much carvings and groovings due to the sculptural mind of the Hindu mason. But later periods 15th and 16th centuries show a complete assimilation of the two traditions as displayed in; the Masjid-i-jami (Friday Mosque) in Delhi, Badshahi mosque, in lahore and the Taj mahal (architecture's greatest gift to India).

This style extends to malaysia and Indonesia where the great masjid legara (Kvalo lampur) and Azhar mosque (Djakarta) show some local influences).

4.3 CHINESE REGION

Islamic architecture in this region is purely chiness, as most of the mosques are not easily distinguised by any immediate character from other buildings either secular or religious. However, the use of Arabic caligraphy helps to lend some identify to the mosques since Arabic is not common in China. This effect has been employed in the great mosque of Hang-chov, where the high portal has bold Arabic inscriptions and a frieze of mugarnas like mouldings over the portal, also in the mujie Mosque in Beijing and the Huajua jiang Great mosque in Xian.

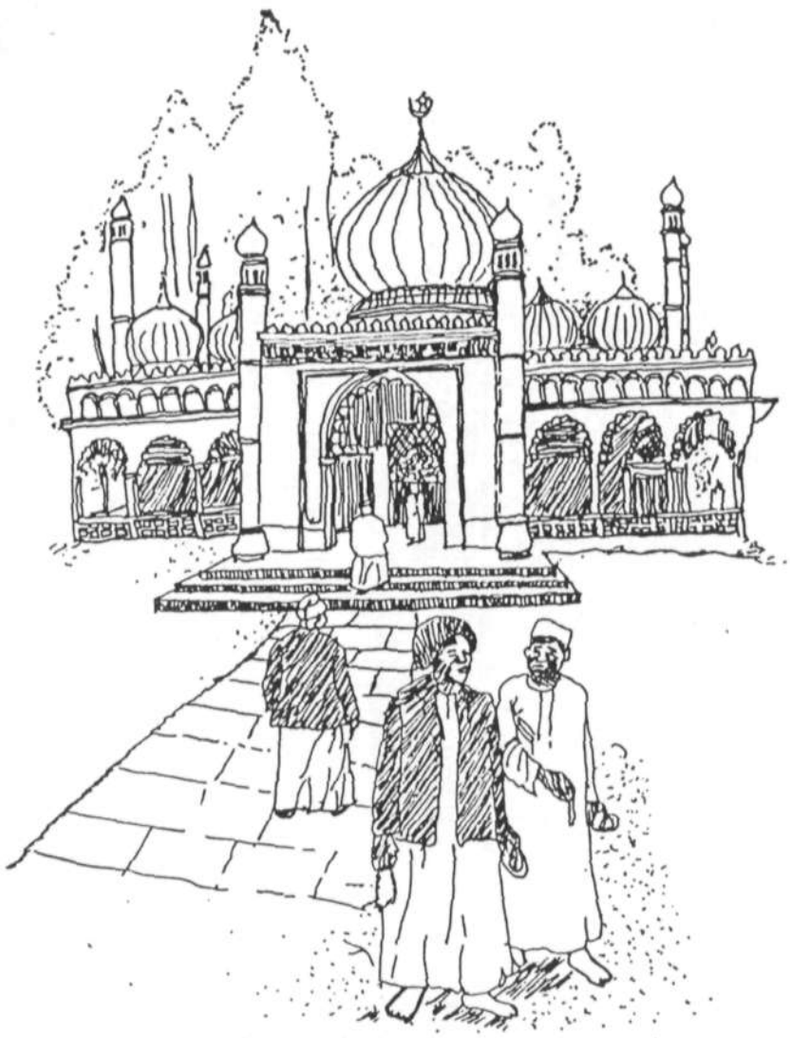


FIG 4·1 A modern East African Mosque, built in 1956 at Wandegeya, Kampala, Uganda. It shows Indian influence.

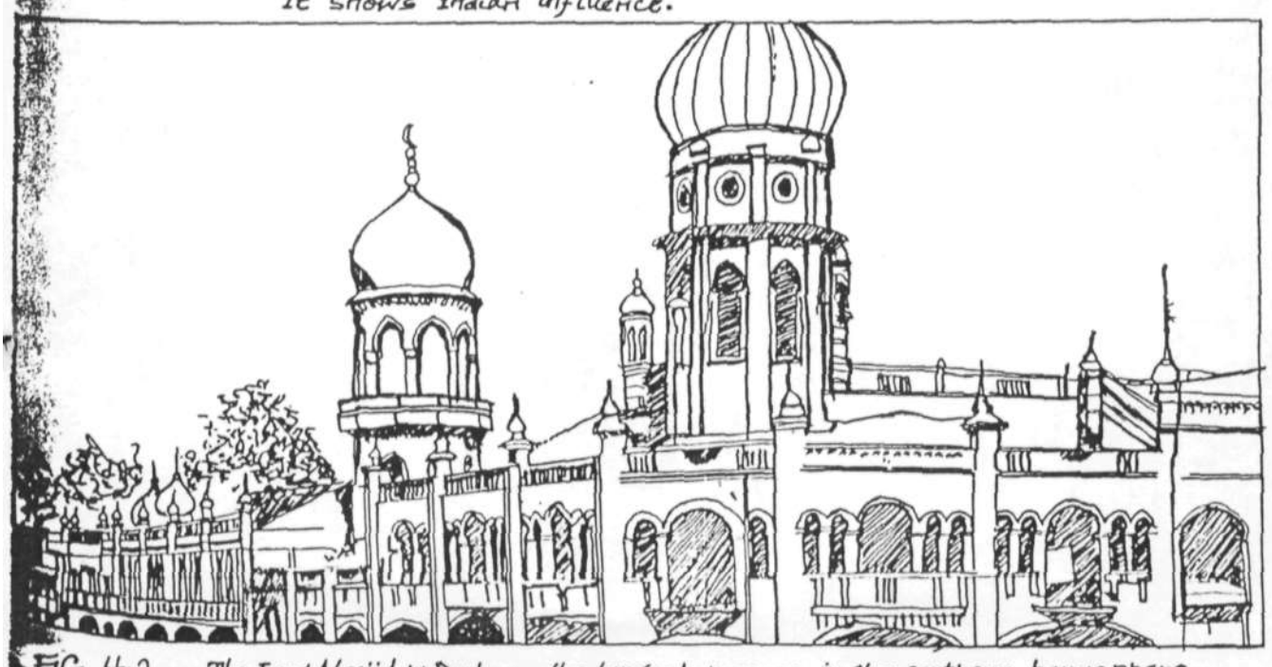


FIG 4.2 The Juma Masjid in Durban, the largest mosque in the southern hemisphere.

4.4 NORTH AFRICA

When talking of the architecture of North Africa, one could group them or rather term them the Magrib. These are the countries of Morocca, Algeria, Tunisia, Libya. It makes it easier to group them, because they had a parallel architectural development as well as historical connections.

The first Mosques of North Africa, especially the mosques of Qairawan, sousse and Tunis display a clarity and uniformity of concept. This was expressed in the disposition of internal arcades, low roOfs, court yards with square multy storeyed minarets, vast rectangular enclosures. Decorations were applied in carned store, stucco and wood, testifying to close artistic contacts with both the Eastern Mediteranean and Spain.

Under the Berber dynasties, North Africa developed its most characteristic expression; arched shapes and lobed forms were used to create complex interlacings on a mommental scale. These were made of carned stone for city gateways and minarets, stuccoed brick was used for the interior arcades of mosques. The characteristic mugarnas corbelling was employed not only for vaulting but for arches and inches.

During the Turkish period in Algeria, there was a marked impact of Ottoman architecture. In Tunisia

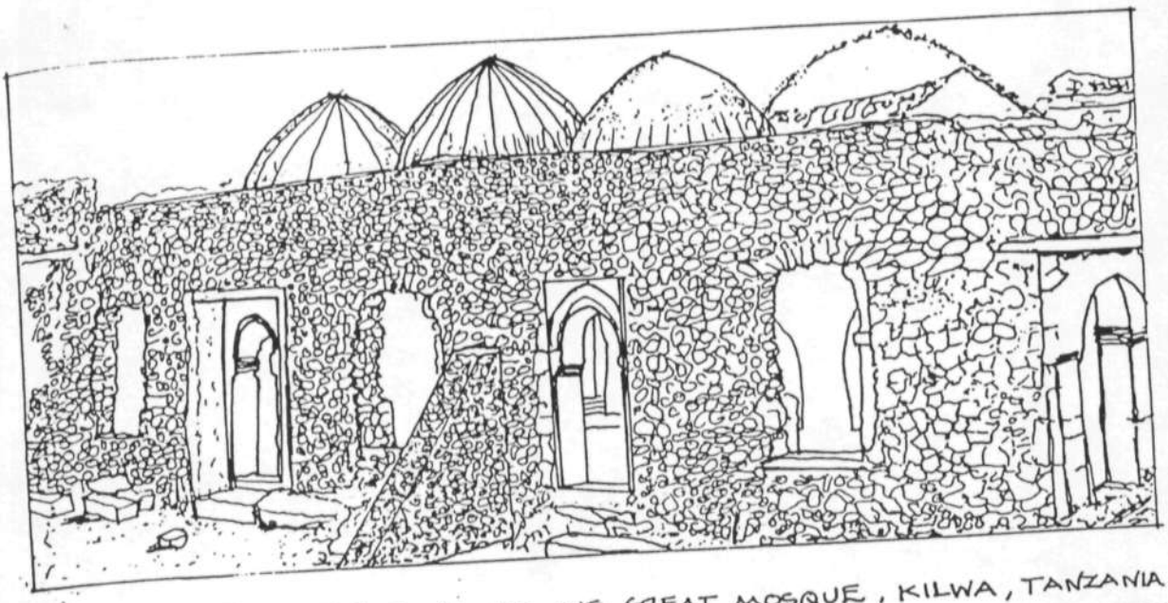


FIG. 4.3 THE RUINS OF THE GREAT MOSQUE, KILWA, TANZANIA. IT IS ONE OF THE MANY HUNDREDS OF MOSQUE LINING THE EAST-AFRICAN COAST BUILT BETWEEN THE TWELFTH AND NINETEEN CENTURIES.

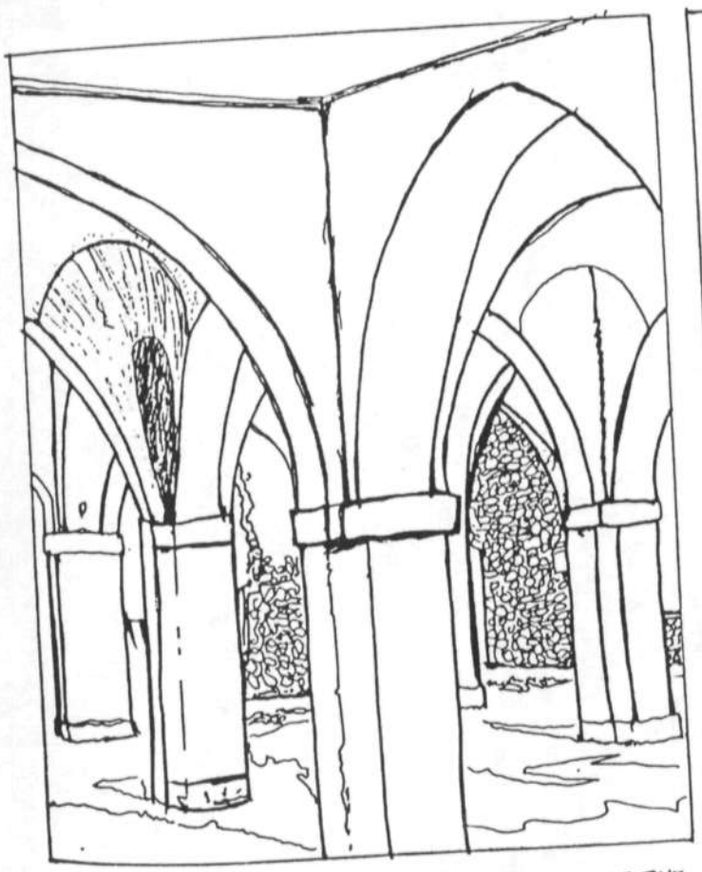


FIG 4.4 INSIDE THE INTERIOR OF THE GREAT MOSQUE KILWA.



FIG 4.5 MIHRAB OF THE GREAT MOSQUE, KILWA, 1965

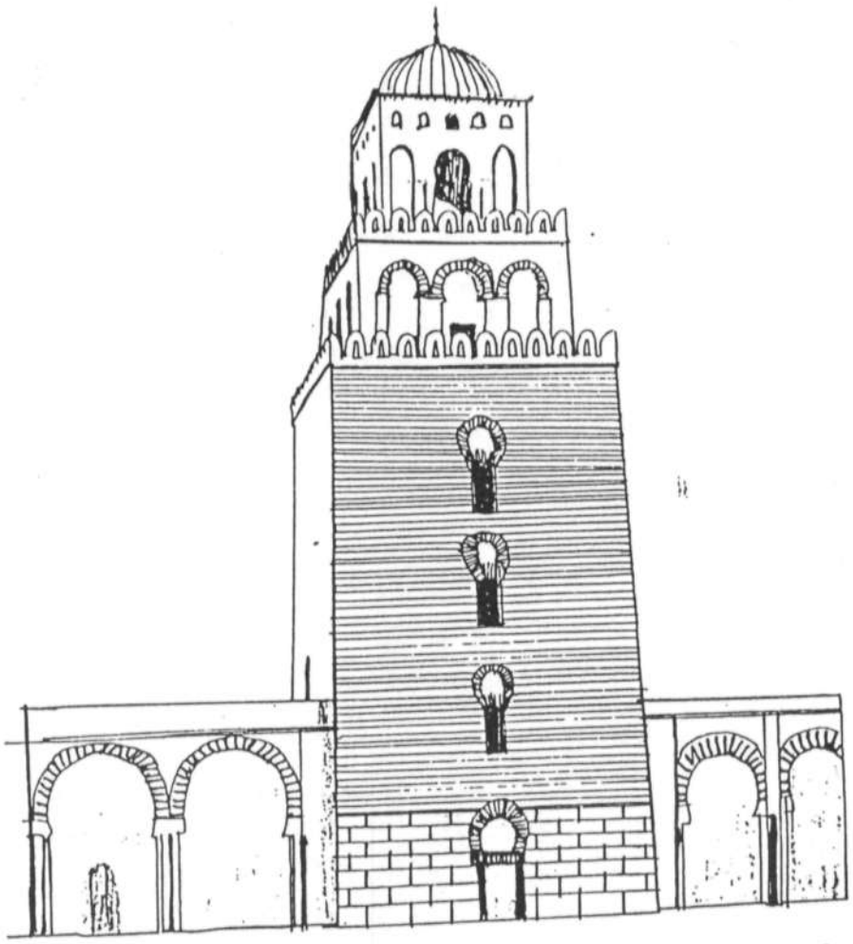


FIG. 4·6 MINARET OF THE GREAT MOSQUE, QAIRAWAN, 8th AND 9th CENTURIES. A TYPICAL NORTH AFRICAN MINARET.



FIG. 4·7 THE FACADE OF THE GREAT MOSQUE QAIRAWAN WITH ITS BEAUTIFUL CAPROOMED DOME.

and Libya, however, more local traditions were combined with a Europeanized decorative tile panels and in laid stone work with stucco.

4.5 EAST AFRICA

The Swahili Coast of East Africa had for long been in contact with the muslim World of Arabia and persion Gulf. Hence their mosque buildings show the influence of these regions, but the material and technology available was to give birth to distinct architectural style. Hence coral and coralline were the chief building materials and they were to be used throughout the entire building. So much was and intense was this cultural contact between the Arab and the African that a distinct language and culture were developed the kiswahili and swahili respectively. The rained palaces and mosques of Kilwa Ganzanial and Gedi (Kenya) served a good example.

4.6 WEST AFRICA

The spread of Islam into West Africa brought about the interaction between the Islamic and the African cultures. Despite the ethnic and geographical diversity, a distinctive style of architecture - a synthesis of muslim and 'Sudanese' architectural concept was evolved.

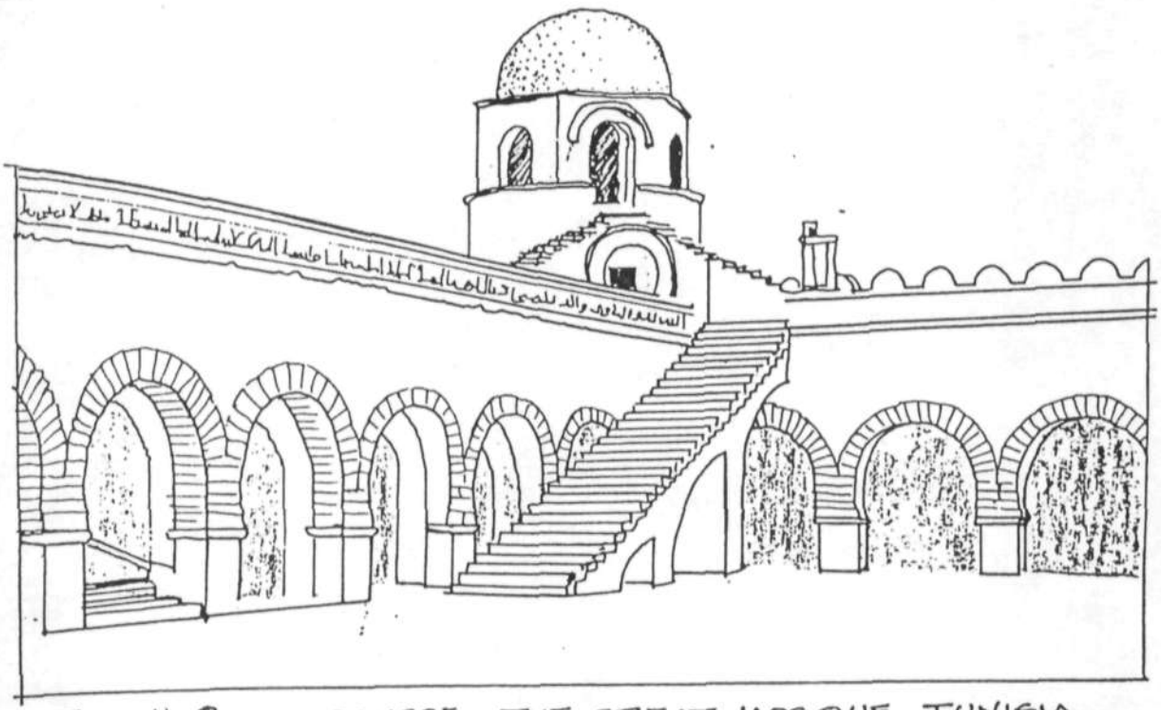


FIG. 4·8 SOUSSE, THE GREAT MOSQUE. TUNISIA. ORIGINALLY FOUNDED IN THE NINTH CENTURY, THE LITTLE DOMED KIOSK CROWNING THE CORNER TOWER WAS ADDED IN THE 11TH C.

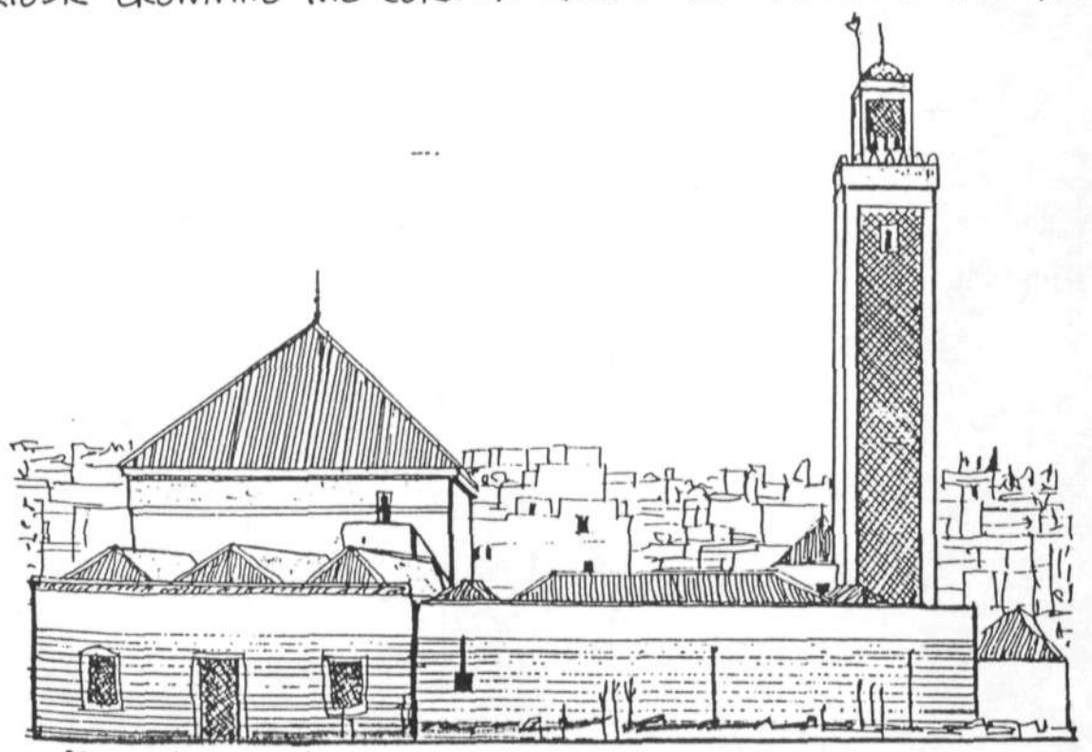


FIG. 4·9 FEZ, MAULAY IDRIS ZAWIYA, 15TH AND 18TH CENTURIES, THE TOMB OF THE CITY'S SAINTLY PATRON AND FOUNDER. A TYPICAL MOROCCON STYLE.

The Saharan Caravan trade between. North Africa and Western Sudan resulted in bringing about cultural diffusion between the two regions. A type of clay mosque was developed whose minaret was based on the square North African Minaret, but the nature of the material - sun-dried mud and the adapted technology was to result to the evalution of a new style characterised by slanting minarets. While in the Dyula region of old Ghana and Mali, the sculptural quality of their mosques of Djenne and Niono in Mali and Larabanga, Ghana, while the Hausa mosque is found in Kano, Katsina and agadez.

4.7 EGYPT

In 639, due to the Holy Jihadists, Egypt was finally conquered by the Arabs and in 641 Cairo (formally fustat) was found, and as a result Egypt received a succession of alien rulers. The introduction of stone as the principal building materials and the creation of recessed, richly decorated street Facades also date back to this period.

In 1174, the crusaders seized control of Egypt and created a new Syrian-Egyptian Empire. It was under this Dynasty that Cairo, was opened for the populace and expanded to the South towards the newly erected citadel. The Ayyubids (Dynasty of crusaders) laid down the foundation of 'madrassas' to serve and promote the re-established

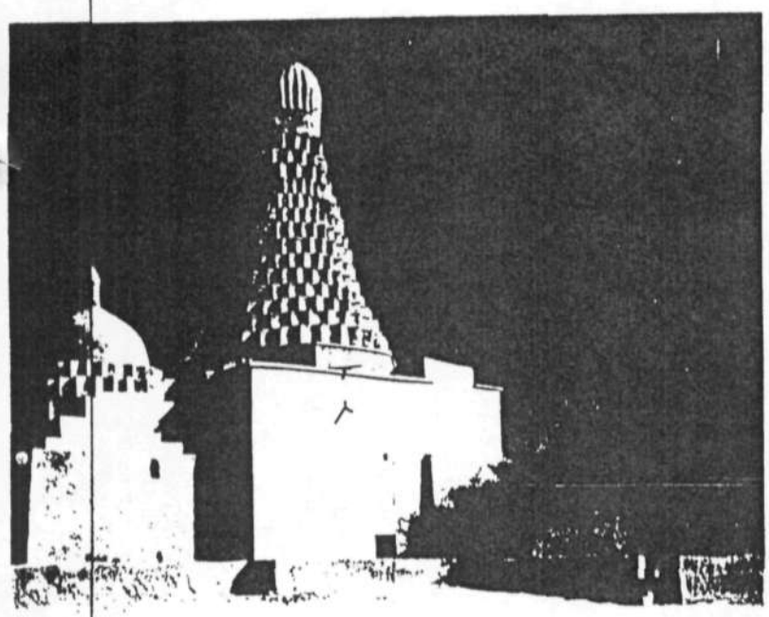
Sunnism. New 'Iwan' - type buildings, influenced by Syria and Asia minor were also established in Egypt.

4.8 PERSIAN ISLAMIC ARCHITECTURE

Architecture in persia has a continueus history of more than 6,000 years, from at least 5000 BC to the present, with characteristic examples distributed over a vast area from Syria to North India and the borders of China, from the Caucasus to Zanzabar. Persian buildings vary from peasant huts, tea houses and garden powilious to some of the most beautiful and majestic structures the world has ever seen. In meaning and purpose, monumental persian architecture was primarily religious - At the beginnings. Magical and invocational in character by which man was brought into communication and perticipation with the powers of haven.

Available building materials dictated major forms clays readily available at various places. Moulded mud, compressed as solidly as possible and allowedt to dry. The aboundance of heavy plastic earth, in conjuction with a tenacious Gypsum mortar, also facilitated the development of brick.

The mosque was often a court of justice, parts of the mosque complex were even used as prisons or morgues, spiritually coextensive with the whole life of the



TE. 8 "Sugar-loaf" towers, Karg

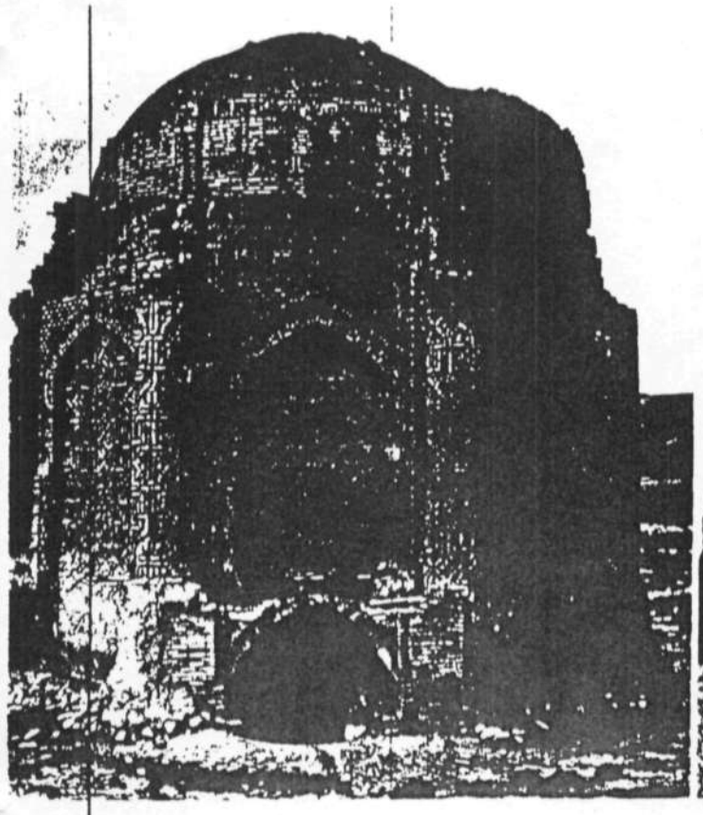


PLATE. 9 TOMB TOWER, KHARAGAN,

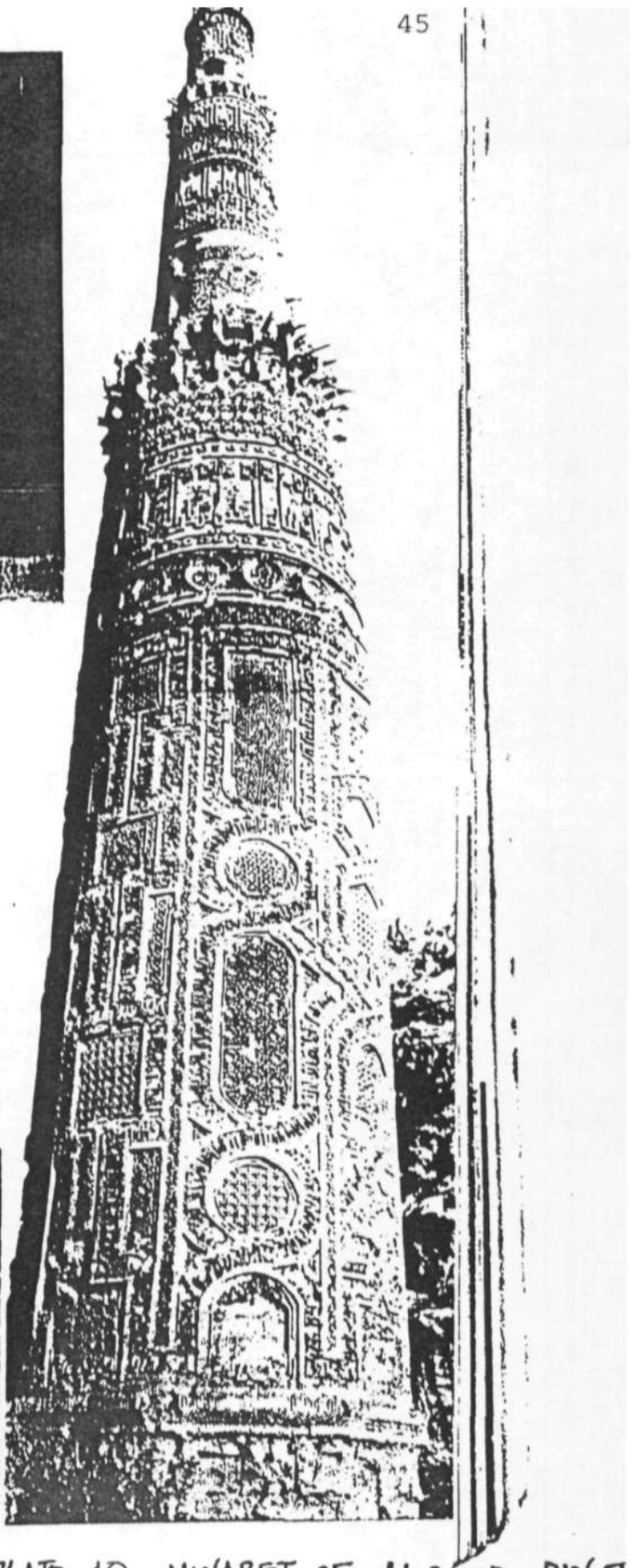
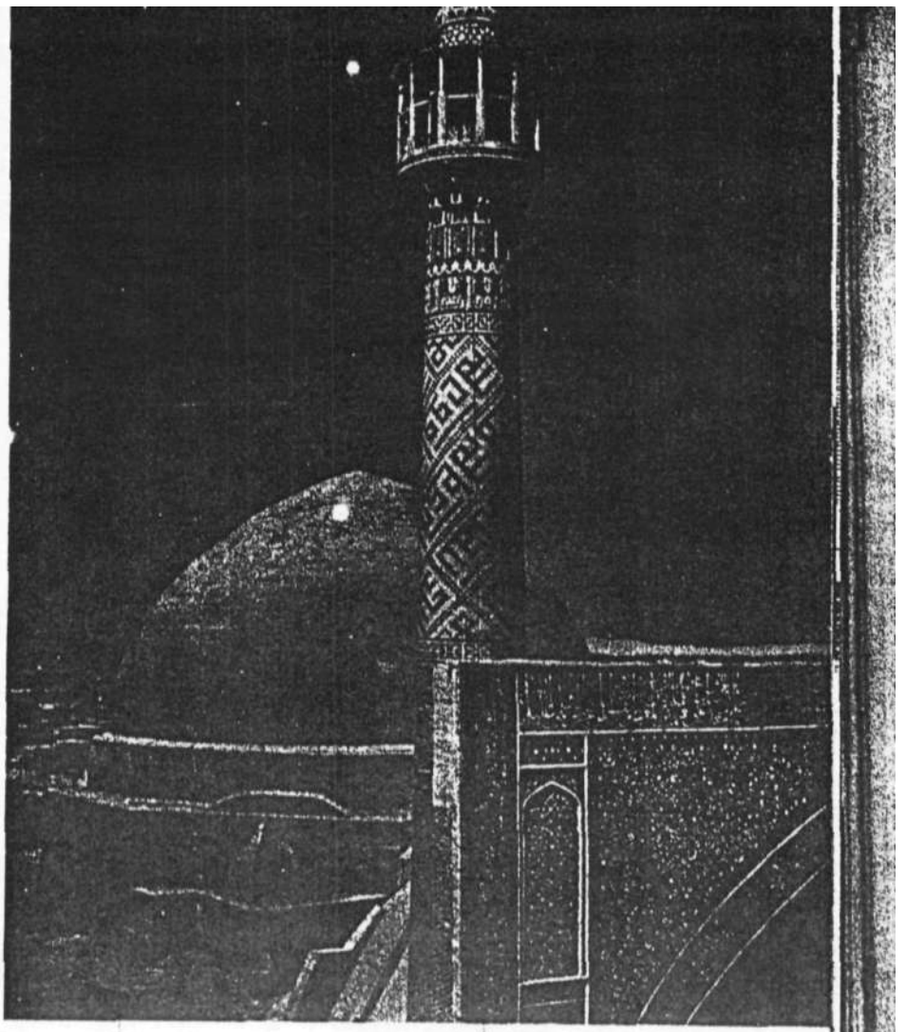


PLATE. 10 MINARET OF ALA, AD-DIN, J



Masjid-i-Jami, Isfahan, sanctuary dome (minaret, 15th cent.)

