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ACE, PANKSHIN (NGAS ARCHITECTURE AND ITS PALACE)

PIUS, BULLS LOKRIT.

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN ARCHITECTURE.

A THESIS PRESENTED TO THE DEPARTMENT OF ARCHITECTURE, FACULTY OF ENVIRONMENTAL DESIGN, AHMADU BELLO UNIVERSITY, ZARIA.

JULY, 1985.

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CERTIFICATION

I certify that this thesis was carried out by Mr. Pius Bulus Lokrit of the Department of Architecture, Ahmadu Bello University, Zaria.

DR. TUKUR SAAD,
SUPERVISOR.

Date----------

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DEDICATION

To

a dear friend Kangrot;

And my mother for making

me what I am, and what I

hope to become.

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ACKNOWLEDGEMENT.

A thesis of this nature would not have been written without the help of many people, and this help has taken many forms; Financial and moral support, company during various case studies, refinement of ideas, pratical help and ideas borrowed from existing publications.

I apologize in advance to all these people whose names shall mean another thesis on 'NAMES', moreover I have less than 48 hours to crash and summit - typed and bounded?

My profound gratitude goes to my supervisor DR. TUKUR SAAD for taking the pain of reading and correcting the draft.

Finally, I acknowledge an enormous debt to my family - my mother most especially, Thank you all.

PIUS, BULUS LOKRIT.

JULY, 1985

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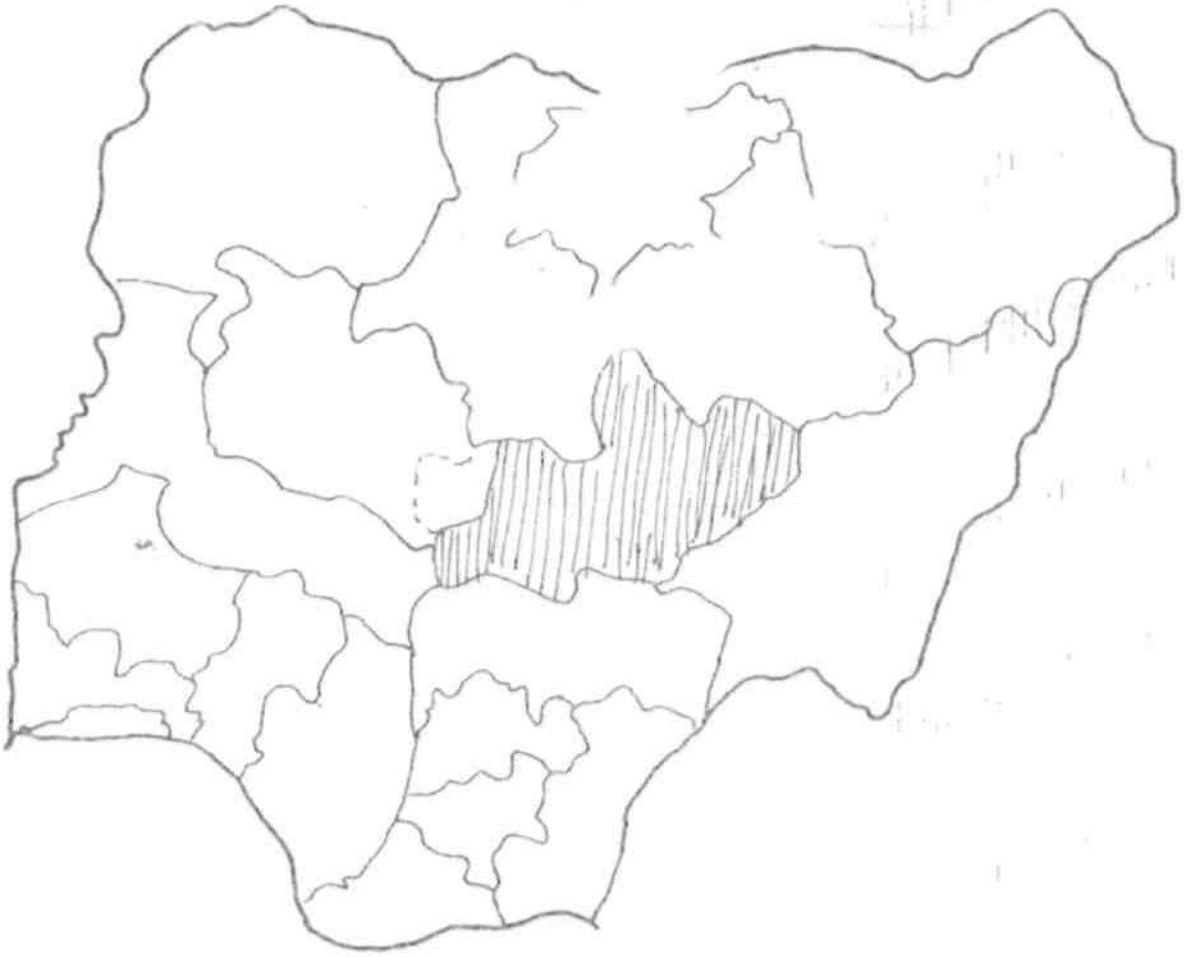


FIG 1. MAP OF NIGERIA SHOWING PLATEAU STATE.

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ABSTRACT.

The Ngolong Ngas' Palace (ie, the paramount chief in Ngasland's Palace) is a representation of Palace designs in Ngasland and Ngas traditional architecture as a whole in modern terms, with conventional building materials and methods of construction. In order to achieve this goal researches involving case studies and data collection are made and reported in five chapters which are further grouped into three main parts, forming this thesis.

The first part is made of chapters one and two, and it deals with the historical background and the way of life of the Ngas that is their origin, settlement portterns, Religion, socio-economic structures e.t.c. It went further to discuss Chieftaincy institution in Ngasland that is their traditional council, Duties of traditional title holders, Judicial functions e.t.c.

Chapters three and four constitute the second part. This part is on the Ngas traditional architecture, - the materials, methods of construction, planning concepts e.t.c. It also analyses the case studies carried out from which conclusions and criticisms are drawn; and discussed how the Ngas

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'builder' combats the climatic discomforts associated with the location of Ngasland, in his buildings.

The last part is a combination of Chapter five and the conclusion. It discusses about the design aspect of thesis, that is concept evolution which is based mainly on Ngas traditional architecture, design brief, schedule of accomodation; and a final Conclusion.

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FIG.2.

MAP OF PANKSHIN L.G.C. SHOWING THE 12 DISTRICTS.

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INTRODUCTION.

This thesis is a conception that has been in my mind a long time ago. What I did not know was the manner in which I will implement it.

Traditional architecture is the cultural expression of the people, (that is, is part of their cultural tradition) since it closelyreflects the physical, technilogical, cultural, political and socio-economic conditions of the traditional community. This cultural expression (architechere) of the Ngas is being threatened by the use of new building materials and technology and thus achieving new structures and forms. The rate of this change is so alarming that if a close study is not carried out on Ngas architecture, throught which these new materials and methods of construction could be used to achieve the architecture of the Ngas; then, with time Ngas architecture would have been a thing of the past.

