A THESIS PRESENTED TO THE DEPARTMENT OF ARCHITECTURE

FACULTY OF ENVIRONMENTAL DESIGN CF

AHMADU BELLO UNIVERSITY ZARIA

IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR

THE DEGREE OF

MASTER OF SCIENCE IN ARCHITECTURE

(M.SC. ARCH)

BY

BALOGUN, OLULAJA MUBO B.SC. (ARCH) ZARIA

ON

A LEISURE ENTERTAINMENT CENTRE FOR ILORIN

(JUNE 1983)

PROFESSOR E.A. ADEYEMI
HEAD OF DEPARTMENT

ARC- SHIM ADESINA
THESIS SUPERVISOR

DECLARATION

I hereby declare that this Thesis has been composed by myself and that it is a record of my own Research Work. It has not been accepted in any previous application for a higher degree. All quotations are distinguished by quotation marks and the sources of information are specifically acknowledged by means of References.

Name:.....

Date:.....

A K N O W L E D G E M E N T

I would like to take this opportunity to acknowledge the efforts of the following: Arc. Shim Adesina, my Supervisor who guided me through my Thesis; Mr. Philip Biseh of A.B.U. Staff School, who typed all the manuscripts; those friends and colleagues who have been a constant inspiration - especially Mr. Polycarp Gbaja who has been more than a friend; Dr. Balogun and Mrs. Balogun, my parents, for their untiring support and guidance, and all those people whose names I did not mention, but who in one way or another, have been very helpful.

THESIS ABSTRACT

TOPICS LEISURE ENTERTAINMENT CENTRE, ILORIN

SITES APPROXIMATELY 16km OUTSIDE ILORIN
Along the Airport Road. Area of the site is approximately 14 hectares.

SPONSORS: PRIVATE ORGANIZATIONS

BRIEFS A MODERN LEISURE CENTRE
Catering for 800 people on peak days. Provisions should be made for future Expansion to a Tourist Resort. The design will consist of the following:

A. Amusement Park
B. Motel
C. Discotheque/indoor Games
D. Shopping Arcade
E. Amphitheatre
F. Restaurant/Bar
G. Administration/Maintenance
H. Picnic Grounds
I. Swimming Pool

APPROACH: Proper site planing incorporating extensive use of landscape elements. Organization is along a Main Axis with variations in Movement Patterns and creation of distraction as top Priorities,.

I N T R O D U C T I O N

Generally, the world over, people are working fewer hours per day although this is more pronounced in the technologically advanced countries, the trend is beginning to show up here in Nigeria. This becomes apparent when one compares the number of working hours spent by a farmer 50 years ago with that spent by an office worker today. This in effect means that people now can have more leisure time at their disposal than did their forebears. From all indications this trend is likely to continue as machines and computers gradually replace human labour and time consuming chores. There is thus a need for a place where people can spend this leisure time. The type of leisure and entertainment facilities available in most parts of the country is however no longer adequate. Technological advances in communication and transport have contributed to an imense alteration of people's tastes and values; more and more people travel out of the country and come into contact with better organized systems. They can therefore no longer be satisfied with anything less than what they see in advanced countries or on the television, Radio and in Books. The need for sophistication in design and available facilities is further emphasized by the need to look ahead and prepare for the future. Walt Disney once said, "The only problem of anything of tomorrow is that at the pace we are going right now, tomorrow would catch up with us before we got it built" (A.D. October 1982). Within the next 10 years the sophisticated things of today will have become mundane, everyday things.

CHAPTER ONE

DEFINITION, BACKGROUND AND HISTORY OF LEISURE

DEFINITION OF TERMS

This problem of definition of leisure has always been a fundamental and recurrent one. When is a person at leisure? What constitutes leisure as opposed to work? These are some of the questions this Chapter seeks to answer in relation to leisure specifically and other related terms such as play recreation and entertainment. After examining a few definitions put forward by various learned persons, it should be possible to define leisure, or in the alternative, to determine whether it is possible or even necessary to differentiate precisely between leisure, work and other related terms. This search for a definition is essential because it is necessary to know what constitutes leisure before one begins to consider the design of a leisure centre.

LEISURE

Stanley Parker (1976) wrote "Of two men performing the same activity, say playing golf, or a musical instrument, one will be at leisure and the other earning a living." This implies that there are many activities which are part of both work and leisure. Thus work is not necessarily the opposite of leisure. The difference clearly does not lie in the kind of activity but rather in the attitude to the activity.

The International Study Group on Leisure and Social Sciences (1972) put forward a definition as follows:-

> Leisure consists of a number of occupations in which the individual may indulge of his own free will - either to rest, to amuse himself, to add to his knowledge and improve his skill disinterestedly and to increase his voluntary participation in the life of the community after discharging his professional family and social duties.

One problem with this is that it is rather difficult to differentiate between what constitutes social duties and voluntary participation in the life of a community. Another problem is with terms such as 'Disinterestedly,' or 'Of his own free will.' It is possible to increase one's skill interestedly and yet be at leisure, for example when playing a musical instrument.

The Funk Dictionary defines leisure as:- 'Freedom from the demands of work' or time available for recreation and relaxation.' From this definition it is possible to say that unemployed people are at leisure, whereas this is not necessarily so. So far it will be seen that the definitions seem to be tied to only two main variables i.e. Time and Work.

Some definitions, however have gone beyond this to speak of an 'Attitude,' i.e. A state of mind. J. Pieper (1952) wrote of leisure as a mental and spiritual attitudes .... it is not simply the inevitable result of spare time, A holiday, A week-end or A vacation. It is .... an attitude of mind a condition of the soul." This type of definition more or less ties in with the Greek ideal of leisure or contemplation - in the sense of both being states of the mind.

Some experts have even tried to list out what constitutes leisure. R. Maw (1969) tried to solve the definition problem by constructing a table of activities (Table 1.1) which differentiates between work and leisure by the degree to which time has been committed. Isobel Cosgrooves (1972) says of this tabulation"..... Does little more than illustrate the complexity and variety of choice of activity, and the difficulties involved in trying to categorise them at all."

From the few definitions presented here we see the problem in trying to determine exactly what leisure is. It seems it may not be necessary since for any individual, leisure is only what one takes it to be. However, for the purpose of clarity, leisure in this work, will be defined as time made free by an absence of a necessity to work. Time in which by choice, one can perform activities to distract oneself from the demands of work. Thus the key ingredients of leisure are 'choice' and distraction. This will be a major consideration in the process

of designing the leisure/entertainment centre proposed for this thesis.

RECREATION

The same problem applies to this term as with leisure. There is disagreement over what it means. Tillinghast ( ) wrote "Recreation is time off work that improves working performance and useful time" implying that it is an aspect of work. Other definition have tied it in with leisure rather than work. Thus in this work, recreation is defined as - time off work (and the activities carried on in this time) which improves one's working performance. It may or may not be a part of leisure.

PLAY

If leisure is time made free by an absence of necessity to work, then I shall define play as that distractive activity which takes place during this time. According to Nuemeyer (1949) Play consists of a series of ".... activities which are undertaken for their own sake and not for any reward beyond themselves, and which are relatively free, spontaneous and enjoyable." If one attempts to be more specific than this, the same fundamental problems of definition resurface.

ENTERTAINMENT

The sense in which the word is generally used today, connotes a purely leisure phenomenon from which enjoyment and

amusement are derived with little or no effort exerted by the person being entertained: Musical shows, Theatrical presentations, Cinema and Television and Eating. This is the sense in which the word will be used throughout this work. In fact provisions for the activities listed will have to be provided if the thesis is still to called a Leisure Entertainment Centre.

In Summary it will be observed that it is practically impossible to arrive at a concise all embracing definition of any of the given terms, since each situation in which they are used demands a definition relevant to it, which may prove utterly useless in another situation. Definitions have therefore been given which are relevant to the situation presented by this thesis. Perhaps greater light will be shed on these four terms and their relationships (as defined in this work) by the diagram (Fig. 1.1) which I constructed to explain them.

Since it has not been possible to come to a concise understanding of leisure through a definition, then perhaps through observation of the history of what people do in their free time, it may be possible to find out what activities constitute leisure and thereby gain an insight into how to approach the design of a leisure centre and what activities activities to provide for.

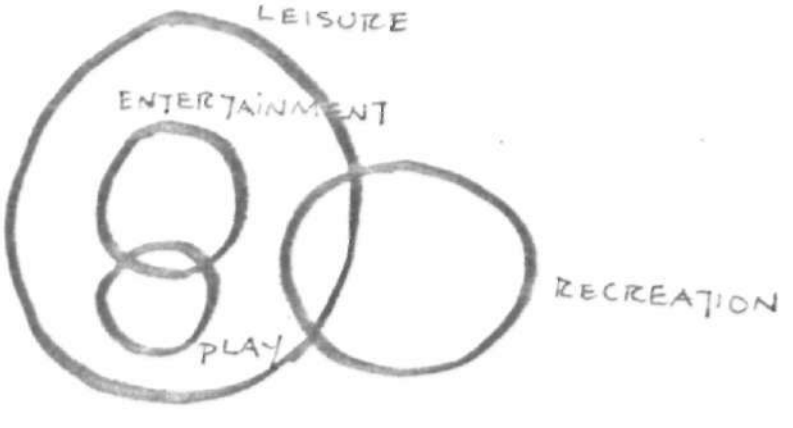


FIG. 1.1

DIAGRAM SHOWING RELATIONSHIPS BETWEEN DEFINED TERMS

HISTORY AND EVOLUTION OF LEISURE

Having disposed of the issue of definition of basic terms, it will now be appropriate to gain an insight into the history and evolution of leisure through the ages. This study will be on an international scale though specific reference will be made to Nigeria as often as possible.

PLAY AMONG PRELITERATE PEOPLES

These groups of people exhibit the most basic and earliest known playforms which have been divided by Mitchell (1948) into the following six groups:-

(1) Dancing, and rythmic movement

(2) Mimicking and acting

(3) Singing

(4) Conversing and story telling

(5) Arts and crafts

(6) Games and contests.

DANCING AND RYTHMIC MOVEMENT

In Africa generally and in Nigeria specifically, danging, rythmic movement, singing and story telling seem to be the dominant aspects among preliterate peoples. They all had crucial roles to play in virtually all our leisure activities. That this characteristic of play is parvasive is emphasized by Mitchell (1948).

> It is not surprising to find response to rythm and particularly dancing, a salient characteristic of play of preliterate man. For humankind the world around and in every period of recorded time, has found rythm contagious and a stimulus to participation.

This is why when one attempts to find out how our forebears in Nigeria spent leisure time. What immediately comes to mind is dancing.

SINGING

Singing in preliterate societies was probably just as pervasive as dancing and in fact might have been virtually synonymous. In Nigeria, one would be hard pressed to find any traditional dance routine not accompanied by singing. Among the plains Indians of North America, the words 'Dance' and 'Song' were often used interchangeably (E.D. Mitchell 1969) such was the relationship between the two. However, it is pertinent to that singing was not restricted to dancing alone, but also featured as an integral part of everyday life. For instance, quite a number of stories and legends of the Yoruba of Nigeria, are accompanied by songs and refrains. They usually aid the intensification of emotional thrills derived from the stories. Women would sing while cooking or

weaving cloth. Communal farming sessions among the Hausa were never without a contingent of singers and drummers.

MIMICRY

This was often tied to dancing as well. Certain sometimes performed in which the chief interest is mimicry in representation of spiritual or earthly beings and animals. When one examines the dances performed among the various ethnic groups of Nigeria, we one again find this to be so. For example the 'Egungun' Masquerade dancers of the Yoruba.

STORYTELLING

Although this activity was used basically as a means of education, religious training and of transmitting social lore, it also had its place as an important leisure activity- especially among children. Very often these stories would be interwoven with songs and rythmic movement to add to its appeal. In fact many dances among preliterate people are simply another form of storytelling, where legends and folklore are acted out. The eminence of storytelling becomes understandable when we consider that the spoken word was the only means of perpetuating legends and historical happenings.

ARTS AND CRAFTS

These, (though not strictly forms of play) were found to be common leisure-time activities.

GAMES AND CONTESTS

Being similar to those found in present day literate societies, they included, wrestling, running, boxing, riding, swimming etc. Among the various ethnic groups of Nigeria, wrestling, boxing, fishing and boating of sorts, were but a few of the playforms of this category.

In summary therefore, its important to note that the majority of these activities had their religious as well as playfull significance. More often than not, the religious aspect was given more emphasis than the play aspect. This is not surprising when one finds that at such a stage of cultural development, man, in his everyday life, was closer to the spiritual realm than he.is today. Dances were used to worship gods, or to purify offenders and even heal psycopaths. The North American Indians had their rain dances. Therefore, early societies, (Those of Nigeria inclusive) having fully intergrated play into everyday life and religion, had no need for specialized leisure pastimes.

EVOLUTION OF LEISURE

Man, by nature, is both active physically and mentally; thus when he had met the basic needs of self preservation, he temporarily enjoyed leisure and freedom for self gratification. This self gratification however, could not

be totally satisfied just by resting and sleeping alone, he thus invented play. In all probability, this play consisted of play-fighting, play-hunting, dancing, singing, storytelling etc. Children then probably imitated these adult activities turning them into play. Each generation of children then, through imitation, absorbed these play patterns. A background of play forms thereby emerged among both adults and children which was handed down from generation to generation acquiring small changes along the way. These playforms gradually evolved in much the same way as other customs and folkways of people. This was the situation of play among preliterate people.

As societies developed, emerging from the primitive ages, mankinds struggle for survival became less critical and attitudes towards leisure began to change. The Greeks came up with their ideas on leisure. For them, leisure was an ideal situation which was the opposite of work or any activity for that matter. Aristotle spoke of leisure as being unrelated to any occupation whatsoever other than music and contemplation. Thus this is what probably constituted real leisure to them. The Romans impression was different. Leisure was for a certain class of people and it was more akin to what obtains today. Wrestling, chariot races, Gladiator fights etc. They had Amphitheatices and collosae for music, dance and festivals. The forum andpublic baths all offered leisure diversons.

By the middle ages however, things had changed again due to the influence of religion, leisure became a negative thing. It implied laziness which was a cardinal sin and was therefore to be avoided. With the coming of the renaissance, thought trends began to revery back to Greek and Roman periods and this in turn also affected leisure patterns.

The biggest change came with the industrial revolution. Previously, though attitudes were changed at different stages, leisure was still not a specialized activity divorced from everyday life. Even the Roman fights and races were to gear people towards the conditions of war in which Rome constantly found herself. When the industrial revolution came, work habits changed and one had to work for many hours a day. Even at home one was forced to contend with hopelessly overcrowded slums, noisy environments and little or no peace. The need for leisure was heightened. Industrialists also discovered that people work better if given a little time off from work for recreation. Organized sports were encouraged among workers, paid holidays were introduced, drinking became commercialized. As the general standards of living slowly rose, workers began to be more aware of their rights, formed unions and Trade Groups and got the work week reduced and working hours shortened. As a phenomenom of its own, which was not necessarily related to everyday life. Amusement parks and industries began to boom. People now took holidays farther

away from home and there emerged a set of people, who, not having any need of work, engage themselves almost entirely in leisure pursuits. i.e. The leisure class. This trend continues up till the present where leisure and play have become so important that we now have experts on leisure and entire villages and complexes devoted solely to leisure pursuits. Places such as the Waly Disney World.

In summary, one has been able to briefly trace how leisure developed from its earliest stages to what it is now. As was mentioned before, the study has been on an international scale, but it would now be appropriate to consider leisure in Nigeria specifically. Since one now has a better grasp of what constitutes leisure, it should be easier to identify the various playforms already existing in Nigeria.

CHAPTER TWO

LEISURE IN NIGERIA

From the previous Chapter, it has been possible to trace the development of leisure in other parts of the world. When one attempts to apply the process to Nigeria one comes to a dalemma. Aside from the fact that up until very recently, there were no written records from which one could look for a trend, even those available now, do not seem to correspond with observed trends elsewhere. The reason for this may be that leisure as a major activity in Nigeria never really evolved far from the primitive stages described in the last Chapter. The process by which we arrived at what obtains today was not an evolution but a revolution. Within a relatively short period, leisure practises have 'jumped' from the primitive stage to a very advanced one. This was brought about due to the contact with more advanced countries through colonialism. The colonialists, apart from the various ills also brought with them, possibilities of extensive travel, better communication through news media, telephone, telegraph etc. All this led to a greater interaction with different cultures. Although the level of interaction was and still is not uniform throughout the society, it's effects were felt by the greater majority of the people. Is there any part of Nigeria which has not in any way been affected by contact with western values and things, where No. 2 Radio, bycycle or sewing machine exists. Most of the Technology in use today,

the work habits of civil servants, students company workers etc., are either acquired directly from or are by products of colonialism. It therefore inevitable that foreign leisure patterns should also be absorbed all this has taken place within 2 or 3 generations where it took the western countries nothing less than 3 or 4 centuries to get to these states. What took place is a revolution. This revolution is also responsible for the fact that there are very few modern leisure pastimes in Nigeria today which can be said to be strictly original. It is therefore almost impossible to provide a leisure centre which will cater only for strictly original pastimes even then, its popularity and usefulness would be next to zero. This issue is further emphasized by an examination of the existing leisure situation. Leisure in Nigeria today exists on many levels, depending of the levels of education, exposure to western values, and standard of living. This also true for 'advanced countries' but the difference lies in the fact that the range of activities engaged in by the different levels is wider in Nigeria. Ranging from primitive playforms to the most sophisticated types available elsewhere. These different levels can be broadly grouped into two sections. Each with its own sub-groups. The first level will consist of activities which are based on the old traditional playforms described in the previous chapter. The class of people which engage in these

playforms are mostly those in the rural areas where small scale subsistence agriculture is still a dominant economic activity, and where exposure to western values is still minimal. Their leisure is usually tied agricultural or religious festivals, though some leisure pastimes could be played at any season of the year, for example in the evenings. Examples of the later type are:- Story telling, weaving, plaiting of hair, Ayo' (a Yoruba game played with seeds) social drinking. The former (those tied to some sort of festival) include: wrestling, dancing of various forms. Boxing (among the Hausa) fishing (e.g. Argungu fishing festival) canoe races, farming competitions, magic displays and so on.

TRADITIONAL BOXING

Among the Hausa, this was and still is an activity that attracts a lot of attention. It's a highly organized game. Special attires are worn by the boxers. Gloves, consisting of pieces of cloth wrapped around one hand. Each boxer has to go through ritual preparation for protection from his opponent. Boxing matches are always accompanied by a group of singers and drummers who add to the festivity of the area. Usually food is prepared by the host village and boxers and spectators alike eat at no cosy to themselves.