PLATE · 11

SELJUK ARCHITECTURE

Seljuk architecture in Persia, scarcely recognized as a distinct style before 1930, now comprises a repertoire of about fifty monuments and is increasingly regarded as one of the world's great architectural styles. A number of important monuments have been recorded within the last decade; still more may come to light. Each discovery reveals new merits in structural inventiveness: double domes, ribs, wider vaults, taller minarets: and in decoration: stucco mihrabs, opulent and expressive overall arabesque networks, and in brick ornamentation patterns and bondings of infinite variety, vigor and originality.

The power and nobility of Seljuk architecture is doubtless best exemplified by the Masjid-i-Jami of Isfahan, one of the greatest

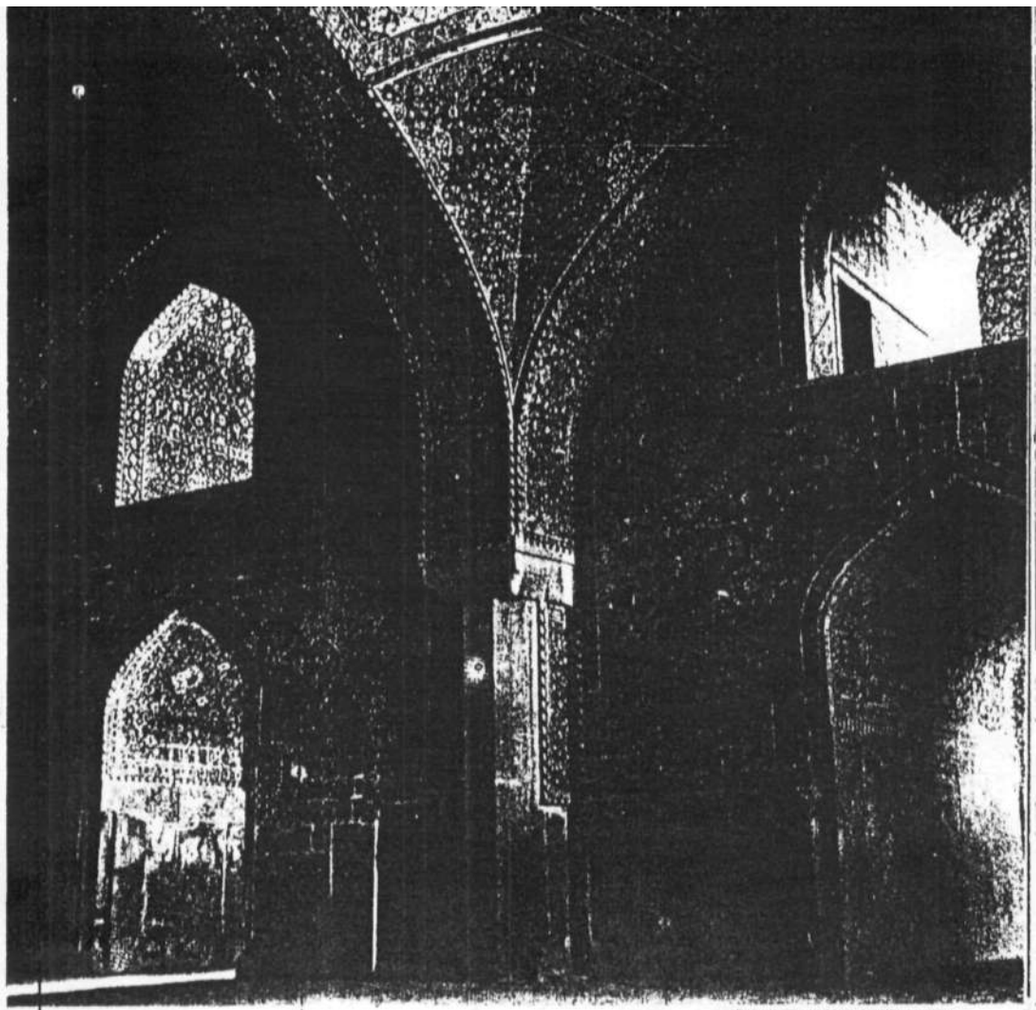
people, the mosque often becomes physically integrated with the city indeed can become its very focus.

Architecturally the mosque may be wholly an interior court design, conceived to exclude the outer world and emphasize its inner concentration. Repetitive element - ARCADES OR columns - give it cohetence and at the same time define its purpose - fulfillment of the deepest kind of unity.

The power and nobility of setjuk architecture is doubtless best exemplified by the masjid-I-Jami of Isfahan, one of the greatest buildings in the world. More than 900 years of persian architecture are revealed in this great mosque's twenty distinct structures. Aesthetically, the most important unit is the Jami is the small but superlative North Dome known as the GUNBAD -I-KHARKF located at the opposite end of the central axis from the sanctuaty. This is perhaps the most perfect Dome known with 9 dimensions of 65 ft high and 35ft in diameter.

Although the primary task as well as the greatest achievement of persian architecture were in service of religion, architecture activity was by no means confined to religious movements and secular palaces.

The vault is absolutely vital to the Development of persians great architectural achievements. Persian Domestic architecture is in many periods, Quite worthy



LATE 12— winter prayer hall

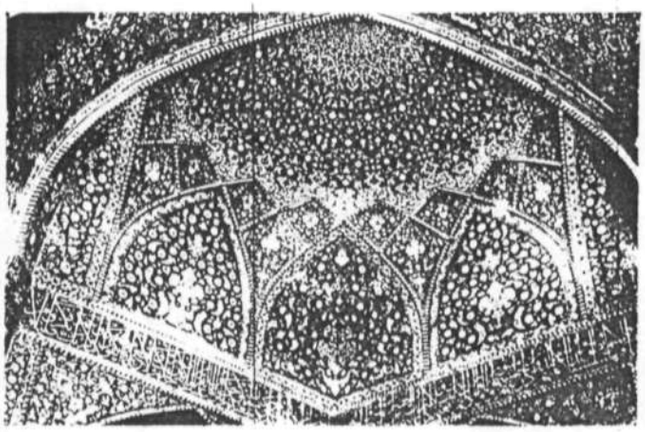


PLATE.13 SANCTUARY PORTAL VAULT

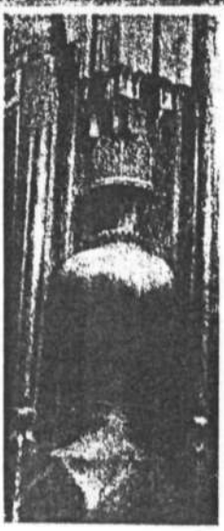


PLATE.14 VASE AND SHAFT MOTIF

of note every house of atleast middle-class status has its own pool.

For protection, most have traditionally had a off - axis entrance. Persian architecture has several paramount virtures, a marked feeling for form and scale, structural inventiveness, especially in voult and Dome constructions. A Genious for decoration with a freedom and success not revaled in any other architecture. The Madrassa of Khargird, the mosque of Gawharshad, the blue mosque of Tabriz, the Masji-I-Shah and Shaykh Lutfullah of Isfahan - all holding their own with the tinest architecture the world has seen, all different yet, all persian.

4.9 TURKISH ISLAMIC ARCHITECTURE

The foundamental building types in moslem Turkish architecture are closely connected with its own original tradition. Both religious and secular buildings show the same general structural character but they exhibit a great variety of material, proportion and ornamentation. These buildings may be divided into the following.

Religious buildings:- Mosque, convents, mausolean and tombs

secular buildings:(A) Social and public, schools (Madrassa), Hospitals, hoctelries caravanserais, market halls, public baths, public fountains, Reservoirs and bridges

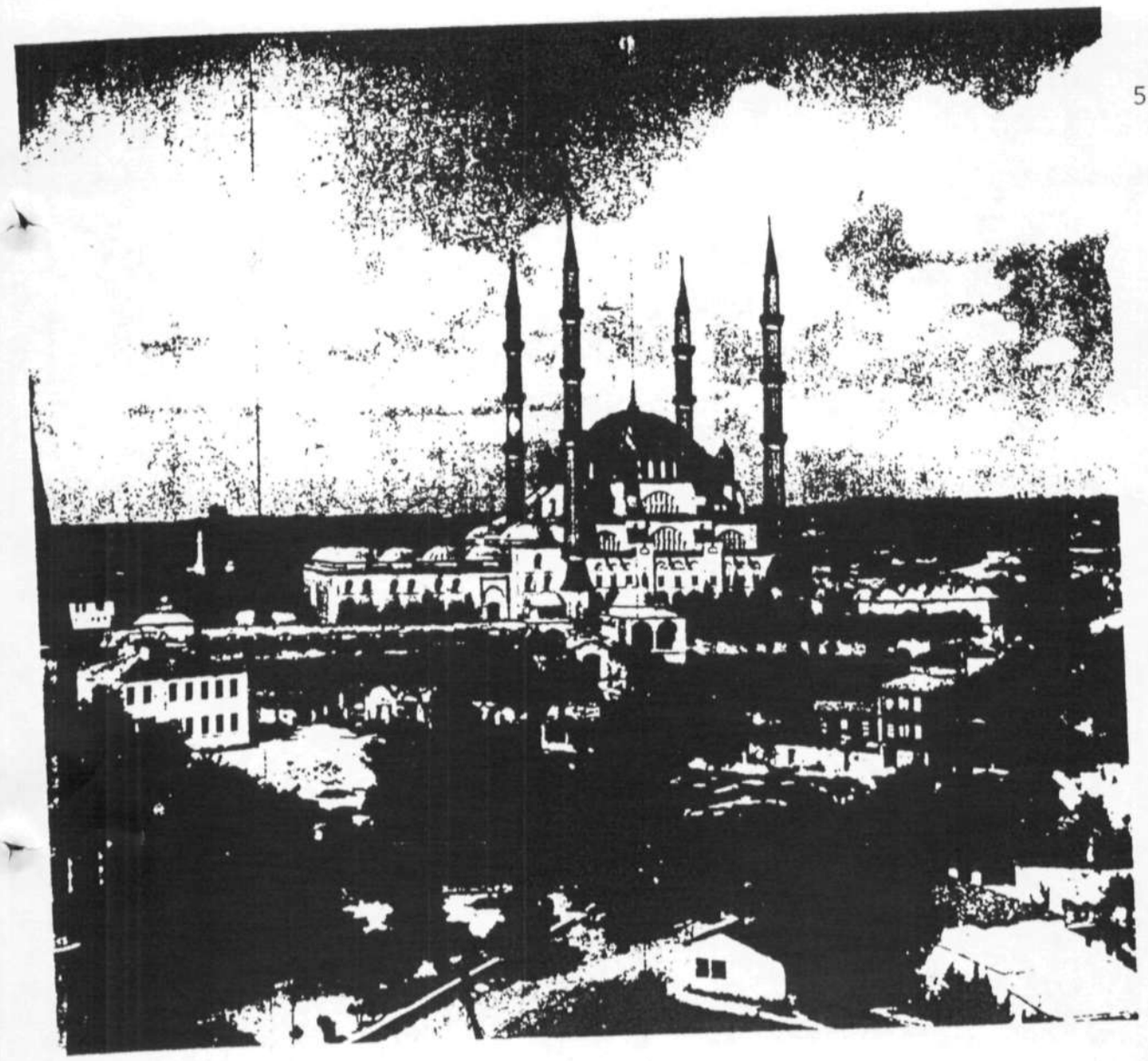


PLATE 15 EDIRNE. Selimiye Mosque

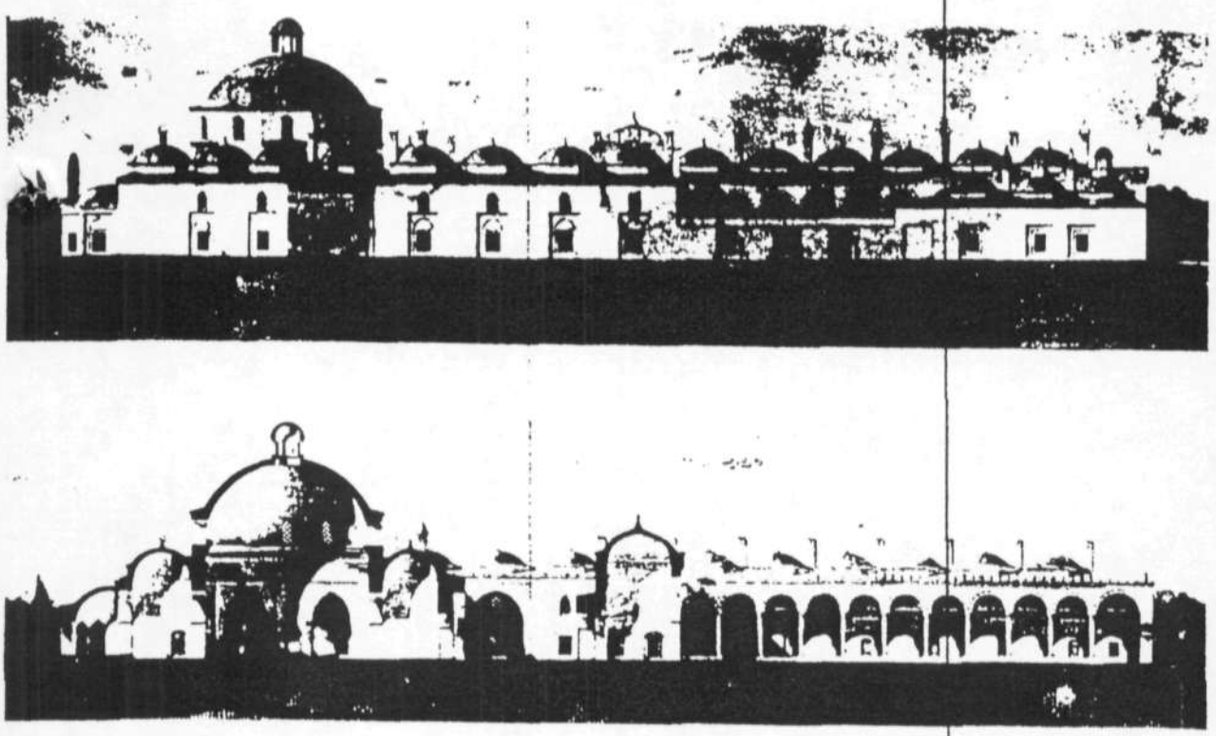


PLATE. 16 EDİRNE. Beyazıt II Mental Hospital, reconstructed

(B) Domestic: palaces, castles, House and shops. Military buildings - city walls, towers, Forts, barracts.

Form and character vary not only in the different types of building, but also according to style and period.

Though the architecture existed in different periods that is the Seljuk and that of Ottoman but for the purpose of this thesis only the neo-Ôthoman period will be looked into.

Among the muslim Arabs the building in which communal prayer is performed is called MESCIT. From the Arabic pronounciation of this word, MASGIT, the name mosque is supposed to be derived. Among muslism Turks MESCIT means a small mosque, the larger buildings called Cami (DJAMI), that is a place of assembly. And in practice a mosque is not merely a place for prayer, but also for listening to the readings from the Holy Quran, to sermons and to addresses.

The sultan's mosque at Istanbul was that of Fatih mehmet II, built in 1463 - 1471, it survive until the middle of eighteenth century, the present mosque that has taken its place is built upon a different plan modelled on that of Sultan Ahmet. The origional plan comprised one whole and one half dome. The mosque Beyazit II at Istanbul (1501 - 1506) which set the pattern for the manumental mosques of tne sexteenth century. Here the plan of the

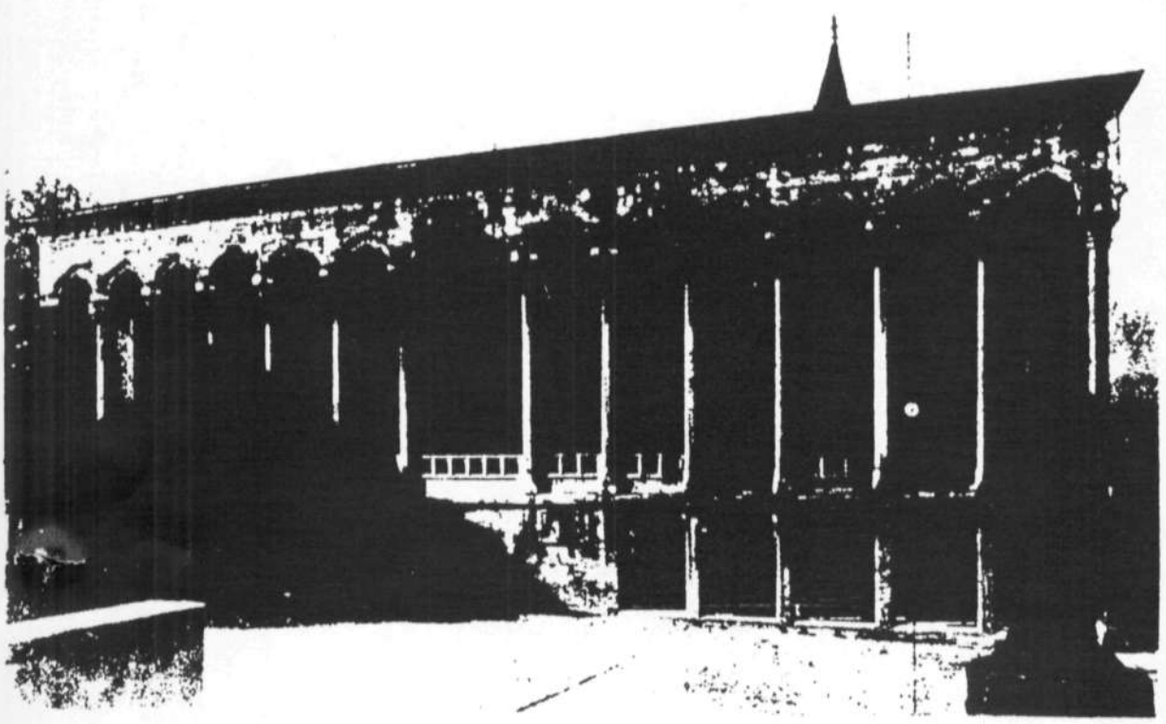


PLATE 17 ISTANBUL. Çinili Köşk, after restoration

Fatih mosque has been developed with and introduction of a second half-dome opposite to and in the same axis with, the half -dome that supports the central dome on the side of Mihrab.

In the Nuru Osmaniye Mosque (1755), a specimen of Turkish baroque, the new style is seen in the minor architectural features and in the detail, while the general plan, with single central dome, remains faithful to the old Turkish tradition.

The madrassas were institutions for advanced education, corresponding to the University Faculties of our time, where the various branches of learning were taught and studied.

In general, the maddrassas continue the seljuk tradition, except that they are mostly single-storeyed with a courtyard. This later is surrended by arcades supported on columns; these porticoes, like the students rooms, are domed.

The Horasan house-plan, with courtyard and four eyvans of which the caravaserais and maddrassas were and adoptation served also as the prototype for the pavilions and main buildings of the palaces.

Turkish Islamic Architecture inherited the Byzantine vault and carried it to its sublime limit. They added new elements to Islamic architecture, the symbolic use oblight. It's all domes and minarets with monumentality and Grandeur.

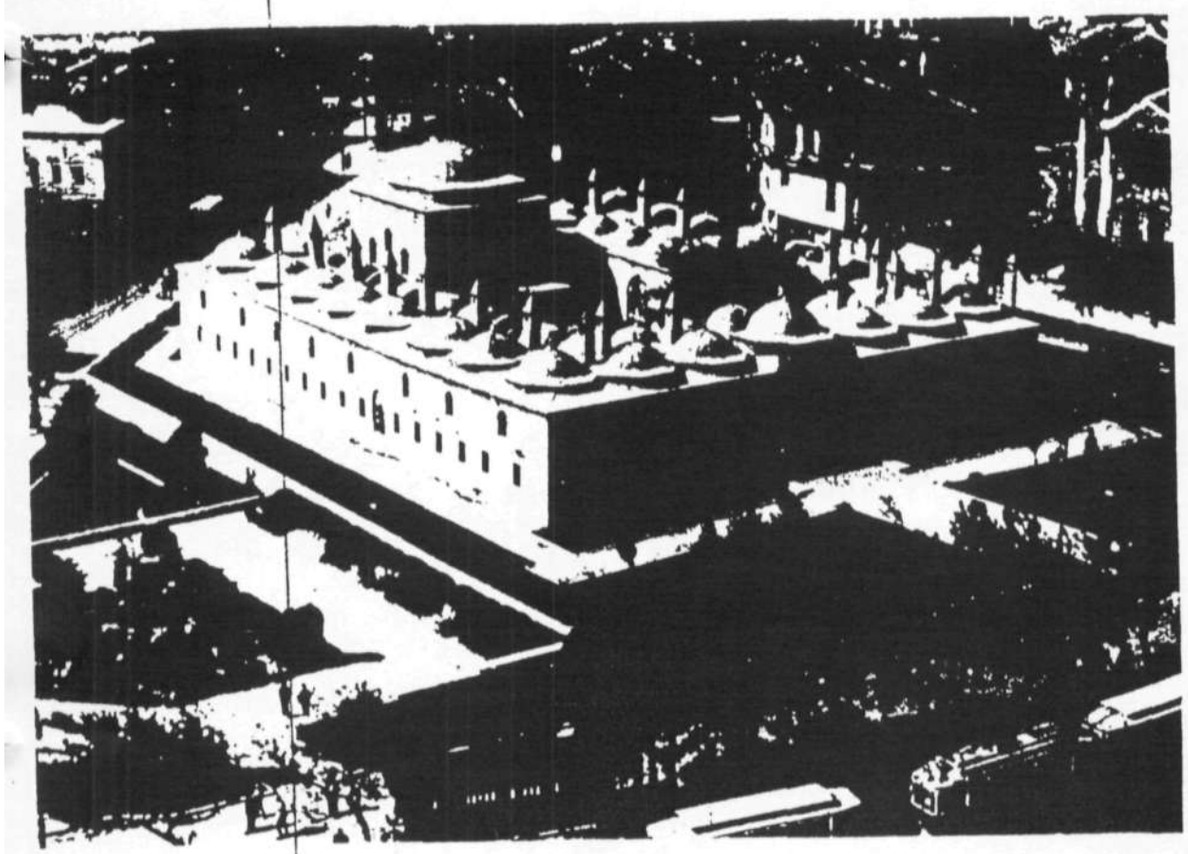


PLATE. 18 ISTANBUL. Beyazıt II Medrese

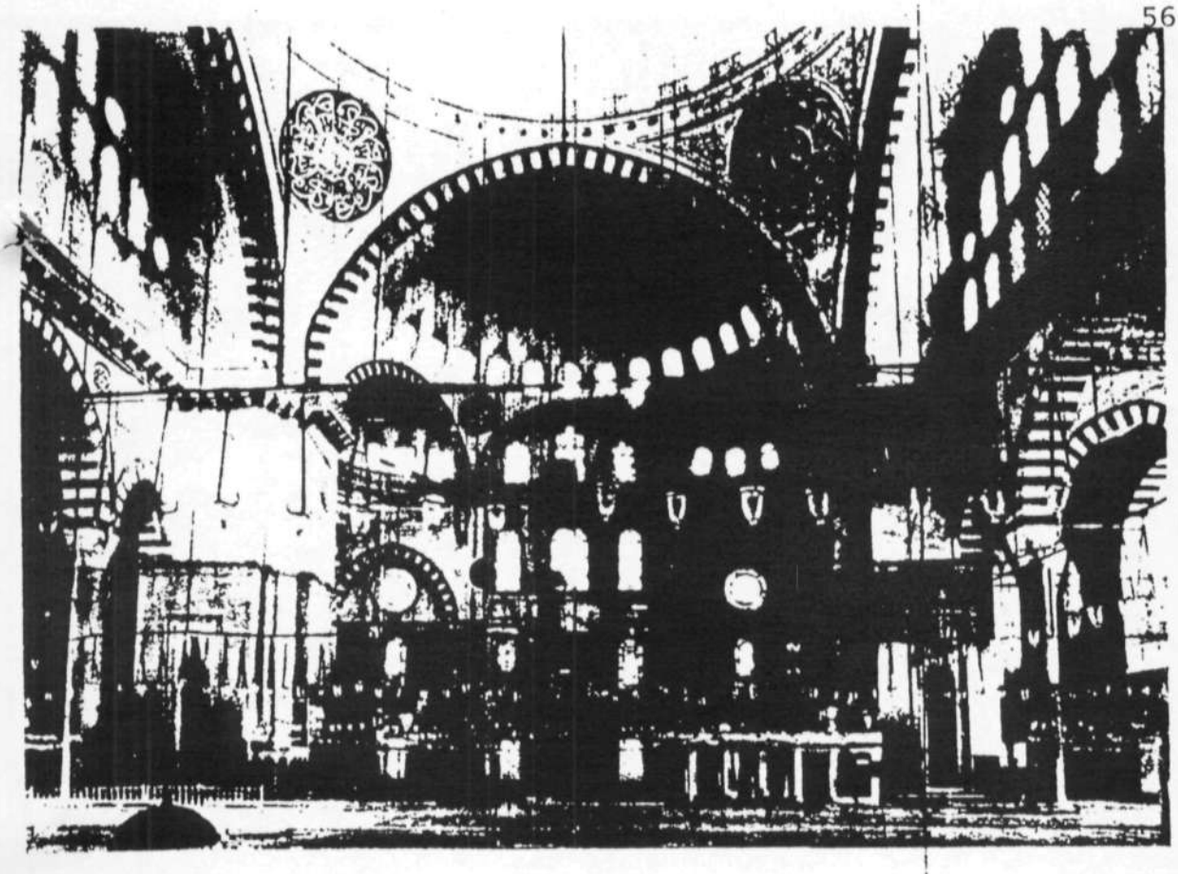


PLATE. 19 ISTANBUL. Süleymaniye Mosque, interior

CHAPTER FIVE

(CASE STUDIES)

5.1 INTRODUCTION

An Islamic centre comes in many forms depending on the scope of Facilities provided. In the early days of the prophet Muhammad (S.A.W.), the mosque used to serve as the Islamic centre in that it comprised of almost all those facilities that made the umma more confortable. It comprised of the worship area, the meeting house, the court as well as the Educational unit. But as time went on, It became necessary to dissociate some of the units with the mosque, even though maintaining them within the same complex.

In this light some existing Islamic centres to serve as case studies which are expected to serve as a guide to the general needs of Islamic centres and help towards the understanding of architectural contributions to the contemporary trends in Islamic traditional architectures.

5.2 ISLAMIC FOUNDATION HEADQUATERS KANO

5.2.1 HISTORICAL BACKGROUND:

The Islamic Foundation is a private organisation established with the main objectives of promoting unity and understanding between muslims themselves, and between them and all their other fellow citizens. It is

one of the noble aims of the Foundation to enhance the understanding of Islam and to propagate As teachings and practice. To this effect the foundation decided to build its headquarters, which was completed in 1981 so as to centralise its various activities.

5.2.2 LOCATION

The site of the Islamic Foundation headquarters is situated on the outskirts of Kano City along Zaria road, opposite the Audu Bako Secretariat. This enables it to be easily identifiable and accessible from all parts of Kano and other states in Nigeria.

5.2.3 CLIENT/USER:

The Client is the Islamic Foundation and the users are the general muslim public of Kano and environs.

5.2.4 ARCHITECTS

The design of the headquarters was undertaken by DEBCON (Nig. Ltd) an architectural and construction firm.

5.2.5 FACILITIES:

At present the Islamic Foundation headquaters have the following facilities:-

i. Administrative Unit.

ii. Bookshop

iii. Primary School

iv. Mosque (under construction)

v. Clinic (Al-Nowri Hospital)

However, the design proposals for the Islamic centre comprises the following:

i. Cultural centre

ii. Office tower

iii. Conference centre

iv. Residential Flats

v. Imam's house

vi. Library

vii. Shops

viii. Ware house.

5.2.6 DESIGN CONCEPT

The concept adopted in the planning seems to have taken the advantage of the long but narrow strip of land along the road. The buildings are planned in a linear form along the road with the acess road situated on lyaka road opposite the main Zaria road. The classroom blocks are arranged to form a U-shape making it possible for open air assembly at the centre. The administrative unit and the mosque are situated at the opposite sides of the classroom blocks.

5.2.7 ARCHITECTURE:

The architecture is purely modern and reflect the international style. It is devoid of any traditional element in both form and plan. There is also a total lack of Islamic architectural concept in the design of the administrative and educational blocks. The mosque however displays some Islamic character in the architecture in the use of dome, minarets and double tiered arches.

The construction materials are cement, blocks and concrete columns. The windows are glazed and cover the entire wall on both sides of the classrooms.