The need for a Ngolong Ngas' Palace in Pankshin (headquarters of Pankshin local government area in Plateau state) provides me with an

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opportunity to create a model of Ngas architecture in 'modern terms'. That is using conventional building materials and methods of construction. There was an attempt by the local government to accomodate the Ngolong Ngas in a simple fourbedroom apartment, which in essence implies that the apartment was converted into a 'Ngolong Ngas Palace', which failed. The failure was due to the design, which was considered below standard compared to the neighbouring palaces around Ngasland having the same status as the Ngolong Ngas. The other reason was due to poor location, which was on a low plain and this is uncharacteristic of Palace locations in Ngasland, which is usually on hills or elevated lands. (where hills are not part of the landscape).

I do not intend to repeat the structures I find in Ngas architecture - because the social orders, (which have been changed by western civilization) building materials and methods of construction that I shall be dealing with are different from those that these structures were built from and for. However, it is recognised that these structures obviously satisfied their communities' psychological needs far better than most modern suburban settlements do.[1]

The need for the representation of Ngas architecture in 'modern terms' so as to check its

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total eradication; and the need for the provision of a palace for our paramount chief (ie. NGOLONG NGAS' PALACE) in Pankshin and the need to ratify the faults associated with the so called 'Ngolong Ngas' Palace', are the motivating factors of my thesis.

DEFINITION

Ngolong Ngas is the paramount chief in Ngasland. Ngasland covers the present Pankshin local government area in Plateau state, consisting of twelve districts; AMPER, AMPANG, PANKSHIN, WOKKOS, GARRAM, KABWIR, TAL, FIER, CHIP, LANKAN, PAI AND KADUN. Ngolong Ngas is the only graded chief in Pankshin local government area with twelve ungraded chiefs for each of the twelve districts under his jurisdiction.

The Ngolong Ngas institution is a political institution established some five decades ago. There is an electoral college consisting of the twelve ungraded chiefs of the twelve districts; which is responsible for the election of the Ngolong Ngas under the supervision of an electoral committee headed by a chairman. All the twelve district heads are eligible candidates to the throne, which makes, each of them a potential Ngolong. Out of these twelve districts only six districts, Pankshin,

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t, Amper, Kabwir and Garram speak as their primary means of communication. The remaining districks, Tal, Fier, Chip, Lankan, Pai and Kudun have their dialects, thus making Ngas as their secondary dialect.

Palace design in Ngasland is a representation of Ngas traditional compound on a larger scale. This forms the architecture of the Ngas people which is mainly residential. And therefore provides the link between this thesis, NGOLONG NGAS' PALACE, PANKSHIN, and the subtitle, NGAS TRADITIONAL ARCHITECTURE AND ITS PALACE. This thesis is made up of five chapters and a conclusion.

Chapter one deals with the historical background and the way of life of the Ngas people. It talks about, the origin, migration and settlement patterns of the Ngas; and it went further to discuss, the socio-economic structures, settlement formations, Religion, ceremonies and types of festivals of the people.

The second chapter is about chietaincy institution in Ngasland. It looks into early developments of leadership in Ngasland, the composition of the institution and function; and talks about the Ngolong Ngas institution.

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Chapter three looks into the traditional architecture of the Ngas. It discusses the materials used, methods of construction and forms so derived with particular reference to the Ngas traditional compounds and Palaces, which are replicas of the former on a larger scale.

The fouth chapter analyses the case studies carried out, from where criticisms are made on the Ngas traditional architecture as a whole.

Chapter five looks into the design aspect of the thesis. It deals with the concept evolution and development, the design brief, functional relationship diagram and schedule of accomation of the design.

PROBLEMS AND PROBABLE SOLUTIONS.

Due to time constrains, the work and care needed for one to successfully mix people of different cultural values together; there is that tendency to jumble up different cultural traditions, (ie in essence different 'architectures') of the slightly different cultures in 'Ngasland' in an attempt to produce a design with an architecture that reflects

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the whole of 'Ngasland'. (Pankshin local government area)

To avoid this, the concept evolution of this thesis design is based strictly on case studies taken from those districts that speak Ngas language as their primary dialect. These districts are Pankshin, Wokkos, Ampang East, Kabwir, Amper and Garram.

Another problem is the justification for this thesis, which is being threatened by the fact there is the possibility of a government in power deciding to scrap chietancy institutions in the country in the future. Since suggestions to this effect have started coming from the public.

Following the trends of events in the country whereby each government in power tends to get support from the traditional rulers; the possibility of this problem occuring is very limited. But should ~~in case~~ this happens. The Palace is so designed that it could be converted into a public building, a hotel to be specigic with the various household units converted into suites; and the administrative block for administrative purposes of the hotel. With the already developed portion of the site this conversion would be very appropriate and convinient.

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nt economic constrains in the
e difficult for the Ngolong Ngas' Palace to be of the standard of the existing Palaces around Ngasland.

Since it is one of my objectives to produce a standard Palace design, the only probable sulution to this problem is for the project to be executed in phases.

SIGNIFICANCE.

1. Representation of traditional Ngas architecture in modern term, through the introduction of conventional building materials and modern methods of construction.

2. Provision of a residence for the paramount chief in Ngasland, that is Ngolong Ngas' Palace in Pankshin.

OBJECTIVES.

1. Produce a Palace design that would be accepted by all twelve district heads who

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eligible candidates to the throne; and the Ngas community as a whole.

2. Choose a site that is characteristic of location of Palaces in Ngasland, that is on hills or elevated land. (if area has no hills)

3. The Palace should be comfortably comparable to other first class chiefs' Palaces in the state.

4. Ngas traditional architecture should be represented in the Palace design through planning concepts, spatial organisation and visual symbols; in modern terms.

GOAL.

Harmonization of Palace designs and architecture in 'Ngasland' into one, that is Ngolong Ngas' Palace. Which would serve as a model of Ngas architecture in the modern aspect, using modern materials and methods of construction thus evolving new structures. And the application of those elements and concepts in Ngas traditional architecture that enhance the modern building.

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... 'We are talking about authentic analysis of traditional architecture and utilization of those elements and concepts that enhance the modern building in a meaningful way,2

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FOOTNOTES.

1. Susan Denyer, African traditional Architecture (Great Britain: BAS Printer limited), 1978, pp. 4.

2. Sa'ad Tukur, Between Myth and reality. Aesthetic of traditional architecture in Hausaland (Doctorate thesis,) 1981, pp. 377.

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PANKSHIN LOCAL GOVT. AREA.

MAP OF PLATEAU STATE SHOWING PANKSHIN L.G.A.

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PART ONE

THE NGAS PEOPLE

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CHAPTER ONE

BRIEF HISTORY OF THE NGAS

ORIGIN, MIGRATION AND SETTLEMENT PATTERN OF THE NGAS

Historically, the Ngas in series of their oral traditions believed to belong to the sudanic kash group of people who were originally related to the kas of the catarcut of the Nile-Ancient Nobatae - Nubians. That is why it is believed that the Ngas language is similar to the Ancient Egyptian language.[1] The 'Ngas' word came from Ngazragamu, while others claim it came from 'Ngas' meaning cheek. The Ngas' cheeks are cut across by two long marks running from the temples across the cheeks to the chin. The Ngas family is called 'Nkarn' which has a general interpretation throughout Ngasland.