DANCING

This is the most prevalent activity engaged in by all age groups. They are usually accompanied by musical

instruments. Each dance usually has a special significance with specific dance steps and a unique attire or body painting technique.

MAGIC DISPLAYS (YAN HOTO)

This is also another popular Hausa activity. It usually takes place in the village grounds and is engaged in by people from all walks of village life. A man would step out into the open, shout and sing his praise names and Titles and then perform some magical feat to the astonishment of the spectators gathered round. This pastime usually takes place at the end of harvest periods.

WRESTLING

This, like boxing, attracts a lot of attention and also requires special dress and hair styles to be worn by the participants. It is accompanied by musicians who urge their various protegees on to greater feats of strength. Such competitions were usually organized between neighbouring villages and a lot of prestige was attached to winning. At the end of the match, the spectators and musicians would often poke good natured fun at both the winner and loser.

From the foregoing descriptions, a few salient characteristics of the 1st level of play activities are evident. Virtually all these activities, are accompanied by musical instruments and singing - creating a generally

noisy festive atmosphere. Secondly, most have a special attire which is worn by the participants and are usually vigorous and energy sapping. It is thus not surprising that food and drink are always consumed in large quantities on these occasions. Finally, a large proportion of the activities are of the spectator type. That is only a few people participate while the greater majority watch.

The first level of leisure thus described is rapidly decreasing in popularity as education and standards of living increase, thereby opening up an awareness of outside influences. This often results in a modification of tastes. Especially among youths who have not had the opportunity of being reared into such pastimes, inevitably, they lean more towards western values of leisure than did their forebears.

The second level of leisure engaged in by Nigerians have gone through formal education or some other form of contact with Europe and America, consist mainly of activities aquired from these places. People who participate in such activities are usually resident in towns and cities where the majority of the population is not involved in the primary sector of the economy i.e. Agriculture and the extractive industries. A brief account of the type of activities comprising this level is given below.

GAMES AND COMPETITIONS

This form of leisure has captivated the attention of a large proportion of Nigerian people especially among the middle and low income earners, who spend a lot of time and money following the various sports competitions and festivals around the country. Football features prominently on the list - others include table tennis, wrestling and boxing (international) volleyball, lawn tennis etc. Any Nigerian will attest to the vast number of sports festivals perpetually in progress around the country. More air time on television is alloted to sports than any other programme excepting News and Current Affairs on N.T.A. Channel 2 Lagos. In August 1982, the following sports programme were on the air once a week: Brazzilian Soccer, Mid-week sports, Saturday sports, Lawn Tennis, I.W.A. Wrestling. In fact wrestling seems to have become a very popular T.V. programme. Therefore, any leisure centre in Nigeria, depending on the local situation cannot really be successful without at least one of these activities, especially those which do not require much skill and learning.

SOCIAL EXCURSIONS

This is also very popular among all Nigerians but the frequency at which it's undertaken depends to a large extent on the money available and mobility of the individual. This pastime includes: Social Drinking (At Hotels, Night Clubs, Local Bars). Going to parties, eating at restaurants, going to beauty salwons, cinemas, beaches etc. By far the most

popular of these is social drinking. In some parts of the country especially in the south, there's hardly a street that does not have a beer parlour. or hotel of some sort. Breweries are some of the fastest growing bussiness converns in Nigeria. We have 19 states and more than 20 Breweries. This aspect would thus play a vital role in any leisure entertainment centre. This form of leisure is not so widespread in the North because of the greater influence of religious restrictions in that area.

DISCOS, PARTIES, PICNICS

Also a popular pastime especially in big urban centres. A predominantly Night-time activity which affords an opportunity for people to dress attractively and to ease tension. One of the basic factors which attracts party goers is that they environment at such occassions is entirely different from any other day-to-day social activity. Loud music, pulsating multi-coloured lights, the crowds and fashions on display, heavily interior decoration helps to create an atmosphere totally removed from reality. It provides an escape from everyday problems. It is especially prevalent among the younger generations, between the ages 15 - 27.

RESTAURANT

Yet another popular leisure time centre. On public holidays and occasions involving some sort of celebration people would often go out to eat in a restaurant - for a change of

eating atmosphere. In Nigeria, any abundance of food usually implies some festival or celebration of a sort.

BEAUTY SALOONS, SHOPPING

This activity, I believe, is also a leisure activity. Though partially essential (for women especially) they are done in time away from any need to work. Moreover, Beauty Saloons are fast becoming social centres and meeting grounds. Added to this is the fact that they serve as distractions from day-to-day activities. Likewise, shopping, no longer being restricted to particular market days, is also becoming a leisure activity for those who can afford it. The rich in Nigeria often travel out of the country just for luxury inessential shopping. Some Nigerians enjoy just plain window shopping - to relax and day dream.

CINEMAS

This is still a popular leisure place though its popularity is somewhat reduced in extent because of a standard of living which affords more families opportunities of owning a T.V. which reduces the attraction of spending money to watch a film at a cinema.

BEACHES

Very few in the country since only a few cities are located close to the sea. However, the few available are

all very popular spots on Sundays and public holidays. Visitors to the Beach include people from a wide range of income groups.

HOLIDAY RESORTS, AMUSEMENT PARKS

This category consists of facilities which are relatively new in the country. They are very few and in the case of Amusement Parks, located in Urban centres, and geared towards children. There's only one popular major holiday resort in Nigeria - Yankari, Game Reserve. Unfortunately most of these facilities are inaccessible to lower income groups. Peak times for these centres are on the numerous public holidays that abound in the country. The major Amusement Parks are at Apapa and Ikeja (Lagos). Enugu, and Ilorin. Most are either not functioning or inadequately supplied with facilities and attractions.

CONCLUSIONS:

Leisure in Nigeria is basically western oriented especially in the cities - though a few older leisure pastimes still persist today, but on a very small scale and in predominantly rural areas. Thus any leisure centre in Nigeria has to cater more for aquired western habits than any other. However Nigerian preferences and attitudes should be respected. e.g. one needs to make provisions for adequate eating and drinking and for a noisy festive and distracting atmosphere, and some spectator, and competitive games e.g. table tennis or dances and theatrical productions.

CHAPTER THREE

CASE STUDIES

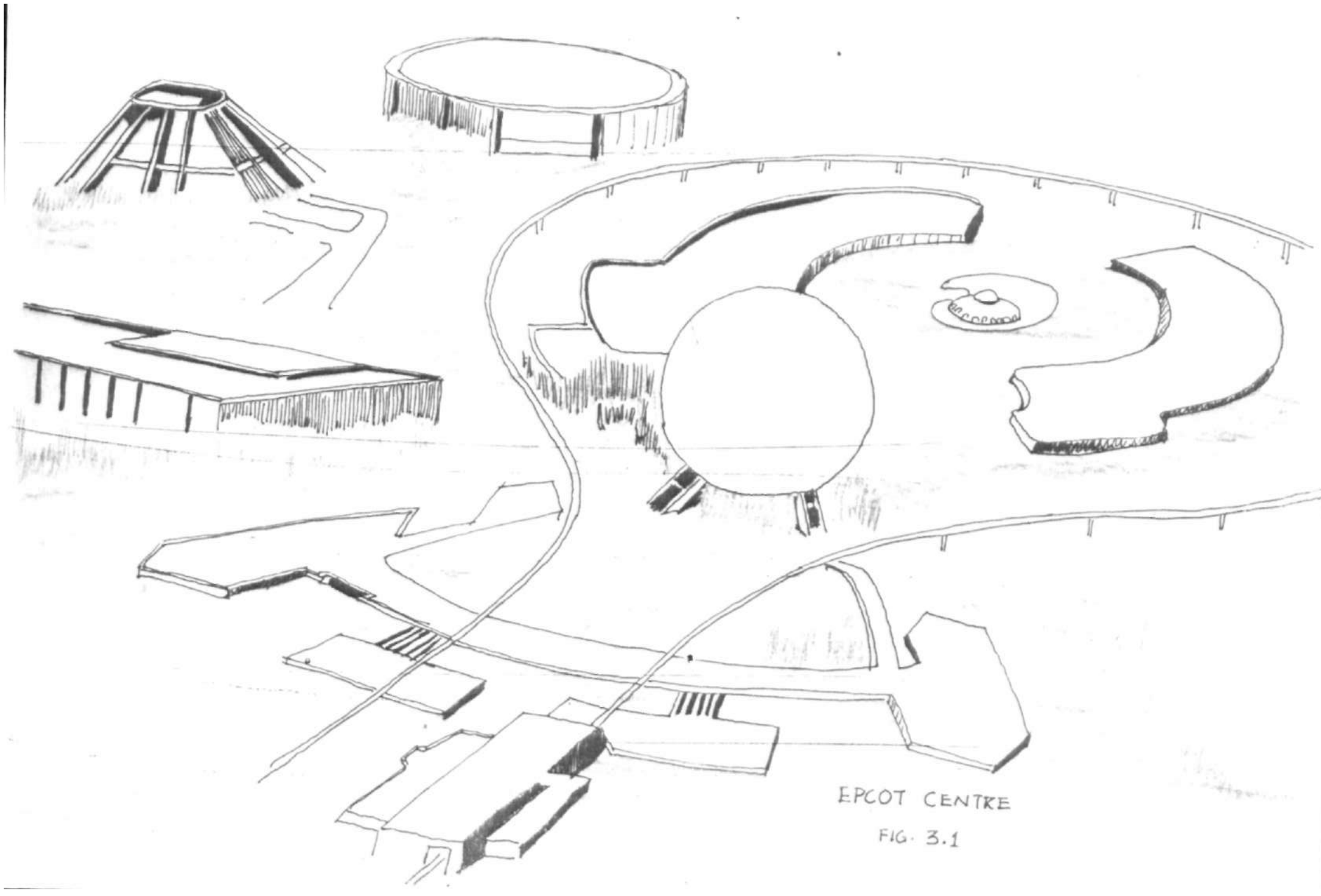
A. EXPERIMENTAL PROTOTYPICAL COMMUNITY OF TOMORROW

LOCATION:- WALY DISNEY WORLD,
FLORIDA U.S.A.

ARCHITECTS:- WALY DISNEY ENTERPRISES

The experimental prototype community of tomorrow (Epcot Centre Fig. 3.1) is one of the most recently constructed leisure centres today. As the name implies, it was originally intended to be a place where "people actually live a life that they can't find anywhere else in the world today. Epcot will be a living blueprint of the future..... a fully operating community with a population of more than 20,000. Here American free enterprise will constantly introduce, test and demonstrate new concepts and technologies years ahead of their application elsewhere." Unfortunately by opening day in October 1982, the centre had not achieved this aim. It had become in essence, just a gigantic themepark.

The entire 550 acre site was divided between 2 major theme areas. The first was the future world (Focus of this case study) - exhibiting all the latest technology in photography, transport agriculture, communication etc. The second theme area is the world showcase consisting of full size models of important places and buildings from all over the world, arranged around a man-made lake. At the entrance to the centre is the first major presentation in the future world, called the spaceship earth.



EPCOT CENTRE

FIG. 3.1

This is a huge 18 storey steel geosphere. Here the history of communication is traced from the first cave images to computers whose electronic pathways take you to the very edge of space. This structure is the first geodesic structure to achieve a complete sphere with a diameter of 165 feet. The sphere rest on two supporting 'legs' which contain the earth station (The 'City Hall' of the complex), and its key information system. The sphere is actually two seperate spherical structures. One inside the other. The outer sphere is held 2ft. away from the inner one, and contains aluminium support frames for 954 triangular aluminium panels. The inner core is made up of steel structural members arranged in typical geodesic form. Its multilevel decking houses the spiralling route for the ride system. The upper portion of the sphere is a giant projection screen where a planetarium effect is achieved. The ride system consists of a rail track which spirals around the interior surface of the globe, and several cars which carry a total of 228 guests. Around this primary monumental structure, are arranged all other presentations of the future world, each in a seperate building.

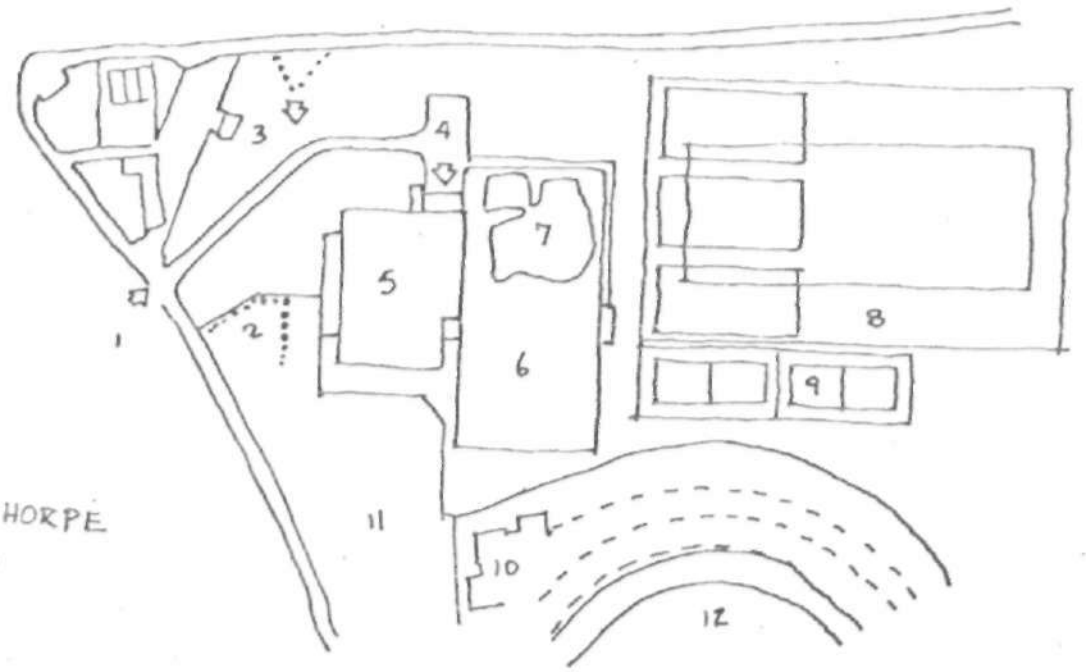
The Universe of energy takes one through the great geological upheavals that enfolded fossil fuels deep within the earth up to the present and on to examine the energy sources of the future. The presentation involves the most complex film system ever developed. Even smells are simulated to give the viewer a feeling of actually being present in the film scenes.

The roof of this pavillion carries a six acre area covered with 80,000 photo voltail cells producing power to drive the six electric passenger vehicles carrying a total of 600 people within the world of motion housed in a building shaped like a wheel is 3 shows in one - an interesting ride through the history of transportation takes guests to the centre core, a six storey high kaleidoscope view of a futuristic city. Then on to trans-centre, the showcasing of advanced concepts in present and future transportation systems.

The journey into imagination presented by kodak is in two parts. A ride through the creative processes in photography and participation in an electronic centre where one can draw colour pictures on a screen with a finger. Second is the magic journey theatre which screens the world's largest 3-dimensional motion picture ever produced. The landscaping at Epcot was also on a monumental scale. Millions of cubic metres were moved to create hills, ramps, valleys, berms and so on. Over 12,000 trees were transplanted and thousands of flowering plants were nurtured. (Readers Digest, August 1982).

This case study presents a really gigantic and interesting picture of an educative, entertaining exhibition centre. Its relevance to this thesis will, along with that of other case studies, be examined at the end of the chapter.

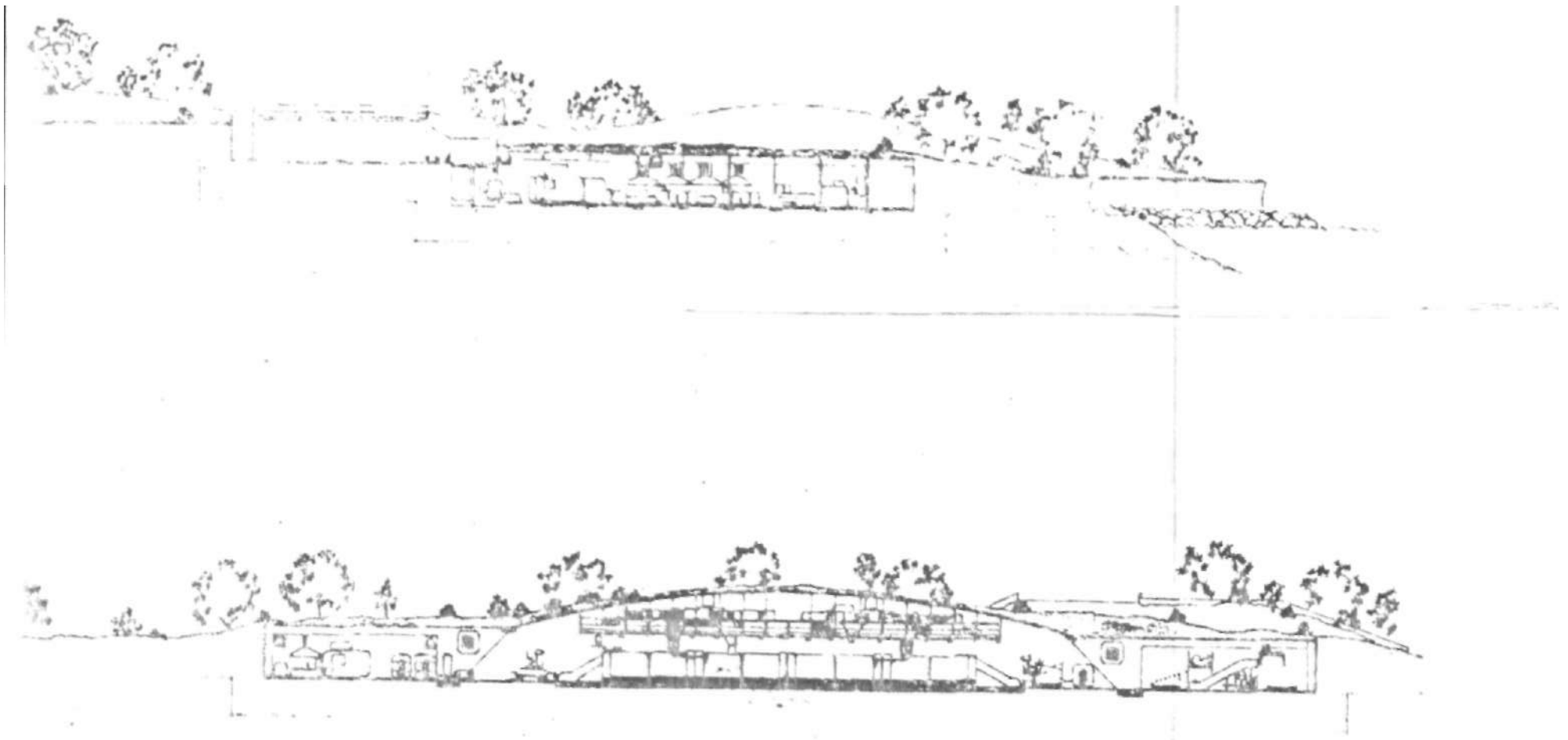
1- SERVICE ACCESS
2- PEDESTRIAN ENTRANCE
3- FOOTPATH TO MAIN ENTRANCE
4- SERVICE AREA
5- SOCIAL UNIT
6- SPORTS HALL



HERRINGTHORPE
LEISURE
CENTRE

SITE PLAN

7 - POOL
8 - HARD PLAY AREA
9 - TENNIS COURTS
10 - EXISTING SPORTS PAVILION
11 - CAR PARK
12 - ATHLETICS TRACK.