5.2.8 APPRAISALS:

Major problems stem from the total lack of Islamic architectural elements in the design of the Headquaters. As an Islamic centre the architect should have designed it to potray an Islamic identity rather than use a modern approach applicable in any other institution at which ever given area, even the mosque displays a foreign concept of Islamic architecture in the use of its elements. No attempt was made to incorporate traditional concepts and decoration thereby making the mosque to look entirely foreign and out of context with Hausa traditional architecture and the region as a whole.

ISLAMIC FOUNDATION HEADQUATERS, KANO.

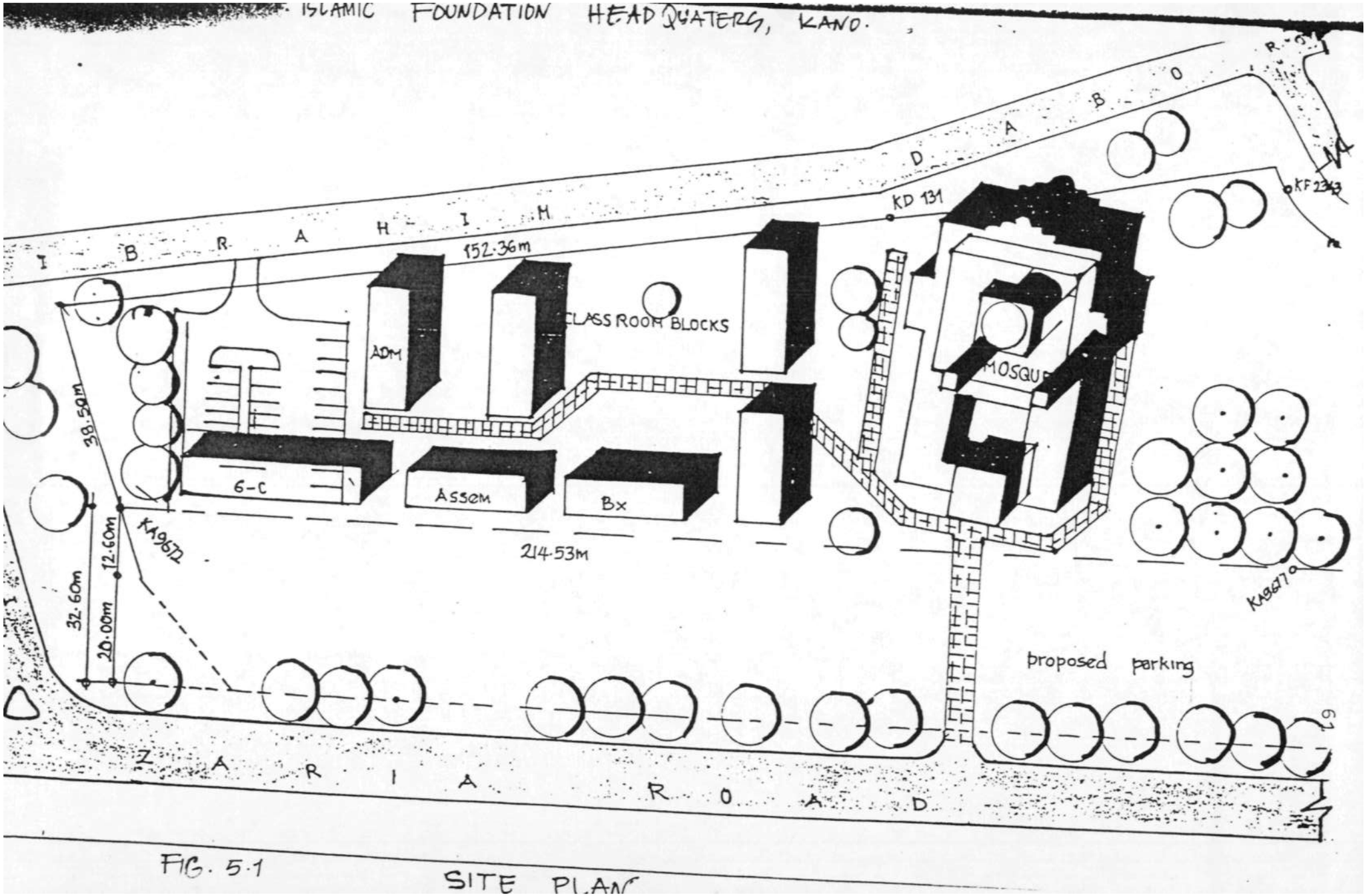


FIG. 5.1 SITE PLAN

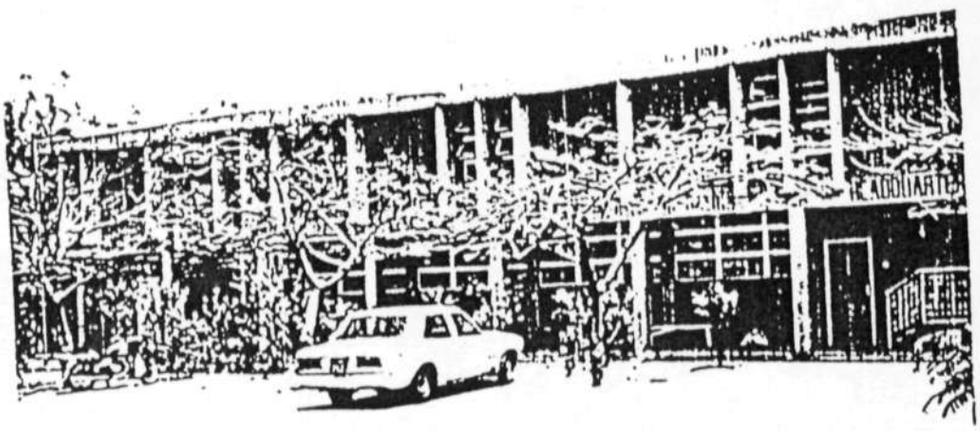


PLATE 20 THE ADMINISTRATIVE BLOCK OF THE ISLAMIC FOUNDATION ILARC.

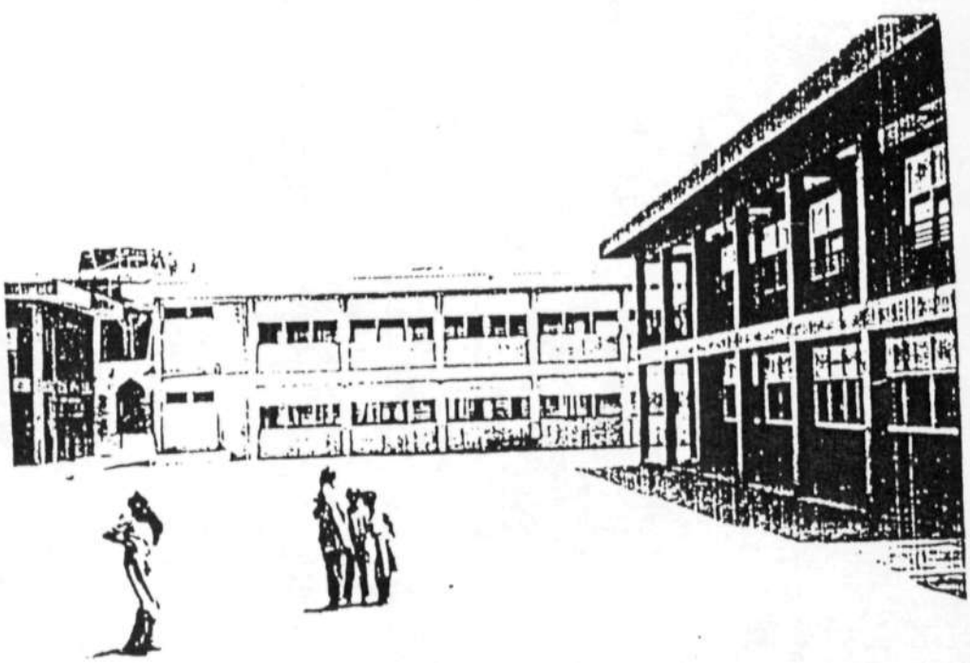


PLATE 21 VIEW OF CLASSROOM BLOCKS.

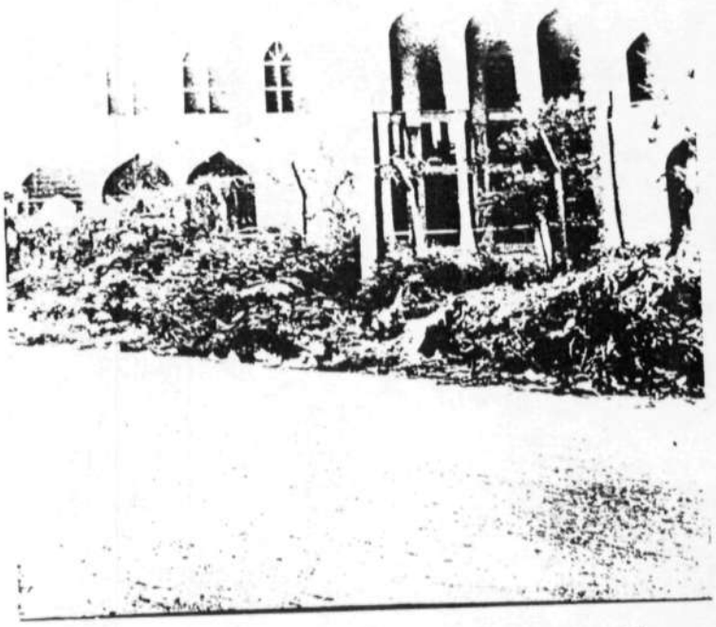


PLATE 22. THE UNCOMPLETED MOSQUE OF THE ISLAMIC FOUNDATION LAND.



PLATE 23 A VIEW TOWARDS CLASSES.

Another major problem is the lack of proper parking space for visitors and hence parents bringing their children to school have to drop them on the road for them to travel down to the school compound, likewise at the end of their classes children have to cross the road to meet their respective parents, and this makes it very dangerous for the children and also congests the traffic.

Credit will however be given to the well executed construction of the different blocks of the entire complex, the use of shading devices and the well protected upper corridors.

5.3 ISLAMIC CENTRE OF NORTH AMERICA

5.3.1 BACKGROUND

In 1975, the muslim students Association (M.S.S) of U.S.A. and Canada decided to centralize their numerous activities by establishing a Headquarters in Indiana. They had a land of about 84 acres in area, and the design was given to ARC GULZAR HAIDER of the University of Canada.

5.3.2 DESIGN BRIEF:

The complex was supposed to be the Headquarters of all religious activities in the U.S.A. and to act as such, the Islamic centre was designed with the following functions:

i A mosque complex for 500 men and women with a 25% overflow.

ii. A library for 10,000 volumes, as well as a micro-film and audio visuals unit.

iii. Office complex for sponsoring and associated organizations.

iv. Offices and storage space for the Islamic book space.

v. Educational unit with an auditorium, classroom and Day care centre.

vi. Cafeteria.

vii. Dormitories and cabins for 500 short residents.

viii. Staff housing for seven families.

ix. Recreational and outdoor sports facilities.

5.3.3 DESIGN CRITIQUE:

MERITS

i. The Design of the Islamic centre of North America has been made expressive to all as well as understandable to all muslims due to the use of the Dome and Minaret.

ii. The introduction of plaza pools, i.e water bodies, has Reinforced the Natural context: this improves the micro climatic effects of the environment.

iii. Religious activities like abulution and prayer have been treated with the utmost care, and are reinforced by the architecture.

iv. The planning is economical because of the simplicity of the facades.

DEMERITS

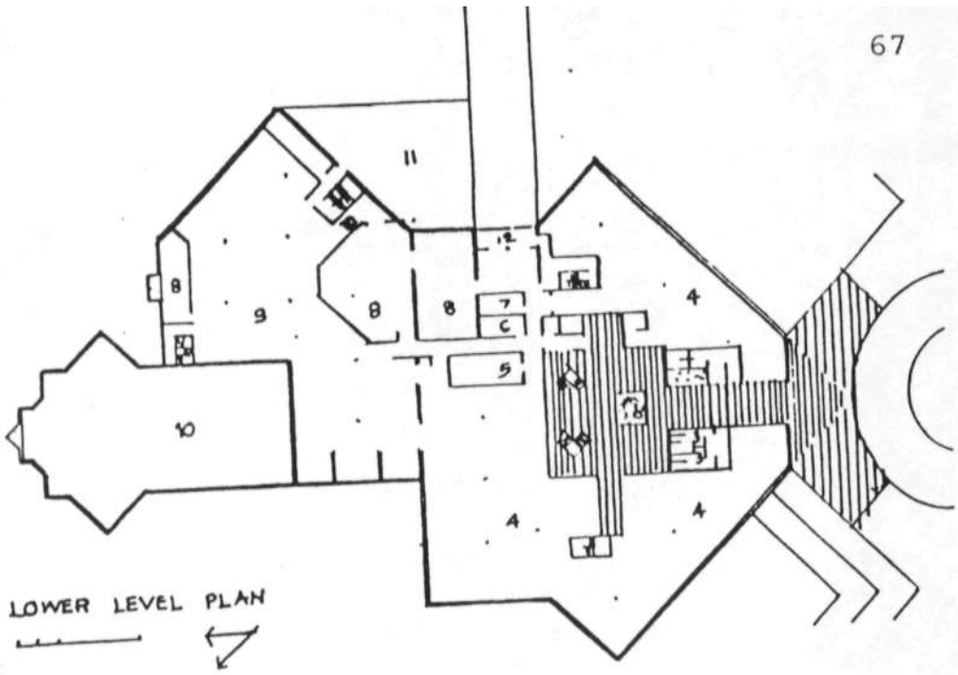
i. The use of a polygonal shape in the prayer Hall has made it possible for maximum number of worshippers to assemble in the front row, which has gone contrary to the Islamic principle of design.

ii. At the Main Entrance, there is no segregation between female and male worshippers and this encourages mingling which is not supported in Islam.

iii. The minaret is completely detached, making it seem like it's introduction is an after thought.

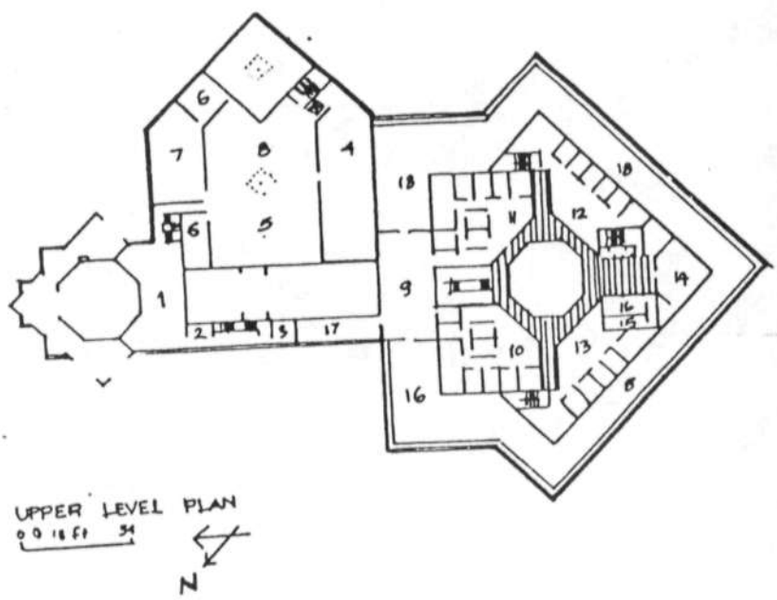
5.3.4 CONCLUSION

The architect has been able to come up with a design that is Islamic through the understanding of modern principles of design, but the absence of court yards which is symbolic of Islamic architecture is unfortunate.



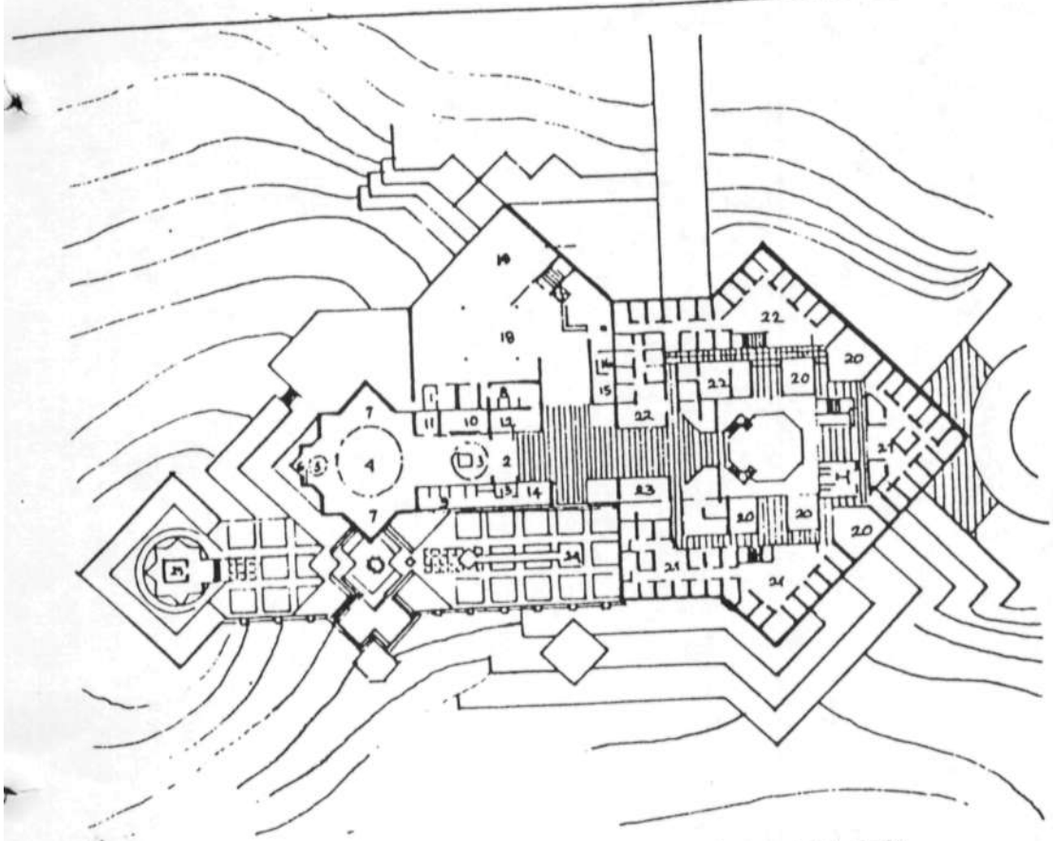
KEY:
1 Staff entrance
2 Atrium
3 Toilets
4 storage
5 Mail room
6 Office
7 Receiving
8 Mechanical
9 Library storage
10 Unexcavated
11 Areaway
12 Truck dock

FIG. 5·2 LOWER LEVEL PLAN



KEY:
1 Women's prayer area
2 Ablution
3 Child care
4 Rare books
5 Stacks
6 Seminar
7 A.V., Microfilms
8 Reading area
9 Project room
10-13 professional associations.
14 Seminar
15 Women's toilets
16 Men's toilets
17 Additional project space
18 Roof deck

FIG 5·3 UPPER LEVEL PLAN.



KEY:

1 Entrance lobby
2 Mosque entrance
3 Mosque lobby
4 Domed area
5 Minbar area
6 Mihrab
7 Eywans
8 Men's toilets
9 Women's toilets
10 Ablution
11 Imam's office
12 Men's coatroom
13 Women's coatroom
14 Women's entrance
15 Librarian
16 Assistant librarian
17 Circulation desk
18 Stacks
19 Reading area
20 Conference rooms
21 Offices
22 Offices
23 Showroom
24 Plaza Pools
25 Minaret
26 Sundial.

FIG 5.4 MAIN LEVEL PLAN.

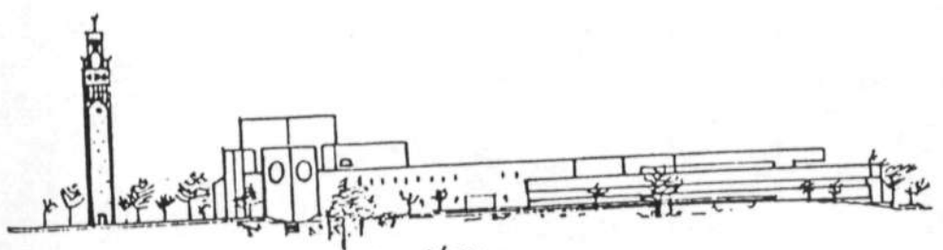
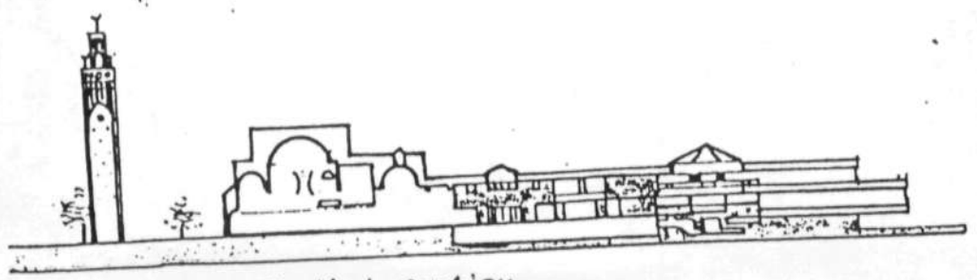


FIG 5.5 Northwest elevation



Longitudinal section

5.4 ISLAMIC CENTRE SLOUGH, ENGLAND:

5.4.1 BACKGROUND:

Slough is a community 35km East of central London. It has a Muslim population of about 14,000. The designs of the Islamic centre where done, with an estimated cost of about £7m. An appeal for Fund was raised and a large sum of money was collected. The project started in 1983 and is now funtional.

5.4.2 DESIGN BRIEF:

The Islamic centre of slough was designed with the following facilities so as it would work like a complex, viz:-

i. A prayer hall for male and female worshippers.
ii. Maddrasa for children religious education.
iii. A Nursery for infants
iv. Community functions facilities
v. Ladies and girls meeting facilities
vi. Small Hostel for single homeless.
vii. Residence for Imam and Mu'ezzin.
viii. Car park facilities.

5.4.3 ARCHITECTURE:

In the design of the Islamic centre, the continous plan of the complex is denominated by the rectangular prayer hall at the centre, with the male and female areas

occupying its adjascent sides while on the upper flours, residential units are situated in each case.

The central portion of the prayers hall is covered by a low dome, the north Western side of the prayer hall is heavily glazed and has an extensive entrance porch. The minaret is however concealed between the male ablution area and the kitchen area on the Qibla side of the complex. The wall openings are characterised by pointed arches throughout the building.

5.4.4 APPRAISAL:

The incorporation of the minaret; the dome and the arches have established a link between the Islamic centre and other regions around the world, given it a desired Islamic appearance. Also the design of the prayer hall with the shorter axis oriented towards the ka'aba makes it more functional and more Islamic. Moreover the complete segregation between the male and female areas fulfills the Islamic injuction as regards to privacy.

The compact nature of the design expresses a sense of unity between the various components of the building. And in the use of materials and form it has to some extent achieved a regional character.

However the use of water bodies; pools and Functains which could have enhanced the natural and

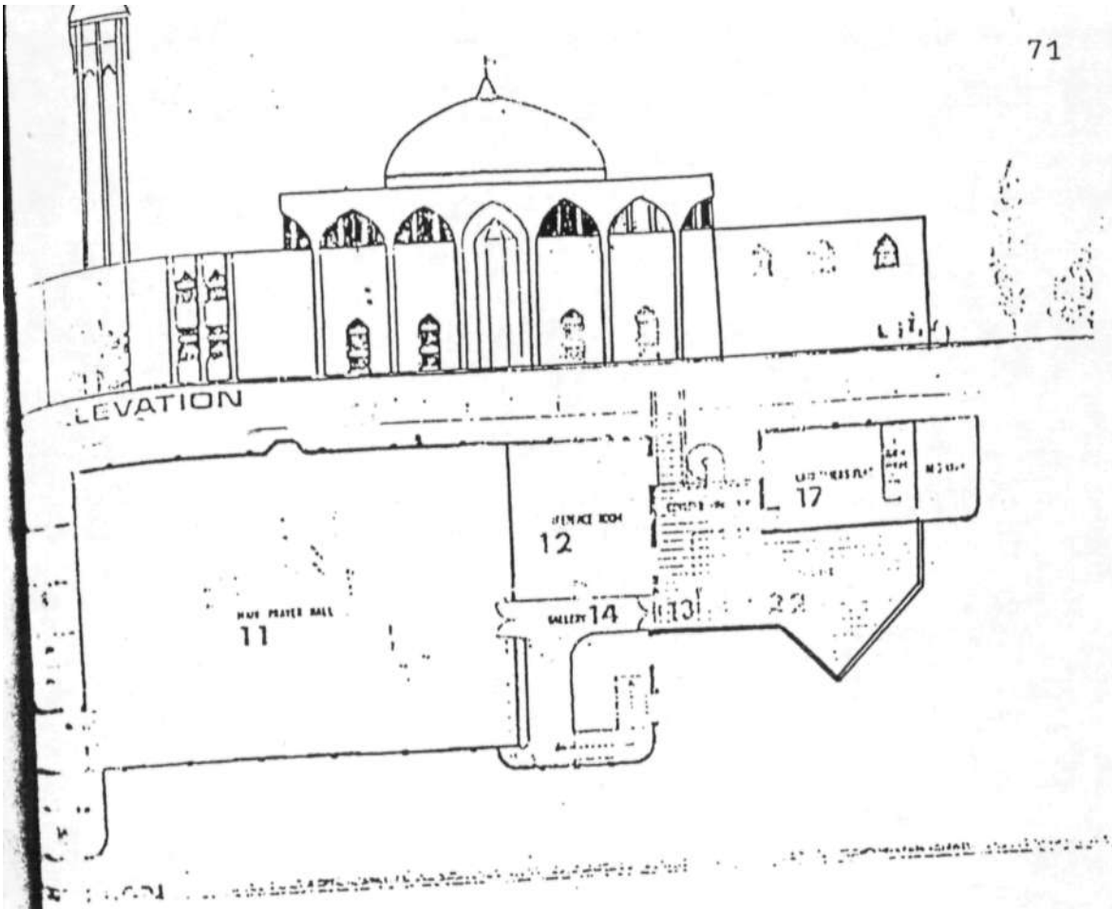


FIG. 5.6

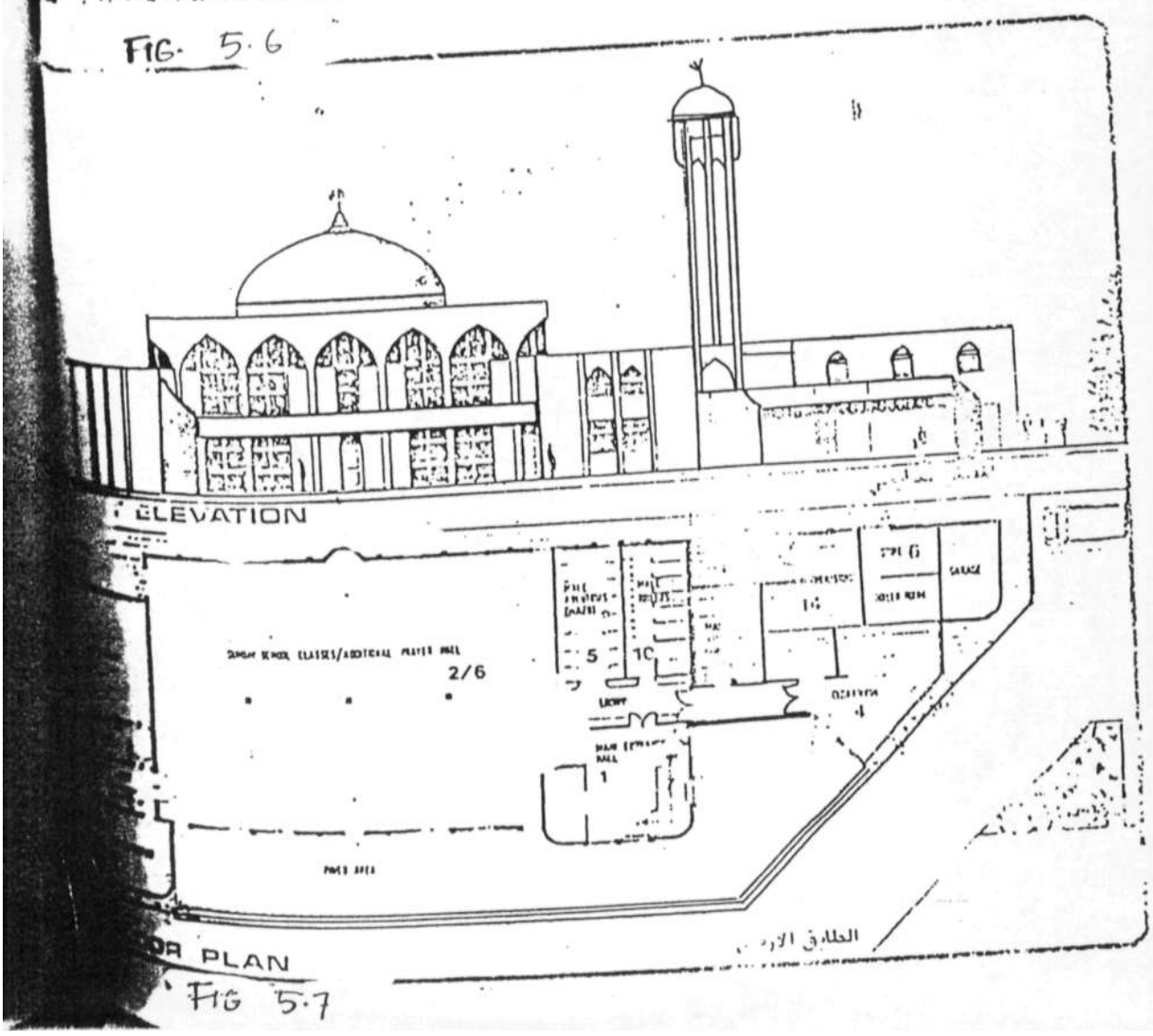


FIG 5.7

aesthetic qualities of the surrounding environment has been neglected. There is also a general lack of landscape elements around the complex, making it unpleasant.

CHAPTER SIX

HAUSA ARCHITECTURE

6.1 HAUSALAND: HISTORICAL BACKGROUND

This proposed thesis will be in a Hausa Community and therefore there is the need to know where Hausa society is located and their architecture. Thus, Hausa states lie in between the confluence of rivers Niger and Benue in Nigeria and to the southern part of Niger Republic. It is the geographical region between the Sahelian and Savanna regions and extended approximately from latitude 3.5°east to 11.0°east or 844km and from longitude 10.5° north to 14.0°north or 400km in Nigeria.