The Ngas probably left Borno between 1100 and 1300 A.D. and were forced to wander under a chief.[2] They sojourned the plains and finally came to a place called 'Yam' in the North of the present

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overnment area bordering Bauchi State. They moved from 'Yam' westwards to sur from Sur to Zwal and then to Jakkah in present Amper district.[3] The actual division of the Ngas family started here. Ewa the Ngas chief had three sons from two wives; one with two sons and the other with one. It was the latter who founded a place called Gyangyang while the other two dispersed and had their settlements called Boksella, Seri, Kabwir, Amper and some others.[4] The son that moved to Gyangyang took with him Kristyer, the most important tsafi (charm) in Ngasland. The tsafi was used to complete the installation ceremonies of the Ngas chiefs. Therefore in Ngasland today the Ngølong Gyangyang is traditionally respected as the elder and this fact is undisputable.[5]

These claims by the Ngas of their originality from Borno is equally supported by the Kanuris that they are their ancestors hence the name 'kaka' meaning grandfather or mother. Furthermore, the evidence of their connection is supported by Quran in possession of 'Pwel' - Dawaki (horses) and Kabwir (burial place for kings) which is strongly believed to have been brought along with them from Borno. However, the irony of the whole situation is that although the Ngas language

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ame language group as Hausa, it bears no resemblance with Kanuri.

This place called 'Yam' where they made a Stopover is still held with high esteem because it is still involved or used in incantations during planting seasons, harvests and burials of the dead who are positioned to face 'Yam'.[6]

Various adaptations were necessitated because of ecological factors thus the difference in festivals of Mostar performed by the plain Ngas and Morgi by the hill Ngas. However, all theses festivals have one goal of celebrating the harvest of new corn.

SETTLEMENT FORMATIONS

The Ngasmwa (pl), regard themselves as one brother regardless of language or dialectical difference but with course in history and the search for better living, certain migrations were observed.[7] Perhaps the situation is best given by Wagner who says:-

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> lement communicates its
> life implicitly, whether
> or not it can be otherwise
> described. Yet the form taken
> by constraints and cares that
> guide the way of life are shaped
> by someone's work, itself obeying
> rules and styles. The form of the
> settlement is a command from the
> past. It expresses and insist on
> a certain cultural pattern.
> Accordingly it can be regarded as
> a highly important communication,
> among the most fundamental of all
> connecting the inhabitants at any
> time with many generations of their
> predecessors. The surrounding in
> which a man lives thus certain
> long - prepared lessons and directions
> for activity',[8]

The Ngas family identified themselves with the early founders of their towns and adopted their language and customs and became part and parcel of the original settlers. The Ngas as any other African Society live in clans because according to J.S. Mbiti.

> 'The clain is a sub-division of the tribe...
> clans are normally totemic, that is
> each has an animal or part of it, a
> plant, a stone or mineral which is
> regarded as its totem. Members of a
> particular clan observe special care
> in treating or handling their totem....
> The totem is the vissible symbol of
> unity, of Kinship, of belongingness,
> of togetherness and common affinity'.[9]

Another common feature of the clan system in Ngasland is that members may not marry fellow members, Ngasmwa live in groups of common decent; that is

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s with extended families inclusive believing in one ancestor called Jep-pup (Jipup) or clan. Each clan's name is traceable to its founder. Thus there are clans in vel, Dilla and Pancen in the hill area known after Jis who was the founder of the clan in Wokkos. And in Kabwir the families of Wokklis and 'luwarang' the chief's Palace, bear the name of Dimka (meaning our line of descent will never end).[10] The homestead of the Ngas is usually surrounded by fragments of farmlands which provides a settlement formation that suits household subsistence.

Solidarity is so strong in the clan system of Ngasland that activities are done together. The Ngas family is different from that of the Western family in that relatives have restricted membership to small household units.[11] The extended family can easily range from 200 to 300 relatives or sometimes more in sizeable groups.[12] In traditional society, the family includes children, parents, grandparents, uncles, aunts brothers and sisters who may have their own children and immediate relatives.[13] The family also includes the departed relatives whom are designated as the living dead. These are as their name implies 'alive' in the memories of their surviving families and are thought to be still

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affairs of the family to which in their physical life.[14]

The Ngas family includes relatives and in the extended patrilineal families it is usual for the family to remain as part of the father's household and to bring their wives to live in the family compound with their children.[15] In either case, the number of family members may range from ten to even a hundred persons where several wives belonging to one husband may be involved.

SOCIO-ECONOMIC STRUCTURES.

> 'Each people has its own district social and political organisalion. The family, age groups, special persons in society, marriage customs, traditional forms of government, political personages and the like, are points of distinctions, with both similarities and differences from one on to another'. 16

The socio-economic lifes of the Ngas are closely inter-dependent but there are two separate aspects. The Ngas are identified by pockets of groups organised in segmented political systems, each group derives its stability and social controls from various class of the social order or associations,

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of age-grades.[17] These groups can common defence of their territory when threatened by external enemies.

In the social set-up, the 'Jep-pup' members of one clan or the 'Jep-zang' ranging from ages between 16 and 25 form the youth group, and the 'Miskam' or elders in the community. There is also a class system which includes the members of the royal family, the elders of the community and the mass of the people. The smallest social unit of the Ngas is the 'Nkarn' family or extended family. The Nkarn might have a compound or more and each is bind by kinship such as the acknowledgemnt of common ancestor.[18]

The age grade institution is very important because of its base on kinship. The first grade is made up of the 'Miskam' (Ndemwa') decisions, policies, rules, law and order, code of conduct and sensitive matters affecting the welfare of the village are formulated by them. The next grade which is perharps the major one in the society is the 'Jep - zangs'. The 'Jep - zangs' are usually youths in prime age of life. They make up bulk of the labour needed, military forces and enforce laws in the society. They are usually initiated before they are called Jep-zangmwa (pl).[19]

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This group is always subjected to rigourous tests and initiation rites in the forests far from their villages. This could be called circumcision exercise or initiation and the rebirth as men in the society because Paul Neiri explained that the rites and the exercise which accompany it have a character which was at the same time political, social and religious. Politically the boy passes from one state of being stage in their lives which has been attained.[20]

Ngas women as in most African societies have their own groups and organisations that perform various civil duties in their communities and are prohibited to take part in any of the religious rituals performed. They are only allowed to brew the local beer popularly known as mos, made from fermented guinea corn or millet and cook food for rituals and festivals. However, they play important roles in the communities; for examples they can settle disputes between two parties or when there is war, the women display green leaves in both warring camps signifying peace and the child bearing aspect cannot be underestimated.[21] They farm and are also responsible for threshing the harvested corn and the general welfare of the household. While the men spend their time leisurely smoking tobacco pipes called tul-taba, drinking local bear or play 'dak' (local gambling).[22]

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ciated with social functions of man and woman existence in the society is marriage. Marriage is a complex affair and it is inseparatable with economic, social and religious aspects in a society.