Features: Monte Carlo Sections

FIG. 3.3

even guess its size, shape, colour or sonic distance, since it would be constantly changing. The actual concrete never being visible wither from outside or inside.

It was discovered that the optimum space and structure suggested a circle that was covered by a concrete dome. This space will be buried in the ground and covered with landscaping. A steel gantry is suspended from the dome to form a ceiling. It also supports a crane which does the rearrangement for various purposes. Service outleys are located in the floor and ceiling on a 6m grip. These outleys in the roof supply the open paruland above the dome so people can plug in electrical appliances e.g. radio, air cooler, fans, airbed, telephones etc. Projection televion is provided so that major events going on can be reprojected onto a huge screen so that minute details may be observed and instant replays shown. The large number of configurations which the place can undergo is astounding; added to this is the fact that several events can go on at the same time. This gives each individual a choice in determining what to watch at any given time. The salient innovation however, is that within this shell, many different environments can be simulated thus ensuring great flexibility. Each individual would be able to find at least one item to entertain himself with.

WONDER WORLD: Corby, Northamptonshire, England.
(Fig. 6.4)

This is a gigantic themepark proposed basically as a tribute to British Heritage. It's scale and approach to design are very much akin to that of Disney World. Though it is expected to play a much more important role in everyday life. It is a multi-themed leisure place set in beautifully landscaped surroundings which provides a wide range of facilities and attractions. The project includes a vast weather projected centre which houses a wide variety of attractions, each based on a particular theme such as the technology of the day, social or environmental matters or even folklores. It works like a gigantic exhibition centre with the biggest amphasis on participation. In this respect it's different from most other themeparks. One learns about the digestive process by taking a boat ride through a huge replica of the human ailimentary canal. Restaurant/Bar is provided which is shaped like an any and is capable of being shifted around this is the British answer to Waly Disney.

SUMMARY

From the preceeding case studies, a few salient points may be observed concerning the general approach to leisure centres around the world.



FIG. 3.4

They all provide to differing extents, environments w which are different and distractive from what obtains in the everyday life of its visitors. The Herringthorpe leisure centre provides a tropical climate and vegetation which is totally removed from normal British climate. This serves to increase interest in the centre - thereby contributing to its success. The showcases at Epcot centre brings one out of the present into the past or into the future by simulating conditions which obtain at such periods. This is total distraction which as mentioned earlier helps one to relax better.

Secondly, there is an air of innovation and inventiveness about them all. Something new and different is going on. At the Epcot centre, latest technologies are on exhibition, the worlds' biggest 3-dimensional screen is constructed, plants are being grown in zero gravity, and the world's first complete geosphere. At the features, Monte Carlo, a new extensive flexibility is introduced. Things can now be completely changed round at will. The wonderworld unique space simulators and rides. They all give a feeling of man's unlimited creativity as well as making visitors subtly aware of all the latest improvements in various fields of endeavour.

Thirdly, they all present projects which are closely connected to landscaping. At Epcot, landscaping was done extensively and was a major consideration.

Lastly, there's a wide range of activities provided. So that all age groups will be catered for - an abundance of facilities. Thus the areas of emphasis in the design have been brought to light.

CHAPTER FOUR

THE CONTEXT - ILORIN

Ilorin, capital of Kwara State, has a population of over 400,000 and is the biggest urban centre in the state. The indigenous people are the Yoruba, Hausa, Gobir, Nupe and Fulani but by far the largest group is the Yorubas, in fact Ilorin can be conveniently called a Yoruba city. Despite this predominance of Yorubas, the city still maintains strong cultural and religious ties with the old Northern region. For example, the majority of the people are moslems (Fig. 4.1) and since 1831, Ilorin has been an emirate. Islam has a great bearing on the festivals in Ilorin are mostly moslem festivals, such as the great Beiram Kabir and Maulud Nabiyi.

Regarding the cities economy, there exists a diversity of occupational types and participation in the various sectors of the economy. Agriculture is no longer a major economic activity:- Manufacturing, commerce, construction and home industries also fall within the city's economic sphere (Table 4.1). Thus Ilorin is not rural but urban in character since agriculture no longer carries a large portion of the labour force. It can therefore be considered, taking all the factors mentioned above, to be big enough in terms of available services and infrastructure to support a large leisure centre.

ECONOMIC ACTIVITY	MALE	FEMALE	TOTAL NUMBER	TOTAL DISTRIBUTION
AGRIC.	3700	175	385	3.2
MINING	125	0	125	0.1
FACTORY	1850	75	1925	1.6
CARPENTRY	1975	25	2000	1.7
HOME INDUSTRY	9375	4650	14025	11.6
TAILORING	2675	2125	4800	4.0
OTHER WORKSHOPS	3975	2050	6025	5.0
ELECTRICITY, GAS	500	0	500	0.4
CONSTRUCTION	2775	25	2,800	2.3
TRADE, HOTEL RESTAURANT	11975	3125	15100	12.4
STREET TRADE	—	43825	43825	36.2
TRANSPORT COMMERCE	475	50	4,800	4.0
FINANCE	500	225	725	0.6
COMMUNITY SERVICE	16525	3775	20,300	16.8
OTHERS	175	50	225	0.2
TOTAL	60,875	60,175	121,050	100.0%

LABOUR FORCE PROJECTION FOR ILORIN

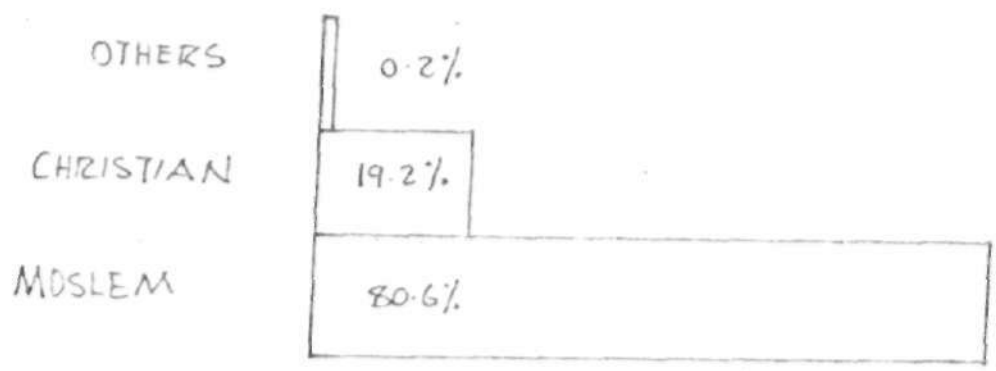
TABLE 4.1

STATUS	CIVIL SERVANT	OWN ACCOUNT	EMPLOYER	PRIVATE EMPLOYED	FAMILY MEMBER	TOTAL
NUMBER	14,350	93,325	1425	11,175	775	121,050
PERCENT	11·9	77·1	1·2	9·2	0·6	100
HOURS	45·21	56·75	60·81	55·81	59·39	55·36
INCOME	81·09	28·45	75·77	37·42	—	35·89

EMPLOYED POPULATION BY ECONOMIC STATUS.

AVERAGE HOURS/WEEK AND AVERAGE INCOME

TABLE 4·4



PERCENTAGE POPULATION BY RELIGION

FIG 4·1

NEED FOR A LEISURE CENTRE

Despite the size and urban nature of Ilorin, it has only one amusement park which does not adequately cater for the population. The facilities provided are minimal - a snack bar, six swings for children, and about four cages containing monkeys. The rest of the park consists of just landscaping which is well maintained. However, because of a lack of better alternatives people still come there in large numbers. On any of the numerous Islamic Public holidays, in search of a different environment, other than their homes in which to celebrate, to mark a special occassion. Recently however, attendance has been declining because the park has [illegible] boring since there are not enough facilities to keep one entertained for an appreciable length of time.

From this, there are very few places of interest to go to when visiting Ilorin and often are the times when visitors to the city complain of any data lack of interesting places to visit. This need is further emphasized by the fact 47.7% of the entire population are below the age of 14 years of age (Table 4.2). These age groups need and have time for amusement; which should be properly organized. There are also the students of the various secondary schools, the University, and other higher institutions whose tastes, aquired through formal education would not be satisfied by the existing amusement park. However, other leisure facilities and activities do exist in Ilorin and these are described in the following sections:

SECTOR	1975	1980	1990	2000
PRIMARY	4.100	4,700	6.000	7.700
SECONDARY	35,600	44,200	75,500	138,200
TERTIARY	93,400	108,900	158,100	238,100
TOTAL EMPLOYMENT	132,800	157,800	239,600	384,000
LABOUR FORCE	135,475	160,920	244,400	391,700
URBAN PARTICIPATION RATIO	44·8%	44·7%	44·5%	44·0%

PROJECTED DISTRIBUTION OF EMPLOYMENT

TABLE 4·2

A. ATHLETICS AND ORGANIZED GAMES

(Football, Boxing, VollayBall, Hockey etc.)

These are adequately provided for at the new "ultra modern" stadium proposed for Ilorin, a part of which has been constructed and is now in use. Participants are usually semi-proffessionals or school teams engaged in organized contests. This type of leisure activity will not be considered as part of the thesis for the following reasons.

1. These sports are becoming less of leisure activities and more of a professional and economic one.

2. They require a substantial amount of skill and training before one can enjoy playing them.

3. As stated above, these activities are being adequately provided for already at the new complex.

4. A lot of entertainment is often derived from watching these games, but nowaday', one needs only to switch on the television set to get that satisfaction and these will be provided in adequate numbers at the proposed entertainment centre.

B. INDOOR GAMES

(DRAUGHTS, LUDO, TABLE TENNIS)

These are very popular leisure pastimes which usually take place in front of one's house or by the roadside in the late afternoon with a few spectators gathered round.

C. EATING AND DRINKING

There, exists an abundance of hotels, bars and restaurants in Ilorin, catering for various tastes and peoples. This could be said to be the most prevalent leisure facility here. This indicates the importance of this aspect to the people despite their islamic backgrounds. The proposed centre will contain provisions for this.

D. THEATRICAL AND MUSICAL PRODUCTIONS

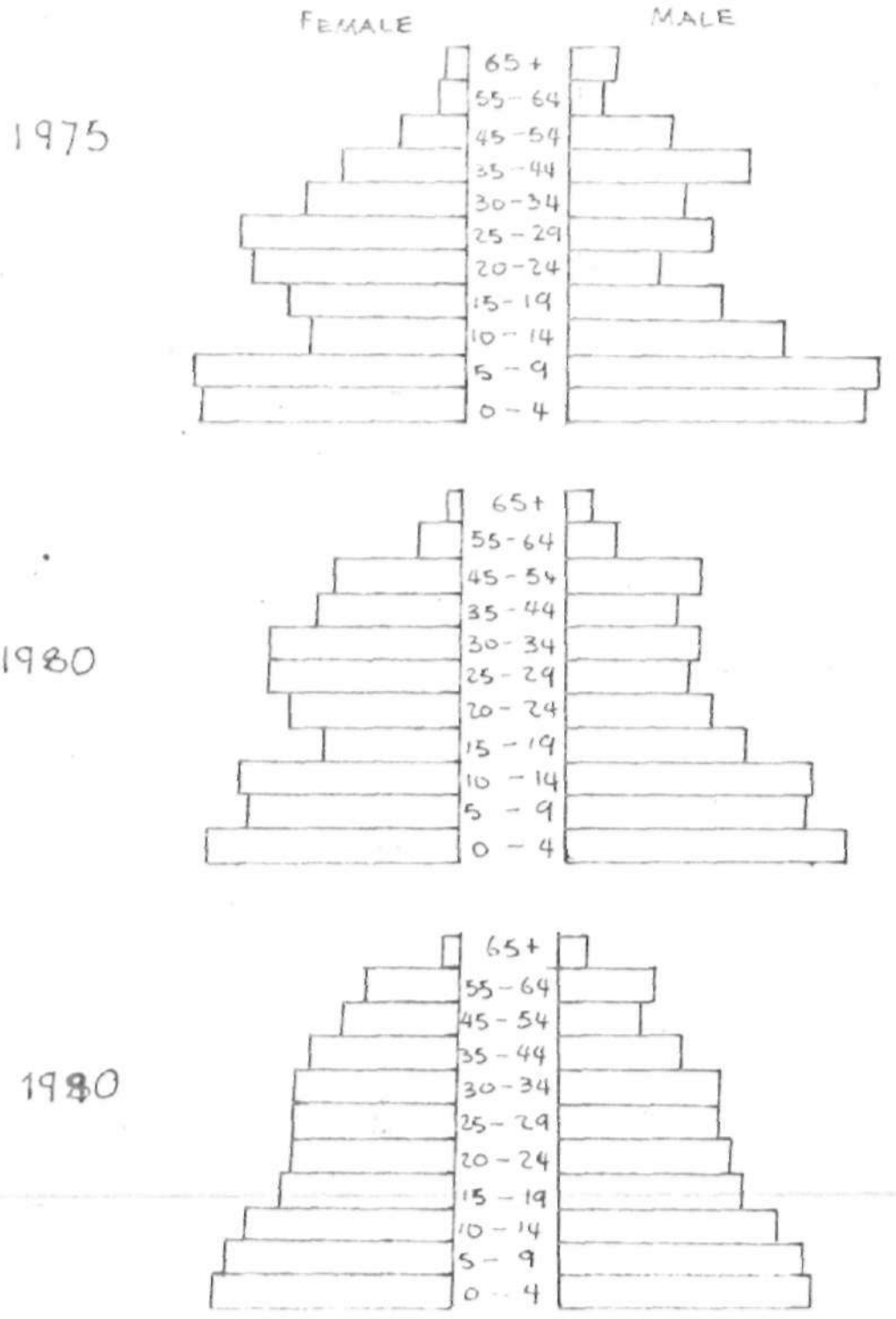
Attending these is another popular pastime here as in most other parts of Yoruba land. Travelling Theatrical Companies such as Baba Sala, Jacob Papy-Lolo and Traditional as well as modern musicians often visit the city. unfortunately no facilities for them exist. They always end up performing in Hotel Lobbies, the stadium and at times the Cinema house. A major fault which can be corrected by the new centre.

E. DISCOTHEQUES, PARTIES, PICNICS

As in other parts of the country, these are basic leisure pastimes, but more so among the Yoruba who need only the smallest excuse to throw huge parties.

F. SWIMMING

A very popular activity among students and the main pool in town (at Kwara Hotel) is often crowded on hot days.



PROJECTED AGE-SEX DISTRIBUTION

FIG. 4.2

G. AMUSEMENT PARK

This has already been discussed in the preceding sections.

H. SHOPPING

This too is an important leisure activity, as was discussed also in the previous section.

The above are some of the popular leisure pastimes in Ilorin. One may ask if the city really needs an entertainment/ leisure centre if all of these facilities described already exist. The answer to this would be that, though quite a few facilities exist. They are scattered all over the city. Each providing for only one or two leisure pastimes. Thus in order to get a complete range of activities, one would need to do a lot of shuttling around town from one place to the other. There is therefore a need to have a centre where these activities can take place within a relatively small radius of movement. Such a centre would also incorporate facilities which have been left out unwittingly.

SOCIO-ECONOMIC SURVEY OF ILORIN AGE - SEX DISTRIBUTION

(FIG. 4.2)

From the Bar Chart shown in Fig. 4.2, it will be observed that there is a predominance of children under 14 years of age. They form 47.7% almost half the entire population in 1975. This percentage is expected to decrease to about 40.5% by 1990,

due to better family planning and consequent low birth rates. The ages between 15 - 28 seem to be much smaller than expected. This has been attributed (Ilorin Master Plan) to mass emigration to schools of higher learning and in search of better jobs in Lagos, Ibadan, Ife and to the North. However, with the establishment of a University and Colleges of education, technology, the various secondary schools and an increase in good, well paying jobs. This trend is likely to be reduced, thus increasing the percentage of youths (15 - 28) which remain at Ilorin. Thus from the 1980 chart, percentage of youths from 8 - 24 is 38%.

Thus it can be safely said that about half of the total number of visitors to any amusement centre will be 28 years and below. This will affect the design and planning of the leisure facilities since age often dictates the type of activities engages in. Youthfull activities are more energetic and involve a greater range of mobility than the older age groups whose leisure becomes progressively less energetic, localized and more contemplative with increasing age. Thus the younger ages being more in number, and more mobile, would require bigger spaces and more energetic games than the older generation. Youth are also better able to absorb innovations. Play structures for them need not be traditional, new ideas can be introduced.

PROJECTED DISTRIBUTION OF EMPLOYMENT

(TABLE 4.2)

This table highlights a trend which indicates a general decrease in the urban participation ratio. as well as a shift in the distribution of labour between the three major sectors, both the primary and tertiary sectors show a decrease while the secondary sectors, shows an increase; absorbing the excess from the other sectors. This has been attributed (Ilorin Master Plan) to an increase in education level attained by the working population. The decrease be due to the following.

A. An increase in the pace of educational opportunities, implying that people spend more years at educational institutions before being released to the labour force.

B. Married immigrants with steady employment tend to bring their families with them thus increasing the non-working population.

What this implies is that since a smaller proportion of the population will be engaged in active economic work a greater number will be free from work and therefore free to engage in leisure pursuits.

INCOME DISTRIBUTION (Table 4.3(a) 4.3(b)

The table shown in table 4.3(a) shows the distribution of income between the various income groups of Ilorin. This protection indicates an increase in the share of income taken up by the medium and low income groups and a corresponding

decrease for the higher incomes. Table 4.3(b) shows the projection monthly income per household (in Naira) for 1980 and 1990. The table shows an increase in the average monthly income of household in Ilorin.

These two tables together indicate a rise in per capita income and consequently living standards, which is expected to lead to more people having no need to work (especially women) and to early retirement. This means an increase in the number of people most likely to be interested in a leisure centre were free time can be pleasantly occupied. It also indicates a possibility of people having more money to spend on leisure.