The Hausa-fulani cities of northern Nigeria have 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

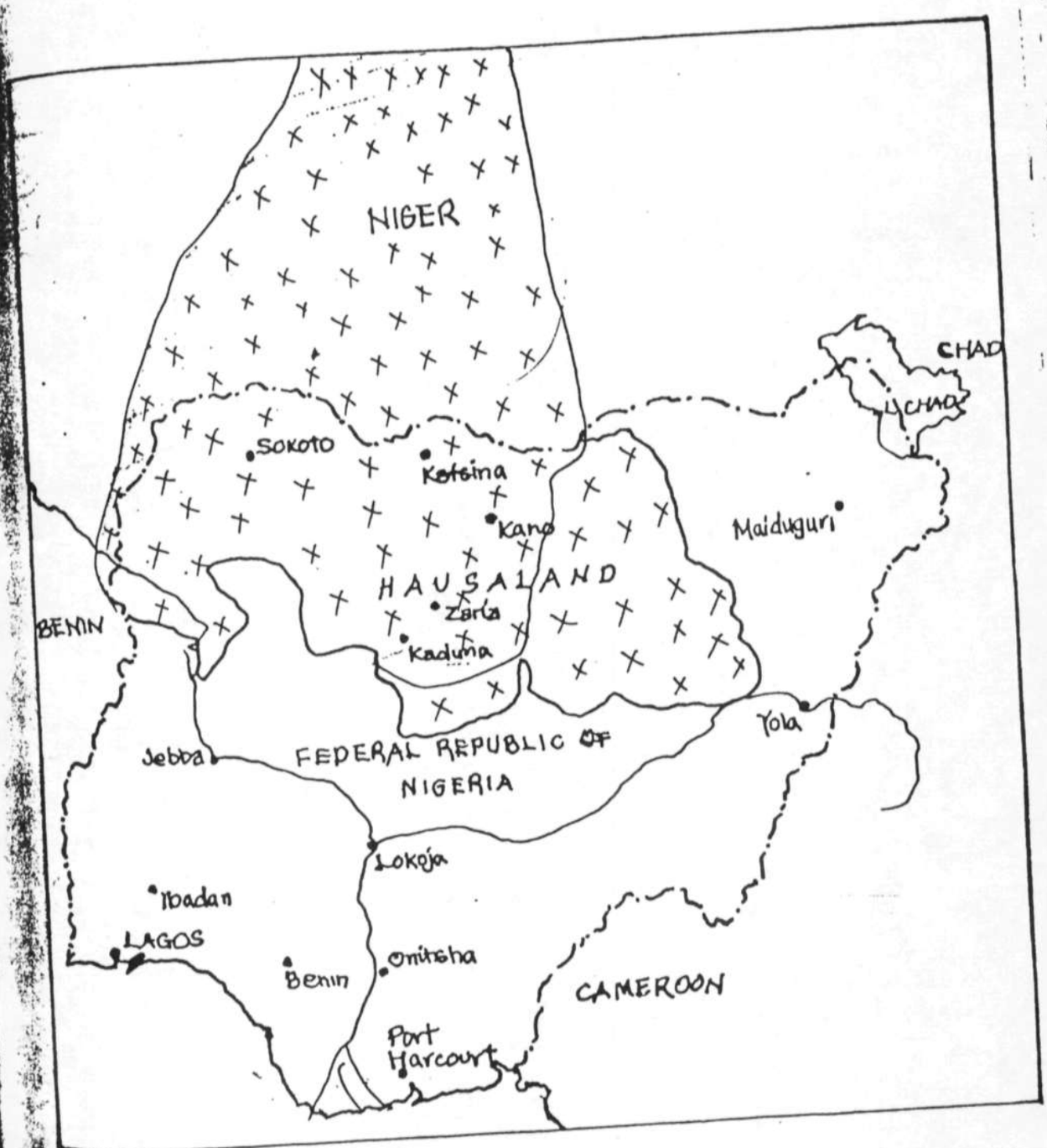


FIG. 6.1 . A MAP SHOWING THE PROBABLE EXTENT OF HAUSA LAND.

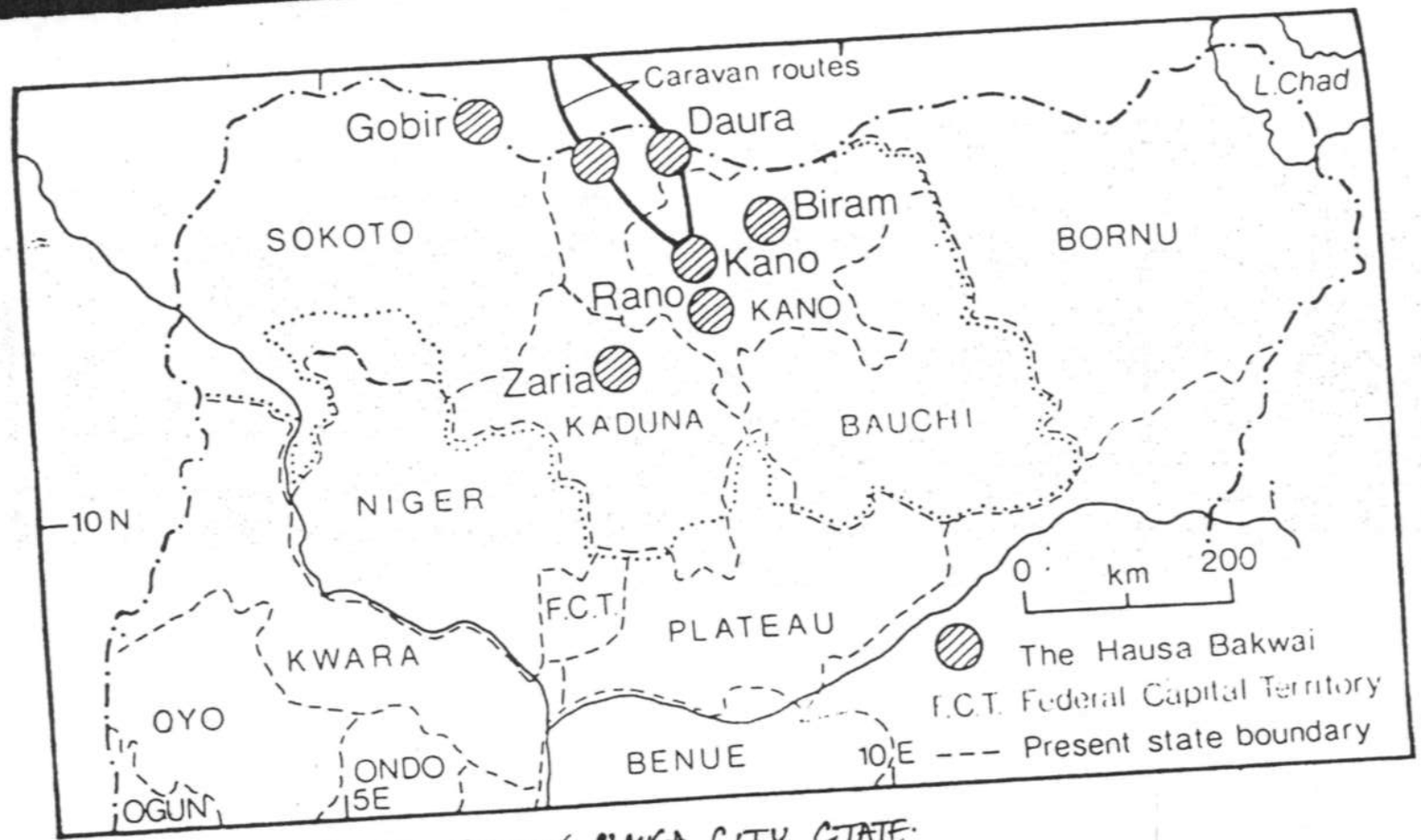


FIG 6.2 MAP OF THE SEVEN HAUSA CITY STATE.

SOURCE: MOUGHTIN J.C. (1985): Hausa Architecture, Ethnographica, London.

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.

6.2 THE DEVELOPMENT OF ISLAMIC ARCHITECTURE

The spread of Islam in the Hausa states in the 14th century usher in the development of Islamic architecture in Hausaland, particularly in the cities of Kano and Katsina. The diffusion of the building of clay mosques occured through the trading and missionary activities of the wangarawa from Mali who first introduced Islam the Hausa states.

A synthesis between North African and Hausa architectural concepts evolved a unique style of clay mosque characterised by heavy tower minarets; the 'Hasumiya' derived from the square North African or maghrebian form. Muhammad Rumfa of Kano (1463-1499) and Muhammad Korau of Katsina (1330 - 1420) were said to have built the first mosques.

6.3 THE 'HASUMIYA' MOSQUE

As it had been earlier mentioned that building a tower in a mosque building was quite common in the mosque

THE 'HASUM...' - MINARET TOWER

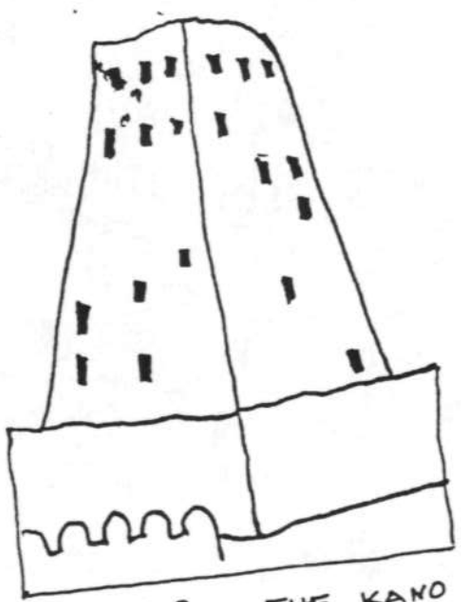


FIG. 6.3. THE KANO MINARET, FOUNDED IN THE 15th CENTURY (1463-99), REBUILT IN 1883 AND WAS DEMOLISHED BETWEEN 1937 AND 1938.

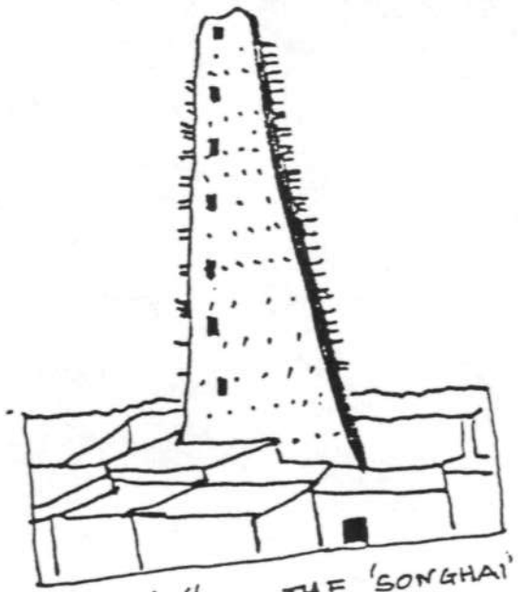


FIG 6.4 THE 'SONGHAI' MINARET, FOUNDED IN 1501, REBUILT 1844-9 IT IS STILL STANDS IN AGADEZ, NIGER REPUBLIC.

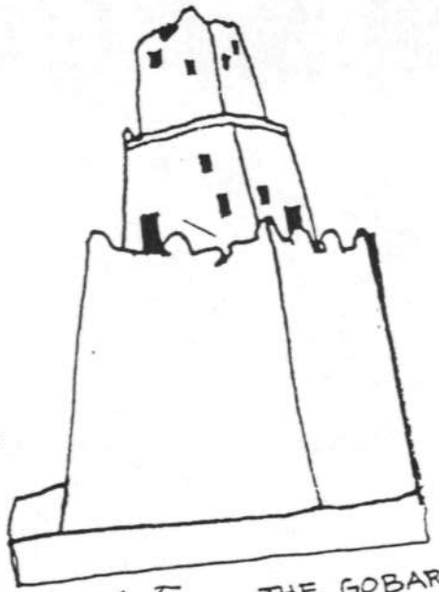


FIG 6.5 THE GOBARAU MINARET, KATSINA ALSO FOUNDED IN THE 15TH C. REBUILT 18TH CENTURY AND IN 1927 BY THE EUROPEAN, FRANK DANIEL

architecture of west Africa.

In the Hausa States prior to the Fulani Jihad, there used to be a tower or hasumiya attached to each mosque. The Kano Friday mosque was founded during the reign of the Hausa ruler Muhammad Rumfa whose rule between 1463-1499 A.D. witnessed the complete Islamisation of Kano and marks the golden period of Hausa Kings. The mosque was however rebuilt during the reign of the Fulani Emir Abdullahi (1850 - 1885). Like all the earlier Hausa mosques it is characterised by a heavy tower minaret about 20 metres high.

Other mosque displaying the same form includes: The great Agadez mosque, the Katsina tower or the Gobarau minaret and the Bauchi mosque.

6.4 THE DEVELOPMENT OF THE VAULT:

Another change in the form of mud mosques construction in Hausaland was the replacement of the trabeated system of construction by arched structures. The development of Hausa vault and the emergence of the Fulani Jihadists reformers under the leadership of Sheikh Usman bin Fodiye (1754 - 1817) usered in a new period of architectural vigour the Hausa vault "a la voute haussa", curvoy 1955, pp.30) led to the construction of new mosques and palaces using this technique. These

arches enabled the magina (builders) to achieve domic interiors in mosques, palaces and residences. sa'ad H.T. speaking on this technique said:

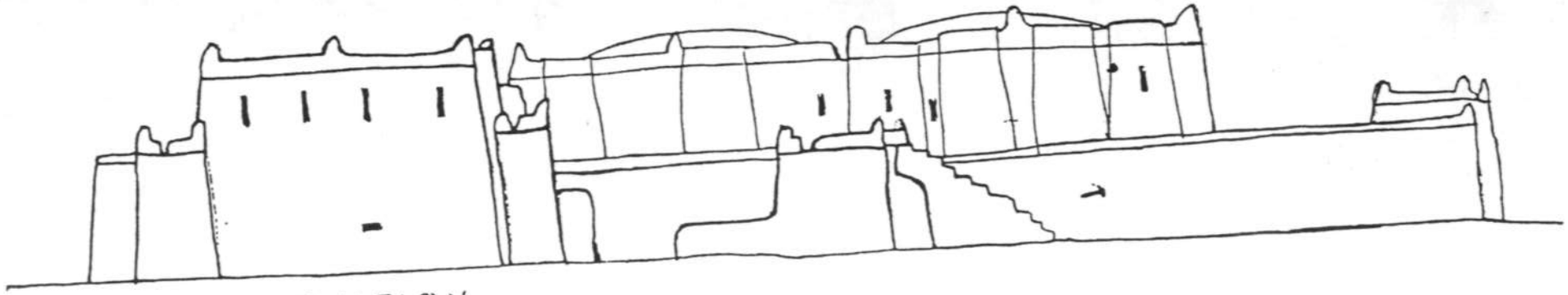
> "This structural breakthrough allow Hausa builders to Span longer distances and to create monumental buildings with sublime interiors that would not have been possible otherwise, given the nature of the material available to them".

Hence the vault became a feature of Hausa architecture just as it is in Islamic architecture.

6.5 THE GREAT FRIDAY MOSQUE ZARIA

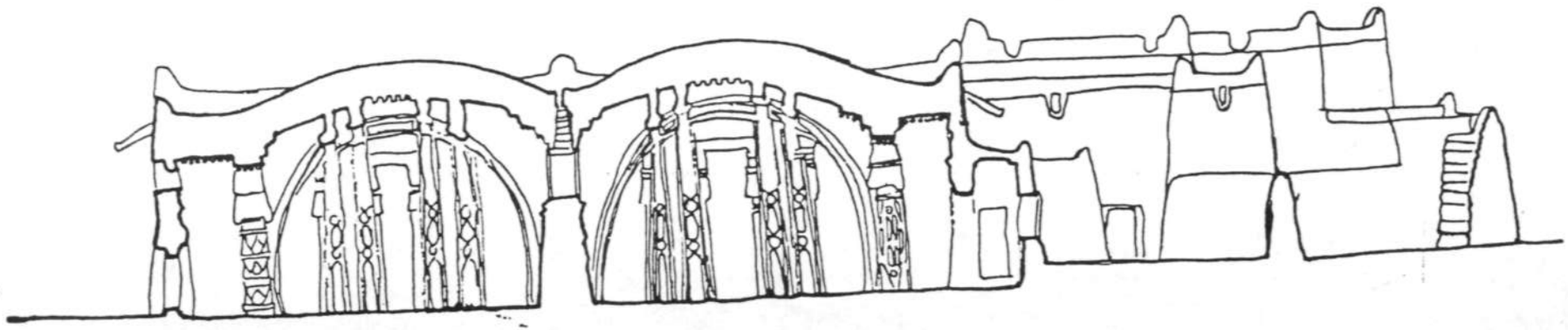
The Zaria Friday Mosque was built during the reign of the Fulani emir ABDUL-KARIM (1834 - 46) The mosque was the hand work of a famous Hausa builder, Mallam MIKAILA BABBAN GWANI. It consisted of a multidomed walled enclosure. The building was made of oval mud bricks; the spaces within the sanctury are spanned by complexes of mud arches reinforced with corbels of AZARA!

The mosque was reconstructed in 1975, and a part from the sanctury preserved within a new concrete mosque. Most of the old building has been demolished. It now stands with four modern minarets at the corners. Fig( )



NORTH ELEVATION

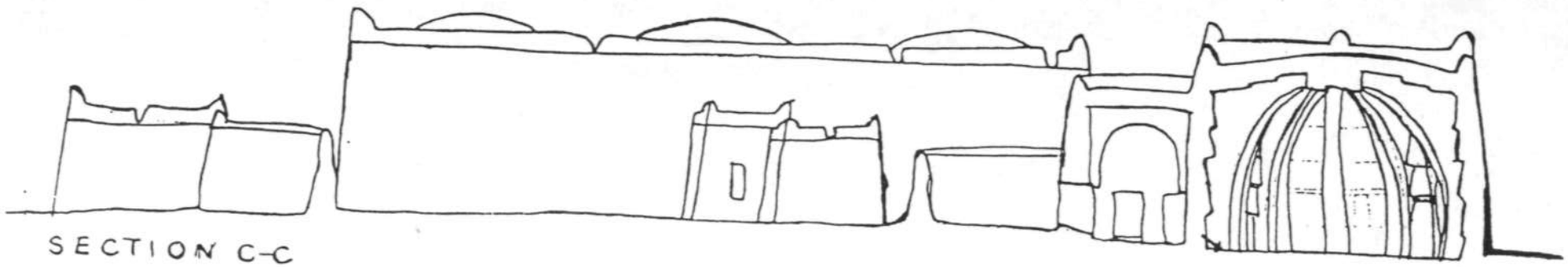
FIG. 6.6 FRIDAY MOSQUE ZARIA



SECTION A-A

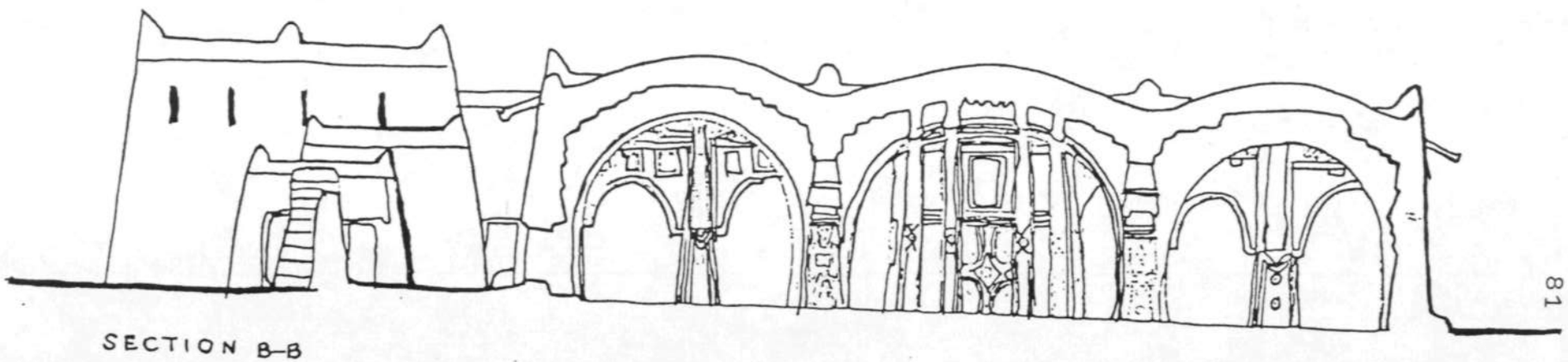
FIG. 6.7 FRIDAY MOSQUE ZARIA

SOURCE: HAUSA ARCHITECTURE



SECTION C–C

FIG. 6.8 FRIDAY MOSQUE ZARIA.



SECTION B–B

FIG. 6.9 FRIDAY MOSQUE ZARIA.

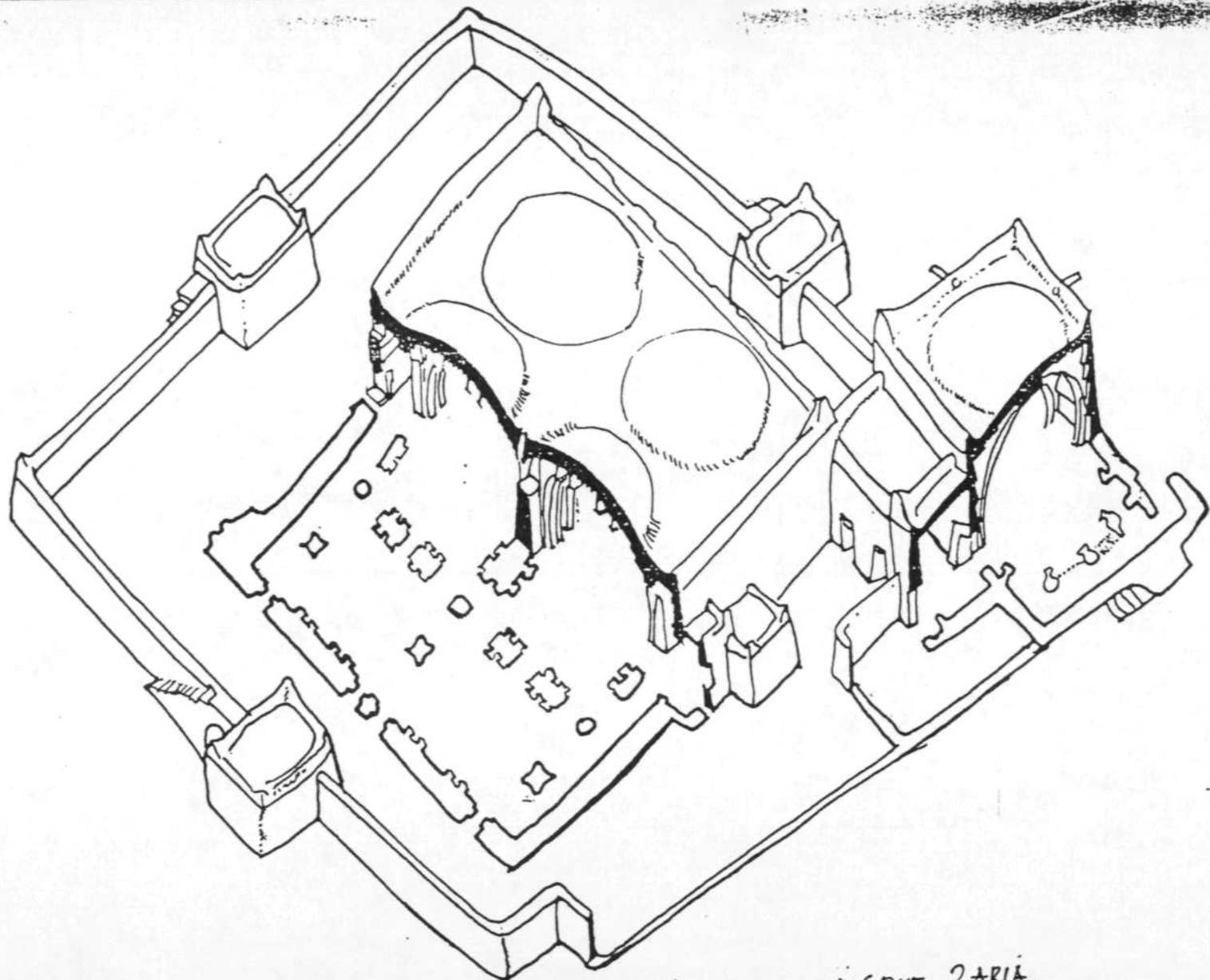


FIG. 6·10 AXONOMETRIC VIEW OF THE GREAT FRIDAY MOSQUE, ZARIA.

source: MOUGHTIN J.C (1985): Hausa Architecture, Ethnographica, London.

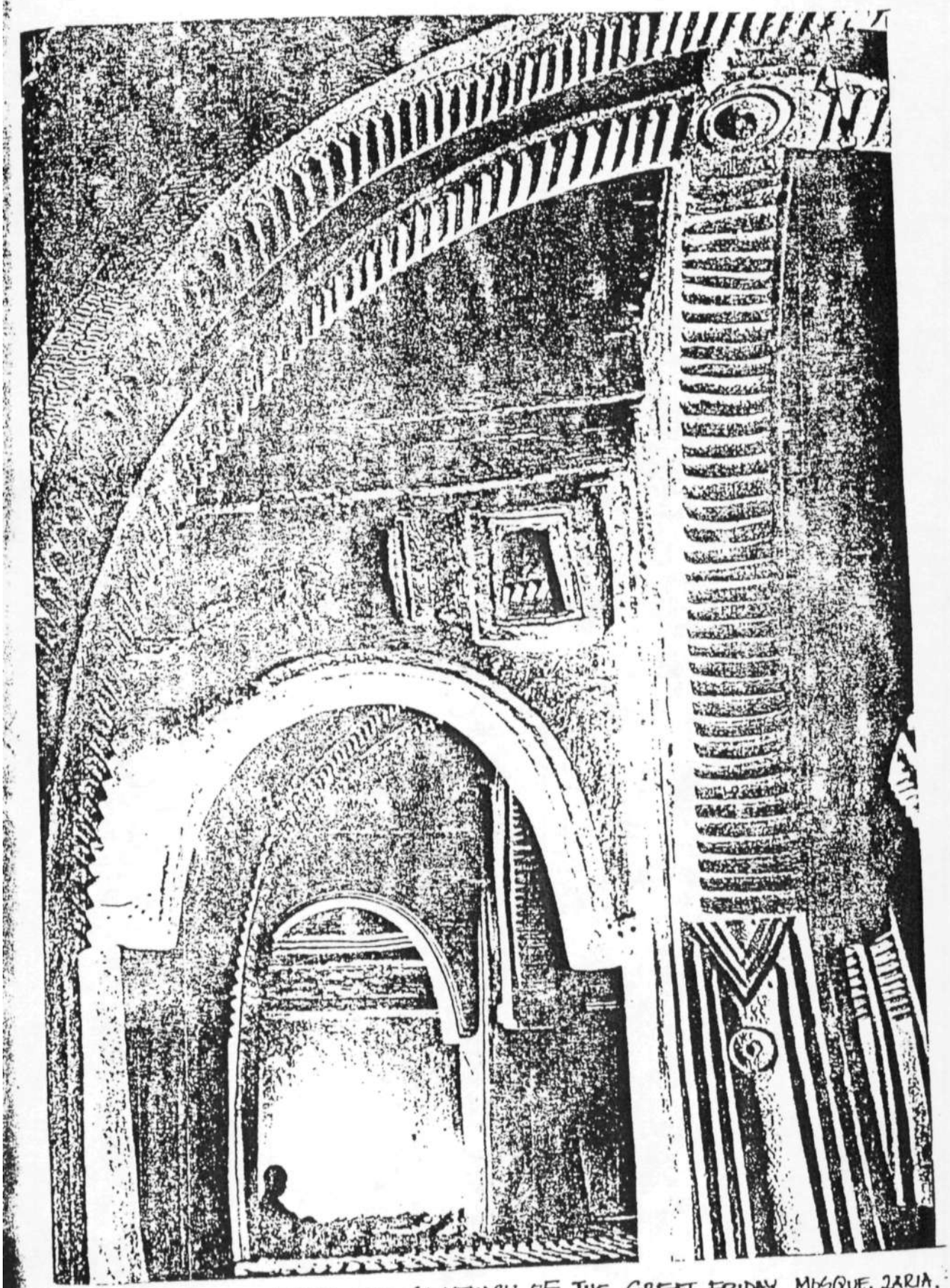


PLATE. 24 INSIDE THE SANCTUARY OF THE GREAT FRIDAY MOSQUE, ZARIA.

6.6 THE PALACE GIDAN SARKI:

Palaces are symbols of authority in any given society In Islam they express both the spiritual and temporal power of the ruler the Hausa palaces tend to exhibit this concepts. Thus in all the Hausa states we find vast complexes housing the ruler, his family and slaves.

The most extensive palace in Hausa land is the Kano palace or Gidan Rumfa (House of Rumfa) built by the famous Habe King Muhammad Rumfa (1463-1499). "A resembles in Microsom".....as leavy describes "the traditional walled compound with entrance zaure leading first to a semi private courtyard, the 'Kofargida, then to the senior man's reception hut, shigafa. Beyond this is his sleeping hut, turaka, and a private courtyard, the ciking-gida, occupied by wives and children".

The above description amply describes the Islamic concept of privacy in architecture. The design was believed to have been influenced by the great Islamic scholar Abdulkarim Al-maghili of Themcen, Algeria.
Fig ( ).

6.7 DOMESTIC ARCHITECTURE: THE GIDA"

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.