> 'Otherwise he who does not participate in it is a curse to the community, he is a rebel and a law breaker, he is not only abnormal but under human. Failure to get married under normal circumtances means that the person corncerned has rejected society and the society rejects him in return'.23

The Ngas marriage is time wasting and expensive as stated by H.D. Foulkes in his preliminary notes on the Ngas that

> 'There is no actual marriage ceremony, though marriage or 'la ki mat' is recognised institution'.24

An engagement, marriage agreement entered into is usually done when the girl is young especially during her prime age, the preliminaries being settled by her parents. In Ngasland, however, the opinion of the girl has to be sought before any further arrangements are made therefore when a girl is old enough to have any say in the matter, her suitor first of all obtains her consent to his courtship which is signified by the acceptance of a piece of cloth made from the cotton grown and woven locally which she wears henceforth. Also the courtship has to be done in secret from

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e girl. When the courtship is
ards the mature stage local tobacco - 'taba' and a goat are given out to the parents of the girl. The girl's uncle or any other elderly man in the family can act in place of the girl's father.

Presents come as instalments until such a time when the payments are completed.[25] During the courtship period too, the idea of a new house is concieved by the groom, so he prepares to construct a new house with the assistance of his friends. This is in cases where the bride and groom wish to live on their own.

ECONOMY

The base of Ngas economy is traced to the long practice of subsistence agriculture, mixed with some local trade in items produced in particular areas. Agriculture is the most important economic life wire of the Ngas and they show a very high efficiency and mastery of its contrasting environments - the high plateau and the plains of the north-eastern part of the Ngasland.[26] They are agriculturists right from their early migration from Borno and judging the

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e colonial officials' reports, [illegible] terracing appeared to be extremely good. According to an observation made by H.D. Foulkes, Generations of Ngas have conserved the soil by an elaborate system of drystone embarkments to retain the valued top-soil. He further wrote that

> 'In the hills every scrap of ground is utilized, and the whole mountain sides are terraced up at enormous expenditure of labour. On the steeper slopes the terraces may be three feet high, built up of rocks and stones and frequently only a few inches wide, just room for one row of guinea corn'.27

Among the crops grown in Ngasland are acha or fonio that grows as grasses with seeds as small as mustard, and the popular millet or 'Soghum' with the red called 'Naza' and the white called 'Mor'. The implements used include, 'Kenti' or 'Kyang' (obtained from the lowland Ngas from the Bauchi Kantana) was five inches long and three inches wide, and the 'Chan' (made by the hill Ngas) was larger and spade shaped. Iron smelting was evident too because

> 'Their industries are the manufacture of iron implements and weapons and ornaments, the iron being smelted and worked up with extrmely primitive tools, the plaiting of string from fibre grown by themselves and the making of bags, caps with string, the weaving of grass into mats, baskets, the moulding of clay water pots, pipes, bowls e.t.c.'28

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...e technology, the final product was of good quality.

RELIGION, CEREMONIES AND TYPES OF FESTIVALS

The Ngasmwa (pl) have their traditional religious centred on the worship of certain objects named 'KUM'. To the Ngas people, the belief in one supreme God called 'Nen' is strong although there are smaller deities placed aside. And perharps, the most important of the Ngas deities is the 'Kum-Tau' worshipped at Kabwir during 'mostar' or the shooting of the moon - the significance here is that the moon as a held belief was evil. This festival is normally witnessed in the months of October in Amper and November in Dawaki and Kabwir.[29]

The second most important deity was 'Kum-kristyer' whose cult was associated with power. This Kum is kept in possession of the chief of Gyangyang and used for the installation of Ngas rulers before the coming of the British. Found in Amper is the 'Kum-Fwan', the most venerated and this was associated with rain and is generally used in Ngasland for good planting

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' however were not left behind in

e Ngas had the 'Kum-Yer',

'Kum chok', 'kum pel', 'Nawut', 'Yir', 'Kudang'

'Zar' and many lesser ones, worshipped as family, clan or village deities. The Kum tsafi are spiritual entities represented by concrete symbols such as branches of oil trees, locust bean trees, locally called 'Mes' pebbles and so many totems kept in in Sacred shrines or groved places. These kum or tsafi (Hausa name for it) have special hereditary people who perform them. The Ngolong Kum or 'Sum-wari' precides over all kum worship and rituals.[31] And P.D. Foulkes described what he saw as

> 'Jigwel are spirits beneficient or otherwise. Everystone, tree, locality, hill e.t.c had its spirit.... jigwel 'net' or white and the others are jigwel 'tip'.... If a man farms piece of land and its jigwel happens to dislike him, that farm will never be profitable, but if it is the reverse, the farm would be very profitable'.[32]

The Ngas believed that when a man is born, he is endowed with remarkable entities - that is life and 'Rin'. When the 'Rin enters a man its counterpart enters some beasts at the same time and it was believed that when he dies so also does the body containing the possessed Rin.[33]

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The Ngas have masquerades called 'wong' which appear on occasions. The 'wong' is a representative of the spirits punishing men for their errs and misdeeds. The 'wong' is believed to have the powers of the ancestors and are commonly seen in harvest festival, hunting and special rituals and occasions when there is the need. Costumes made from leaves are worn by the masquerades to perform 'mos-wong' or morji, festivals, and they assist the Chief priest 'Sum-Wari' in rituals and assignments connected with festivals. Other masquerades include, wong-gurna' (looks over ancestral cult and sacred groved) 'wong-wim' is identified with oaths and trial by ordeal; and wong bilta (dresses in the hausa flowing gown with leaves round the head and it is responsible for corn threshing.[34]

Festivals, ceremonies are part of the African tradition thus it will be incomplete to talk of people's history without these. Activities are carried out to mark a major unity in the life of a people. For instance, the installation of a Chief, marriage rites, funerals. planting season, successes in hunting and victories in wars are marked by colourful celebrations of rigourous dancing. In short, in every activity an African participates, he carries along with him his religion.[35] And often these dances are collective,

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bringing together social groups of men and women, girls and newly initiated boys and this in the whole involue the community from the aged to the youngest.

Finally, the Ngas' idea of a supreme God or universal God is well defined as they appear to place more emphasis on the 'Kum' and rely on their ancestors. A 'Ngolong' is seen as the reincarnate of the late chief and the reason why the appointment of a new Chief has to be ratified through a process of divination wholly for all in the society. Hence, the position held with great esteem and absolutism.[36]

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FOOTNOTES.

1. Kabwir Development Association, Programme (July'83) page 1.

2. History of the Ngas to the time of British occupation (Binji, J.T. Thesis; B.A. History. 1984) page 5.

3. Kabwir Development Association. page 2.

4. Isichei, Elizabeth, studies in the History of Plateau state (1982, Jos) introduction.

5. Binjin, J.T., Histry of Ngas, Thesis 1984

6. Kabwir Development programme.

7. History Thesis report, Binjin, J.T. 1984.

8. Wagner, L. Philip, Environments and peoples, page 45.

9. Mbiti, J.S. African Religions and philosophy, page 1056.

10. Tuwan Development Association, Gantang Tuwan. page 26.

11. Kabwir Development Programme, page 2.

12. Mbiti, J.S. African Religions and philosophy.

13. Ibid.

14. Ibid.

15. M.D. Foulkes, Reports on Angass Patrol, para.10.

16. African Religions and philosophy, Mbiti, page 106.

17. Binjin, J.T., History of Ngas to the time of British occupation, (Thesis report) 1984.

18. The peoples of Jos Plateau, page 185

19. Ibid.

20. Binjin, J.T. History of Ngas, 1984. (Thesis).

Your complimentary use period has ended. Thank you for using PDF Complete.
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21. H.D. Foulkes, some preliminary notes on the Angas, 1907 para. 29.