This projection is, however, not entirely accurate as it does not take into consideration the rising inflation and cost of living. The inflation will have a negative effect. Thus neutralizing the positive aspects of an increasing per capita income. This does not mean Iloring people will no longer spend on leisure or even that this money will be substantially reduced from one's observation, people often spend huge amounts of money on pleasures (e.g. drinking, parties) despite the pinch of inflation - especially in Urban areas.

EMPLOYED POPULATION BY ECONOMIC STATUS (TABLE 4.4)

From the table, the majority of the working population works between 45 - 59 hours a week (approximately 9 - 12 hours per day) civil servants work the least number of hours and yet

earn the highest salaries. Civil servants will thus probably form the biggest proportion of working class visitors to any leisure centre at Ilorin, since they spend less time at work (more free time) and have more (average of ₦81.09 per week) to spend in this time than do other workers.

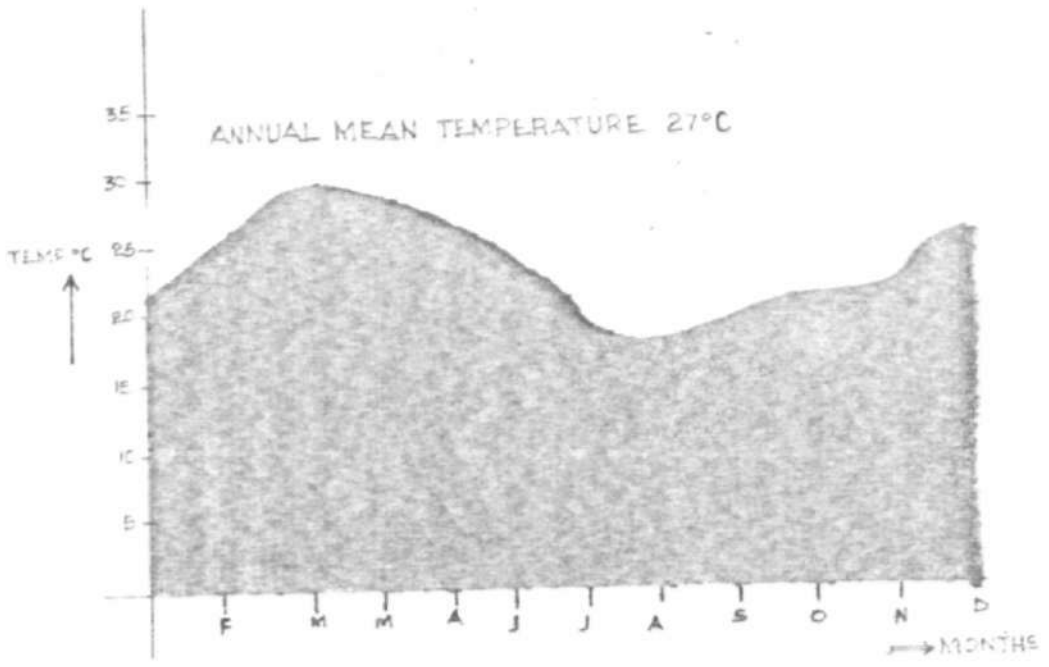
The largest group of workers are own account workers, mostly street traders (Table 4.1) who spend 56.75 hours working per week for meager incomes. These are not likely to have enough time or money to spend on leisure as they quite quite often work on public holidays.

CLIMATE, VEGETATION, GEOLOGY

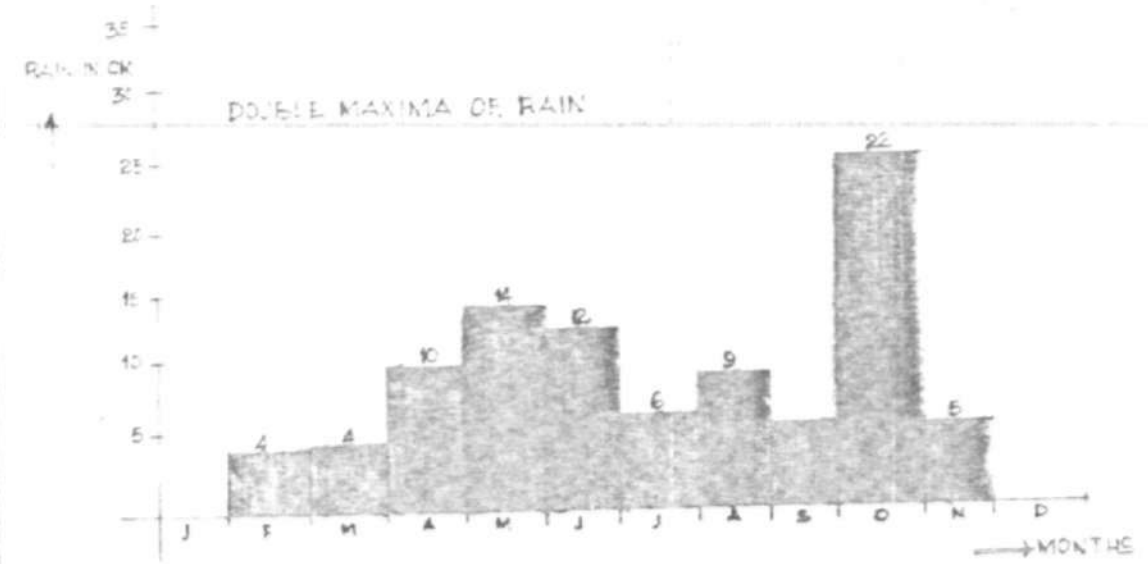
Ilorin falls within the hot humid climatic zone with high temperatures and rainfall the year round. Temperatures range between 21 - 24^{o}C with the hottest period being February and March. It then decreases from a peak of 24^{o}C to a low of 21^{o}C in the months of June, July, August due to the moderating effect of the peak rainfall in June. It then begins to rise again, falls in October - November and picks up again until it reaches its climax in February.

The rainfall follows a similar pattern and the months just after peak rainfall show the lowest temperature readings. Ilorin has a double rain peak the first being June - July and the second in September/October. However the rain persists virtually all year round and the effect of the harmattan winds isn't felt until December and January even then it's very short lived.

CLIMATOLOGICAL DATA



TEMPERATURE CURVE ABSOLUTE MEAN

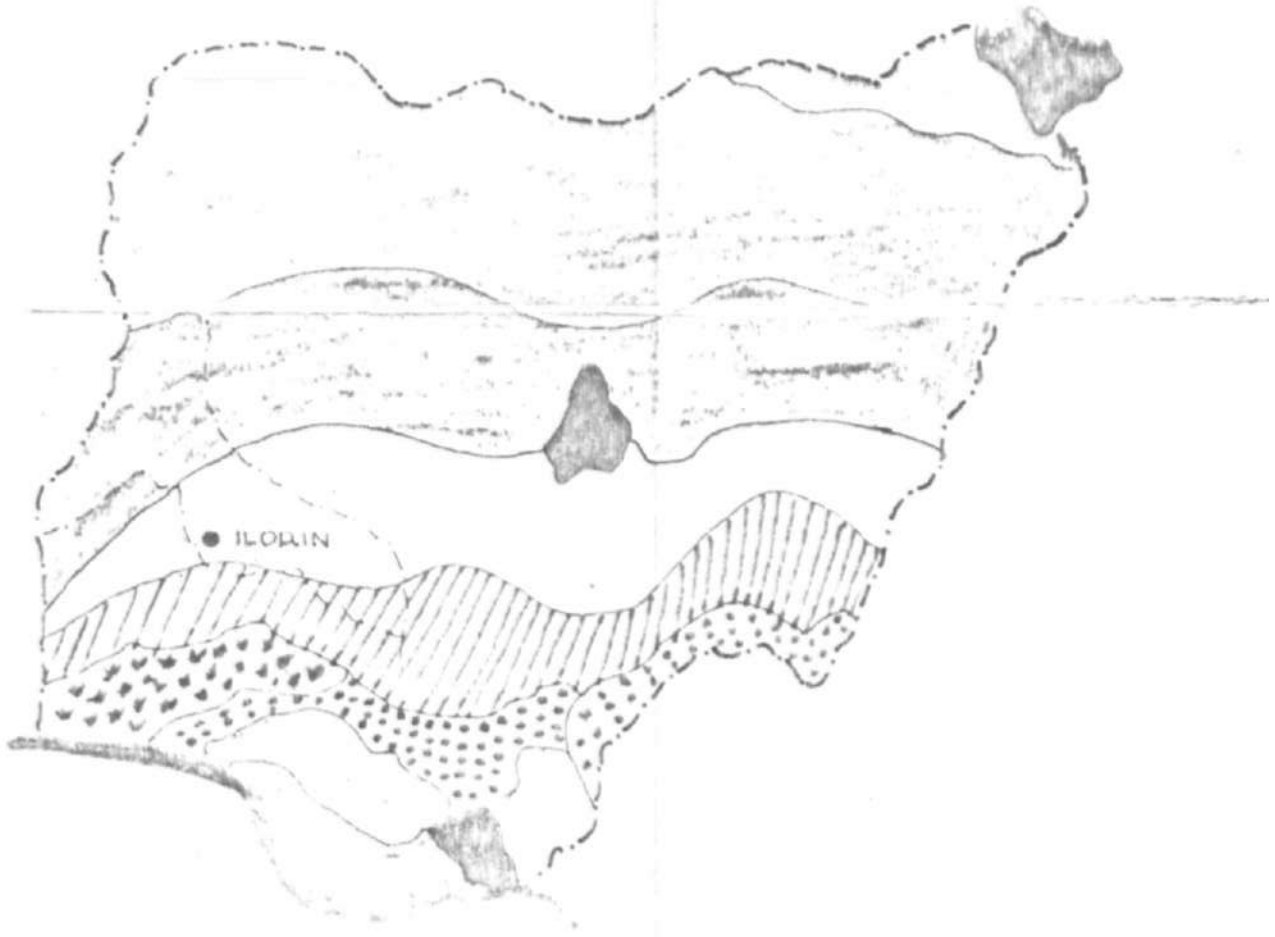


RAINFALL HISTOGRAM WITH Nº OF RAIN DAYS

FIG. 4·3

VEGETATION OF NIGERIA





GEOLOGICAL SURVEY OF NIGERIA.



TERTIARY-RECENT VOLC

RECENT

TERTIARY

UPPER CRETACEOUS

LOWER CRETACEOUS

PRE CAMBIA BASEMENT

FIG. 4.5

VEGETATION

Because of it's climate, the vegetation type of Ilorin consists entirely of the south Guinea Savannah vegetation. This is characterised by a predominance of grasses and shrubs interspersed with trees, mostly of the evergreen type. Common tree types are shea butter and nim tree. The climatic and soil type (lateritic) are however, conducive to a much wider range of tree type than are found in the area. Trees such a fragipan: flamboyant and parkia clapertoniata would do quite well in this zone.

GEOLOGY

The basic substratum here is the precambrian basement complex. It is an old sturdy rock type consisting of granitic rocks with high structural capabilities and thus a high load bearing capacity. Foundations generally need not be specially treated as a major constraint. The soil type produced by the weathering of this basement complex is mostly of the acidic lateritic type which has good structural capabilities as well.

CHAPTER FIVE

DESIGN GOALS

From the previous chapter, one can see that Ilorin lacks an interesting and entertaining leisure place, which isusually necesseary for any urban centre. Those which exist are by nature of their location (in the city centre) and facilities provided not capable of adequate distraction from the busy city environment. Yet distraction is a basic ingredient of leisure - distraction from various pressures, distraction from work and the work environment. It is only in this state that one can truly be at leisure to immerse oneself in whatever leisure activity one desires. The major design goal of this thesis would therefore be to create an environment geared towards total distraction from everyday life and its attendant pressures. This can be achieved by various means, some of which are outlined below:-

LANDSCAPING

Lanscaping allows for a wide range of possibilities to create an interesting environment. Hills can be created from excavated soil, earth berms, man made lakes, waterfalls etc. can turn the land itself into a sculpture piece. By using trees and shrubs, vistas can be created to highlight interesting features of the site as well as adding to scenic beauty. Trees can also be used as ornamental objects especially flowering trees

such as frangipani or the flame tree. Variations in light and shade over the park is also possible by altering the density and form of the trees. Flowers, shrubs and grass enhance the beauty of the environment when they are well treated. Other landscape Hardware such as benches, footpaths, sign posts, fountains, steps and sculpture pieces also offer means or creating interest.

ARCHITECTURE

The built environment can also be used to create interest and to distract attention. To successfully achieve this goal, the form of Architecture should be different from whatever may be common in the city. Forthermore, psychologists have been able to determine the kind of shapes and forms which promote feelings of festivity and playfullness (A.R.G. Isaac, 1971). These forms are based entirely on curves and circles, while straight lines and acute angles are said to be more rigid. This assertion seems to hold some truth when one considers the fact that very may games and leisure pursuits contain or are based on circular or spherical objects and areas. A ball is spherical, a racket is circular, stadia and theatres are often based on circles or curved forms. When dancing we think of a dancing ring or "ball" room dancing. This consideration will play a very important role in the thesis. In fact, as much as possible, the

Architecture of the centre will be based on the circle and curved line.

COLOURS

It is generally known that colours do influence the behaviour of people though to extents (Neufert: 1970: published) these could also be brought into play to enhance the beauty of the place.

FACILITIES

Ultimately these are what would determine the success or failure of the centre. They will also have to be beautiful and interesting enough to absorb attention. This will also require that they be innovative to some extent or at least provide different experiences from everyday ones. Movement between facilities is another avenue for creating the totally distractive environment. Usually in parks and centres of this nature, (in Nigeria) the various facilities are provided such that as you leave from one to another, the entertainment ceases until one gets to the next. I propose to make this movement interesting such that even while moving from one point to another, one is being entertained. Passing through tunnels, along ramps changes in level, creation of vistas, the use of mechanical passenger conveyors, escalators and the like, are some of the ways by which this can be achieved.

LOCATION

This is also a factor affecting a leisure centre, and it contributes to the amount of distraction which can be achieved. Where the centre is located in the heart of the city, and close to a very busy traffic node (as in the case of Ilorin Amusement Park) noise from the surrounds will prevent adequate relaxation. Moreover, the feeling of "Going Out" or "Getting Away" is drastically reduced compared to when the site is farther from the city centre. Perhaps a site a little out of town or, in the least, secluded, would be best for such a project. This was taken into consideration when selecting the site.

In order to maximise the entertainment derived, it would be advantageous if provisions are made such that one could spend a whole day on the site. The most basic provision in this regard would be food, than a place or places for rest and calm occupations.

Another goal, related to the first would be to arrive at a design which accomodates all age groups. This implies a very wide range of activities where each group can be pleasantly amused. For the younger children say those under 7 years of age. Supervision for their play is essential, though their radius of activity is limited. As age increases, more open spaces are needed. Accomodation of such a wide range of age groups is perhaps essential since people spend a whole day here and are thus more likely to bring children along with them rather than leave them untended at home.

Safety should also be an important consideration for any age group but more so for the younger ages.

Night-time activities among the youths and young adults. The need for this has already been identified in the last chapter.

Everyone will admit that Nigeria as a whole, is technologically backwards campared to other advanced nations despite the fact that we have quite a few creative minds in this country, in addition to the abundant universities colleges of science and technology. Perhaps one reason for this is that we as a nation are afraid of being inventive, but more than this, the greater problem is probably that the greater majority of Nigerians are not aware of just how far behind we really are.

People do not know about technological advances going on elsewhere around the world, since we spend all our time looking back at our past. Maybe its time to stop cultural dances festivals and the like and open our eyes to the twentieth century. Mankind is reaching out making achievements and we have to expose ourselves to these advances in order to gain from them or at least to secure an awareness in people of the need to sit up and do something positive for a change. I believe a leisure centre offers an opportunity to expose people to higher technology in a relaxed atmosphere - which is the best atmosphere in which to absorb innovations.

From the case studies presented in chapter three it has been pointed out that leisure centres are usually mediums for trying out new ideas, structures and building types, new machines and processes. The sphere at the entrance of the Epcot centre, Florida, is the first completely spherical geodesic Dome in the World. New methods of image projection were invented (3 Dimensional projection). At the features project, Monte Carlo, an experimental structure with almost total flexibility of function and form was introduced. The fun palace project by cedric price proposes numerous technological feats, the wonderland project in England (Construction begins this year) is another astounding feat of science and Architecture. The Audio-animatronics at the E Epcot centre are another innovation; Robots which speak, move, have facial expressions and can respond to various situations. All these go to show that leisure centres can often be used as means of exposing people to these new advances in science

I propose to attempt to broaden the awareness of Ilorin people and the nation leisures technology Architecture and so on. Nigeria does not yet have the infrastructure to support the very advanced technology, but within our limits, it's still possible to try a few things. However, there is the fear that if taken too far, the purpose may be defeated when the provisions become so futuristic that it begins to disoriente-leading to a phenomenom described by alvin toffler, as 'Future shock' (Toffler - 1969)

This is one of the reasons which have led me to conclude that it may not be necessary to consider a centre which offers ultimate flexibility as it may lead to complete disorientation. Slight disorientation in my opinion, is good, for short periods of time, for leisure centres - to add to interest and stimulate curiosity.

But where is exceeds a certain limit (as I believe would happen in a changing, totally flexible unit) it becomes a negative factor. The environment becomes rapidly changing, unfamiliar and unpredictable one, taxing the minds' tolerance for change to the limit.