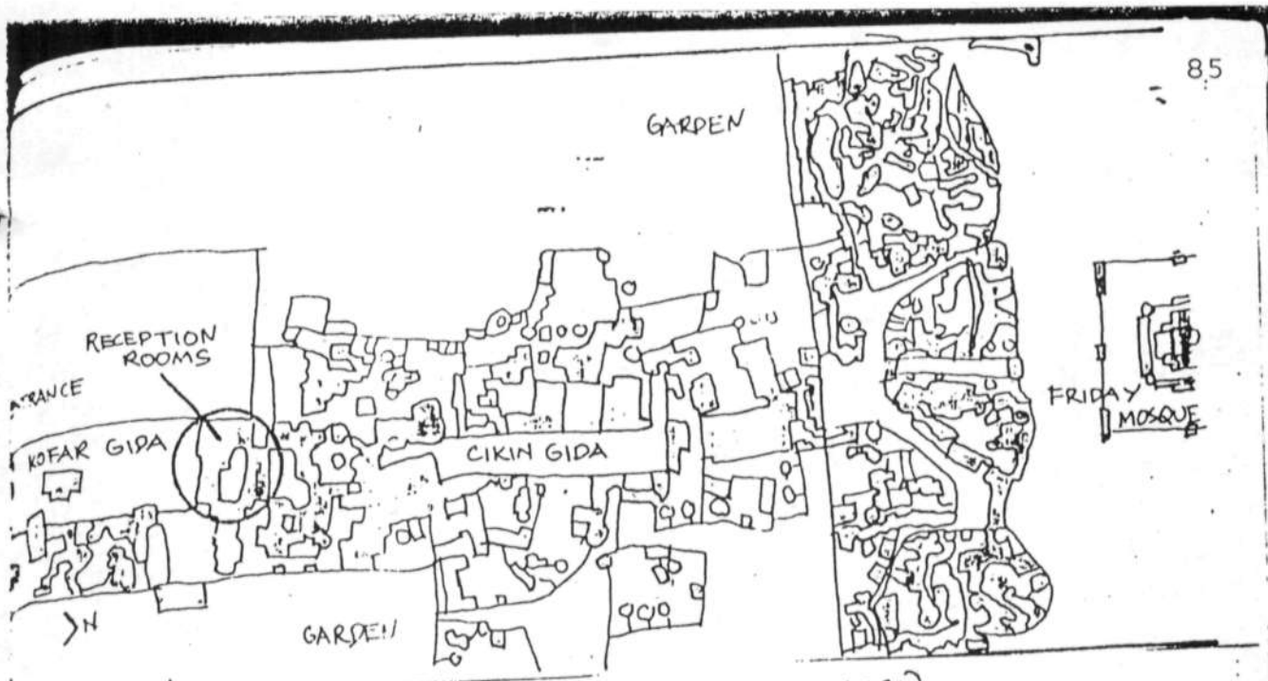


FIG. 6·11 THE GIDAN RUMFA (KANO PALACE)

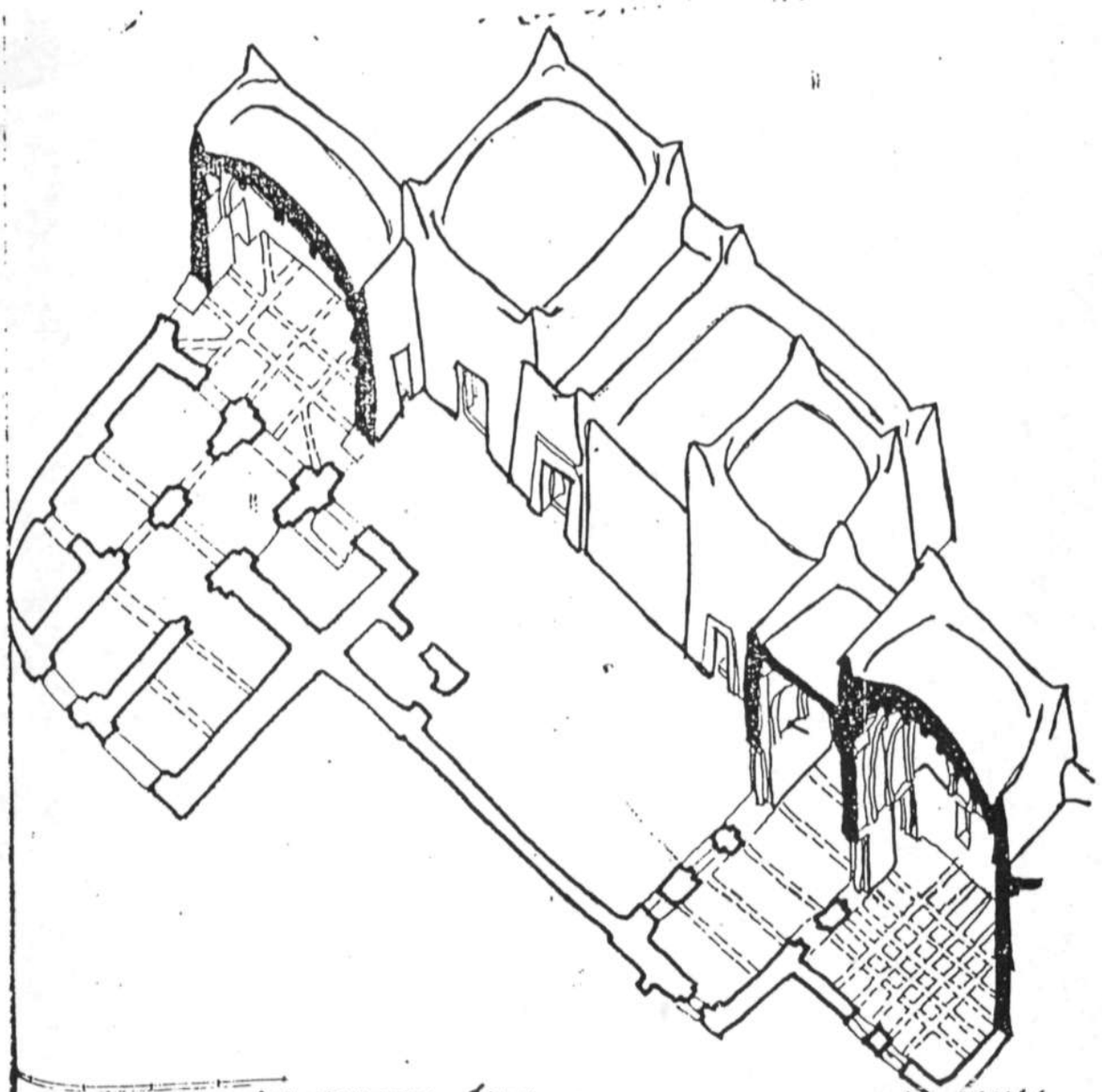


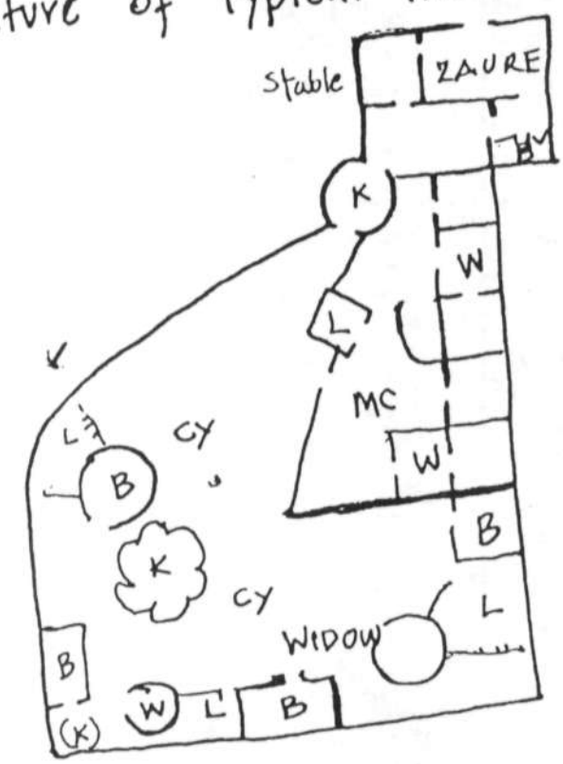
FIG. 6·12 AXONOMETRIC SECTION OF THE RECEPTION HALLS.

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. Fig( ) 91

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 lining selling and environmentally, it effectively modify climatic conditions. It permits out door 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 season.

Roof is another important part of the house where parapet is extended to produce what is known as pinnacle (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

The structure of Typical Hausa House plans.



LEGEND

Z – ZAURE
MC – MAIGIDA'S COMPOUND
W – WIVES
CY – COURT YARD.
S – STORAGE
L – LATRINE
K – KITCHEN
B – BROTHER AND WIFE.

FIG. 6.13 HOUSE AT KAZAURE

source: J.C. Moughtin (1985): Hausa Architecture, Ethnographica London.

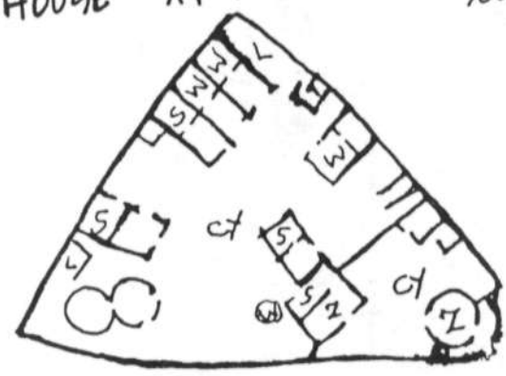


FIG. 6.14 HAUSE AT ZARIA.

source: Mitchell. G (ed) (1976): Architecture of the Islam World, World of Islam, Lo

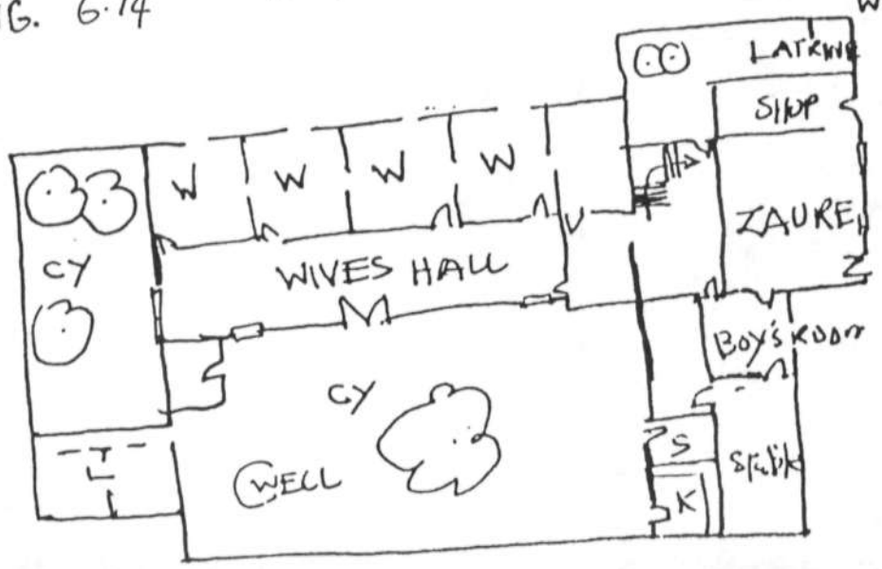


FIG. 6.15 HOUSE AT KANO.

source: Susan Penyer (1978)

as a result of Islamic influence. All the same, the pinnacle gives the massive blank mud construction a lighter and more appealing appearance. It is also to this parapet that water spout project out to discharge water from the roof.

6.8 CITY STRUCTURE: THE BIRNI

The cities of Hausaland share common features. The old walled city, the birni is occupied by the Muslim Hausa-fulani. The pre-Islamic town walls (ganuwa) were left intact even after the fulani jihad Fig( ), at the outskirts of the city wall are the new stranger settlements called Sabon gari (new towns).

Islamisation of the Hausa States gave rise to a concept of space which to some extent coincides with the traditional Hausa perspective. Muslim orientation towards the qibla, east, coincides with one of the major traditional axis for structuring the Hausa physical world. Islam introduced concepts of space and its use; heirarchy of spaces for worship and community gatherings such that the dandali or **dendal** , a vast place for public gatherings, The palace and the Friday mosque, masallacin Juma'a are cited adjacent to each other "at the centre of the city and together symbolise the power of Allah, Islamic law and government, states and community solidarity" Fig( )

6.9 PLANNING GEOMETRIC COMPOSITION

In the Hausa architectural tradition, just as it is the case in the African tradition, there is a lack of rhythm in the geometric elements are the quadrilateral (square and rectangle) and the predominant circular forms. These forms are used indiscriminately to give a variety of shapes (Fig.)

6.10 ART OF DECORATION

Decoration always plays a very important part of architecture in Hauseland. Highly modelled decorative partterns of varying degrees of boldness have long been used to enhance architectural forms (Fig). Pre-Islamic symbols in decoration were replaced with Islamic symbols resulting to a synthesis of all the varied influences and reflection of the individuality of the culture from which it sprang (Fig).

6.11 SYMBOLISM:

Traditional architecture wherever found is full of symbolic expressions which have been incorporated into architectural language in form of structural elements and decoration. The case of the ancestral pillar in the Dyula tradition is a very good example.

In Hausa architecture symbolism is trongly tied with religious concepts, the case of the Zanko and the

MILITARY ARCHITECTURE: WALLS & GATES.



FIG 6.16 THE CITY GATE AND TOWN WALL OF KANO C.1910
THE OLD NASSARAWA GATE.

source: A guide to Gidan Makama museum, National Commission for Museums and Monuments (1985).

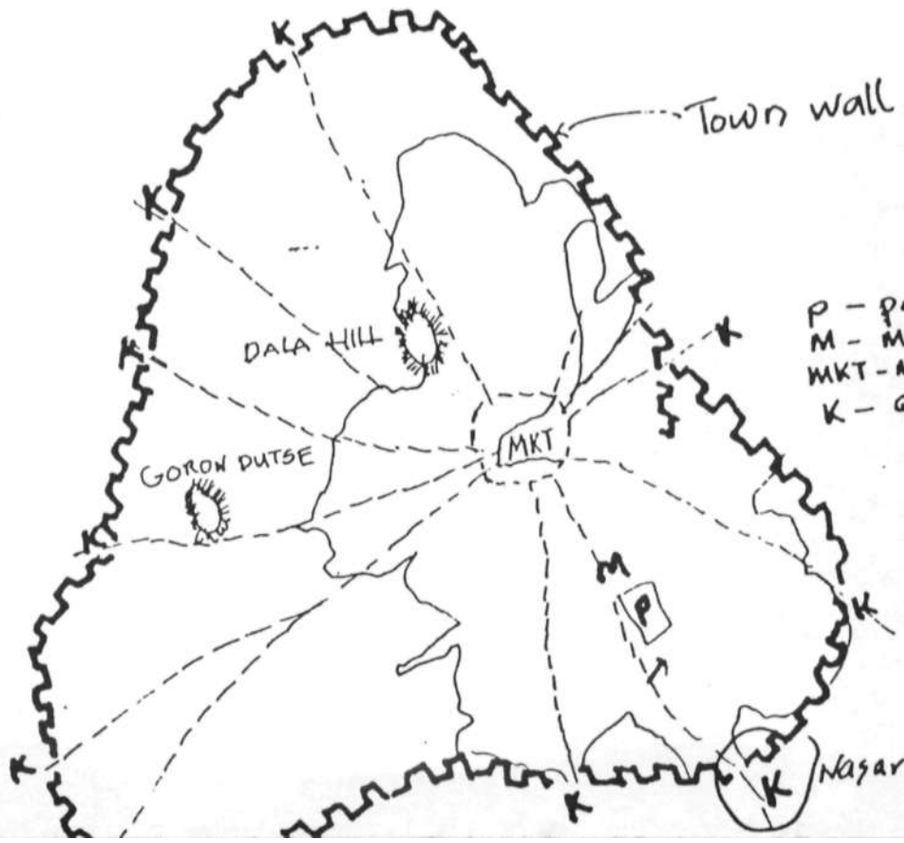


FIG. 6.17

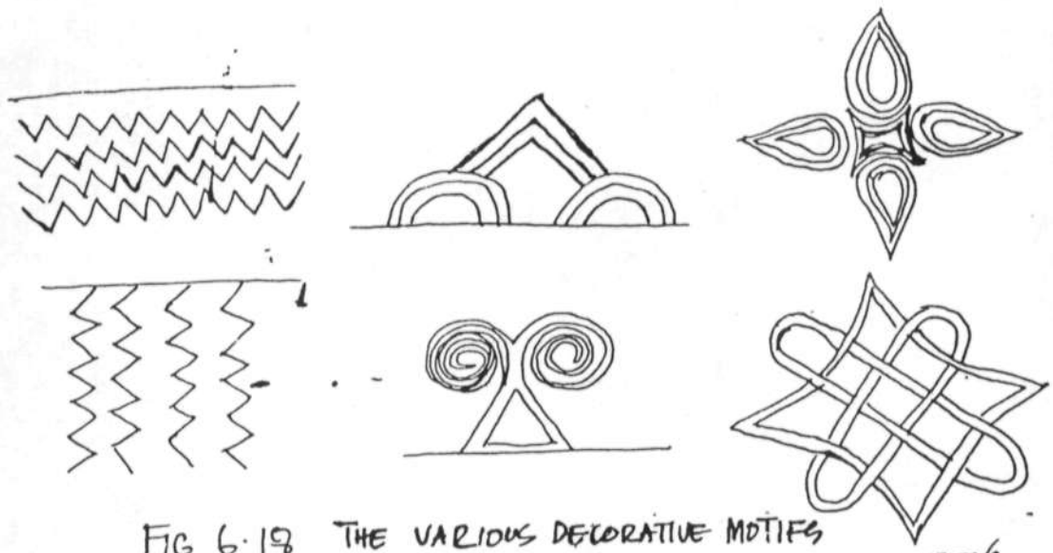


FIG 6.18 THE VARIOUS DECORATIVE MOTIFS USED IN HAUSA ARCHITECTURAL DECORATIONS.

Source : Denyer S (1978): African Traditional Architecture, Heinemann London.

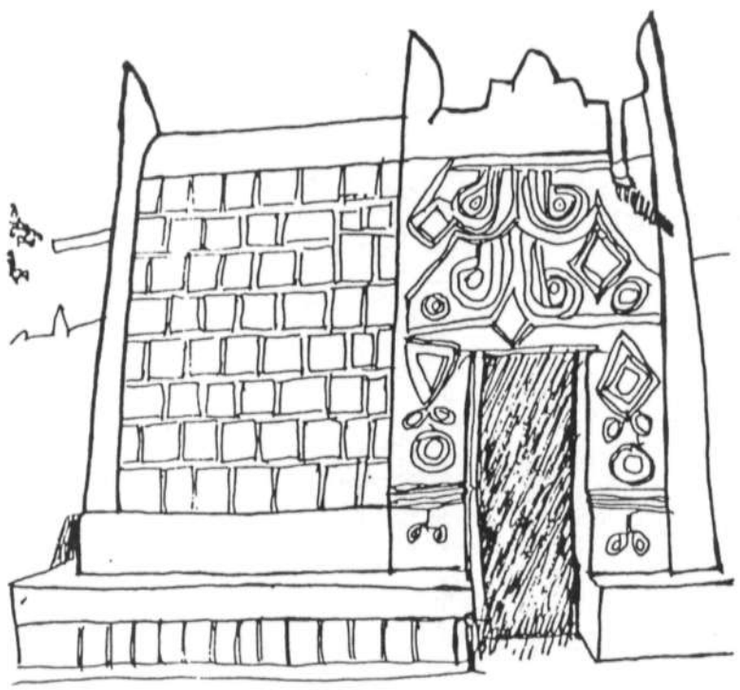


FIG. 6.19 THE FACADE OF A DECORATED HOUSE IN ZARIA.

Source : Friedrich. S. (1981): Housing in Zaria in OLIVER, P. (ed): Shelter in Africa Barrie & Jenki. London.

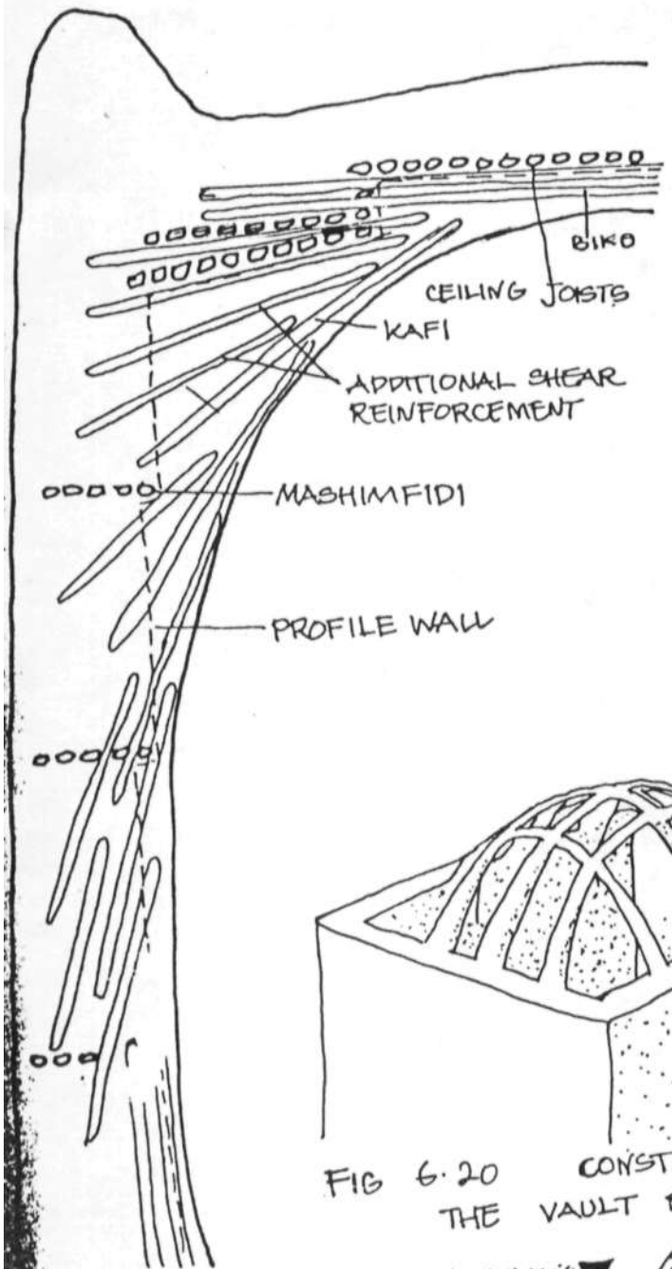


FIG 6.21
ECTION THROUGH
W ARCH SHO
WING REIN-
FORCEMENT.
Source: Moughtin

FIG 6.20 CONSTRUCTION OF THE VAULT ROOF.

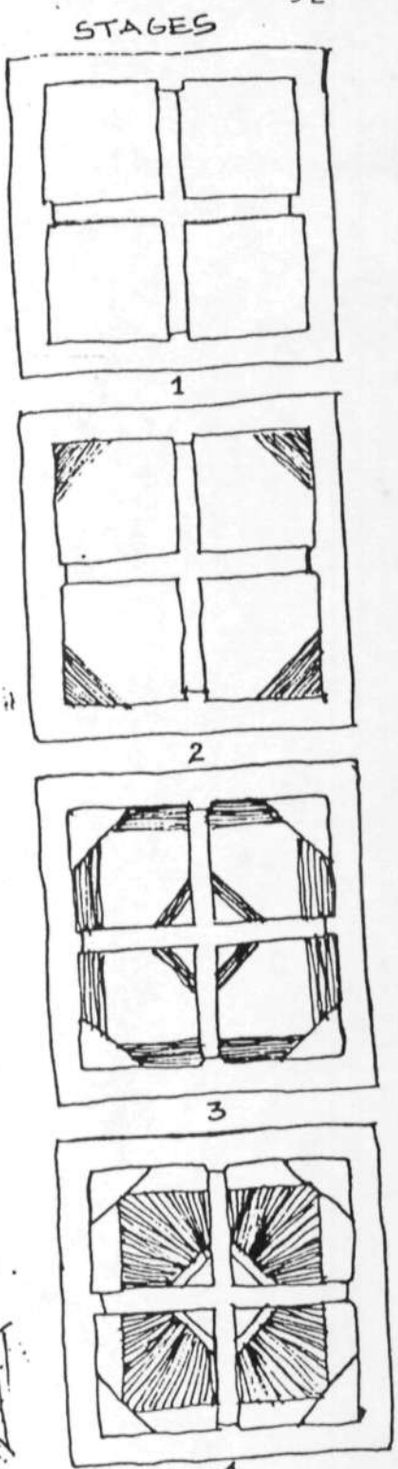


FIG 6.22 PROCESS OF ARCH CONSTRUCTION.

source: Moughti
(1985): Hausa A
tecture, Ethnog
London. PP. 109

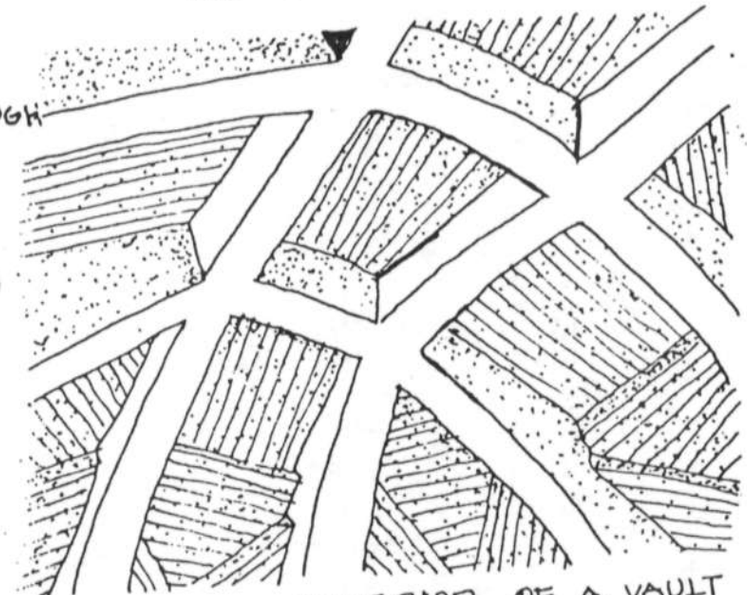


FIG. 6.23 INTERIOR OF A VAULT ROOF OF A HOUSE IN ZARIA.

source: Denyer, Susan (1978): African Traditional Architecture, Heinemann, London. PP. 179.

Tulluwa (pinnacle and dome) shows this concept clearly. The name of God, Allah is symbolised in the rawani (turban) of the Sarki (Emir) and are architecturally symbolised in the Zanko and the Tulluwa which together have become the most visible element, expressing the identity of Hausa-Islamic architecture (Fig)

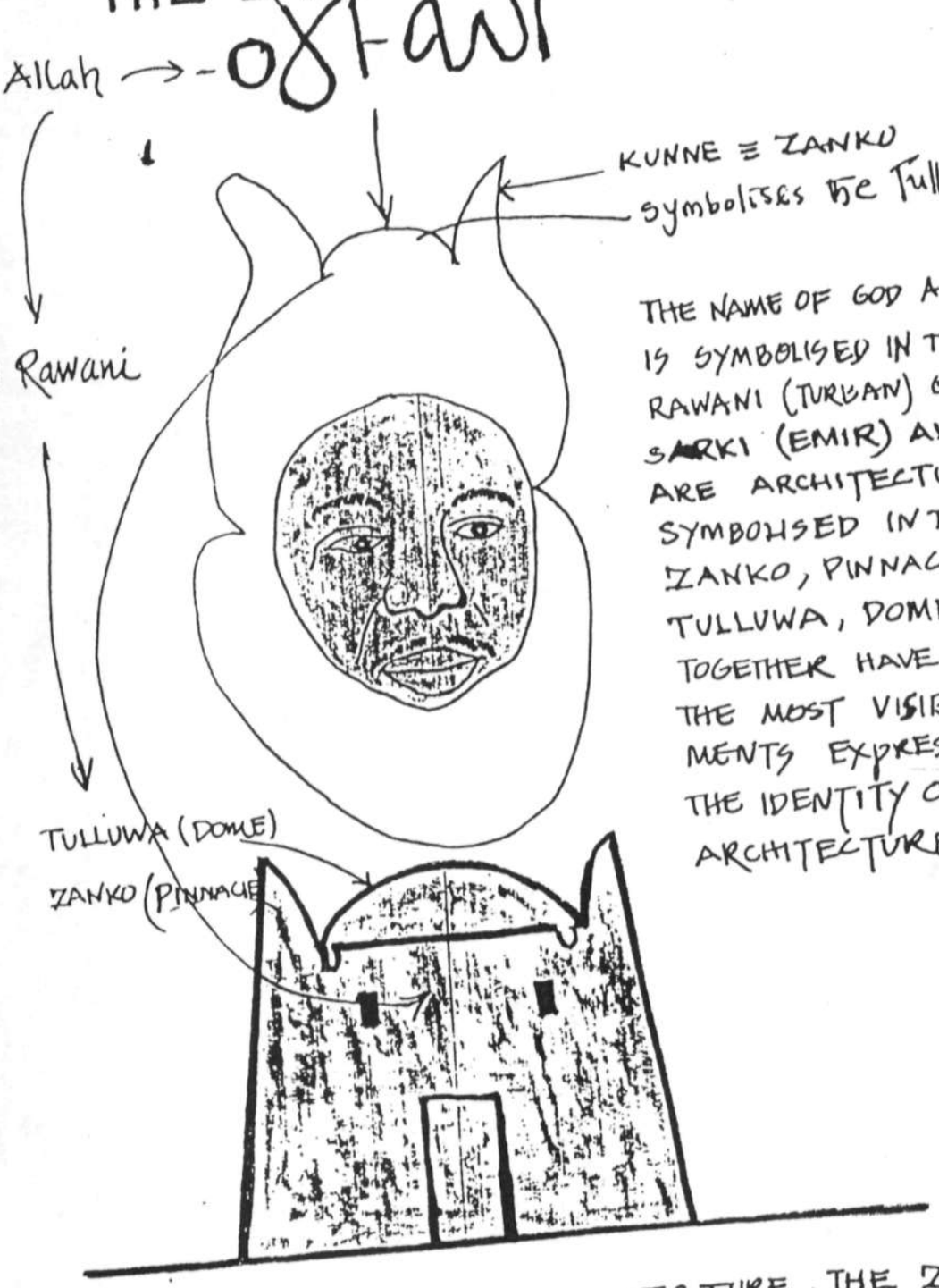
6.12 CONTEMPORARY TREND:

The contemporary trend of Islamic architecture in Hausaland is however reglecting that inherited legacy of Hausa architecture form in the pursuit of Foreign forms and ideologies. The last half of the century has witnessed the composition of octagonal and cylindrical shapes in the minarets and domes of mosques respectively.

In the Kano central mosque one notices the First point of departure whereby; the octagonal minaret with it's balconies, the cylindrical dome and the pointed arches all suggest a Foreign influence (plates). The main entrance in particular shows an artistic display of curvings out of context with the Hausa tradition (Plate). However it depicts some traditional chracter in the use of the Zankwaye, pinnacles, and indararo, water-spouts.

Other cases of this cultural alienation in architecture includes the mosques of Sokoto, Murtala Muhammad and Muhammad Rabiu mosques in Kano and the

THE SYMBOLIC ABSTRACTION OF THE ZANKO AND TULLUWA.



THE NAME OF GOD ALLAH IS SYMBOLISED IN THE RAWANI (TURBAN) OF THE SARKI (EMIR) AND BOTH ARE ARCHITECTURALLY SYMBOLISED IN THE: ZANKO, PINNACLE AND TULLUWA, DOME WHICH TOGETHER HAVE BECOME THE MOST VISIBLE ELEMENTS EXPRESSING THE IDENTITY OF HAUSA ARCHITECTURE.

FIG 6.24 IN HAUSA ARCHITECTURE, THE ZANKO, PINNACLE, AND THE TULLUWA, DOME ARE BELIEVED TO BE SYMBOLS OF DIVINITY EXPRESSING THE DIVINE AUTHORITY OF THE SARKI, EMIR.