22. African Religions and philosophy, page 105 - 7.

23. H.D. Foulkes, some preliminary notes on the Angass, 1907.

24. Binjin, J.T., Thesis Report 1984.

25. H.D. Foulkes, some preliminary notes on the Angass, 1907.

26. Binjin, J.T. Thesis 1984

27. H.D. Foulkes, some preliminary notes on the Angass, 1907.

28. Binjin, J.T. Thesis 1984.

29. H.D. Foulkes, Preliminary notes on the Angass, 1907.

30. Binjin, J.T. (Thesis 1984) History of the Ngas to the time of British accupation.

31. Ibid.

32. Studies in the History of Plateau State, page 30.

33. H.D. Foulkes, some preliminary notes on the Angass, 1907.

34. Binjin, J.T. Thesis on Ngas History 1984.

35. Ibid.

36. Ibid.

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CHAPTER TWO

CHIEFTAINCY INSTITUTION IN NGASLAND.

ORIGIN AND EARLY DEVELOPMENTS.

Chieftaincy institution has been with the Ngas right from the time of their living in Borno. According to traditions the cheif that led them to a place called 'Yam' was Ewa, and it is from his descent the town Gyangyang was founded. The descendants are brothers believed to have separated but allied during wars.[1] This factor too, heightened the Cheiftaincies matter and the institution was splitted. The split was the result of misunderstanding within the internal divisions of the chief's family thereby leaving a group of brothers to part company on the death of their father. Traditions have it that a custom prevented the chiefs of Amper and Kabwir from looking at each other, thus when considering warplans, they would sit back to back.[2]

The position of the Ngolong in Ngasland is believed to be God's chosen and it is held with

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person in office too has the responsibility to command this respect. The Chief stands as the highest man in the society and he was taken as the supreme authority. He is the custodian of the traditional forms of worship, the repository of all the traditions and culture of the society that has been passed down from the ancestors and he precided over all ceremonies and festivals.[3] In short he was the religious, political, social and economic head of the community. A British colonial officer puts it as follows

> 'As all important question were referred to him, and he settles cases and disputes.... capable of grappling with problems brought before him, and not only that, he must be of a disposition such that his people will not be afraid to approach him'. [4]

TRADITIONAL COUNCIL AND SUCCESSORS.

The evolution of chieftaincy titles in Ngasland has its limitations as the royal family is the only priviledged descendants of the founder of a town or village and succession to the position was patrilineal. The heir apparent which is usually the eldest son takes up after his father's

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death. Nevertheless, on the condition that the eldest son is weak and displayed qualities contrary to the expectations of his people and no matter his age, some other person is chosen to replace him. If also all the members of the royal family fail to produce a suitable candidate, the traditional council consisting of four elders 'Diskamfir' come to the aid. One of the 'Diskamfir' is chosen as a chief; that is, his successor was elected.[5] The 'Diskamfir' consisted of the four principal title holders who assisted the Ngolong in conjunction with the council of elders, 'Diskamwa'. The Ciroma, Turaki, Madaki, and Ngolong Kwan (rain maker) are the holders of titles and these titles have hausa origin. The responsibilities of the 'Diskamfir' is felt in the ancestral and secret cults and they officiate at ceremonies or festivals.

The 'Madaki' was responsible for the running of the chief's household and acted on behalf of the chief in matters corncerning the administration of the palace and represented him at ceremonies and festivals. The 'Ciroma' was the chief adviser of the Ngolong took charge of affairs of the community for which he was responsible. The 'Turaki' was the war head responsible for military matters, organisation and defence and was conversant with problems arising from external relation.[6] While

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was charged with regular rainfall and good harvest.[7]

With this effective mechanism of governing, the Ngas chief is chosen subject to general acceptance. This, H.D. Foulkes noted that

> 'The circumtances preliminary to election, makes it practically certain that the chief is personally accepted if not the most suitable'.[8]

'Kop' is usually associated with matured age and the life of a chief is known and as an additional guard however, he is subject to removal on performance below expectations. Rejecting a chief unfit to rule is not a new thing to the Ngas and prior to his appointment or removal a diviner, - 'Gope' is consulted. Everyone believed in the chieftaincy institution and even a deposed chief abide by the decision of the ancestors without demur for the good of the community.[9]

The incumbent chief has no influence on his successor though he is capable and sensitive but at times he is rendered redundant by the 'Diskamfir'. The chief and the Diskamfir meet to make rules to guide the people and at times there are modifications or existing laws and custom to meet circumtances.

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makes sure that the authority of ained and remain absolute. Chiefs have to show acceptability to the ancestors and the spirits of the land; he has to show that he was the elect of 'Kum Tau', the strongest and most sacred. He has to show the ability of prevailing over the Diskamfir, 'Miskam' and the people of the community. Finally, ceremonies on the installation of chief normally take one week to conclude with displays.

DUTIES OF TRADITIONAL TITLE HOLDERS.

The traditional title holders in Ngasland are made up of the chief priest - 'Sum-Wari', the council of elders - 'Miskammwa', the wardhead - 'Mai ungwa' and the traditional council or the 'Diskamfir'.

The 'Sum-wari' is the chief priest of the community, and he officiated in all forms of traditional religious worship and he performed all the sacred rituals connected with the ancestral cult. He holds a very important religious responsibility and in the whole of Ngasland the 'Sum-wari' is placed side by side with the chief. As mentioned earlier the positions of the sum-wari is hereditary in families.

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The 'Miskam' constitute the elder of the communiities and there is no size limit only that it is composed of men over seventy years of age. Hence, membership is determined by age and security and they are considered to be wisemen of the community and as such are treated with care. They are taken as guardians of the traditions in the society and were often consulted on matters of precedent and especially on issues requring the propiation of the various cults and ancestral spirits, their position was for life.

The 'Mai-ungwa' were wardheads of the various sections of the community. This position used to be given to the first person to settle within a particular section of the town and it used to be hereditary in his family. However, subsequently the practice grew up by which the elders of a particular ward would meet to select one of their members to be the Mai-ungwa, depends on how large the village or town is. Their number could vary from fifty to hundred or even more. The position is not permanent because any wardhead found wanting will be removed after a vote of no confidence has been passed subject to ratification of the chief. The 'Mai-ungwas' are responsible for tax collection and tributes from the inhabitants and communal or self help projects are organised under them.

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ers include the chief's household guards, the dogarai who were responsible for the safety of the chief and the maintenance of law and order in the community.

These title holders presided over courts and took decisions on matters affecting livestock, acts regarded as breaches of the peace, disputes arising in market places, murder, adultery, abduction and land disputes, all on behalf of the chief.[10]

They received certain priviledges such as exemption from taxation and tribute from forced communal labour and the possession of extensive farmlands. On the whole the possession of a title in Ngas Society conferred social prestige which helped in the achievement of potitical leadership among the people.

JUDICIAL FUNCTIONS.