> "Just as the body cracks under the strain
> of environmental overstimulation,
> the mind and its decision making
> processes behave erratically when
> overloaded" (Toffler, A. Future shock 1969)

CONCLUSIONS

The main design goals can now be identified as being three-fold, each containing its' various smaller ideas and objectives. They are:-

A. Creation of an environment geared towards distraction from everyday activities.

B. Accomodation of all age groups - implying the provision of a wide range of activities.

C. Introduction and exposure, to higher levels of technology and different ideas in Architecture and landscaping.

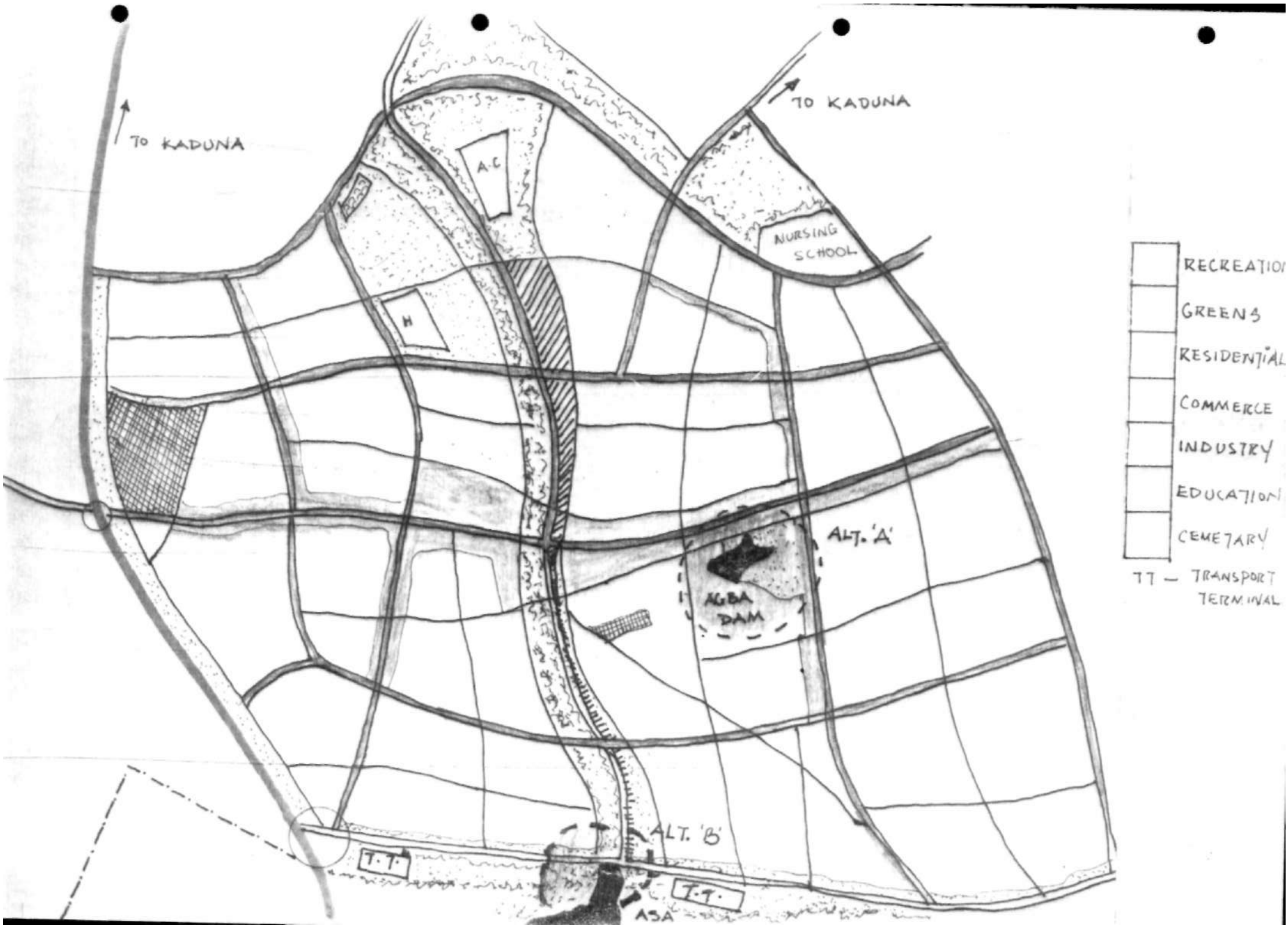
CHAPTER SIX

SITE

CHOICE OF SITE

On consultation of maps of Ilorin and a general physical survey of the city, two alternatives for sites presented themselves. (Fig. 6.1) Alternative (A), the Agba Dam, located behind the Government Reservation Area, is a possible location for an entertainment centre of the sort proposed. There's the presence of a water body, adequate space and proximity to a residential area which would imply that people would not need to walk too far to get to the site. However, considering the design goals (especially the need to have it located a little way out of town) and the fact that the area would soon be overgrown by the city and thus become part of the city centre. (Fig. 6.2) (Ilorin Master Plan, 1980). At that point it would no longer be suitable. Moreover, the site is designated as an open green area by the planning authorities and the proposed centre would be in direct contrast to this.

Alternative (B) the Asa Dam Area, about 16km out of town was thus chosen as the site to be used for the thesis. It is out of town, as stipulated by the design goals, and also contains an extensive water body (Asa Dam) which is the biggest in the city. Already the town planning authorities have designated the area as a zone of "Recreation and special uses." In fact, plans are being made to turn the area into a Tourist Resort. Apart from this, the site is located near the


TO KADUNA
TO KADUNA
A.C
H
NURSING SCHOOL
ALT. 'A'
AGBA DAM
ALT. 'B'
T.T.
T.T.
ASA
RECREATION
GREENS
RESIDENTIAL
COMMERCE
INDUSTRY
EDUCATION
CEMETARY
TT — TRANSPORT TERMINAL

STORM WINDS

SMALL ACCESS ROAD USED BY VISITOR TO DAM

MAJOR TRANSPORT TERMINUS

EXISTING WORKS BUILDING

EXISTING PARKING TO BE REORGANISED AND EXPANDED

N.E. TRADE

OBJECTIONABLE VIEW TO BUILT UP AREA

NORTH

B

STORAGE OF ASBESTOS CEMENT PIPES.

SOIL & WATER EDGE

VEGETATION = SOUTH GUINEA PREDOMINANTLY GRASS + SHRUBS. COMMON TREE = SHEA BUTTER

SLOPE IS VERY GENTLE ALMOST EVEN

AREA = 14,000 HECTARES

GOOD VIEW

GOOD VIEWS

CLAY / SANDY

WATER USED TO BREED FISH.

PEAK VOLUME = 108,000 M³

DEPTH = 13M

SAIL BOATS AND CANOES LAUNCHED FROM HERE

S.W. RAIN BEARING WIND

SECTION 'B'

DAM = 400M WIDE AT THIS POINT. BUILD UP STARTS 10Km AWAY

International Airport and the proposed Expressway junction from Lagos to Kaduna thereby opening up the area to visitors from other parts of the country. A major intracity transport terminal has also been proposed, very close to the site. This makes it easier for those who do not own cars, about 80% of the city population (Ilorin City Survey, 1975) to get to the site by public transport.

Moreover, the site has, within the last few years become a popular picnic spot, especially on easters and summer vacation periods. A few rich people in town own sail boats and can sometimes be seen sailing on favourable days. The water works has become a minor Tourist attraction as well.

SITE ANALYSIS (FIG. 6.3)

The site at present contains no built structures. It consists of just open bush (predominantly grass and shrubs) with a few trees of the parkia variety dotted around. The vegetation is evenly distributed though not dense. Soil type is the same as the rest of the city (Lateritic Clay). The only difference being a greater percentage of gravel and sands especially close to the dam itself. A small area of the site close to the existing cleared area for parking is used for storage of huge asbestos water pipes. The site is serviced by a small road leading to the existing parking area adjacent to the main works building.

Proceeding from the parking is a big path which leads onto the walkway over the dam. The dam itself is 400m wide, 13m deep and approximately 108,000,000 litres at peak volume. It is thus adequate for even medium sized sail boats. The Ministry of Agriculture intends to start a fish farm on a part of the dam, and as such it may not be available for swimming. Boating and fishing can still take place however. Referring back to the existing park, it consists entirely of cleared ground and has not been specially treated as such. About 100m from this parking area is a small natural pier from which sail boats are launched. There are good views from the site to the opposite bank of the river. To the south is a clear view to unspoilt natural landscape for miles around. The site is well aired by local breezes from over the lake created by differences in the heat storing qualities of earth and water. The area of the site is about 14 hectares (5.6 acres) though just portion will be used - depending on the facilities provided - and the rest will be left for future expansion to a Tourist Centre.

GENERAL DESIGN REQUIREMENTS

From the review of leisure practices in Nigeria and Ilorin (Chapters two and four) some general design requirement were made. Provisions for the following should thus be made.

LODGING

There's the possibility of people wanting to spend the weekend at the site. In addition to this, the site being close to a major expressway junction and to an international airport, would be a natural place for a stopover for long distance travellers. This provision would also make it easier for the area to be turned into a tourist resort which is the long term planning goal for the area.

BOATING AND SWIMMING

Since the Dam is already being used for boating, this will be incorporated into the site and special provisions for swimming will have to be made as the dam itself will not be used for this activity as explained in the previous sections.

THEATRE

The need for this has been identified in the last chapter.

INDOOR RECREATION

Activities and small games such as table tennis, draughts, watching television etc. will be provided in addition to video games and the option of watching 8mm films.

DISCO/PARTIES

Provisions for this will also be made as it is a most essential leisure activity at Ilorin.

RESTAURANTS AND SHOPS

These are also essential if people are to spend appreciable lengths of time on site and also to serve lodgers at the proposed Motel.

ADMINISTRATION AND MAINTENANCE

The necessity of providing these is obvious.

AMUSEMENT PARK

This is the highlight of the entire project. The site would be incomplete without it.

PICNIC GROUNDS AND BAMBOO GROOVE

This is also needed as it incorporates uses for which the site is being put already. It will be a quiet zone which will most likely be very attractive to the older generation whose leisure is more contemplative - especially the Bamboo Groove which will contain facilities for rest and calm occupations.

SUPERVISED PLAYPEN/PLAYGROUND

This provision is for the smaller children (below 7 years) whose activities need supervision. Parents visiting

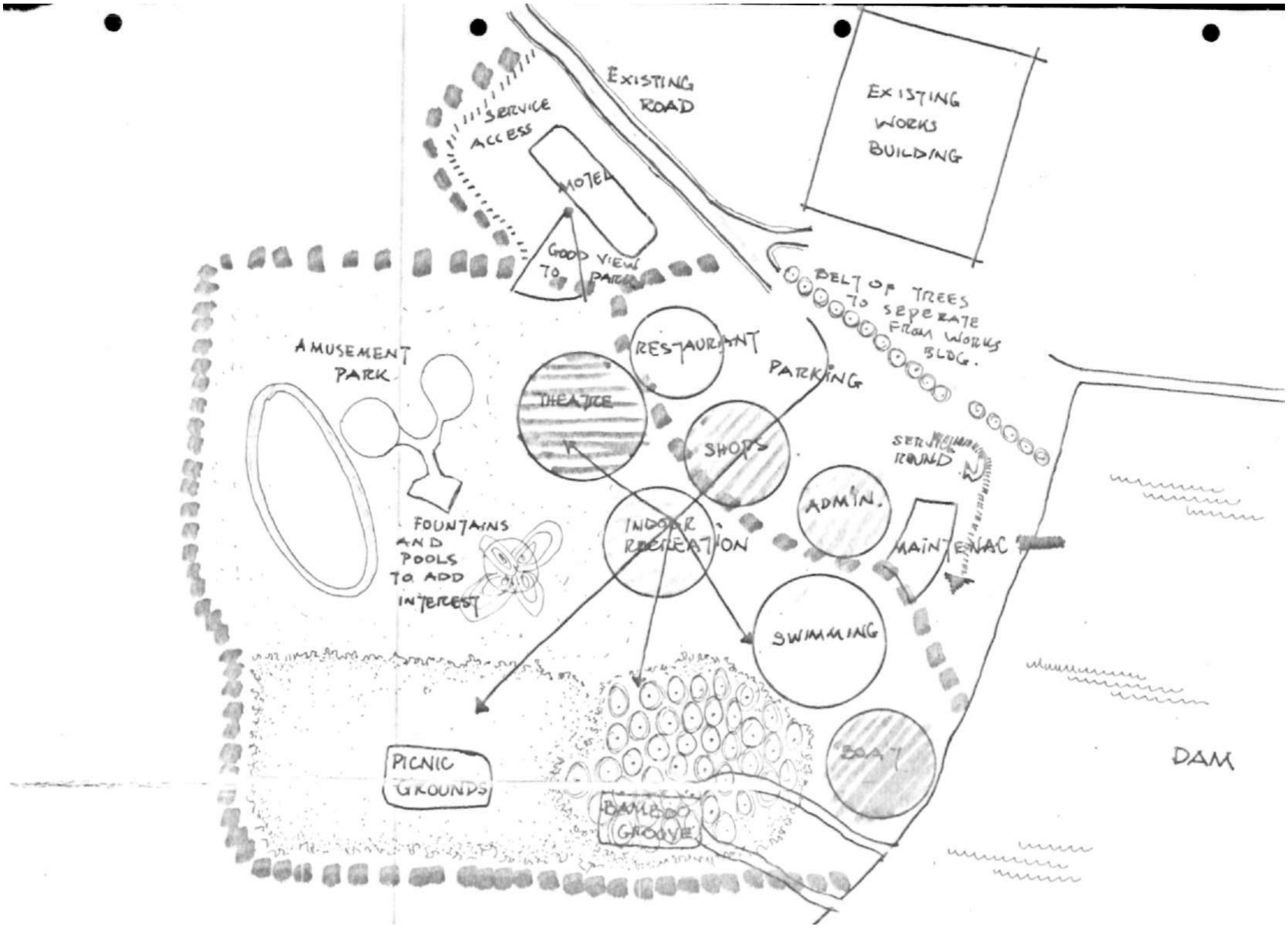
the centre can leave their kids here and go on to enjoy themselves.

SITE CONCEPT

Based on the site analysis, design coals and general design requirements the site concept shown in fig. 6.4 was arrived at after several attempt.

The parking and built of zone are put as close to the existing parking as possible. This was to limit the access of motor vehicles to the green areas, and to leave as much open space as possible. This arrangement also serves to define the entrance to the centre.

This built up zone will be made up of restaurant, shops, indoor recreation, administration maintenance and childrens playpen and swimming pool. As one moves further into the site, the next zone is the amusement zone since this will be the focus of attention on the site, I intend to raise this area above the ground, with access by ramps, so that it is visible from all sections of the site. The picnic area, Bamboo Groove are further into the site. But quite close to the lake for good view and breezes. Thus landscape becomes more open and activities less energetic. Boating and fishing should naturally be close to the water body. The lodging facilities are located just outside the main access to the site. The arrangement makes it possible for gate fees to be


EXISTING ROAD
SERVICE ACCESS
MOTEL
GOOD VIEW TO PARK
EXISTING WORKS BUILDING
BELT OF TREES TO SEPERATE FROM WORKS BLDG.
AMUSEMENT PARK
RESTAURANT
PARKING
THEATRE
SHOPS
SERVICE ROUND
ADMIN.
FOUNTAINS AND POOLS TO ADD INTEREST
INDOOR RECREATION
MAINTENANCE
SWIMMING
BOAT
PICNIC GROUNDS
BAMBOO GROVE
DAM

collected at the entrance and it prevent people sneaking into the site through the Motel, as would be the case if it were incorporated into the site. The Theatre falls into the built up zone but will be an open amphitheatre to emphasize the openness of the site.

This is a brief summary of the site concept. The details can be made clear by refering to the thesis drawings.

CHAPTER SEVEN

LANDSCAPING

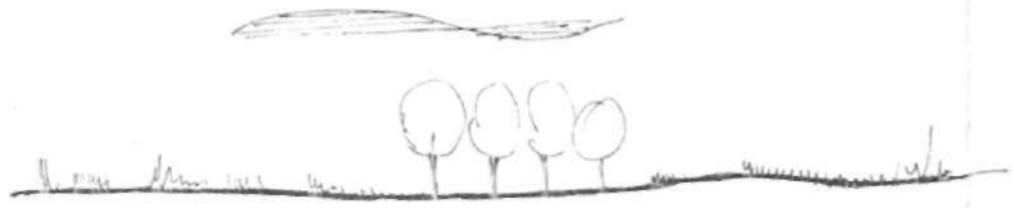
In accordance with the design goals (Chapter five) and to the precedence supplied by the case studies, Landscaping will be used as a means of creating further interest and to relate the Architectural structures to the site. The concept for the site is given in (Fig. 7.1). Since, the site is practically flat (Gradient - one in one hundred and thirty) interest can be created by altering the gradient of the land at certain points, and the use of planting and water bodies to create a sequence of views thereby ensuring a lack of monotony. The basic landscape techniques and elements to be used can be classified into the following:- Earth works, plant material, hard landscape, water and lighting.

A. EARTHWORKS

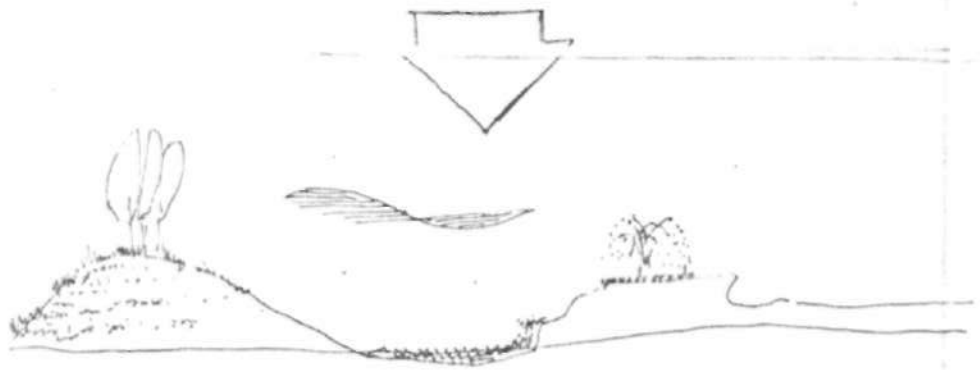
The major use to which earthworks will be put is in the creation of mounds and hills rather excavations to form valleys. Part of the reason for this is that the site itself is a valley bottom and creating more valleys would be simply a repetition of an already existing feature. More importantly however, is that being a valley bottom, the water table will be very high and excavations below it would lead to flooding or seepage thus creating greater drainage problems. The factors affecting ground modelling are briefly described as follows.

287727

RECEIVED
10 OCT 1983
ZARIA, NIGERIA
LIBRARY
Ahmadu Bello University



FLAT UNINTERESTING OPEN GRASSLAND



CREATE HILLS, LEVELS, FOUNTAINS
TUNNELS E.T.C.