SOURCE: AHMED B.N. (1987)

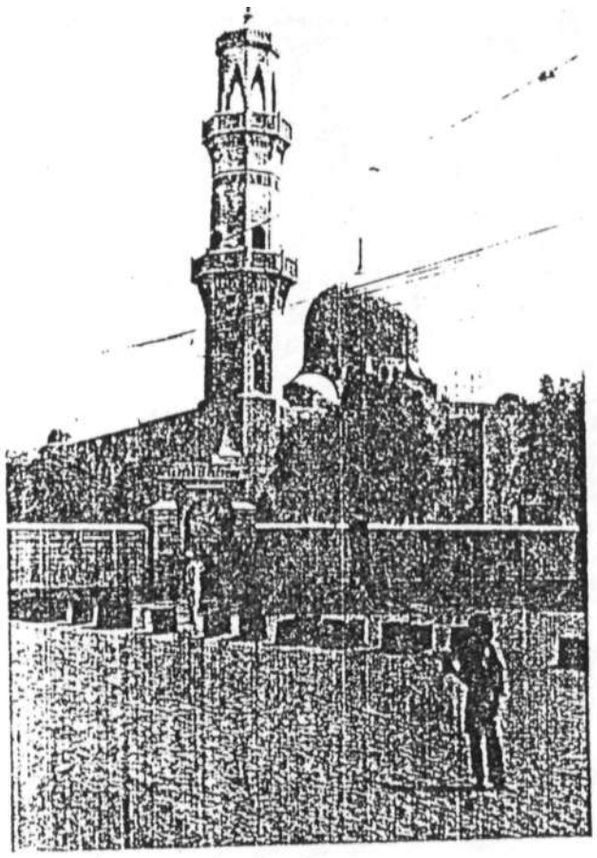


PLATE 25 NORTH - WESTERN CORNER OF THE MOSQUE SEEN FROM OUTSIDE THE MINARET SHOOTS UP TOWARDS THE SKY, THE GRACEFUL VERTICAL ELEMENT IT IS.

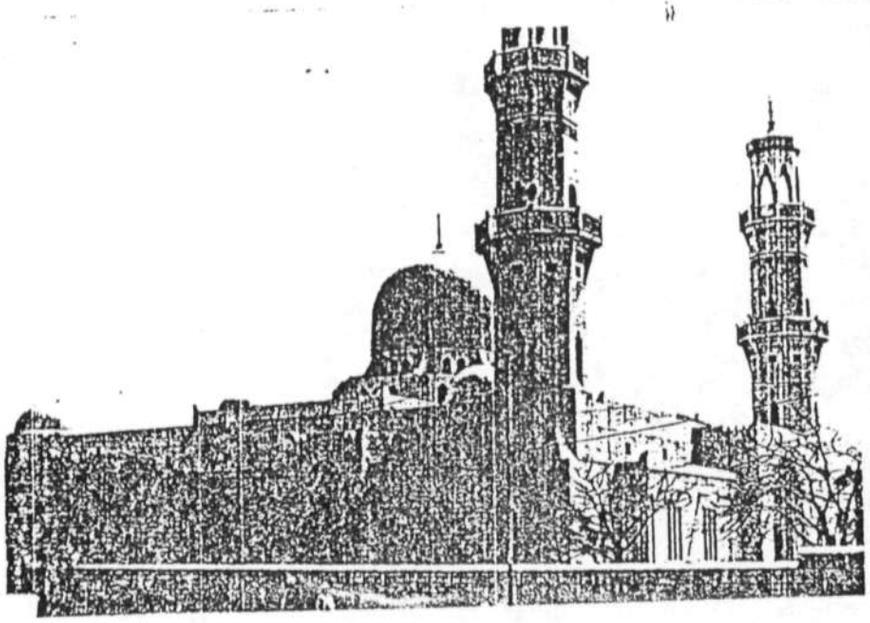


PLATE 26

THE MOSQUE IN PERSPECTIVE. WHAT AN IMPOSING STRUCTURE.



Murtala Mohammed Mosque, Kano

PLATE 27

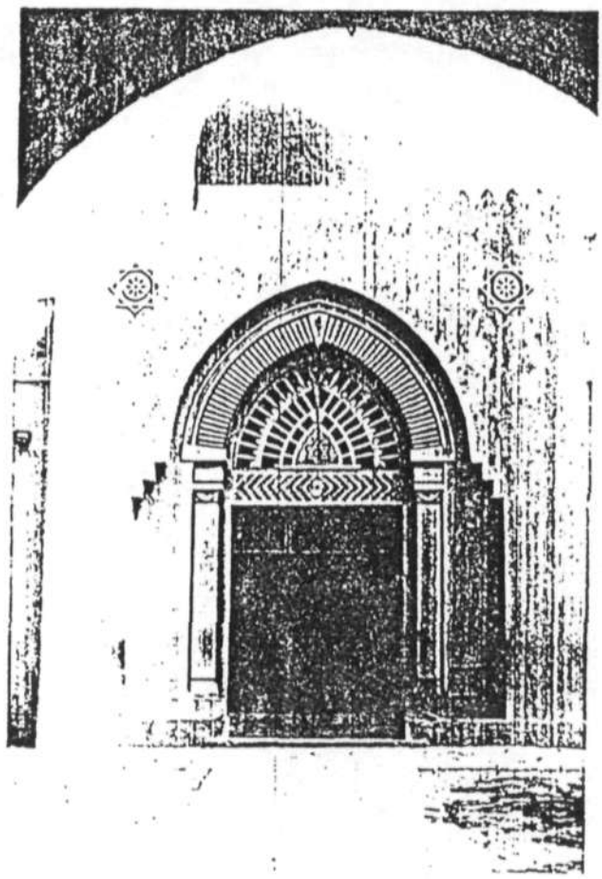


PLATE 28

E FACADE (MAIN ENTRANCE) ONE OF THE MOST INTERESTING FEATURES OF THE MOSQUE. OWING THE SIDE DOORWAY COLUMN, THE 'STALICITE' DECORATION OF THE ARCHED DOOR- THE DECORATIVE MOTIVES AND THE ZANKO AT THE TOP MADE WITH GREAT SKILL AND RKMANSHIP. THE DOME IS OVERLOOKED AT THE TOP.

Spectacular Ilorin mosque (Plate). However some attempt was made at portraying the slanting native of Hausa walls in the National mosque, Abuja (Plate), but despite this it fails in the use of the slender and Turkish inspired minarets the imporsing dome and the gaint portal.

6.13 CONCLUSION

The Foregone analysis has so far shown that Hausa traditional architecture is so much influenced by Islam that it can be called Islamic in all its forms. The Hausawa (Pl of Hausa) created a synthesis of form from a combination of foreign and indigenous elements, the result of which is an architecture; simple and repose in character, organic in form, structurally sensible with a richness in style that is sometimes decorative but at times austere that fully translates the inventiveness and ingenuity of their 'Magina'. A revalidation should be done to ensure the continuity of the Islamic legacy in Hausa architecture.

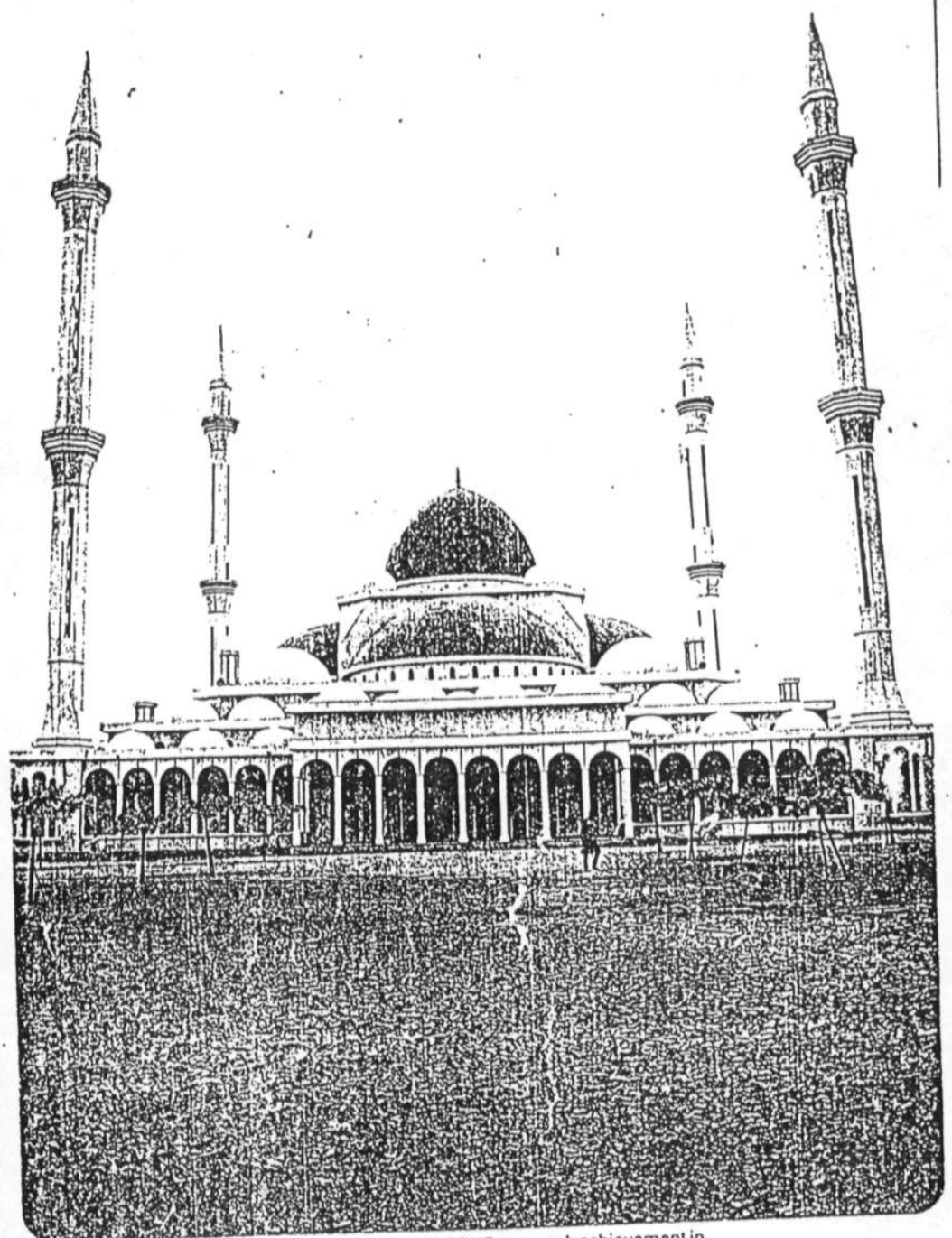


PLATE 29 ILORIN CENTRAL MOSQUE: a superb achievement in the development of Islamic places of worship in Nigeria.

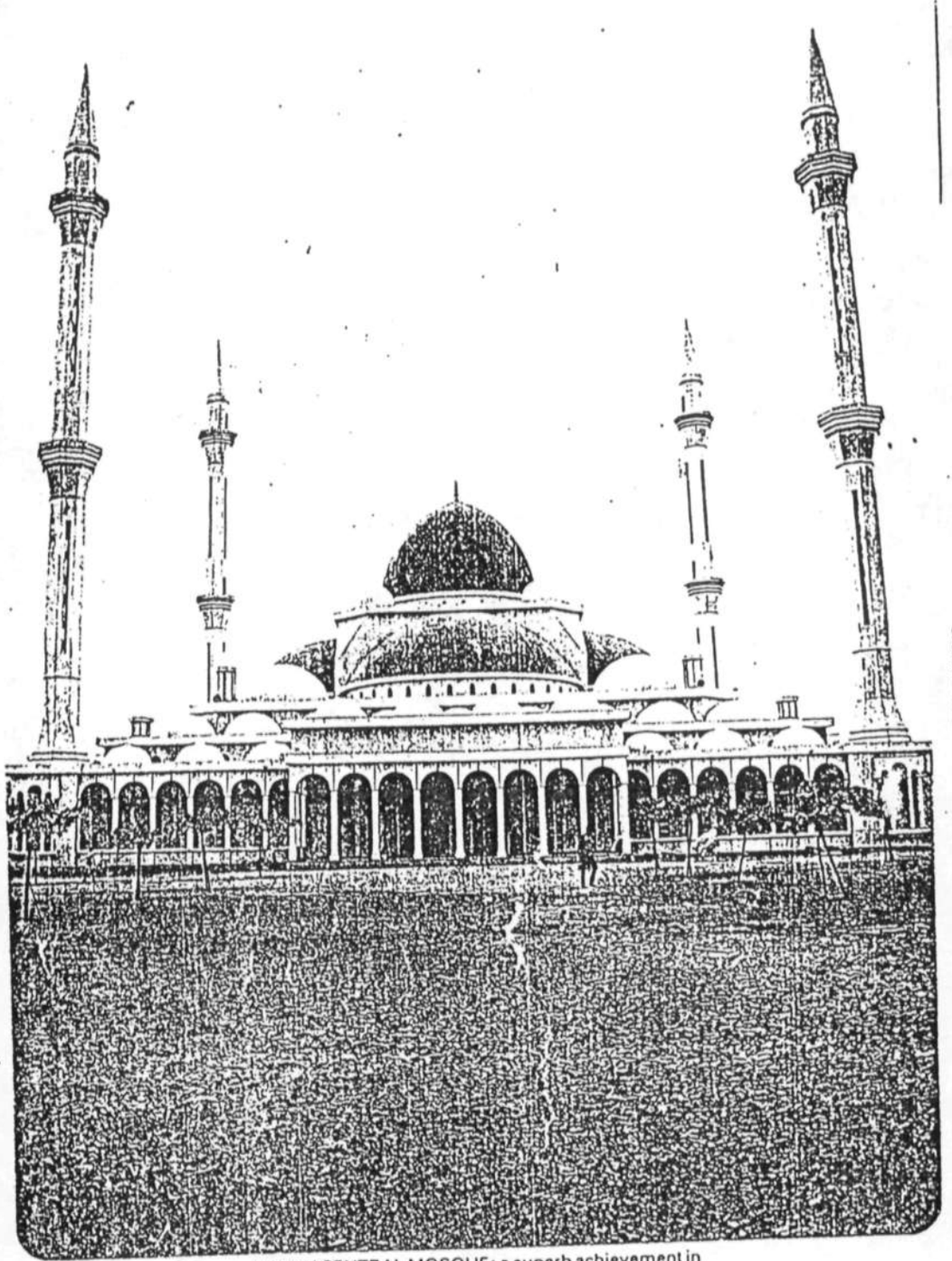


PLATE 29 ILORIN CENTRAL MOSQUE: a superb achievement in the development of Islamic places of worship in Nigeria.

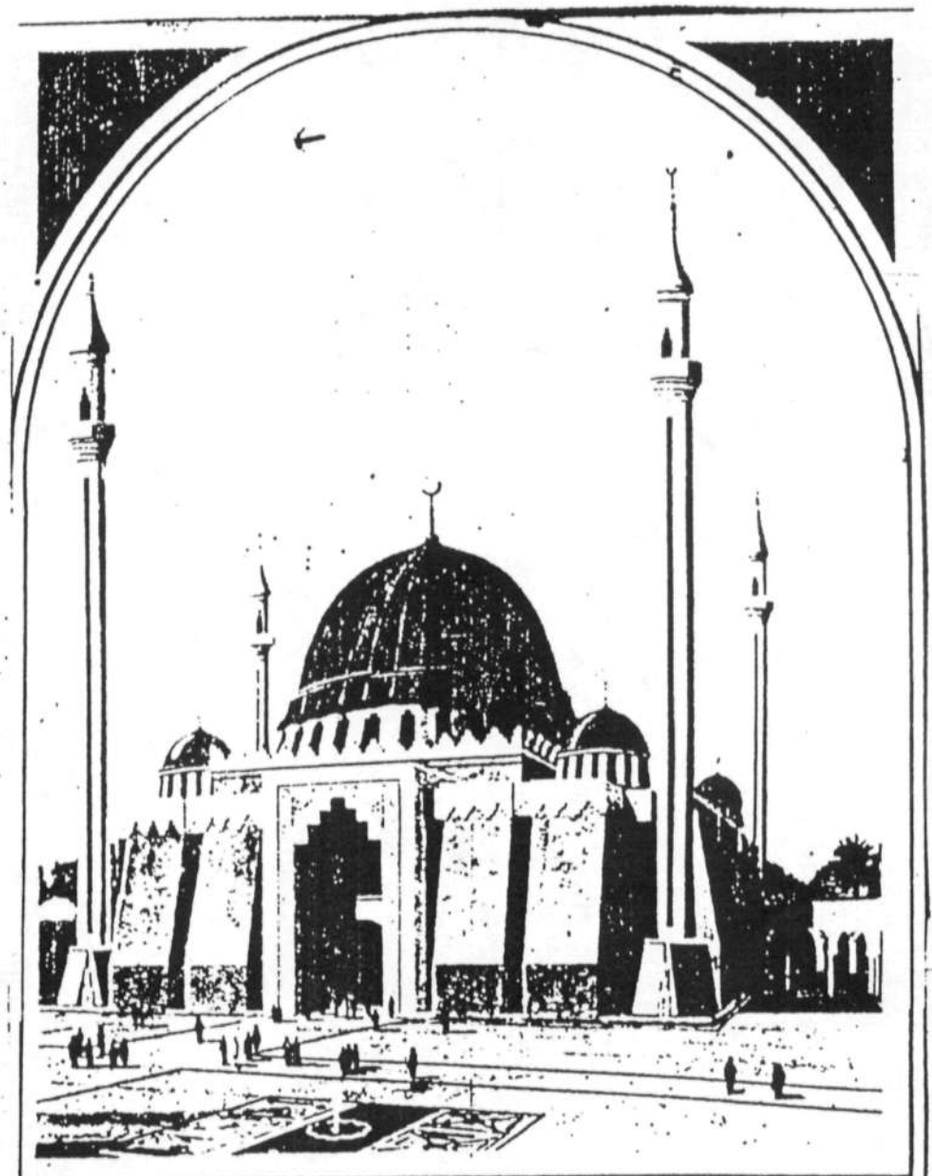


PLATE 30. THE NEW NATIONAL MOSQUE
ABUJA NIGERIA.

446848

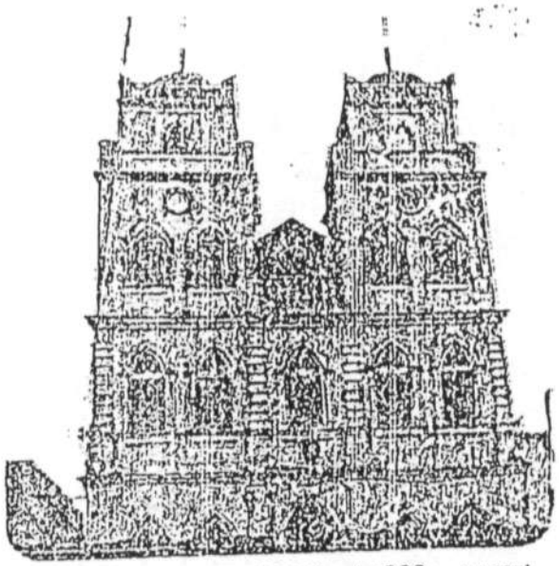


PLATE 31

ALLI BALOGUN MOSQUE, LAGOS; present temporary site for the Jumat Service previously being performed in the Lagos Central Mosque. It is a great mosque in its own right.

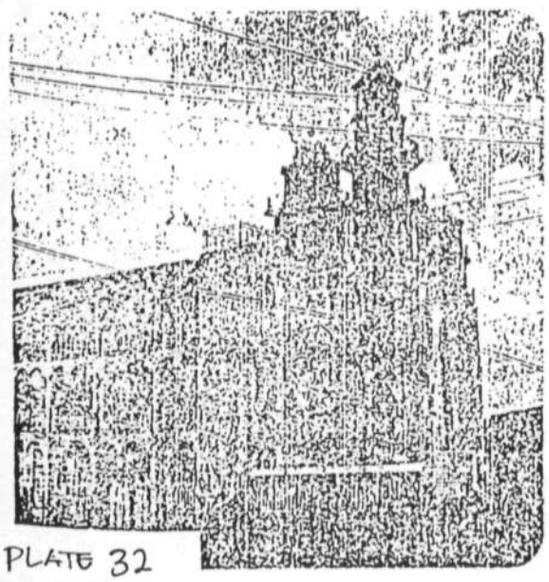


PLATE 32

RAHMAT ISLAMIYYAH MOSQUE, at Muslim Avenue, [illegible] Lagos.

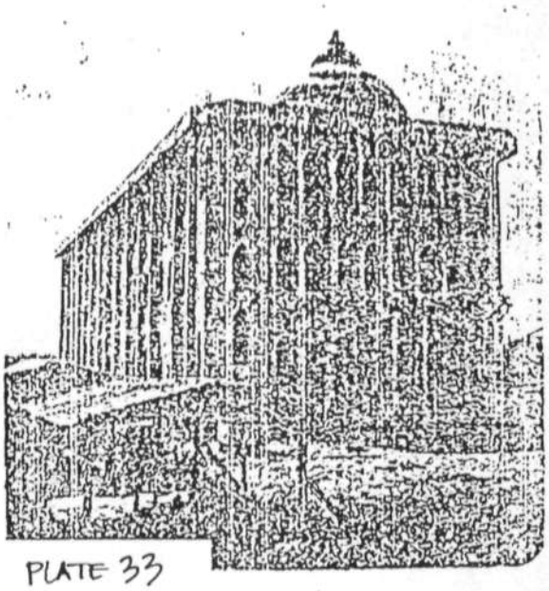


PLATE 33

ANSAR-UD-DEEN CENTRAL MOSQUE, ABEOKUTA.

CHAPTER SEVEN

7.0 REGIONAL AND SITE ANALYSIS

7.1 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 (former country's capital) and Ibadan (Oyo State Capital). It borders Jigawa State to the east and Kaduna State to the south, Katsina to the West and lies between latitude $10^{o}30'N$ and $130^{o}N$, 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.

7.2 HISTORICAL BACKGROUND

Kano city has a continous history of over 1,500 years with Dala as the site for the first settlement and which formed the nucleus for the people 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 2,600B.C.; in Kazaure, Wawan Rafi by 2,400, and Gaya which oral tradition indicates was a source of the earliest migration into Kano. Other settlement at Fanisau, Santolo and Fangwai also predate Dala.

Besides being a major source of iron ore in Kano region, Dala hills provides security which attracted skilled craftsmen that are well versed in the mining techniques, smelting and iron working that later grew and developed. This

MAP OF NIGERIA

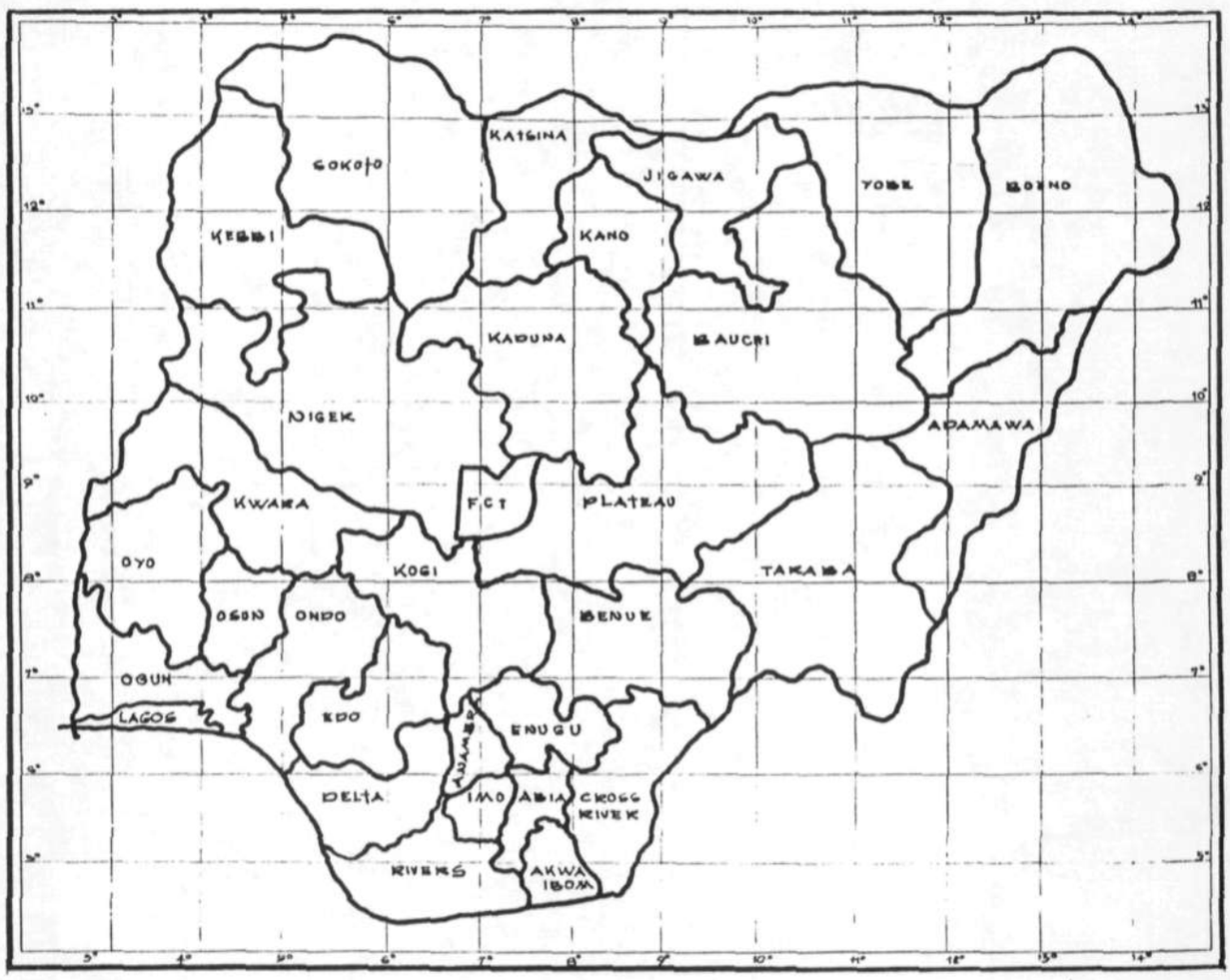
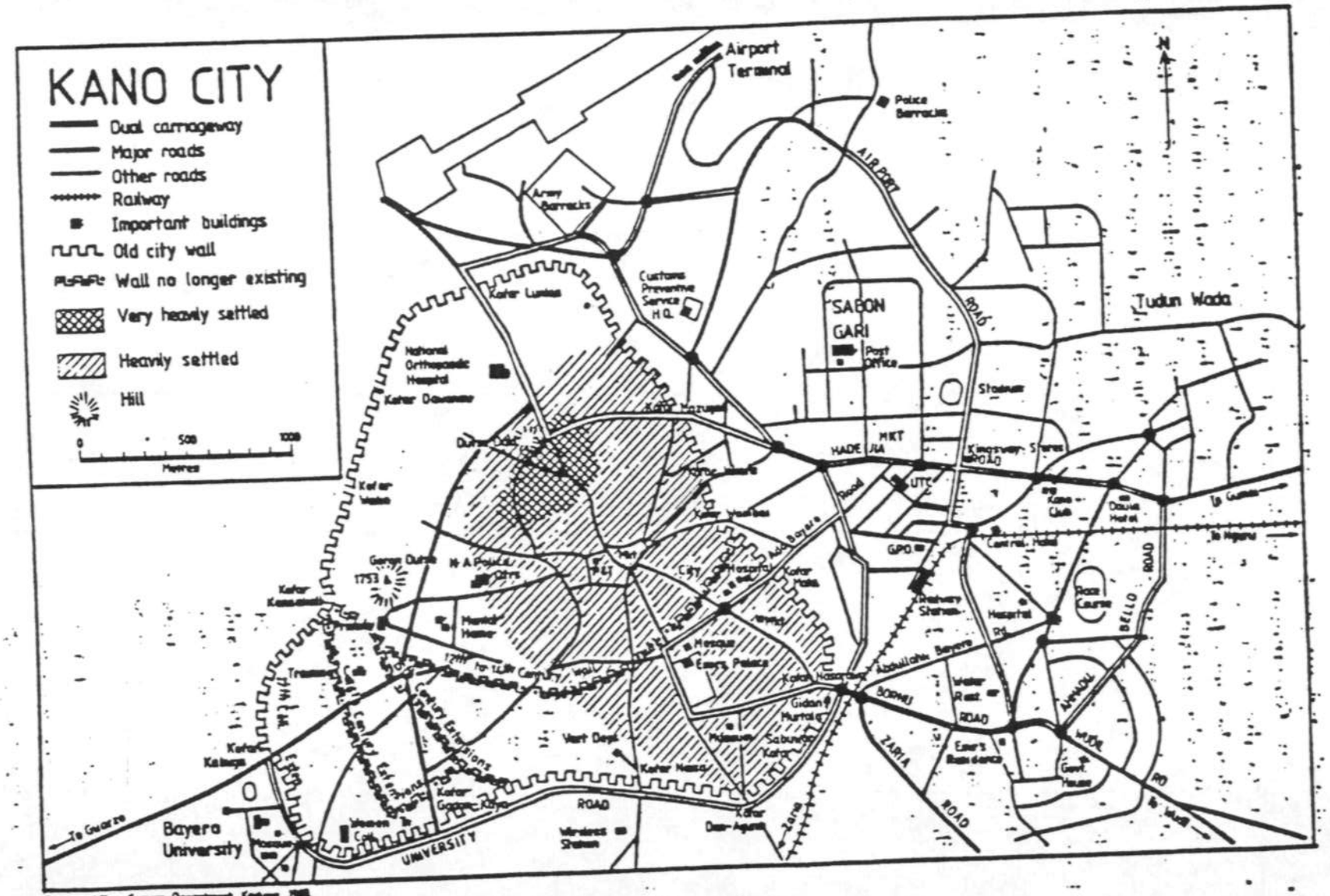


FIG. 7.1 MAP OF NIGERIA.

Source: Department of Land Survey.
Kaduna State.



Source: After Survey Department, Kaduna, 1968.

FIG. 7.2 *Kano City*

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 technical processing such as dying.

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 extens over 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.

7.3 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 as the southern terminus and second in importance only to the famed West African town of Timbuktu. Yaji, otherwise know 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 decendants still occupy Sharifai quarters in Kano minicipality.

Muhammadu Rumfa is refered 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.

7.4 THE PEOPLE

Kano is the second largest city in Nigeria in terms of population and economic development, it has an estimated population of about 5 million with an area of 43,000km^2 and a density of 326 people per square kilometres.

Kano is predominantly inhabited by Hausa and Fulani ethnic groups. The Hausa (Habe) are mainly concentrated in the northern sector of the city, while the Fulani's are mostly concentrated in the southern area of the city, today however, the ethnic difference between the Hausa and Fulani are virtually indistinguishable, due to cultural intermingling and inter-marriages. The people of Kano therefore refer to themselves as the Hausa-Fulani, and the Hausa culture of the past has today been almost completely replaced by islamic traditions.

Apart from the major Hausa-Fulani ethnic group, almost all the other peoples of Nigeria are found to some extent in Kano, predominant among whom are the Yoruba, Ibo, Kanuri, Shuwa-Arabs and Nupe. Accurate demographic data on the actual population of settlers in Kano is not available, but the Ibo and Yoruba clearly follow the Hausa-Fulani majority in terms of numbers, mostly found in the commercial centres of the State.

There is also a small Arab population which include scholars and teachers and others merged into community as well as a few thousand strong lebanese (Kwara) and Europeans,

mostly expatriate workers.