In the Ngas judicial system, the chief was the supreme judge of his subjects and it has been written by H.D. Foulkes and C.J. Ames that

> 'All cases of disputes and querrels are referred to the king, also sometimes with and without the

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(title holders) goes matter and gives his which is final'.[11]

There is a masquerade called 'wongwim' which is connected with Ngas secret cult called wong. This masquerade is used for oaths and rituals by ordeal. The Ngas community is bound to adhere strictly to the norms and taboos governing the society. The principal traditional offences are adultery, witch craft, theft, abduction of wives and murder.[12] There are no fixed days for hearing cases therefore cases could be brought at any time to the chief's palace. The Ngolong, the traditional council and elders formed the panel of impatial judges; they acted as the official interpreters of ancestral customs.

The nature of the offence usually determines the gravity of the offence and in serious cases such as murder, the murderer as a rule is sent away from the community and all his property confiscated and given to the victim. But in rare cases, he was given to the family of the victim who determines what to do with him or her, and at times put the person to death; the manner of execution being in the same way he murder his victim. In cases involuing adultery, the offender might be banished or boycotted. On resistence or refusal

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nity, it was regarded as contempt of the chief and he was killed by being hit on the head with a pestle called 'Sarshing'. In cases of theft and abduction, the punishment involved refunding what had been stolen or the woman abducted at the payment of the cost of what had been stolen and the expenses incurred on the woman.[13] The excercise of justice obviously infringes very closely on the domain or religion and politics.

The Ngas people believed in the rule of law in keeping with their norms, values and taboos. Therefore to preach any of these was tantamount to disrespect of the ancestral spirits. Hence, the norms, values and taboos were strictly observed and enforced by the people. Anybody breaching them was fortrightly condemed or considered an outcast in the society.

NGOLONG NGAS INSTITUTION.

The Ngolong Ngas institution is a political institution established by the colonial masters. Its existence can be traced to about four decades ago, with Nde Joseph Yilsu Dimlong as the first Ngolong Ngas (1953 - 1965 duration of reign).[14] The main function of this institution then was to see to the efficient collection of poll tax in

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olonial masters; and the easy communication between them (colonial masters) and the Ngas people through the institution headed by the Ngolong Ngas (the indirect rule technique).

The Ngolong Ngas as mentioned earlier, is the paramount chief in 'Ngasland', (Pankshin local government area). He has twelve ungraded chiefs representing the twelve districts that make up Pankshin local government area, ., under his jurisdiction. There is an electoral college which is responsible for the election of a new Ngolong Ngas whenever the need arises. The twelve district heads of the twelve districts (Pankshin, Wokkos, Ampang East, Kabwir, Garram, Amper, Fier, Kadun, Pai, Lankan and Tal districts), are eligible contestants to the throne, which in essence makes each of them a potential Ngolong Ngas.

ELECTION AND INSTALLATION OF NGOLONG NGAS.

Upon the death, resignation or deposition of Ngolong Ngas the electoral successor of the Ngolong Ngas shall be appointed by an electoral college consisting of:-

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g Amper

b. Ngolong Ampang

c. Ngolong Kabwir

d. Ngolong Pankshin

e. Ngolong Pai

f. Ngolong Wokkos

g. Ngolong Garram

h. Ngolong Lankan

i. Ngolong Kadun

j. Ngolong Chip

k. Ngolong Tal.

L. Fier ?

The election is carried out under the supervision of an electoral committee with members from all districts in Pankshin local government area, headed by a Chairman.

The installation ceremony is done on a day fixed by the local government. The sequence of events is similar to the past installation ceremony programme below:-

INSTALLATION CEREMONY OF NGOLONG-NGAS.

(CHIEF OF NGAS) AT PANKSHIN ON SATURDAY 16TH DECEMBER, 1978.[16] .

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GRAMME OF EVENTS.

FRIDAY, 15TH DECEMBER, 1978:

3.00 - 6.00 P.M.	-	Arrival of Guests (at the Chief's Palace)
7.00 P.M.	-	Rehearsal of Traditional dances at Nefur.
7.30 - 8.30 P.M.	-	Cocktail Party (By invitation only)
9.00 P.M.	-	Guest Return to the lodging.

SATURDAY, 16TH DECEMBER, 1978.

8.00 a.m.	-	Dancers assemble at Nefur.
8.30 a.m.	-	Local Dignitaries arrive.
8.45 a.m.	-	District and Village Heads arrive.
9.00 a.m.	-	Arrival of Chairman, Pankshin local government council
9.15 a.m.	-	Invited Guests take their seat.
9.30 a.m.	-	Arrival of Emirs and Chiefs.
9.45 a.m.	-	His Highness the Ngolong Ngas arrives.
9.50 a.m.	-	Civil commissioners arrive.
10.00 a.m.	-	The administor arrives.
10.05 a.m.	-	(National anthem) Nigerian Police Band, Jos.
10.10 a.m.	-	Welcome address by the Chairman, Pankshin local government council
10.20 a.m.	-	The Kingmakers present the Ngolong Ngas, Mr. Pius Challa Dyiltu, to the military administrator.

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	-	The administrator delivers his address and present the staff of office; to the Ngolong Ngas,
11.00 a.m.	-	The Rt Rev. Dr. G.G. Ganaka, present the Holy Bible to Ngolong-Ngas and to take oath of office.
11.15 a.m.	-	The Ngolong-Ngas delivers his speech.
11.30 a.m.	-	Traditional Homage to Ngolong-Ngas (list to be announced)
11.45 a.m.	-	Traditional dances
1.15 p.m.	-	The administrator leaves for gevernment guest house.
1.30 p.m.	-	Refreshment for Administrator Civil commissioner, Emirs and chiefs at Government lodge, Pankshin and at Pankshin hotel for other distinguished Guests.
2.00 p.m.	-	Administrator; Civil Commissioners; Emirs and Chiefs; invited Guests depart, followed by the General Public.

FUNCTION OF THE INSTITUTION.

The function of this institution is felt indirectly through a representative at the federal level, and directly at the state level. At the state level the Ngolong Ngas is a member of the state council of chiefs.

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FUNCTION OF THE STATE COUNCIL OF CHIEFS.

The function of this Council has been given more recognition on a federal level as the Constitution of the federal Republic of Nigeria states. Established by section 1978, is the state council of chiefs. This is to be established among other commissions and councils.[17] The Council of Chiefs shall comprise among others a chairman. It includes all the other chiefs in the state (Ngolong Ngas inclusive). The function of this council includes the power to:-[17]

a. advice the governor on matters relating to:-
   i. Customary law of cultural affairs.
   ii. intercommunal relations.
   iii. chieftaincy matters.
b. Whenever requested to will have power to:-
   i. advice on public order within the state.
   ii. matters as the governor may direct.

One person as chosen by the Council to represents the state council of chiefs to make up, among other members, the council of state. This comprises:-[18]

a. President (Chairman)
b. Vice President (Deputy Chairman)

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c. Former presidents of the federation and heads of government.

d. Former Chief justices (of Nigerian citizenship).

e. President of senate.

f. Speaker of House of Representatives.

g. All governors of states of federation.

h. Attorney-General of federation.

The function of the council of state include power to:-[19]

1. Adivce president on maintenance of public order within the federation when requested to.

2. Advice President in respect of population census and keeping of its records; prerogative of mercy, Awards of National Honours, federal National population commission.

Among other things they take up the people's grievances to the government. The government communicates with people through them. They adjust the people's natural laws for the better with the approval of other members of the tribal council.