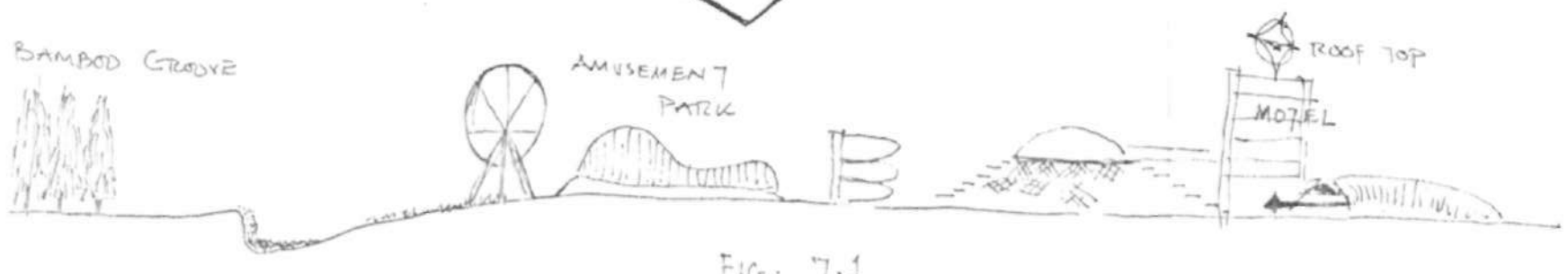
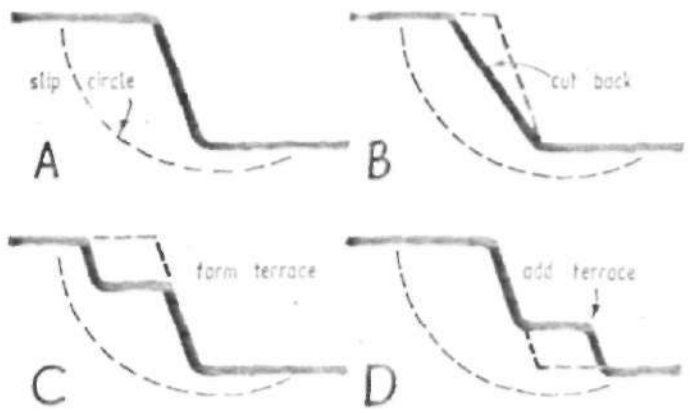
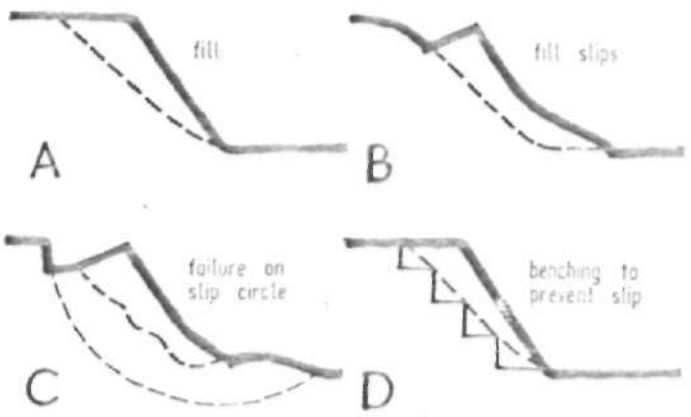


FIG. 7.1
SITE PLANNING IS GOOD.



FORMATION OF SLOPES IN CUT.

A. If the slope is too steep there is risk of slip
B. Risk of slip can be reduced by cutting back slope.
C. Risk may also be reduced by cutting out a terrace or berm
D. An added terrace will give a counter-balance to check slip



FORMATION OF SLOPES WITH FILL.

A. Incorrect formation of slope. Weight of fill material, probably increased by absorption of heavy rain, may cause slip
B. Slip of fill material along original formation.
C. Movement along slip surface of the original formation.
D. Correct procedure, benching cut into original slope to prevent failure shown in B



Undrained areas behind new fill may lead to movement of ground water, excessive loading on regraded slopes and consequent slip

If this kind of fill is necessary, provision should be made for drainage at the top and bottom of slope

FIG. 7.2

(i) Soil type

It is essential to approach the design bearing the limitations of the available soil types in mind. The bearing capacity refers to the structural abilities of the soil. Normally, there's a difference in volume between soils and subsoils in their original states and during and after removal.to a new situation. The design will have to make allowance, depending on the soil type, for a difference of between 5% - 10% where compaction, the allowance should be 15% - 25% (Weddle, 1979). The angle of repose of soil is another important factor. Each soil has its own particular angle of repose or stability. Depending on the amount of moisture in the soil. For earthworks made up of mounds angles of repose for various soils are as follows:-

Very Wet Clay and silt	...	...	1:3
Wet Clay and Silt	...	...	1:2
Dry sand and Gravel	...	...	1:1¾
Dry Clay	...	...	1:1½
Moist Sand	...	...	1:1¼

(ii) Angle of Slope: This refers to the optimum angle needed to maintain a slope against the forces of erosion. "It is virtually impossible to lay down an accurate picture of erosion resistant slope. Angles for different soils, because of the great variations in weather conditions." (Weddle, 1979) However, a few measures can be

taken to prevent a slope from eroding away. These include terracing and benching, as described in Fig. 7.2.

(iii) Water Table:

The need for taking this into account has been mentioned at the beginning of this Chapter.

(iv) Type of Machinery

The type of machinery available also limits the size of the project and the kind of landforms to be created. This will be taken into account when designing the landforms on my site.

GRADING PRINCIPLES AND METHODS

Stripping Topsoil

The top soil is removed after site clearance and stored in a suitable part of the site for use in making mound and r ramps in later opperations. Soil and other fill material can be brought in from other areas and stored on site to form a 'Soil Bank' should the amount available on site be insufficient. The soil Bank should be properly sited to prevent compaction by machinery and workers and erosion by surface water and rain.

Filling

A decision whether the filled areas should hold true to level or not should be made. Especially in the case of artificial hills and mounds. The extent to which this would be possible will depend on the material used and the compaction procedure. For large projects the best method would be to

achieve very high compaction in the first few layers of fill and to decrease it as one proceeds upwards. This allows for good soil drainage.

WEATHER CONDITIONS

Operations have to be planned in relation to the likely weather conditions prevailing in different seasons of the year. Long comparit even dry periods, are likely to simplify the operations and thus reduce costs.

WATERTABLE

Where an excavation cuts across the water table, attention should be given to an adequate [illegible] drainage. In the case of mounds and hills, the effect is that the water level may become out of reach to vegetation proposed on the mound. The water table can be artificially elevated by means of flat saucers forming an impervious topping to the lower layers of fill.

COMPACTION

The various ways in which compaction is achieved would depend on the machinery used. The various types includes-

(i) The Smoothed Wheel Roller

Compaction reaches up to 200mm per layer and it is best for hardcore material such as crushed stone, sand and gravel.

(ii) PNEUMATIC - TYRE ROLLERS.

Compaction can be achieved up to 450mm and almost any type of soil will respond though sands are the most responsive.

(iii) THE VIBRATING ROLLER

This is similar to the Tandem type smooth wheel roller, but with a device for vibrating the roller. Greatest consolidation is achieved with Granular Soils.

(iv) HAND AND PNEUMATIC TAMPERS

Used for very small areas e.g. Trenches, compaction is not very high.

TOPSOIL REPLACEMENT

After the new landscape has been created, the topsoil earlier removed can now be replaced and planting on the area commenced. This is the last stage in earth moving procedures.

B. PLANT MATERIAL

Plant Material as trees, shrubs and herbs are some of the fundamental landscape materials. The uses to which they can be put are numerous and they include:

- Protection against wind, noise or bad fumes
- To screen undesirable views
- Privacy

- To frame views or form focal points
- To give shade
- To form space division
- Site ornamentation
- Visual or ecological link with the surrounding landscape.

Plant material will therefore be extensively used at the proposed centre for the purposes already mentioned above. In order to arrive at a successful design carefull selection of the material has to be made. Selection will be based on the following criteria:

(i) HARDINESS

The tree, shrub or flower must be able to survive in the region proposed. Hardiness depends primarily of the ability of the plant to withstand a wide range of climatic types. To a lesser extent, it also depends on temperature, precipitation, and soil properties of the area.

(ii) FORM AND STRUCTURE

The height and spread of the tree or shrub, the length of time it takes to mature, and its shading properties are important. Also important is the nature of the tree all year round. i.e. Is it evergreen or deciduous.

FOILAGE, FLOWERS AND FRUIT

One should know what the foilage size form, texture and colour are. Does it bear flowers and fruits. When do they

occur and how long do they remain on the tree.

MAINTENANCE

This too is a criterion for selection. It is important to know how much care the plant would need to make sure this would not exceed what can be provided.

Having considered the criteria for selection of trees planting, I have made a selection of trees to be used 3 basic functions.

- Ornamentation
- Shading
- Framing views

Trees for ornamentation will be used for the colour of their flowers and fruits in large numbers at specific points on site. Those for shading will be predominant in areas where people would have to stop or wait for some time. For example in the picnic area. They will also be used for shading of walkways and footpaths. Trees for framing views and forming vistas would be of the tall slender type and are going to be used extensively along walkways in conjunction with the other functions mentioned above.

ORNAMENTAL TREES (Fig. 7.3a - d)

- Delonix Regia
- Flame Tree.

A handsome branching tree with a wide spreading crown. The flowers are bright red, abundant and contrast well with the light green leaves. It is a fast growing tree which thrives well in Ilorin area. Flowering period falls around April - June/July. It can also be used as a shading tree.

- PLUMERIA SP

  FRANGIPANI

This is widely grown in the tropics. Its a low spreading tree, decisuous but bears large heads of highly fragrant flowers in the rainy season. Colours are white, yellow, pink, and red.

- CASAURINA EQUISETIFOLIA

  WHISTLING PINE

A hardy tree which can grow in poor soils. This is a rapidly growing tree with slender branches and tiny, needle like leaves.

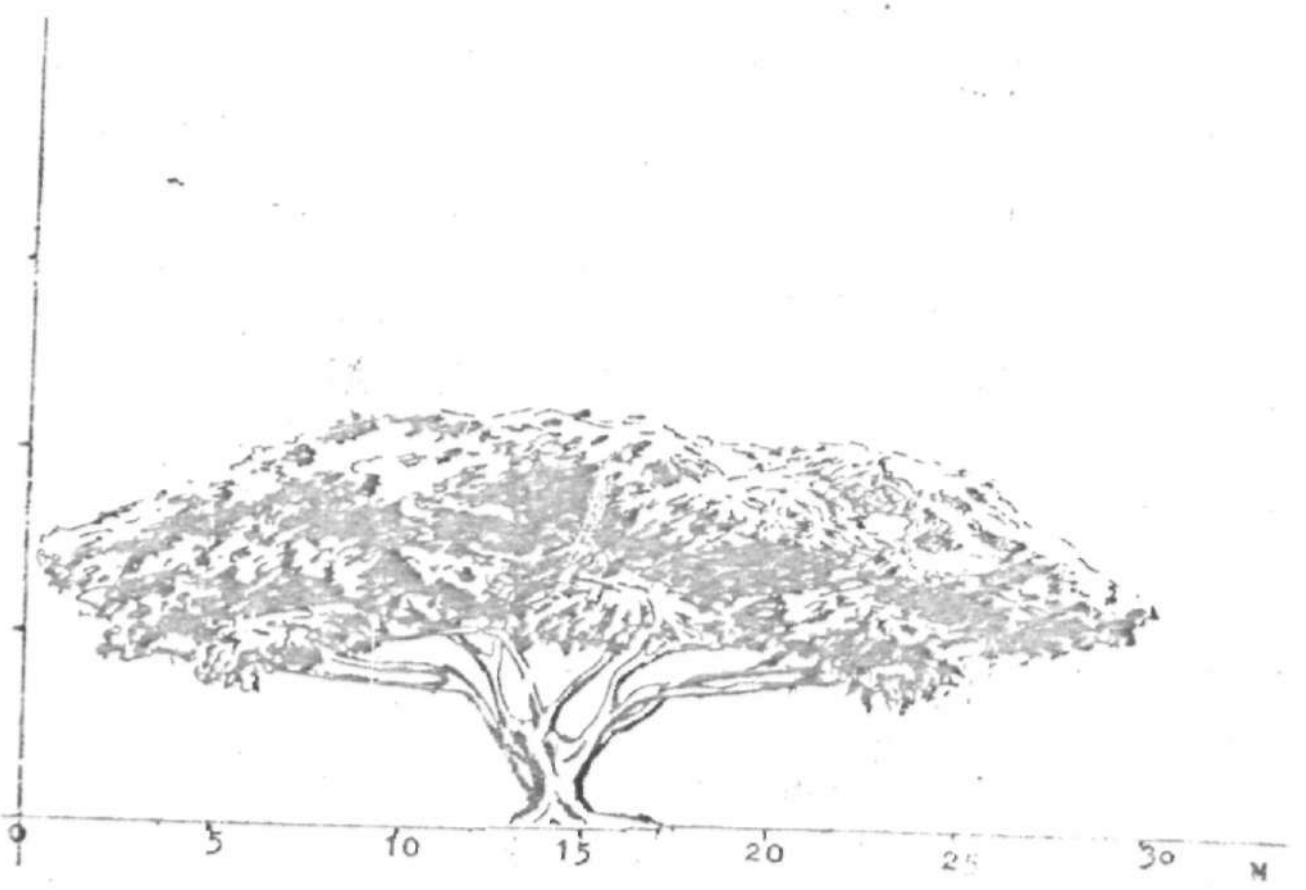
- JACORANDA MIMISIFOLIA

Grows very well in the savannah region. This is a spreading tree with small round leaves and evenly distributed flowering. Flowers come in white and purple.

- SHADING TREES (FIG. 7.3e-h)
- AZADIRACTA INDICA

  NEEM TREE

A drought resistant tree widely cultivated in Ilorin. It has a dense crown, glossy leaves and white, scented flowers.



DELONIX REGIA
Poinciana, Flame tree.

Widely grown,
decorative tree

A handsome tree,
branches forming a
wide crown, flowers
bright scarlet(mar-
nay), abundant.
Fast growing tree,
thrives best under
fairly dry conditions.

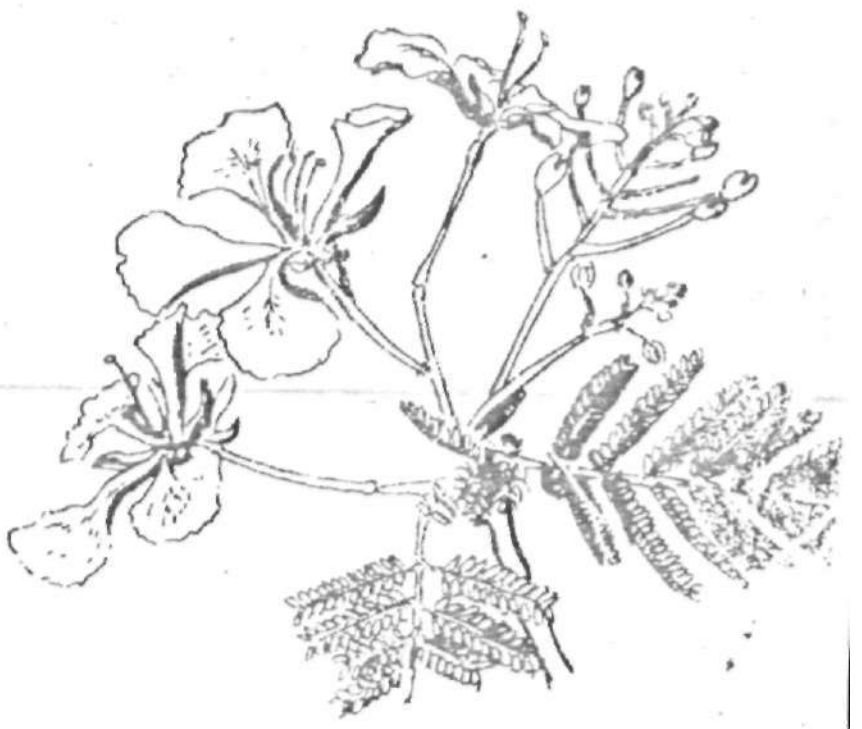
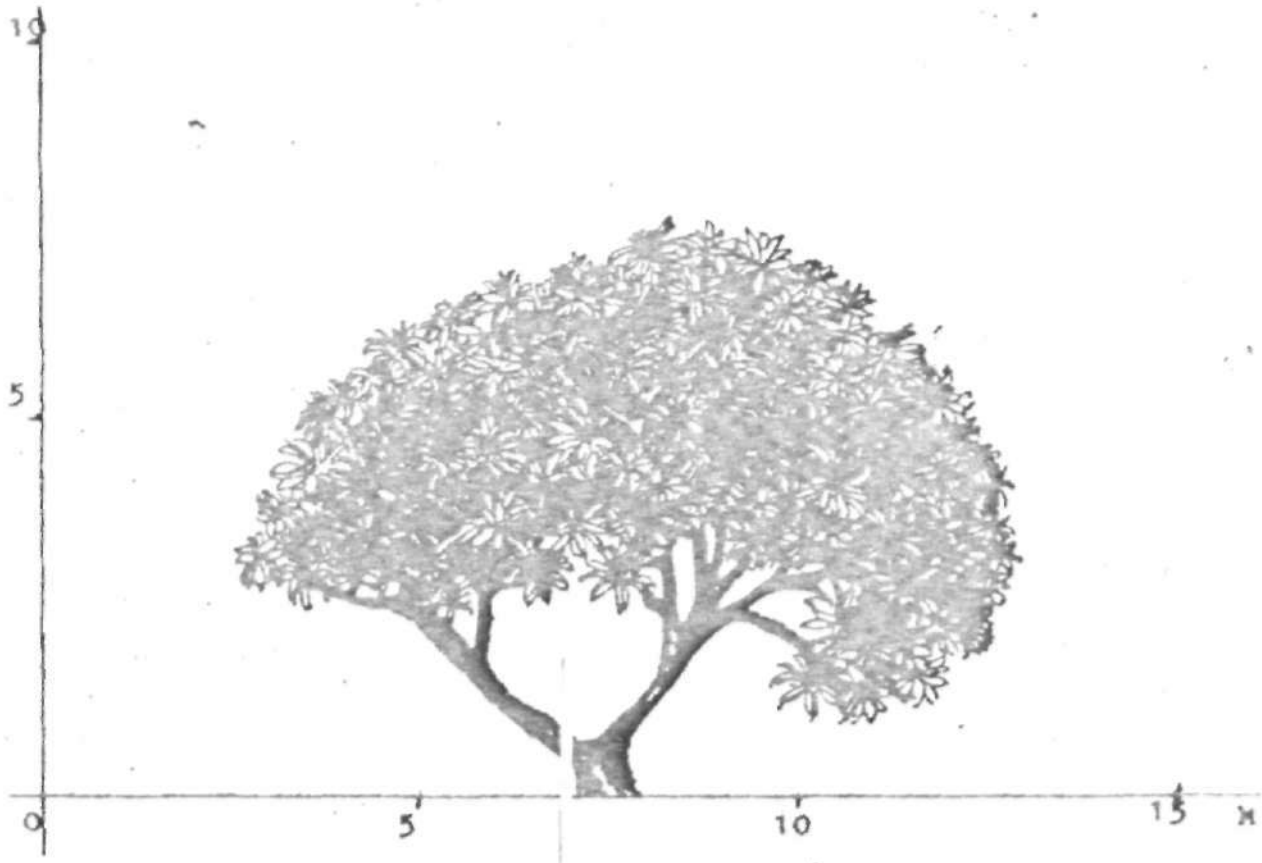


FIG 7.3 (a)



PLUMERIA SP.
Frangipani

Widely grown in tropics.