7.5 TOPOGRAPHY

Kano State lies between the Sudan and Guinea vegetation zones. Urban Kano is about 500km from the perimetre of the sahara and is about 450-500metres 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 525m and 510m respectively above sea level.

7.6 GEOLOGY AND SOIL

Generally speaking the whole region 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 chadiac sediments covered by soil and wind-blown sands and there are rarely any surface exposures.

7.7 VEGETATION

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

7.8 CLIMATE

This comprises of wind, temperature, rainfall 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.

7.8.1. TEMPERATURE

Extreme values occurs during the dry seasons which can range from 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 temperatur for every three hours daily stand at 25.9°c or 78.6°F.

7.8.2. RELATIVE 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 up to 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.

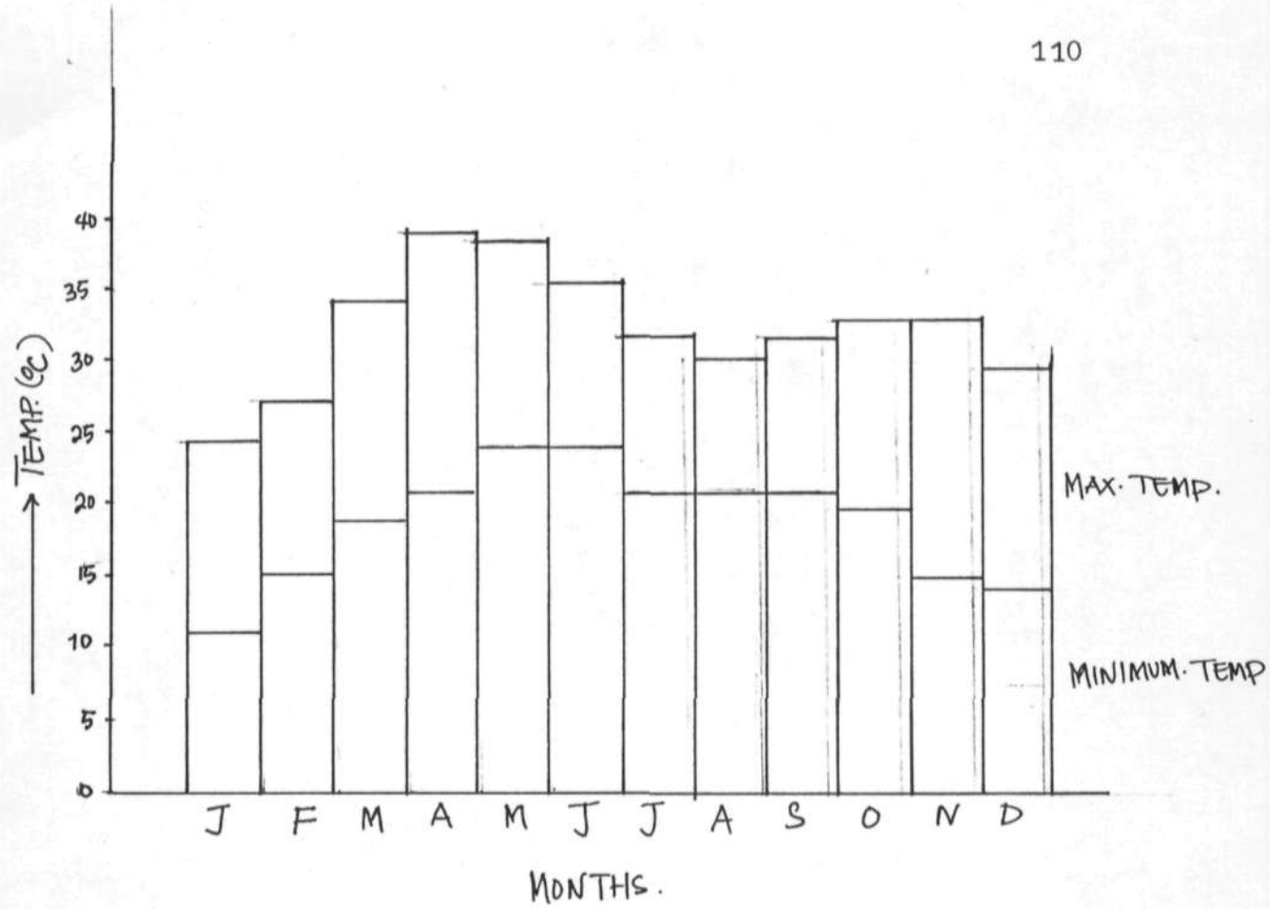


FIG. 7.3 TEMPERATURE.

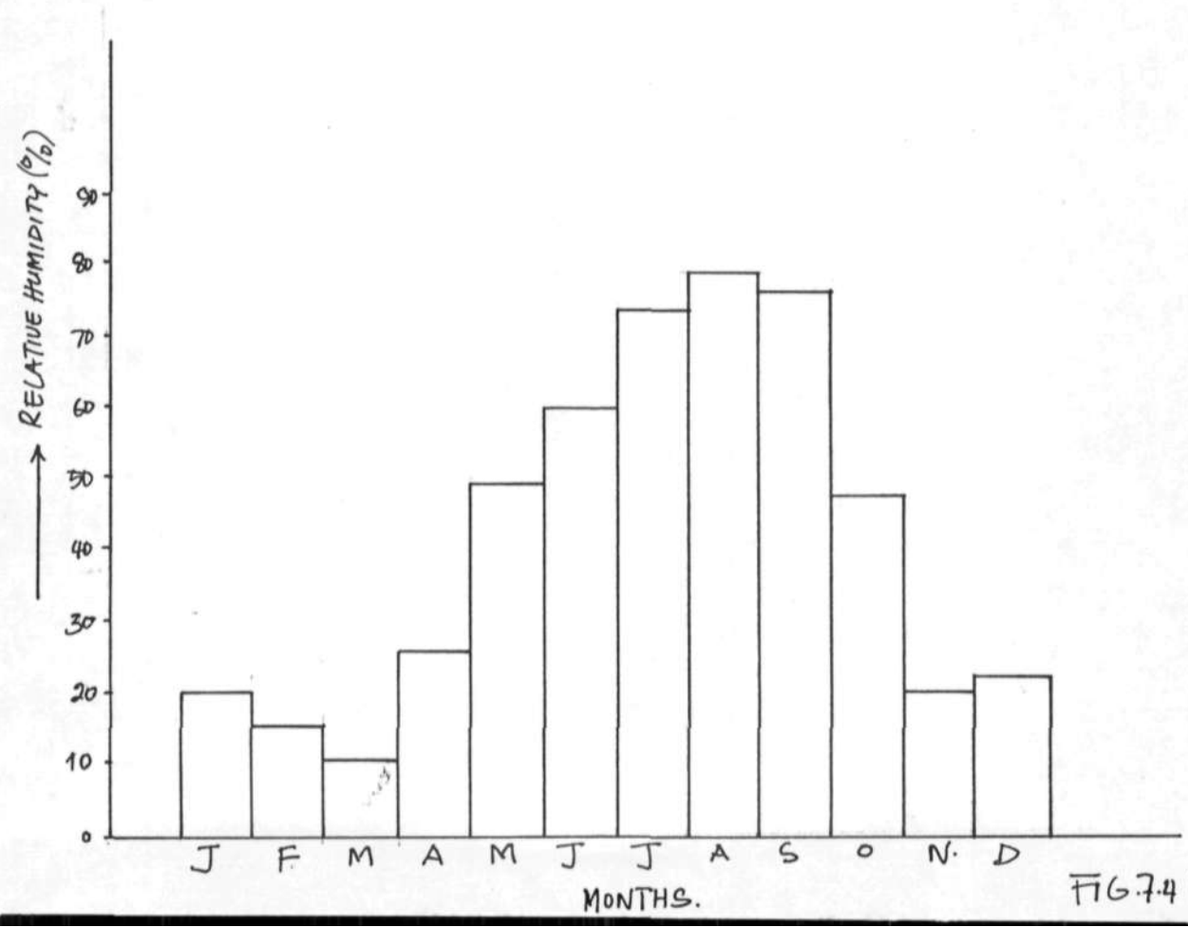


FIG 7.4 R. HUMIDITY.

7.8.3 RAINFAL

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 atall. Average rainfall stand at 0.4mm with the heaviest of 277.5mm in August.

7.8.4 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 tubalance caused by wind difference in temperature.

South-west trade winds, equatorial maritime 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 3.75m1s.

7.8.5. RADIATION

About 80-84 percent of net energy is used as latent heat of evaporation during the rainy season, thus day time temperatures are fairly constant. Night temperatures are fairly low due to cloud cover and the absence of back-radiation.

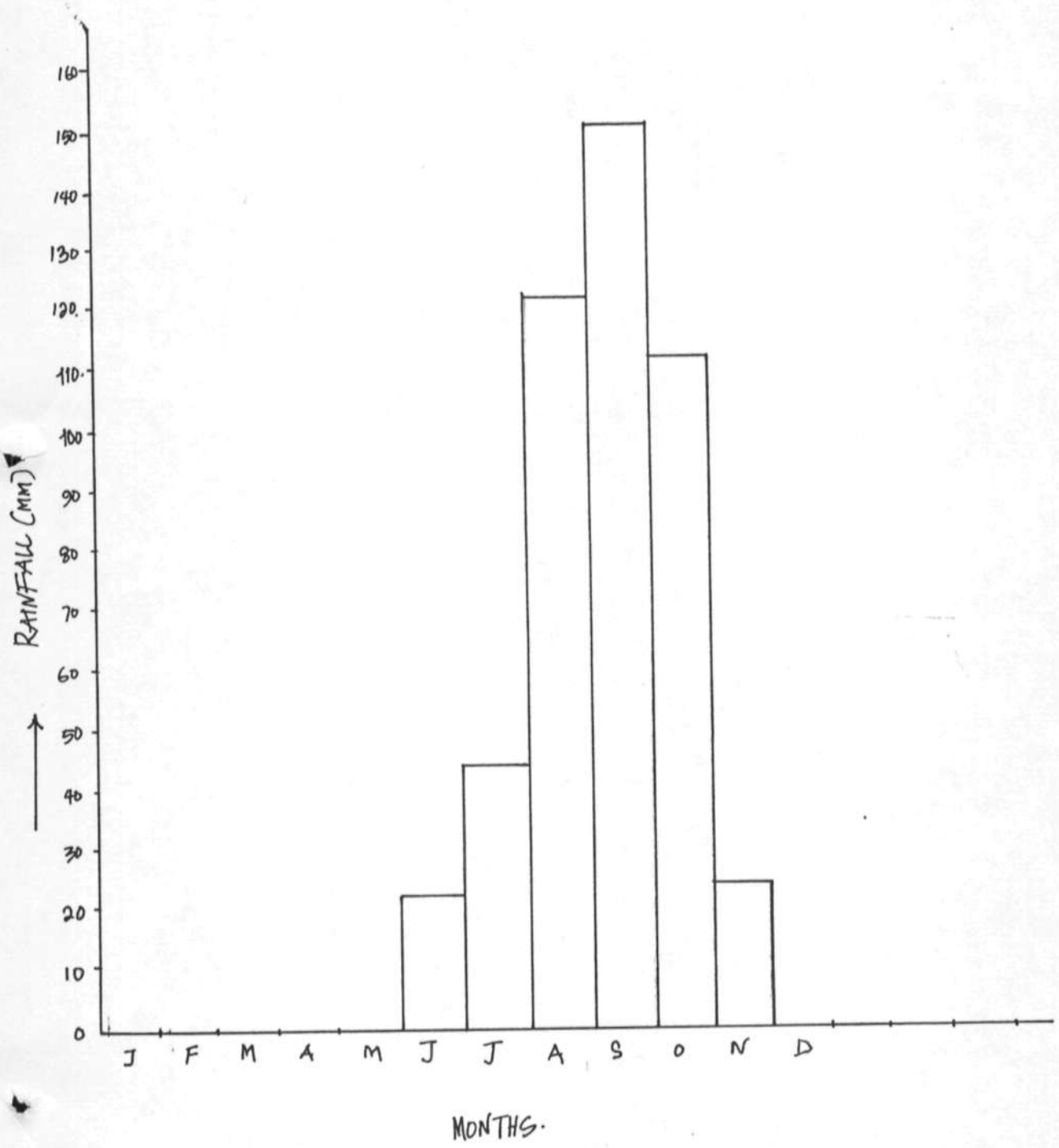
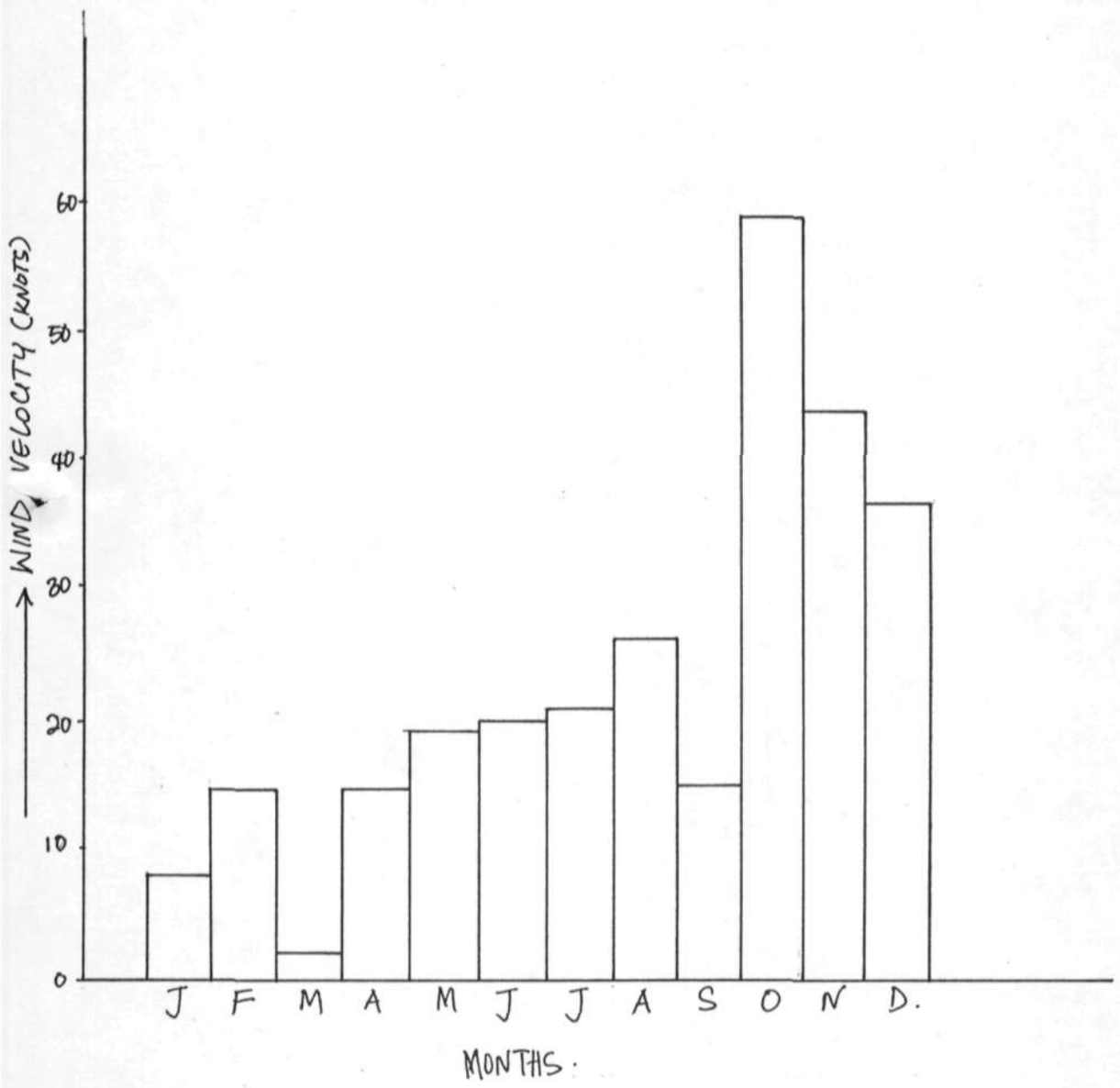


FIG. 7.5 RAINFALL (MM)



FIG·7·6 WIND VELOCITY.

During the dry season when there is little water available for evaporation and transpiration, the bulk of the net energy is used in heating. This causes a rise in air and soil temperatures.

7.9. SITE ANALYSIS

7.9.1. LOCATION

The site of the project is located along a road going to Sharada from Gadon kaya. The site can be identified immediately after the proposed site for the extension of Kano State Polytechnic. Just on the opposite side of the site are residential buildings.

7.9.2. TOPOGRAPHY

The site slopes gently towards the East direction giving a difference of about .8m along the length of it. This results into a natural slope for drainage in the site towards the East direction which is serviced by a culvert along the Sharada road. This fact together with the soil type gives a good drainage capacity for the area.

7.9.3. VEGETATION

There exist scanty vegetation cover on the site with few trees towards the west. The rest of the area is covered by shrubs and grasses which will pose no threat to clearance.

7.9.4. PREVAILING WINDS

The two prevailing winds predominant in Kano blow at

varying periods. The north-east trade winds which is dry and dusty blows from October to April. The wind is not properly blocked by any structure and hence it should be properly checked through well planned and proper planting.

The south-west monsoon wind on the other hand is relatively cool, moist and comfortable and therefore preferred for ventilation. It blows from May to September and is not blocked by any structure, as such it gives an opportunity for proper utilisation.

7.9.5. SUN PATH

During the harmattan period the sun path moves along the east-west direction facing south. This makes the northern plane warmer than the southern plane. During the hot season however, the movement is along east-west facing north, and the south facing plane becomes warmer than the northern plane. Nevertheless Kano being in the northern hemisphere, the period of heating on the northern plane is considerably less than in the southern plane, hence the northern plane has greater advantage in terms of cooling.

7.9.6. SERVICES

Services lines pass in front of the site. The water main from the water works is not very far from the site. While the 33kv overhead cable electricity and the telephone lines run along Sharada road on which is the site is adjacent.

7.10 SITE FEASIBILITY AND VIABILITY

A survey on different locations within Kano city itself and outside the city have shown that there is no better site than this one, it revealed an interesting dimension with respect to its accessibility and viability which together will further reinforce its identity in the area.

The viability of the site was reinforce by:-

(i) The islamic theological centre has to be sited outside the old city, to achieve spirituality.

(ii) A very strategic location to reinforce its identity.

(iii) A very low density Area and less noise.

(iv) Accessibility, easily accessible from inside the city.

(v) It is very near to the university.

The above listed factors have strongly suggested the feasibility, and viability of the site chosen. Thus it become the most suitable place for siting the islamic theological centre.

CHAPTER EIGHT

8.0. DESIGN BRIEF, AND SCHEDULE OF ACOMMODATION

8.1. 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.

In assessing the functional requirements of the islamic theological centre, which as a medium for furthering the religion of islam and knowledge, consideration must be given to the provision of such facilities that shall ensure smooth and effective take off.

8.2. FACILITIES

The designed of the islamic theological centre takes into consideration the provision of such facilities that shall make it a self contained institution. It is to function as a small islamic community living under the guidance of the shariah. Hence facilities are provided that shall enhance the spiritual and moral qualities of the users and also maintain the islamicity of the environment.

The design of this islamic theological centre falls under the following functions:-

(i) The administrative unit.

(ii) The educational Unit.

(iii)Accommondation facilities.

(iv) The mosque complex

(v) Conference unit.

(vi) Dinning facilities

(vii) Bookshop services

(viii) Islamic Art gallery

8.3. THE ADMINSTRATIVE UNIT

This is the overall co-ordinating unit of the whole complex. It takes care of the smooth running of the centre. It co-ordinates other external matters relating to islam.

8.4. THE EDUCATIONAL UNIT

This unit is solely devoted to the educational training of the students and the general enlightenment of the muslim populace.

8.5. ACCOMMODATION FACILITIES

The accommondation unit is to offer full-time accommondation for short-time residents only. This comprises the males and females Hostels.

8.6. THE MOSQUE COMPLEX

The mosque is designed to accomondate about 800 worshippers only. Being the most public sector of the centre.

8.7. THE CONFERENCE UNIT

Another public unit of the islamic theological centre, the conference unit is basically an auditorium meant for the purpose of public enlightenment through public lectures.

It is designed to accommondate about 200 people.

8.8. DINNING FACILITIES

Having recognised the necessity of dinning facilities in institutional design, two dinning halls are provided one each for males and females.

8.9. BOOKSHOP SERVICES

The bookshop is the commercial unit of the centre and helps in providing the necessary islamic literature for students while as the same time earning some revenue for the centre.

8.10. ISLAMIC ART GALLERY

An islamic art gallery is proposed for the islamic centre. It will serve as an exhibition areas for rare islamic/Arabic literature, calligraphic designs of various styles, artcrafts and traditional mediums of Hausa islamic education like the Allo wooden slate, the zayyana or Quranic decoration use in Hausa islamic education with the hope that will revitalise the consciousness of both the students and the visitors and will induce them to learn from such masterpieces of Hausa 'ulamas' (traditional islamic scholars). Thereby reviving the legacy and continuing the rich islamic heritage of Hausa islamic tradition.

8.11 SCHEDULE OF ACCOMMODATION

ADMINISTRATION.

FUNCTION	NO	AREA (M^2)
Director general	1	36
Secretary/waiting	1	24
Deputy Director	1	24
Conference room	1	50
General Office	1	24
Finance Officer	1	16
Personnel Officer	1	16
Accounts Officer	1	16
Publicity Secretary	1	16
Registry	1	16
Information	1	16
Store	1	16
Entrance Hall		96
Toilets	8	20
Transport Officer	1	16
Welfare Office	1	16
Tax - Zakkat Office	1	16

THE MOSQUE COMPLEX

FUNCTION	NO	AREA (M^2)
Main prayer Hall	For males and Females	560
Mihrab	1	8
Minaret	2	18
Storage	Under minaret	

Ablution space and unnals/Toilets	36

THE EDUCATIONAL UNIT

FUNCTION	NO	AREA (M^2)
Head of men's section	1	36
Heed of Female's section	1	36
Teaching staff	2	240
General office	1	36
Librarian	1	16
Attendants	1	12
Library	1	72
Class rooms	10	540
Toilets	12	18
Stores	2	36
Cleaners	1	12

CONFERENCE UNIT

FUNCTION	NO	AREA (M^2)
Conference Hall/Auditorium	1	360
Projection room	1	12
Toilets	8	12
Snacks	1	24

ACCOMODATION UNIT

FUNCTION	NO	AREA (M^2)
Hostel accommodation	52	760
Caretakers	2	32
Common room	2	96
Toilets/Uninals/Bath	40	60
Laundry		96

DINNING FACILITIES

FUNCTION	NO	AREA (M^2)
Dinning Hall	2	260
Kitchen	1	36
Storage	2	64

BOOKSHOP SERVICES

FUNCTION	NO	AREA (M^2)
Book selling	1	48
Store and storekeeper		40
Exhibition Area	1	68
Islamic Arts Store	1	54

CHAPTER NINE

DESIGN CONCEPTS, CRITERIA AND REPORT

9.1. FUNCTIONAL ORGANISATION

Considering the importance of a well functional organisation in the design of an islamic theological centres, the functional organisation of this proposal is therefore geared towards achieving a well co-ordinated and controlled environment that will ensure a good educational islamic atmosphere.

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

9.2. 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.

Taking into cognisance the importance of zoning as regard the privacy and hierarchy of space in Hausa islamic architecture, three important aspects of site zoning will be considered.

(a) Noise zoning

(b) Privacy.

(c) Functionality.

9.2.1. NOISE ZONING

NOISE ZONE	NEUTRAL ZONES	QUIET ZONES
Mosque complex	Administration	Education
	Conference	
	Accommondation	
	Dinning	

9.2.2 HIERARCHY IN PRIVACY

PUBLIC ZONE	SEMI-PUBLIC	PRIVATE ZONE
Mosque	Administration	Accommondation
Conference	Education	Dinning
Exhibition		

9.2.3. 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.

9.3 DESIGN CONCEPTS

9.3.1. PLANNING PRINCIPLES

The eventual purpose of any good design is the satisfaction of its users, visitors and spectators alike. The

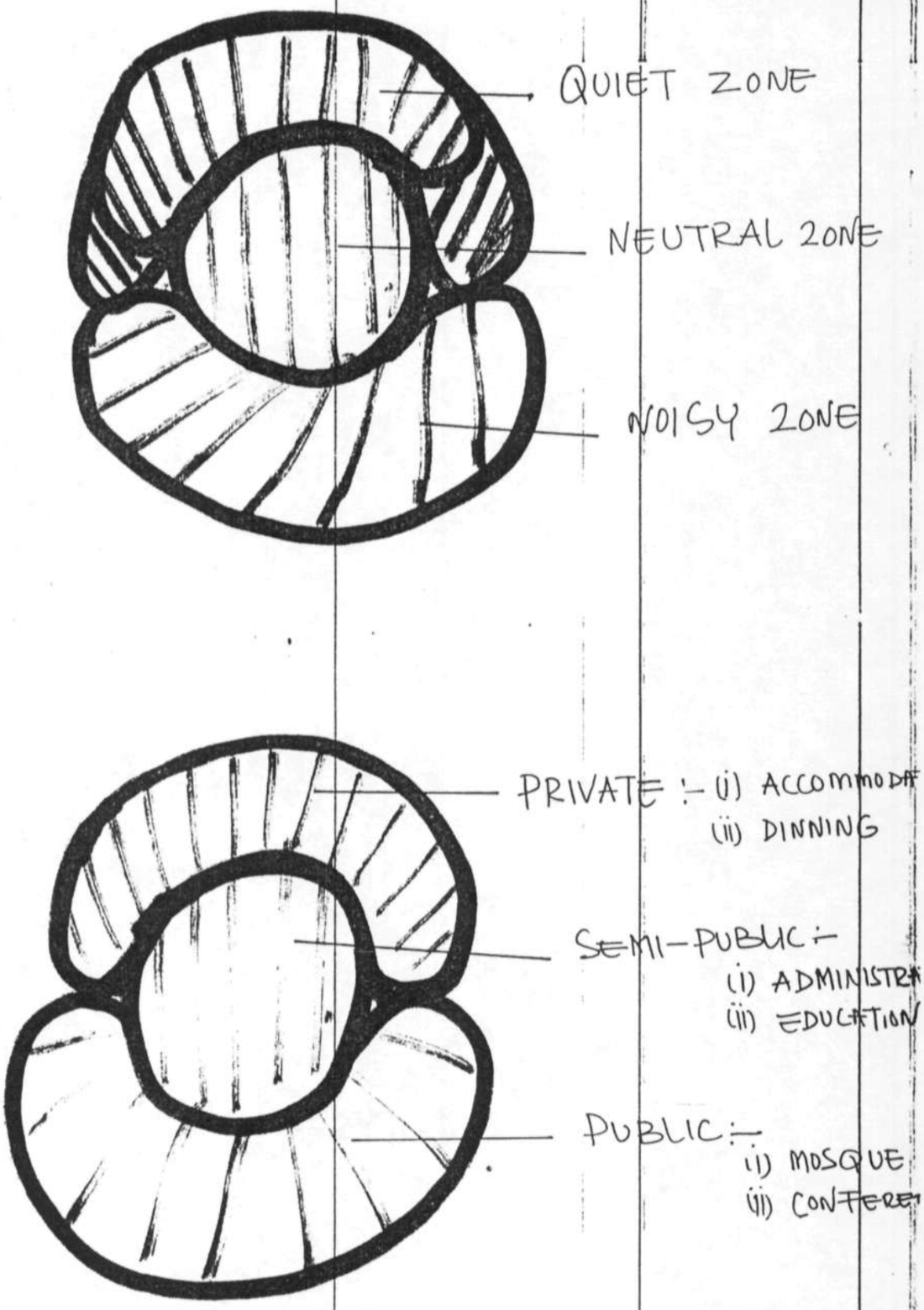


Fig (9.1) HIERACHY IN PRIVACY.

proposal for the islamic theological centre aims at creating an environment which can be absorbed through the maximum number of senses.

In the pursuit of creating an architecture that reflects environmental, cultural and public values of the Hausa people, the design concept is an adoptation and abstraction of traditional and indigenous concepts of planning and design. This formed the framework of the research matter and so lead to the evolution of the whole programme. It is based on the need to philosophise the design approach towards a rational and scientific architecture that it based on islamic 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-examining islamic architecture and cultural/environmental factors. In order to continue the great tradition of islamic architecture.

The analysis on Hausa architecture (chapter 6) has shown that there exist some dominat and definite architectural forms in Hausa land and these therefore should serve as the guiding principle in this design proposal.

9.3.2. 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 the pulling or magnetic effect should 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 prposed and one was adopted after a critical and careful analysis (Fg.).

9.3.3. FORM CONCEPTS

The concepts of forms in architecture had thus been tied to utility, materials and construction techniques and not 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 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 an exterior physically adapted to its functions and culturally understandable, visually impressive and inviting of the exterior, certain symbols and objects of use in Hausa islamic 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.

9.4. DESIGN REPORT

This is the description of the variuos units of the islamic theological 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 architecture plans can easily perceive the centre.

9.4.1. THE MOSQUE COMPLEX

The basic form of mosque design was chosen. This is the rectangle, and it reflects the form of the prophet's first mosque. The decision to use the rectangle was reinforced by the fact that all muslims in prayer have to face a particular direction- The Qibla- as well as having to line up in

rows behind the 'Imam', (who leads the prayer).

The mosque complex has a capacity to accommondate about 500 worshippers. The ground floor, strictly for the male worshipers. Wheras the famele worshippers are accommondated on the balcony at the first floor level. Privacy is ensured by the provision of screen walls across the edge of the balcony.

Two minarets are provided on the two sides of the mosque to give the complex the necessary islamic look as well as to create the necessary contrast to give a more balanced facade. The dome was introduced to give the whole complex a feeling of power, befitting a religious centre. An ablution area is provided at one side of the sanctuary to serve the male worshippers thereby ensuring their purity.

In the case of over flow the double doors of the main prayer hall open out to a paved area on the iwans, corridors and further down steps on to the floor.

The fact that it requires a conscious effort in extending the mosque, a series of steps are provided on the entrances to give one a feeling of ascension and in addition reinforce the domineering power of the mosque.

9.4.2. THE ADMINSTRATIVE UNIT

The adminstrative block is placed at the approach towards the main entrance and is easily acessible from all directions. It was designed such that it overlooks the

inner court yard. It houses those officers who are responsible for the operations of the complex as well as those officers who deal with the muslim umma.

9.4.3. THE EDUCATIONAL UNIT

The educational unit is also more public oriented, as such it is located centrally serving as the main focus of the center. It has been linked with the mosque and the auditorium as well as the malesad females Hostel. The library unit is located within the educational unit. It has its own landscape sorrounded by all the educational unit blocks.

9.4.4. THE CONFERENCE UNIT

The conference unit is an auxillary section of the proposed islamic theological centre Kano. It is chiefly for public use, in terms of public lectures for enlightenment, seminars and for the purpose of various religious conferences.

The conference centre being mainly for public usage was situated such that it is very close to the main entrance and easily identified from outside. It has the capacity of about 250 delegates and it is furnished with a projection room and toilets for males and females.