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PAST NGOLONG NGASMWA (PL).[20]

1. Joseph Yilsu Dimlong - 1953 - 65
2. Adamu Gutus - 1966 - 67
3. Haruna Dimka - 1968 - 78
4. Pius Challa Dyiltu - 1978 - 80
5. Nbok Jos Dimlong -

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FOODNOTES.

1. Tuwan Development Association Magazine, The Gantang Tuwan (1982) page 7.

2. Binjin, J.T. (Thesis 1984), History of the Ngas to the time of British occupation.

3. Ibid.

4. Ibid.

5. Foulkes, H.D., Preliminary Notes on the Angass, 1907, page 7.

6. Binjin J.T. (Thesis 1984) Unicalabar.

7. Ibid.

8. Ibid.

9. H.D. Foulkes, Preliminary notes on the Angass 1907. page 28.

10. Binjin, J.T. (Thesis 1984) Unicalabar.

11. Peter Shehu, The British Colonial Administration (B.A. Thesis, Unijos 1983) page 26

12. Binjin J.T., History of the Ngas to the time of British occupation. (B.A. Thesis University of Calabar, 1984).

13. H.D. Foulkes Notes on Angass, page 28.

14. Programme for the installation of Ngolong-Ngas (Saturday, December, 16th 1978) page V.

15. Ibid. page 7.

16. Ibid. page 12.

17. Miss Gberikon, Tor tiv's Palace, Gboko, (M.Sc. Thesis A.B.U Zaria, 1981)

18. Ibid.

19. Ibid.

20. Programme for the installation of Ngolong-Ngas (Saturday, December, 16th 1978) page V.

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PART TWO

THEIR ARCHITECTURE

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HAPER THREE

NGAS ARCHITECTURE.

As already mentioned, the understanding of Ngas traditional architecture requires a close examination of the physical, technological, social, cultural, political and economic environments of the Ngas people. Since these factors have been discussed in the previous chapters, this chapter will concentrate mainly on the built environment of the Ngas people. Traditional Ngas architecture can be classified under the following:-

Os'K TUN (TOMB CONSTRUCTION)

Tombs were dug to 'accomodate' dead bodies burried in various positions. The most commonly used burial form was the sitting position; whereby tombs were so constructed (having split levels) to comfortably accomodate the corpses in a sitting position after the Knees must have been bent. A relatively flat stone was used as tombstone after which mud was applied round the edge of the tombstone and then filled with earth. However, this method is rarely employed nowadays.

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TRUCTION)

This is characterised by tree planting with climbers round an enclosed area with a single small entrance. The space so achieved is usually dark inside and well screened from the outside by leaves. The 'lit' is used for sacred rituals during harvests, plantings, installation ceremonies e.t.c. In Ampang East there are two 'lits' one is used only for installation rituals of new Ngolongs and the other 'lit Goktok' is used for other sacred rituals.

RESIDENTIAL CONSTRUCTION

For the purpose of this thesis I shall be more concerned with the residential aspect of Ngas traditional architecture, Which is the most prominent in Ngas traditional architecture. As Susan Denyer puts it.

> 'Anyone discussing African architecture wants to know the answers to the questions why, where and when, why this shape, when was it first used and where did it come from if anywhere'. 1

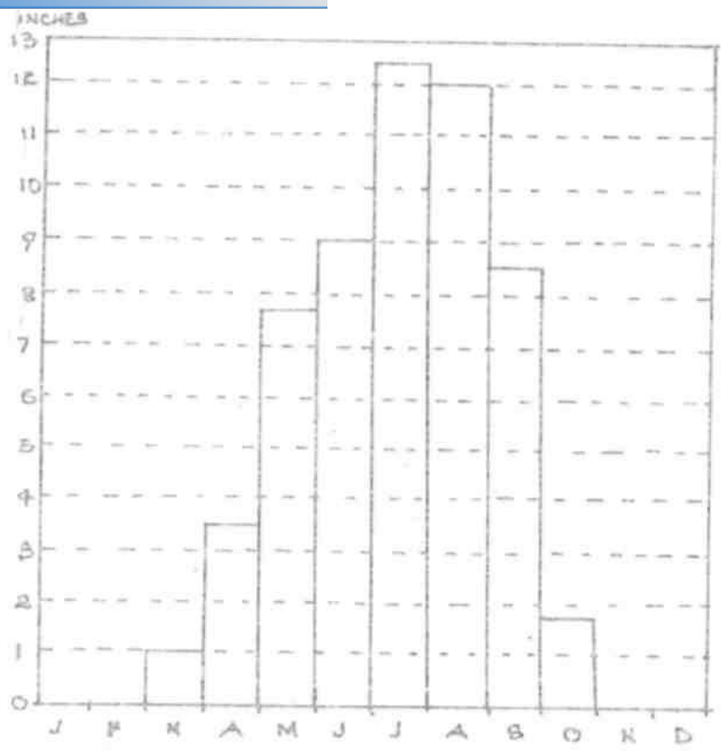
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little documentation available
l architecture, Susan Denyer's idea on the study of African traditional architecture shall only be treated as the scope of this thesis, time available and collected data permit.

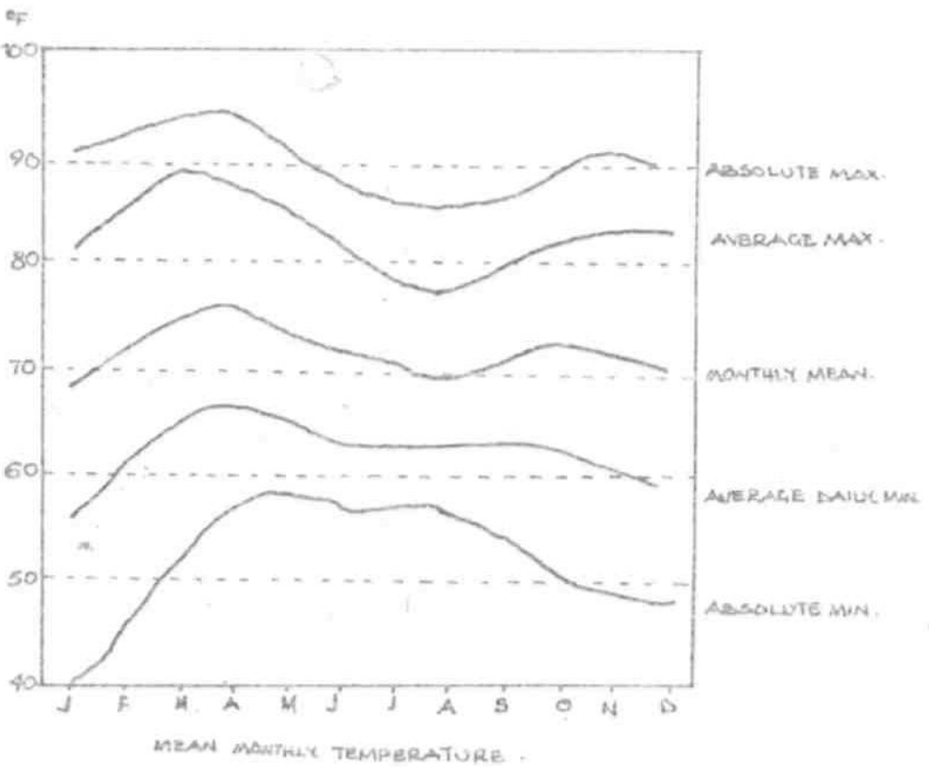
Discussion on the residential aspect of Ngas traditional architecture shall be centred on the materials used, traditional methods of construction, building forms, planning concepts, spatial organisation, various components and functions; and how there are used by the Ngas people to combat climatic discomforts due to the location of Ngasland.