A low, spreading tree. Quite bare of leaves in the dry season when it bears large heads of flowers (highly fragrant). Colours white, yellow, pink, red.

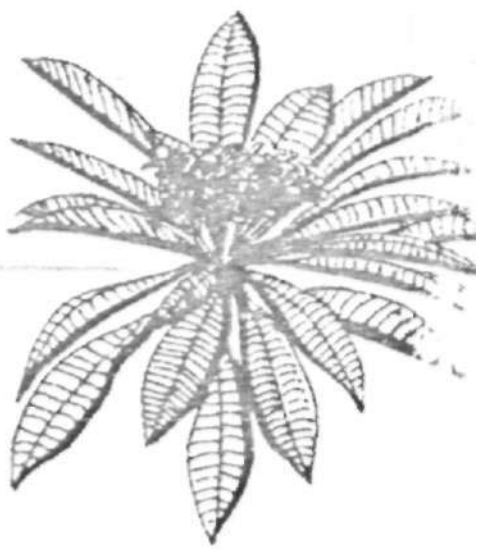


FIG. 7.3 (b)



CASAURINA EQUISETIFOLIA

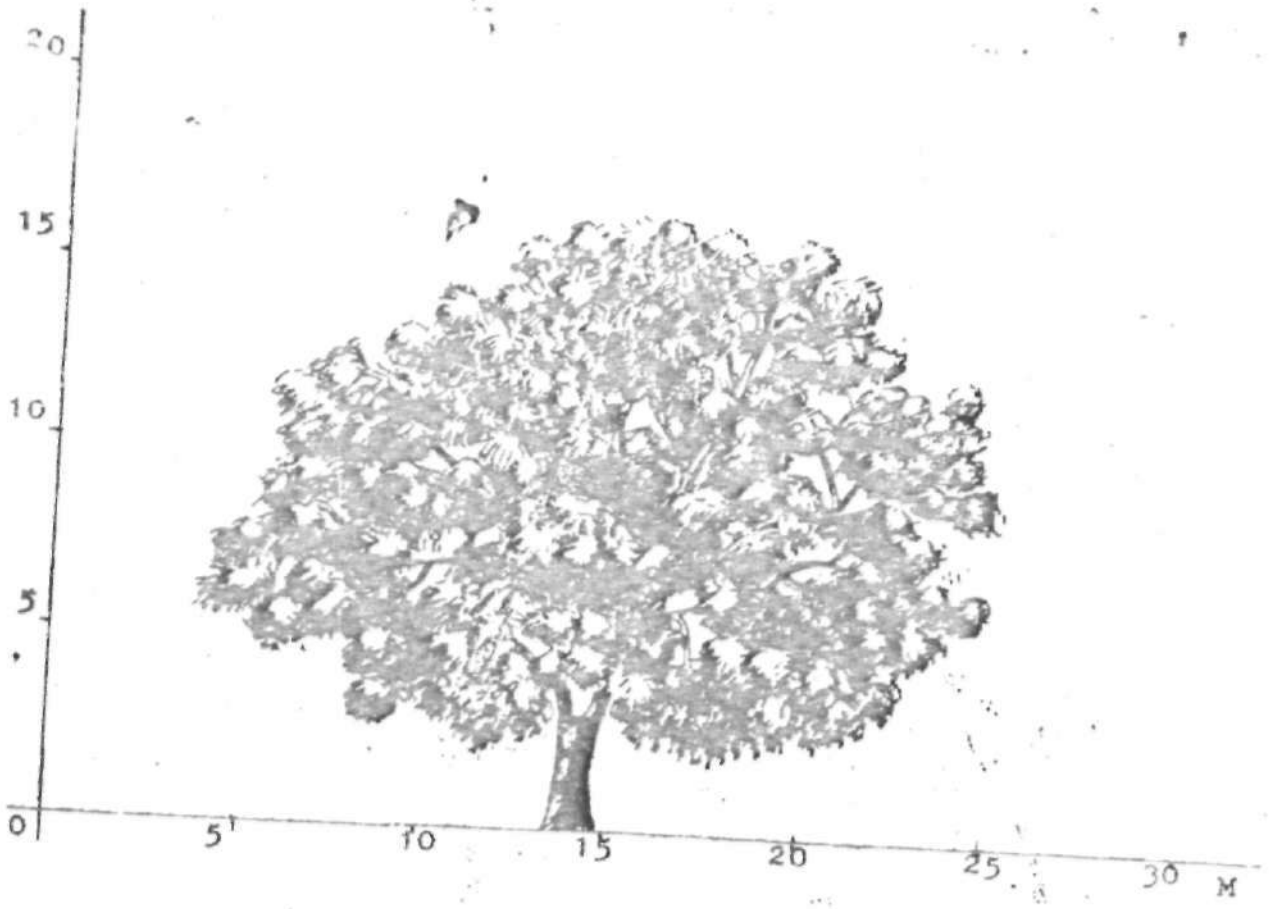
Whistling Pine

Wide distribution,
grows often on poor soils.

A rapidly growing tree,
with slender branches and
tiny, needle-like leaves.
Makes useful hedges and
stands clipping well.



FIG. 7.3 (c)



AZADIRACHTA INDICA
Neem tree

Drought resistent specis,
widely cultivated.

Crown dense, leaves glossy,
crowded on the end of branches.
Flowers white, scented, (dec-
may).
Very endurable tree.



FIG 7 : (e)

Its a very endurable tree. It also has its ornamental characteristics.

- SAMANEA SAMAN

RAIN TREE

It has wide spreading branches, a broad form and flat crown. A very good shading tree.

- PARKIA FILICOIDEA

LOCUST BEAN TREE

Its widely distributed in the savannah regions. The branches spread into a large crown with pendulous balls. It's a partially deciduous tree.

- CASSIA SIAMEA

This is a large, quick growing tree with dark leaves and bright yellow flowers. Its evergreen. Its spread is not very much but the poilage is dense and it provides good shade.

TREES FOR FRAMING VIEWS

Trees for this purpose should be slender and tall with their foilage reaching close to the ground. Close planting would therefore give the effect of a wall directing ones eyes towards the desired direction.

- EUCALYPTUS ROBUSTA (FIG. 7.3i)

A tall slender tree, with linear leaves capable of growing in very moist soils.



EUCALYPTUS a) Amygdalina

A huge tree with narow crown, stringly bark , leaves linear, odour peppermint.
Dry regions.

b) Maculata

A tall slender tree, bark peeling off in patches, leaves linear, with strong "eucalyptus" odour.
Hot and dry regions.

c)Robusta

Mostly near sea coast.



Fig 7.3(i)

- CASAURINA EQUISETIFOLIA

This tree has been described previously.

Briefly, these are the basic tree types which are recommended for the site. Other plant material such as shrubs hedges and flowers will also be used extensively to enhance the function of the trees. The various types available are discussed as follows:-

BAMBURSA SPEC - BAMBOO (Fig. 7.4)

This also belongs to the 'shrub' group of plants which can sometimes grow to great heights (up to 30m or more) with huge stout stems. It was used as a shading plant at the University of Ibadan Zoo and planted in large concentration such that it formed a small forest or groove. Its particularly good because it grows high then bends downwards thus forming an unbrella shape. It will also be used in this thesis in a similar manner.

HIBISCUS ROSA-SINENSIS

(RED HIBISCUS)

This is a popular vigorous much branching shrub. It can grow up to 4m metres high. The leaves are dark green with large numbers of short lived trumpet flowers. Tolerates full sun or partial shade. It is easily pruned and forms a good decorative hedge.

B a m b u s a spec. -Bamboo

Erect stems and delicate, grey foliage. The genus of many different kinds found are of the most striking features of tropical vegetation.They very considerably in size and character, some growing only a few feet in height, others 100ft. or more, with stout erect stems, while others are straggling shrubs.The smaller kinds are usually suited only to the higher altitudes or sub-tropical conditions, the larger species thrive best at the lower altitudes.
All like a shelterd and moist locality and deep retentive soil.



FIG. 7.4

NERIUM OLEANDER

OLEANDER

A dense evergree, quick growing shrub. Leaves are grey-green and pointed with pink, white or red flowers. Widely tolerant of soils, it can grow to heights of 6m. Can survive in full sun or partial shade.

BARRIER HEDGES

Hedges of shrubs like the Agave and Cacti may be used as restrictions to movement in certain directions. They are prickly and spiny and are thus very effective without spoiling the beauty of natural landscape.

GROUND COVER

This will also be specially treated for certain parts of the site, especially in the built up areas. In the Bamboo Groove and picnic grounds, The natural ground cover will be left untouched and little or no additions made. Where lawns are needed, star grass (Cynodon Dactylon) or Kiri-Kiri grass will be used since its easily available and forms an even, mossy looking groundcover.

The problem with Landscaping is the time it takes for the plants to grow to maturity, especially trees. In the advanced countries latest techniques to solve this involve the transplanting of seedlings and semi-mature trees for

'instant' effect. The trees are grown in nurseries and at a certain stage in growth is transplanted to the site where growth is completed. There are several grades of trees for transplanting. The oldest of which are semi-mature trees which are almost full grown, and give the site a planted air.

All these techniques have not yet, to my knowledge, been used in this country-- Planting is still from seed or young seedling stage. However efforts towards this can be started. Large Nurseries exist at Ibadan, 2 hours drive from Ilorin, in addition to the Botanical Gardens at Ilorin. Possibilities of transplanting semi-mature trees from these places can be examined in conjunction with experts in Agriculture and Botany from Universities of Ibadan and Ilorin which have renowned Faculties of Agriculture.

In the alternative, should the sponsors be innovation -shy, the centre can be developed in stages. The first stage would be the built up area and architectural Structures at the entrance to the site. While these are in operation, the landscape will be prepared and nutured to maturity. This should take about 3 to 4 years or more depending on the type of plant material to be used.

C. HARD LANDSCAPE

This includes elements such as pavings for footpaths, playgrounds, roof terraces, flower boxes litter bins, sign

posts etc. The major function of paved surfaces is to provide hard, non-slip dry surface to carry the required load for pedestrian use. They may also be used to indicate direction and to indicate areas of different activities. They should be designed to conform with the general design concept for the site. A wide range of pavings are available in different colours. Paving around tree bases should be loose and porous to areate the roots of the tree. Seats as elements of landscape should have a background of planting, walls or trees and should be related to the other elements of landscape.

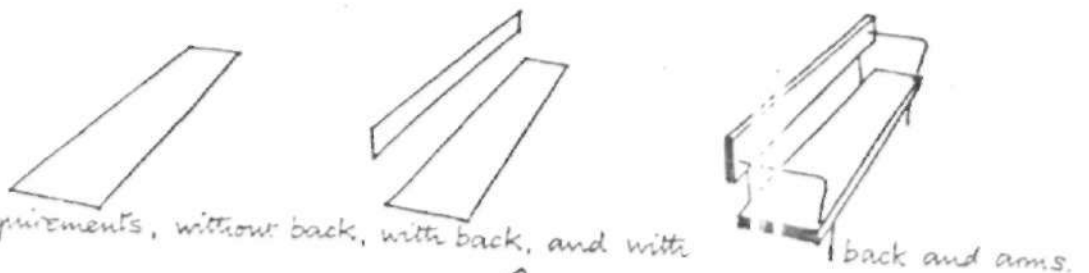
The general principles behind seat design are expressed in Fig. 7.5. Materials normally used are timber, concrete, metal and stone. Use of each would depend very much on suitability to existing local climates. Plant containers may be used to emphasise spaces or pedestrian ways and also as ornamental pieces themselves. They are not normally used in areas where its possible to grow plants naturally in the ground. Plant holders should contain a sufficient body of soil to nuture plants (Not less than 300mm depth), have adequate water retention and be well drained by use of large broken aggregate and a hole, at the bottom. Materials used for plant holders are: Stone, concrete, terracotta timber, fibre glass and metal. Fig. 7.6.

LIGHTING

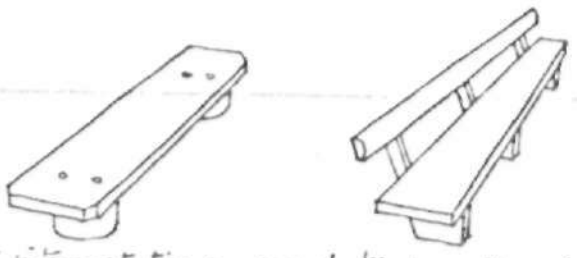
To beautify the site at night for safety, as an amenity or decorative element. Outdoor lighting can be

PRINCIPLES

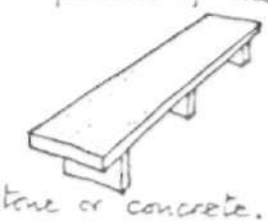
BENCHES and SEATS should be simple in design.



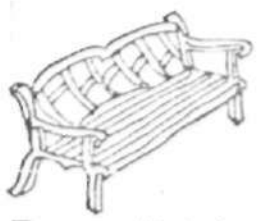
Basic Requirements, without back, with back, and with back and arms.



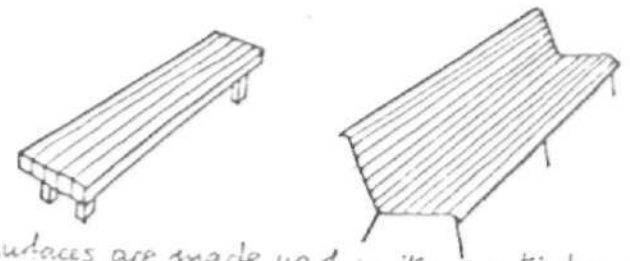
Simplest interpretations are of timber, thus (seats & backs are as far as possible of one piece..



or of stone or concrete.

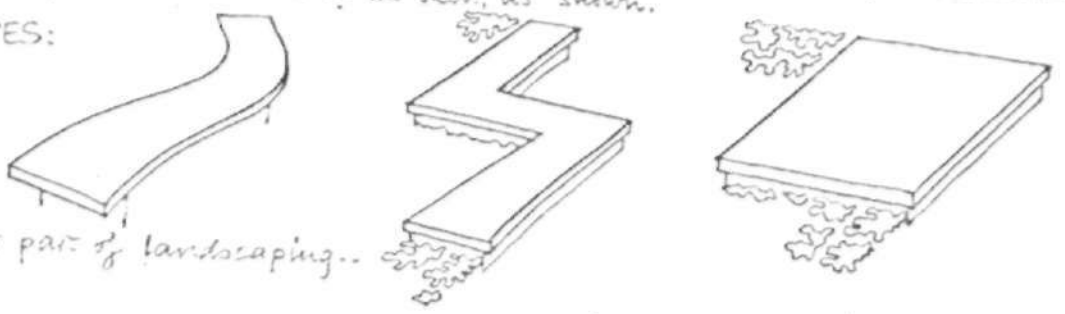


FALSE rusticity is unnecessary and quite often ugly.

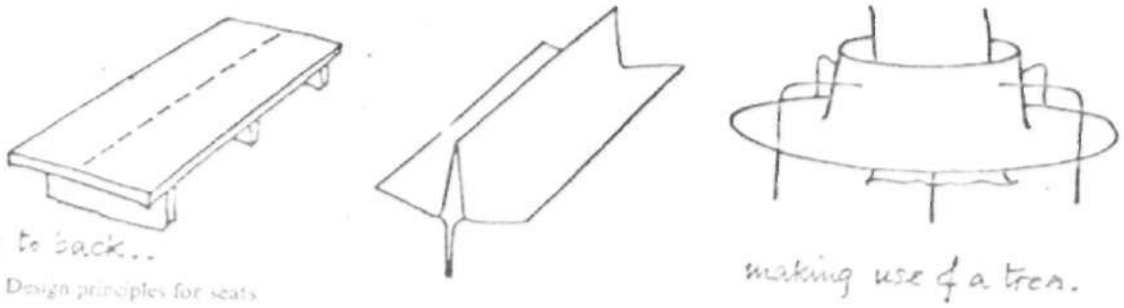


Where surfaces are made up of units, e.g timber slats or battens, it is desirable for them to follow the 'direction' of the seat; as shown.

SHAPES:



e.g. as part of landscaping..



back to back...

making use of a tree.

Fig. 6.1. Design principles for seats

FIG. 7.5

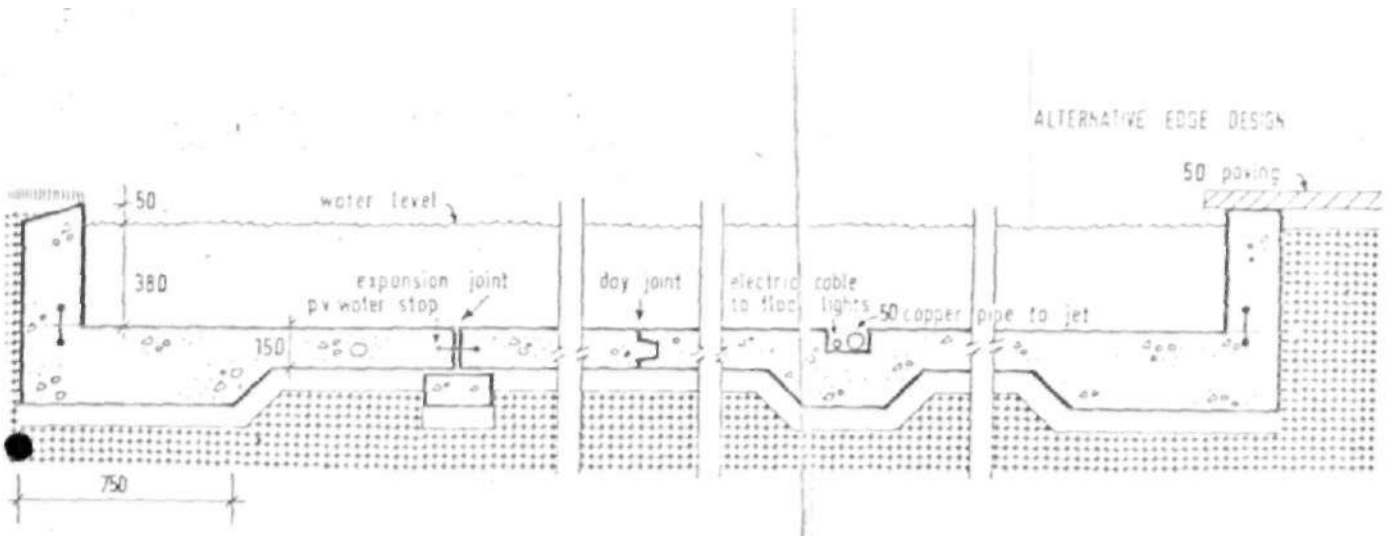


Fig. 7.6. Section showing jointing details and alternative edge designs for a reinforced concrete pool.