9.4.5. THE ACCOMMODATION UNIT

The hostel accommodation forms the outer part of the islamic centre putting the dinning facility in the center between males and females hostel. Both hostels-the males and

females are built around court yards, so as to complement the design concepts.

The planning was made in such a way that each room houses two students.

The orientation of the hostels is such that there is an easy accessibility to the dinning area, the mosque complex as well as the educational unit.

9.4.6. DINNING FACILITIES

The dinning area occupies the joint between the male and female hostels. It consists of storage spaces, kitchen area and washing area. The dinning area is situated such that the main users; male and female students resident on site have a direct access from their hostels to the eating area.

9.5. ELEVATIONS

In bringing out the elevational characteristics of the complex what was foremost in the architects mind was to produce a facade which was immediately identifiably to be an islamic building as well as to blend with the Hausa traditional design character.

In this light, the architect introduced the use of arches and the use of burnt bricks facings and burnt bricks screen walls. The architect also use traditional motifs for the decorations as well as using calligraphic writings to emphasize the complete

and total submission to Allah which every muslim should have in mind.

The dome and the minarets were also introduced to further reinforce the fact that the complex is an islamic place of worship.

9.6. CONCLUSION

Islamic architecture was found to be a subject of controversy. However, it is admired not only for its beauty but for its traditional authenticity and spirituality. Hausa architecture on the other hand was found to be not only fully islamic but organic.

It has also became clear that in design programmes consideration must be accorded to region and site, climate building forms, materials and technology, cultural and social values. Buildings in islamic architecture were found to be a crucial index in the search for self identity. To achieve this it was discovered, symbolic concepts, artistic expressions of the technology through spatial and sculptural order, exploitation and revalidation of changing values and harmonious integration of site, building and landscape exert a story visual impact on riot only the observer but environment.

BIBLIOGRAPHY

1. ABUBAKAR S.S. (1985): National Islamic centre Abuja, unpublished M.Sc. Thesis, A.B.U; Zaria.

2. AHMED S.A. (1988): Discovering Islam: Making sense of muslim History and society: Routledge and Keagan Paul, New York.

3. AL = ATTAS, S.N. (1985): Islam Secularism and the Plylosophy of the future, Nansell, London.

4. AL - FARUQI, I.R. (1982): Tauhid: Its implications for thought and life, whyncote; kwala lampur.

5. ANDERSON, K.B. (1978): African Traditional Architecture, oxford university press, London.

6. ARNETT, E.T. (1910): 'A Hausa Chronicle' Jounal of the Royal African Society, London.

7. BABA - GIREI, J. (1977) National Islamic centre Abuja, Unpublished M.Sc. Thesis, A.B.U. Zaria.

8. BELLO U.M. (1987). Islamic centre Yola, unpublished M.Sc. Thesis. A.B.U; Zaria.

9. BOSWORTH, C.E. (1967): The Islamic Dynasties, Edinburgh university press, Edinburgh.

10. BRIGGS, M. (1924): Muhammadan Architecture in In Egypt and Palastine, Clarandon press, Oxford.

11. BURCKHARDT, T. (1976): An Introduction to Sufi Doctrine, Thorsons publishers limited, Northampteon shire.

12. BURGOYNE, M.H. (1987): Mamluk Jerusalam: An Architectural study, world of Islam Festival, London.

13. CHITTICK, N. (1974): Kilwa, Oxford University Press, Nairobi.

14. CRESWELL, K.A.C. (1959): The Muslim Architecture of Egypt, Vol. 2, Clarendon Press, Oxford.

15. CROWDER, M. (1962): The story of Nigeria, Faber, London.

16. DANGIWA, A.M. (1987): Nigerian Supreme council for Islamic Affairs Headquarters, Abuja, Unpublished M.Sc. Thesis, A.B.U, Zaria.

17. DENYER, S. (1978): African Traditional Architecture; longman and Heinemann, London.

18. DOI, A.R.I. (1972) The Cardinal Principles of Islam Islamic publications Bureau, Lagos.

19. GARCAKE, P.S. (1966): The Early Islamic Architecture of the East African Coast, Oxford university press London.

20. HAIDER G. (1984): 'The city of Islam: A vision for the future, in: Sardar, Z. (ed) The Touch of Midas, Manchaster University Press, Manchesta.

21. HILL, D. and GRABAR, O. (1964): Islamic Architecture and its Decoration, University t of chicago Press, Chicago.

22. HILL, D. and GOLVIN, L. (1976): Islamic Arthitecture in North Africa, Faber and Faber, Limited, London.

23. HOAG, J.D. (1963): Western Islamic Architecture, prentice Hall, London.

24. HOURANI, A.H. and STERN, S.M. (1970): The Islamic city, oxford university press, london.

25. JAIRAZBHOY, R.A. (1921): An outline of Islamic Architecture; Asia publishing house, Bombay.

26. JONAS, L. (1980): Garden and courtyard in Islam, Thames and Hudson, London.

27. KANI, M.A. (1979): Nigerian Islamic centre, Kano unpublished M.Sc. Thesis A.B.U, Zaria.

28. KHAN, F.R. (1978): 'Can the future learn from the past' In: Toward an Architecture in the spirit of Islam, Seminar held at Aiglemont Govieux Frence, the Aga Khan award for Architecture, April, 1978).

29. KUBAN, D. (1974):Muslim Religious Architecture, Heinemann, London.

30. MOUGTIN: J.C. (1985): Hausa Architecture, Ethnographica, London.

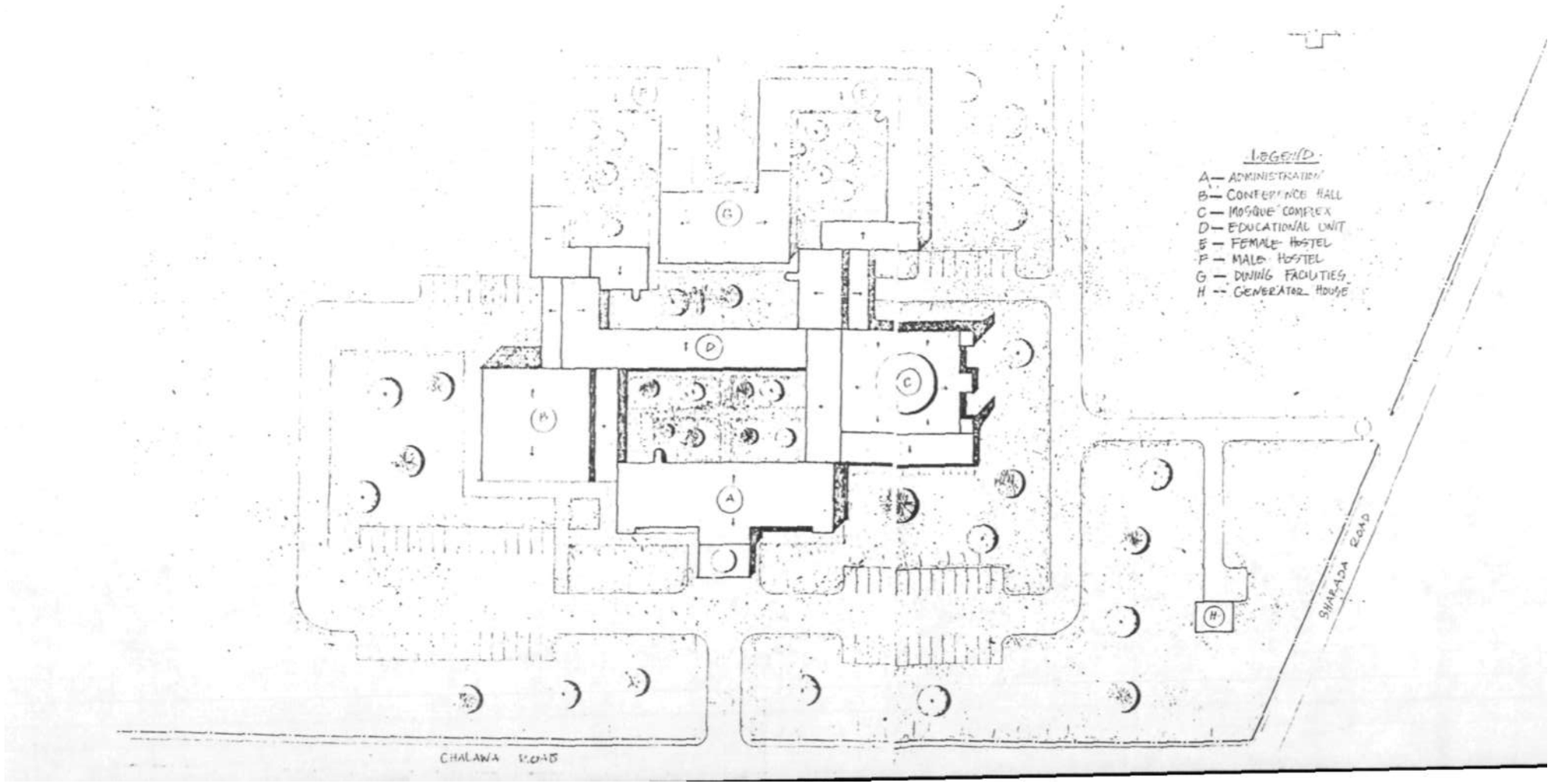
31. NEUFERT, E. (1980): Architects Data, Granada, London.

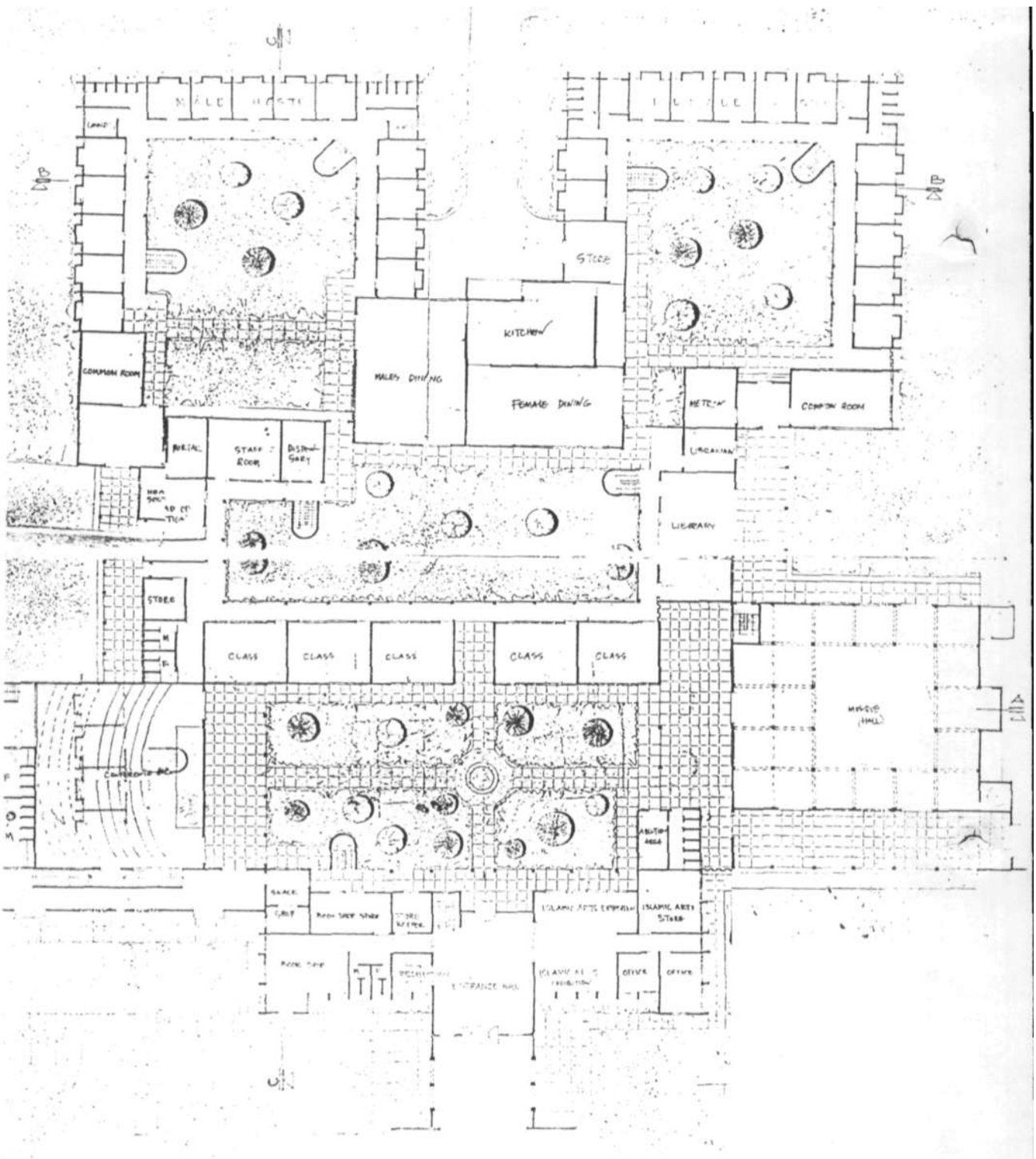
32. OLIVER, P. (ed) (1978): Shelter in Africa, Barrie and Jenkns, London.

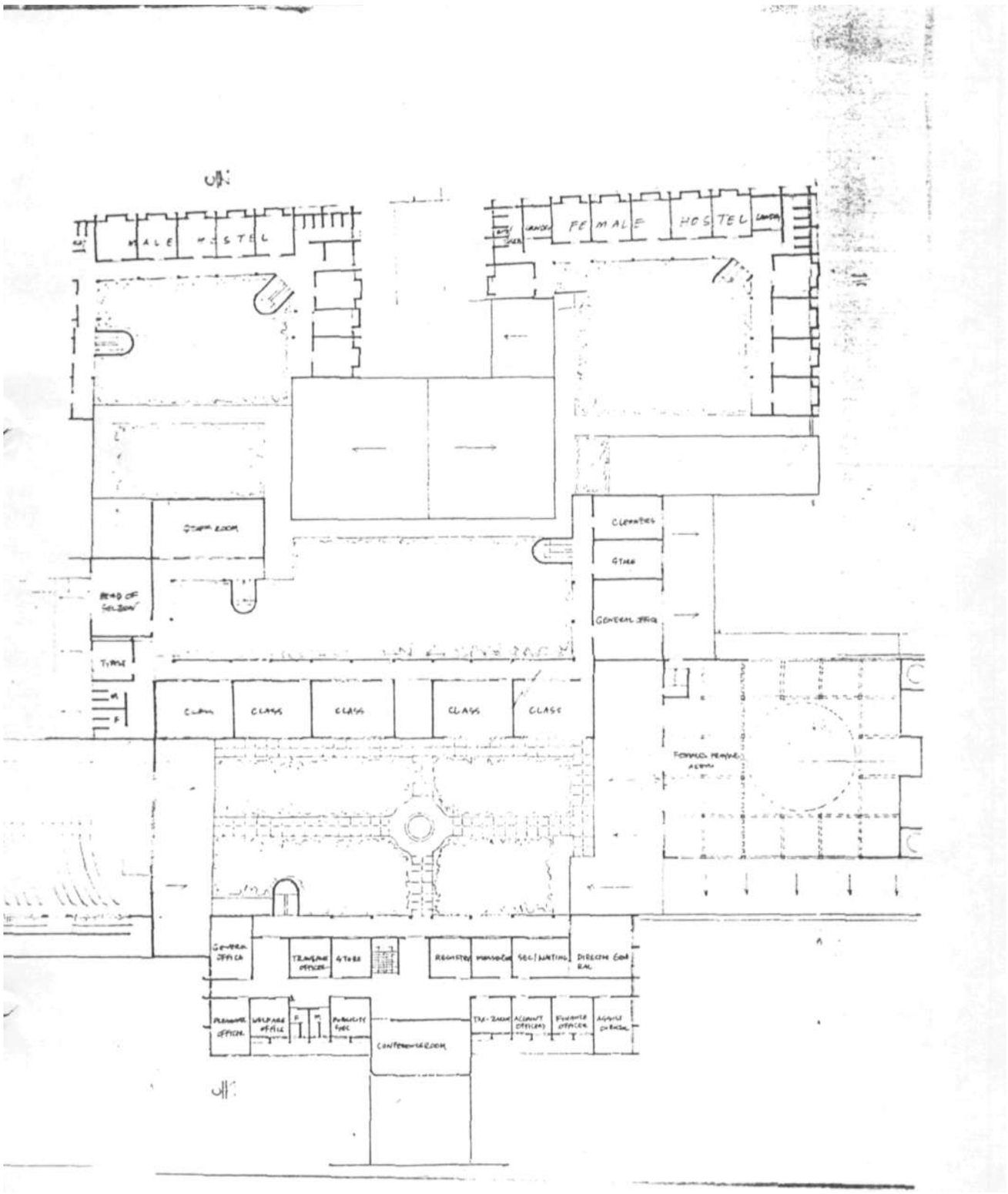
33. PADEN, J.N. (1973): Religion and Political culture in Kano, University of California Press, Berkeley.

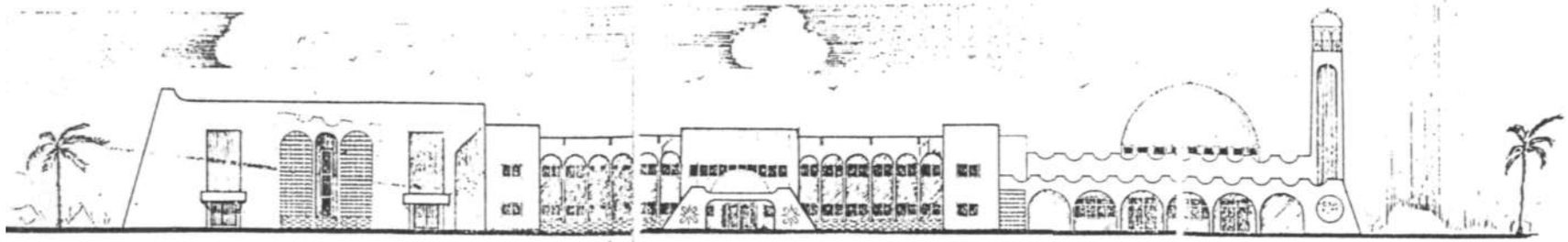
34. SA'AD, H.T. (1981): Between nyth and Reality: the Aesthetics of Architecture in Hausaland, unpublished Ph.D. Dessertation, University of Michigan, Ann Arbor, Michigan.

35. YAKAWV, D.V.M. (1982): National Islamic centre Abuja, unpublished M.Sc Thesis, A.B.U, Zaria.

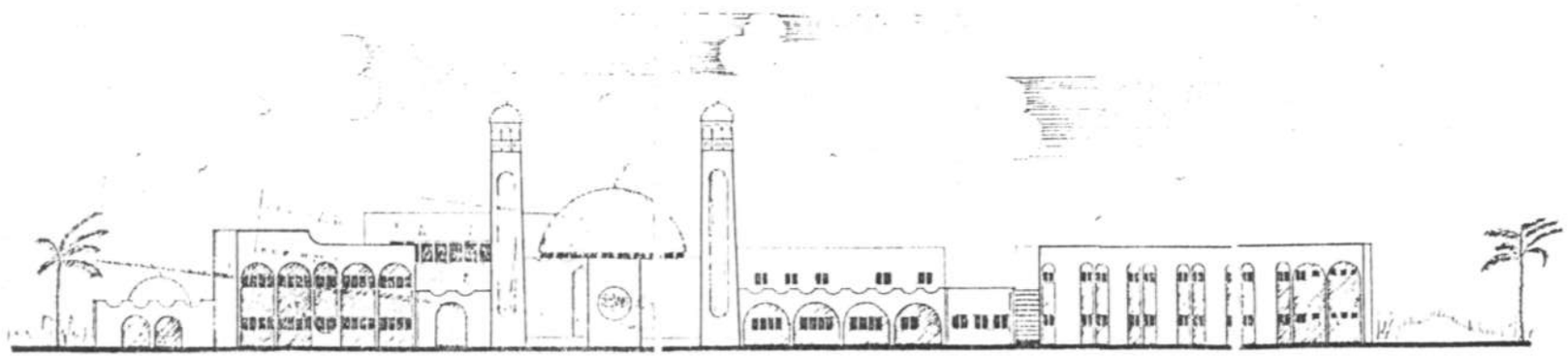

LEGEND
A — ADMINISTRATION
B — CONFERENCE HALL
C — MOSQUE COMPLEX
D — EDUCATIONAL UNIT
E — FEMALE HOSTEL
F — MALE HOSTEL
G — DINING FACILITIES
H — GENERATOR HOUSE
SHAHADA ROAD
CHALAWA ROAD


COMMON ROOM
MALES DINING
KITCHEN
STORE
FEMALE DINING
METEW
COMMON ROOM
LIBRARIAN
LIBRARY
BURIAL
STAFF ROOM
STORE
CLASS
CLASS
CLASS
CLASS
CLASS
MOSQUE (HALL)
ABLUTION AREA
ISLAMIC ARTS STORE
OFFICE
OFFICE

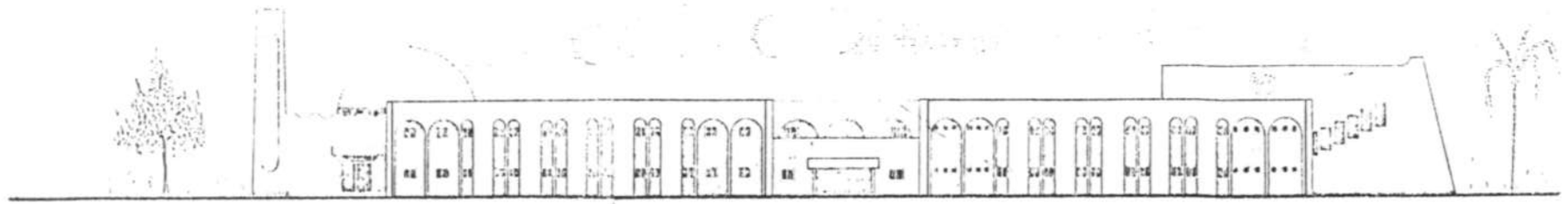

MALE HOSTEL
FEMALE HOSTEL
CLASS
CLASS
CLASS
CLASS
CLASS
GENERAL OFFICE
REGISTER
SEC/WAITING
DIRECTOR GENERAL
CONFERENCE ROOM



FRONT ELEVATION (SOUTH)

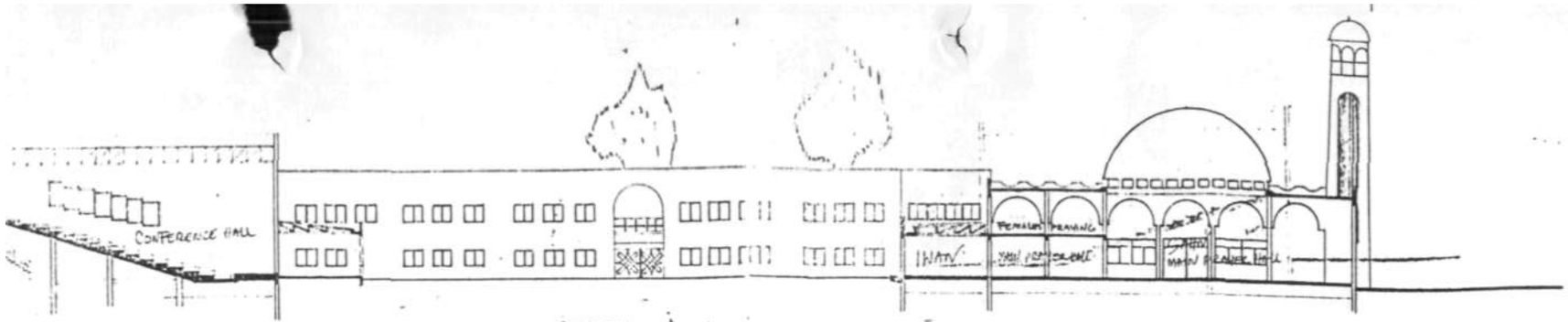


SIDE ELEVATION (WEST)

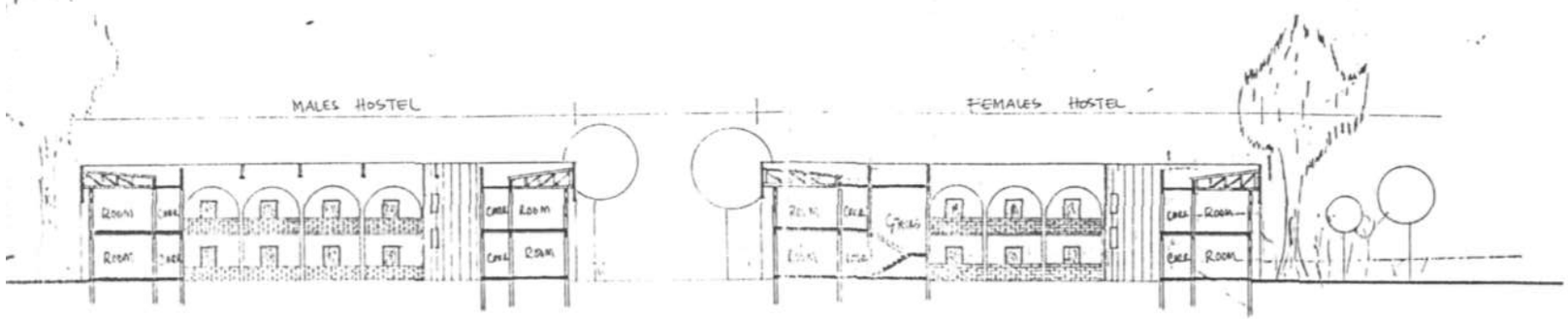


REAR ELEVATION (NORTH)

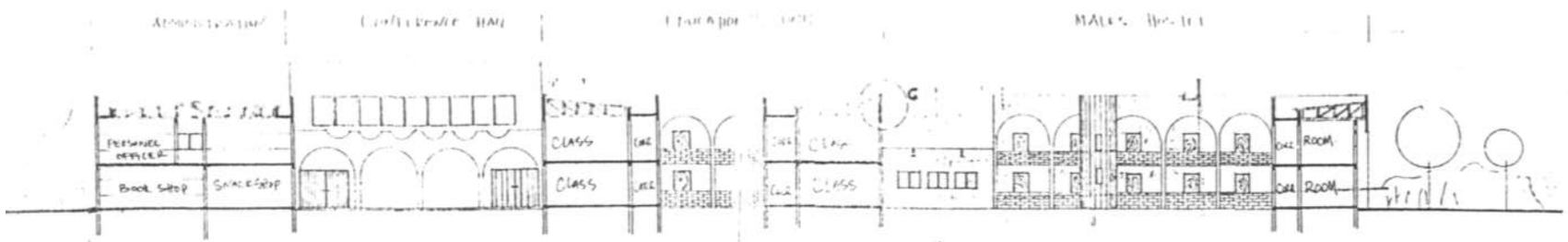




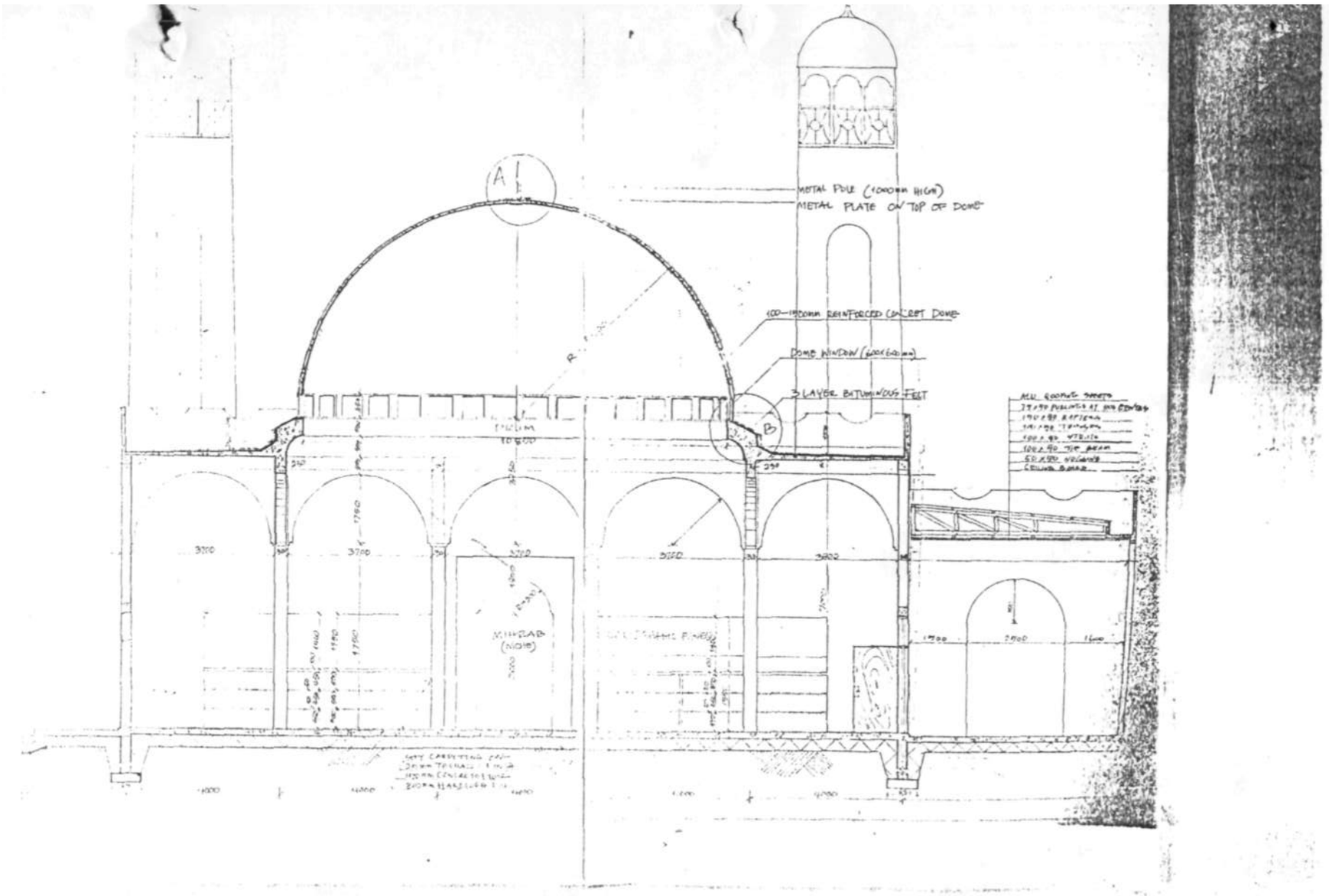
SECTION A–A



SECTION B-B



SECTION C-C


A
B
METAL POLE (1000mm HIGH)
METAL PLATE ON TOP OF DOME
100–150mm REINFORCED CONCRETE DOME
DOME WINDOW (600x600mm)
3 LAYER BITUMINOUS FELT
R
3700
3700
3700
3700
3700
1700
2900
1600
X-HEAD (NOW)