FIG. 7.6

classified into 3 types defending on the function.

(a) Lighting for carriageways

(b) Pedestrian or amenity

(c) Decorative lighting

The emphasis in this design will be placed on the last two. Vandalism has to be taken into consideration here with respect to the materials used. Glass would be of little economic use. Acrylic or polycarbonate is often used as an alternative. Lighting can be direct where light falls directly from the source onto the plant material, in which case the source should be hidden, or indirect lighting where a reflecting surface directs the light to the area or object to be lit. The light itself can become an object in itself rather than for lighting other objects or areas. In this case, the use of glow lamps is most appropriate.

D. <u>WATER</u>

Water is a good material for outdoor use. It is often used to create:

- Suggestion of coolness
- Play of light: Water's a good reflector of light and acts as a mirror.
- Moving water (water falls and fountains) has interesting sound effect.
- It can be used to delineate zones of differing activities.

ARTIFICIAL CANALS, POOLS AND FOUNTAINS

DEPTH OF POOLS

Care should be taken to decide the correct depth, which depends on the purpose. Non-paddling pools in public places however, should not be less than 525mm in order to discourage children, but should not be too deep for safety.

Floors: Reflections are one of the main pleasures of static water, its therefore necessary to design the pool floor to give added interest. Painted surfaces, large pebbles and patterns incised into the concrete before it sets are some of the means by which this can be achieved. Construction of small pools is affected by any variation from the rectangle, in terms of material. Curved shuttering to concrete is very expensive and small units such as bricks are often used instead. Fibre glass in one piece may also be used. Detail of a pool is given in Fig. 7.6. The use of water in fountains is another interesting landscape feature to be used in the design.

In summary, it will now be clear that Landscaping forms an extensive part of my thesis and has thus been treated in a little detail. High quality Landscaping implies a need for the provision of much maintenance and care for the plants. A virtual army of gardeners will be needed on site. This simply means for job opportunities.

CHAPTER EIGHT

THE DESIGN

The Design Schedule is given as follows:-

(The process by which this was obtained has been described in Chapter six)

* Shopping Arcade
* Restaurant/Kitchen
* Bar/Lounge
* Fast Food Restaurant
* Administrative Facilities
* Maintenance Buildings
* Indoor Games
* Discotheque
* Supervised Playpen
* Amphitheatre
* Swimming Pool
* Picnic Grounds
* Bamboo Groove
* Boat House and Pier
* Fishing Pier
* Amusement Park
  - Go - Cart Racing
  - Simulation Room
  - Maze
  - Astrowheels

- Merry-Go-Round
- Bycycle Hire
* Sculpture Garden
* Motel

All the facilities mentioned have been designed. But the emphasis was on only the first eleven items on the list.

DESIGN CONCEPT

The general design concept for the entire design was based on the following statement by Isaac (1971). "Gaiety can be created by flowing forms and spaces; the use of large and small scale; the use of tumbling, swirling induced movement and rhythms; the lack of Restrictions ...." Added to this is my own observation of forms for leisure. Very many games and leisure activities are based on the circle, as mentioned previously. Balls are round, most Bats and Packets are round, when dancing we think of a dancing ring or going to a ball; a bottle of wine or a plate of food; even a record disc is round. Thus I believe leisure is synonymous with circles and flowing forms. This concept was eventually translated into the Architecture in the form of Domes, Circular Building Plans and Free Forms. Even the working of the Landscape reflects this. This concept is summarized in Fig. 8.1.

DESCRIPTION

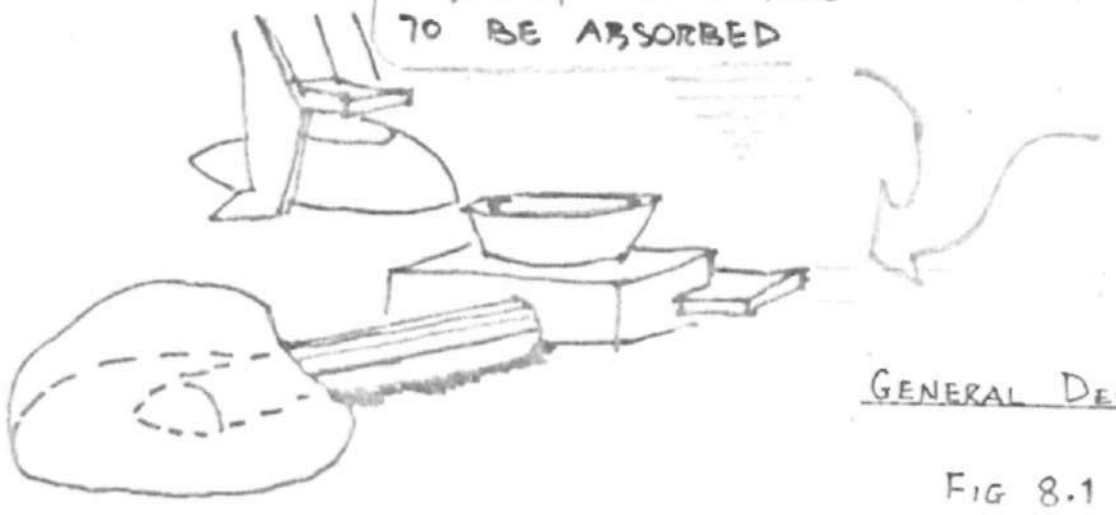
On entering the site, the visitor is confronted by a big three storey high circular building which constitutes the

ARCHITECTURE & FORM

FORM FOR LEISURE = PLAYFULL :
CURVES AND CIRCLES EVOKE FEELINGS OF FESTIVITY.



INTERLOCKING SPACES AND FORMS ADD INTEREST... TAKE TIME TO BE ABSORBED





UNUSUAL SHAPES INSPIRE CURIOSITY, KEEPS PEOPLE COMING BACK

GENERAL DESIGN CONCEPT

FIG 8.1

entrance building. It also forms the major Architectural focus of this Thesis. The building design concept is explained in Fig. 8.2. The Ground floor contains the Restaurant, Bar/Lounge, Bulk Storage and Storage facilities. It has two main accesses; one leads out to the site behind and the other to the front and parking areas. This latter entrance which is expected to serve mainly as an emergency exit is hidden from view by a series of steps leading from the parking area to the first floor. The stairway is supported on an artificial earth mound. The first floor, which is the main floor houses the shopping arcade. Facilities provided include; a minimarket, 2 Boutiques, a Hairdresser, Souvenir shop, Fast food Restaurant, Airways booking and Postal services (For Lodgers at the Motel) and a central information desk which keeps people aware about the whole site. In order to accomodate large crowds in terms of extending the 'space' feeling, (even though the horizontal space provided is adequate) the area in the centre extends two stories high to pierce into the space above natural lighting comes through a lucite quater Dome which also helps to increase the vertical space over the central area. From this floor one can either go down to the restaurant below, via escalators at the rear, or up to the floor above. A service staircase at the West side of the building serves as fire escape as well as a route for the transportation of materials for storage from the service yard and kitchen below. Another exit next to the escalators connects the building with the indoor games room

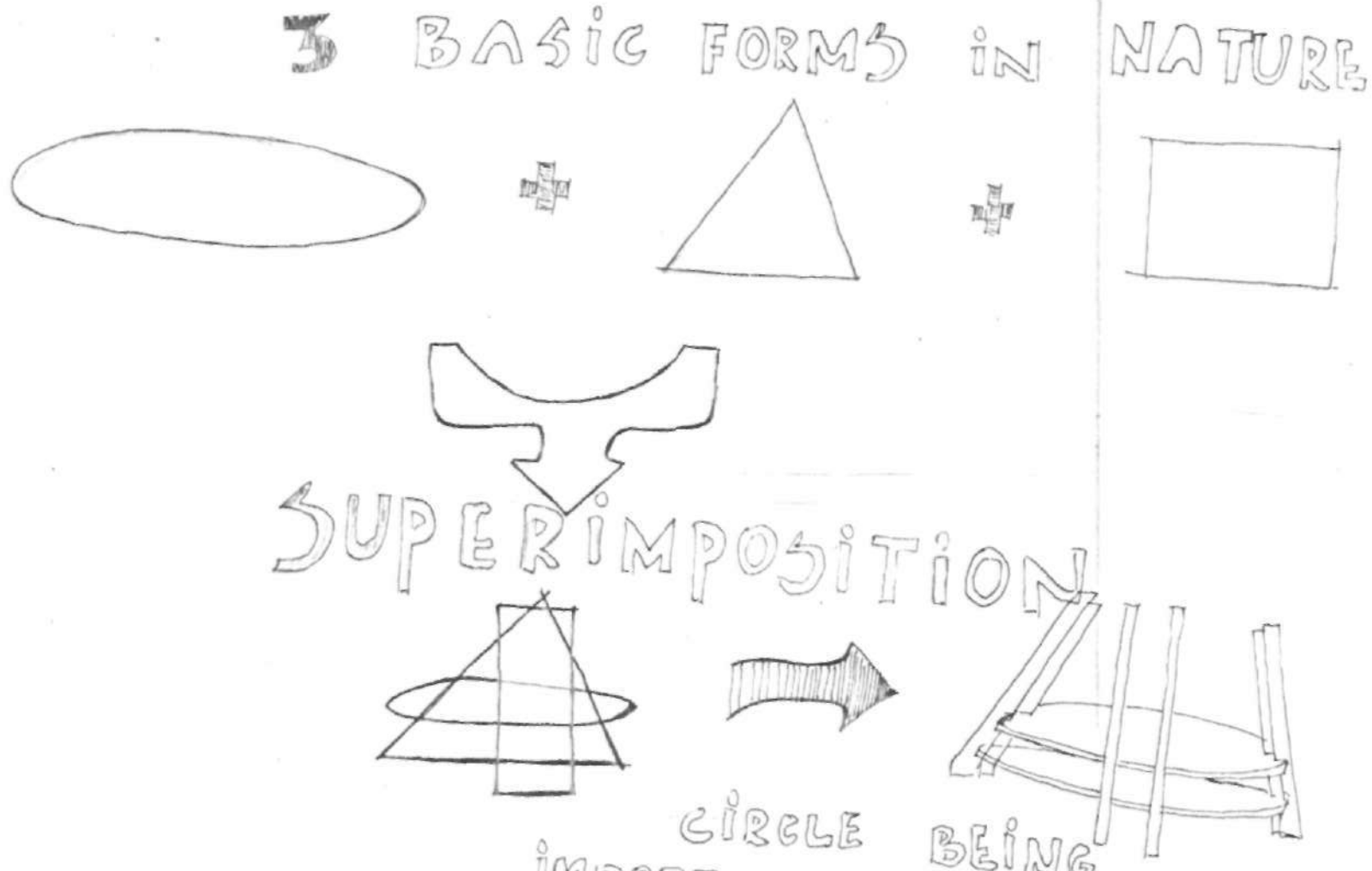


FIG 8.2

BUILDING DESIGN CONCEPT

on the first floor of the adjacent building via a horizontal passenger conveyor that passes one through a 10m long Tunnel. The interior of this Tunnel is equiped with speakes, lights and a projection system to create hallucinatory effects, popularly called the Tunnel of Horrors. The second floor contains the administrative section with spaces provided for the following.

A Director, 2 Secretaries, 2 Assistant Directors, an Accounts Department, Sales, Theatre, Catering, Lodging and Parks Departments. There also a General Office, Stores, Toilets and Labour Pool for messengers. Access to this floor from the first floor is by Escalator and service stairs. Above this floor is the roof top which houses the water tank and an open terrace with good views onto the park and to Ilorin Township in the distance.

As one leaves the main building the footpath is divided into three. One arm leads to the Amphitheatre on the West side, one to the swimming pool to the east and the third leads straight to the children's playpen to the south. This playpen consists of the main play ground and a resting area for children and supervisors. It has an open feeling as about 50% of the space is not walled but is roofed over by the floor above (Refer to Thesis drawings) extending from this indoor open space to the right is grassy lawn for running

around cycling and so on. It also forms a part of the children's play area. The floor above houses the indoor Games/Discotheatre. The plan is based on a circle (as with the floor below) and its form vaguely resembles that of a flying saucer. It is connected by a raised tunnel to the shopping arcade on the first floor of the main building as previously described. The Theatre to the east of this, is an open air amphitheatre built into and supported by an artificial hill created for that purpose. Access to the Theatre from the steep side of the hill is by a staircase and a ramp which curves round the indoor games building. Thus further definition of the children's play space is achieved in addition to providing an alternative exit route in case of emergency.

These three buildings in addition to the maintenance building adjacent to the parking lot form the main emphasis of the Architectural Design. Better insight into these and the other facilities provided (Discussed in Chapter six under site planning) will be gained by studying the drawings.

Another major consideration in the design is that of movement and the use of surprise as tools for creating interest. For instance the ramp way leading to the Theatre from behind the indoor Games area is curved such that as one leaves the main building on the ground floor, ones view of

the Amusement Park beyond is totally blocked by the ramp. As one begins to move round the indoor games area towards the Amusement Park, the ramp slopes down and reveals more and more of the park until, at the opposite side of the building, where the ramp way joins the footpath, the park is completely in view. A huge series of steps leads one straight from the parking level to the first floor level thereby preventing the pattern of monotonous horizontal movement through the site.

SPACE REQUIREMENTS

In order to arrive at usefull data concerning space requirements, an estimated number of expected users has to be found. Methods of arriving at this are many but it will be observed that all, even the most sophisticated ones cannot be accurate. They are just educated guesses because I feel that where a large group of people are concerned, it is extremely difficult to predict their collective behaviour in any situation. Too many factors are involved and there is also the problem of new unforseen factors which can demolish and postulations. Thus what follows in the next section is nothing more than an educated guess, no better or worse than all the rest.

ESTIMATION OF EXPECTED ATTENDANCE

On peak days (Public Holidays) visitors to the Ilorin Amusement Park number approximately 400 - 500 (This figure was obtained during field observation since no recorded figures were available). Since the facilities provided at the proposed

leisure centre by far outnumber those of the existing park, and are more interesting, attendance is not expected to be less than 500 despite its distance out of town. The site is close to major transportation modes and the town is expected to grow closer to the area (Ilorin Master Plan 1980) Also, considering its ulterior function as a stop over for travellers (Due to proximity of major expressway intersection and international airport). As well as its novelty and range of functions, attendance on peak days, are expected to be between 700 - 1000 people. A midrange figure of 800 was then used as the Design Number.

Restaurant: $1.7 - 2.0m^2$/person

400×1.9

$= 437.4m^2$

Kitchen: $0.64m^2$/Diner

400×0.64

$= 256m^2$

Storage: 25% Kitchen Area

$= \frac{25}{100} \times 256$

$= 64m^2$

Bar/Lounge: $0.6 - 1.0m^2$/Person

0.61×400

$= 245m^2$

Shops & Boutiques:	496.7m^2
Hairdresser:	45m^2
Air Booking, Kiosk:	40m^2
Fast Food Restaurant:	80m^2
Manager: ...	25m^2
Secreteries: ...	11m^2
Assistants: ...	20m^2
General Office:	26m^2
Parks Department Accounts " Catering " Commerce " Theatre "	150m^2
Maintenance/Fire Trucks:	500m^2
Discotheque/Dancing:	1.5 - 2.5m^2/couple
	125 x 2.5
	= 314m^2
Table Tennis:	9 x 13
Badminton	13.4 x 6.1m
Space Around Court:	6.5 x 8.5m
Intimate Spaces:	1.2 - 1.5m^2/Pair
	20 x 1.5
	= 30m^2

Audio Visual:	1.5 x 0.762m^2/Person
	10 x 1.5
	= 15m^2
Equiptment Store:	100m^2
Changing/Toilets:	30m^2
Kiosk/Store:	12m^2
Reading	16m^2
Bookstore	30m^2
Children's Playpen:	400m^2

THEATRE

Auditorium:	0.65 - 0.84/Seat
	0.8 x 625
	= 500m^2
Stage:	0.19 - 0.65/Seat
	0.19 x 625
	= 125m^2
Backstage:	400m^2
Workshops, Changing, offices	
Control room:	24m^2

CONCLUSION

I have been able to arrive at a design solution to the problem presented by the context. My underlying motives of introducing innovations to increase the awareness of technological advances around the World by our people has

only been partially fulfilled. The major innovation in design (in Nigeria) was the Landscaping Technique proposed. In all but a very few designs (Nigerian) Landscaping has always been left out when Budgets are being discussed. However, by making it an essential part of the design, there can be no runing away from it. The facilities (such as the simulation chamber) should be an inspiration to budding inventors who may feel discouraged by the numerous limitations which abound in our contry.

All in all, I see this project as a challenge to all people involved in construction in Nigeria to get away from rigid approaches and methods, and to try something innovative, something different for a change. A challenge to more forward in the field of construction technology. I do recognise though, the limitations presented by the very slow rate of industrial development of the Nation as a whole, but perhaps the construction business could act as catalyst to this by presenting problems which have to be solved within our context.

As to leisure and entertainment, more research needs to be done to find out more of the pecucier tastes of Nigerians and to see whether these are just mimics of western ideas or if in the long run it might eventually be possible to come up with specifically Nigerian leisure - though I doubt if this will ever be possible. The world is moving at breakneck speed towards a uniform Global culture.

B I B L I O G R A P H Y

PARKER, S. (1976) The Sociology of Leisure
George Allen and Unwin

PIEPER, J. (1952) Leisure, the Basis of Culture
New York Pantheon Books

WEDDLE, A.E. (1979) Landscape Techniques
William Heinemann. London

MITCHELL, E.D. (1948) The Theory of Play
Ronald Press Company. New York.

COSGROOVES, I AND JACKSON, R (1972)
The Geography of Recreation and Leisure
Hutchinson & Co. London

EADES, J. (1980) Changing Cultures: The Yoruba Today
Cambridge University Press, London

NEUFERT, E. (1973) Architects Data
Granada Publishing Ltd., Toronto.

BUTLER, G. (1958) Recreation Areas,
The Ronald Press Company, New York

TOFFLER, A (1977) Future Shock
Bantam Books/Random House, New York

ILORIN MASTER PLAN: Dioxadis Associates, (1980)

ILORIN CITY SURVEY: Dioxadis Associates, (1974)

CULHANE, J. (1982) "Walt Disney's Dream For Tomorrow"
Readers Digest Vol. 121 No. 724 August 1982.

WALKER, D. Epcot '82" Architectural Design
Vol. 52 9/10 - 1982 pp. 1 - 45.

NEW NIGERIAN: January 9 1982
Interview with Dilibe Onyeama.