Ngasland is located within the grassland Savanna of Nigeria. The climate so found due to this location is modified by the presence of the Jos Plateau which forms part of Ngasland. Infact Pankshin town is located on one of the peak heights of the Jos Plateau. It is on latitude 09 17' and longitude 09 26'.[2] The climate is composed of a brief annual Rainy season during which foggy days with low vissibility are experienced; and a long Dry season during which the dessicating harmattan winds blow down from the Sahara. The daily temperature change may be as high as 30-35°F (see fig. 3) With this climate the Ngas people are faced with problem

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MEAN MONTHLY RAINFALL.



MEAN MONTHLY TEMPERATURE.

FIG. 3. CLIMATIC DATA OF PANKEHIN.

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of cutting the cold and biting winds of the harmattan and at the same time providing a cool respite from the intense heat of the midday sun.

PLANNING CONCEPTS AND SPATIAL ORGANISATION.

The conventional method practiced in the building industry whereby the plan of a proposed building is first designed, based on which the subsequent building is constructed is not applicable to Ngas traditional architecture. But most typical Ngas compounds which form the backbone of Ngas traditional architecture, tend to reveal some basic interesting elements which could be classified as planning concepts or spatial organisation.

The approach or entrance situation of a typical Ngas traditional compound is characterised by an open 'forecourt' which is very prominent as one approaches the compound through narrow footpath(s) that cut through farmlands connecting the various compounds in a Ngas community. The forecourt is sort of an open air theatre, serving as a traditional dance area by itinerant dancers paying visits to compounds during festivals and ceremonies. In most compounds this area is marked out by raised platforms

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PANG'.

The internal arrangement of a typical Ngas traditional compound is composed of various 'household units' which are connected together by a central courtyard 'DAWOK' that in turn, connects these units to the 'PONANG' via an entrance hut 'GANTANG' or through a passage. The connection from the central courtyard 'DAWOK' to these units could be directed through narrow passages round the huts that sometimes produce an intricate network in a compound. The 'DAWOK' is linked to each of the household units through a hut 'KALNG' which opens into another private 'DAWOK' (Courtyard), that connects the kitchen(s), bedroom(s) and granary (ies) (household unit elements) together. Each Ngas traditional compound is surrounded by fragments of farmlands which provides a settlement formation that suits household subsistence. Labelle prussin's view on the savanna belt of West African architecture is quite applicable to the Ngas traditional architecture, that is - The plan of a typical Ngas compound tends to reveal not only the size of the occupant group as whole, but the precise heirarchical and jurisdictional relationship which exist among its members, male, female, young and old.[3]

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BUILDING FORM.

Ngas architecture is composed mainly of the circular form. The huts are free standing having rounded surface with rough textures of earthen walls; with small single door openings (which were round in shape, but changed to rectangular due to western impact.) The roofs have steep slopes with overhangings (see sketches on constructional methods) The building form can be summerised as Susan Denyer puts it

> 'Round plan, free standing, diameter less than height, walled with mud, often with stone foundation, thatch roof (conical, or trumpet-shaped), arranged in clusters of buildings, usually on the ring pattern with building parts of enclosing wall or fence'.4

VARIOUS COMPONENTS, FUNCTIONS AND RELATIONSHIP.

Ngas domestic architecture is mainly based on extended family residential compounds. Where a compound could accomodate up to ten families and more, and therefore having up to hundred or even more people living in it. (This is mostly common with 'LUWARANGS' (Palaces).

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relationship diagram of the
its) within a family household unit in a Ngas traditional compound is almost always the same throughout Ngasland. That is most family household units in Ngas compounds agree with the functional relationship diagram in fig:
The various componets include:-

'POPANG'

This is an open area associated with frontages of Ngas traditional compounds. It is circular in shape and surrounded with platforms of carefully selected and arranged stones. It serves as as a dance area during festivals; with parts shaded by trees where male elders sit leisurely for discussions or play 'DAI' (type of gambling). Closely linked with the 'Popang' is the 'PI CHI SHIG' (pounding and corn threshing area) mostly shaded by a tree(s). see fig: 18

'GANTANG'

'Gantang' is the first hut that one encounters on approach to a Ngas compound after the Popang. It

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y hut in some compounds, while in others the footpath to the entrance way into the compound is directed round the Gantang. In the latter case the Gantang has only one door opening facing the 'DAWOK'. This arrangement is for security purposes in that a visitor entering such compounds is unconscious of the person(s) that might be in the Gantang (there is usually someone in the Gantang) behind him watching; and therefore the directed footpath serves as an 'alarm instrument' to the compound.

The Gantang is used for male family meetings, and serves as a sleeping room for young boys above thirteen years of age, on initiation or already initiated into the 'Jep-zangs'. There are raised wooden slabs 'SHIP' in the Gantang which serve as crouches and beds. Log smoldering in the Gantang each evening chases away the mosquitoes and during harmattan when the temperature descends very low provides welcome warmth. Due to the multi-purpose function of this hut it is normally the biggest hut within a compound; which explains the presence of the characteristic 'DUK' (a wooden post) at the middle of Gantang, serving as a column supporting the enormous weight of the roof structure caused by the enlarged diameter, see fig. 4

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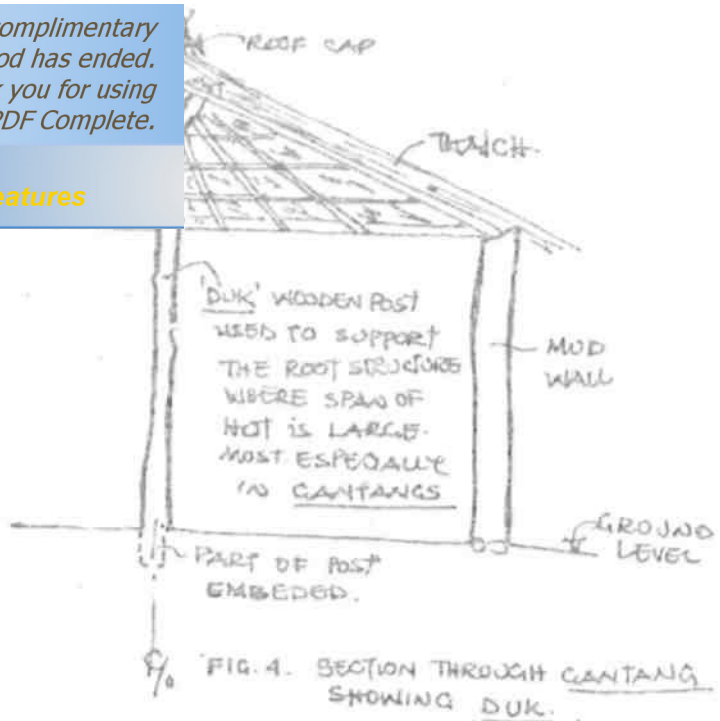


FIG. 4. SECTION THROUGH CANTANG SHOWING DUK.

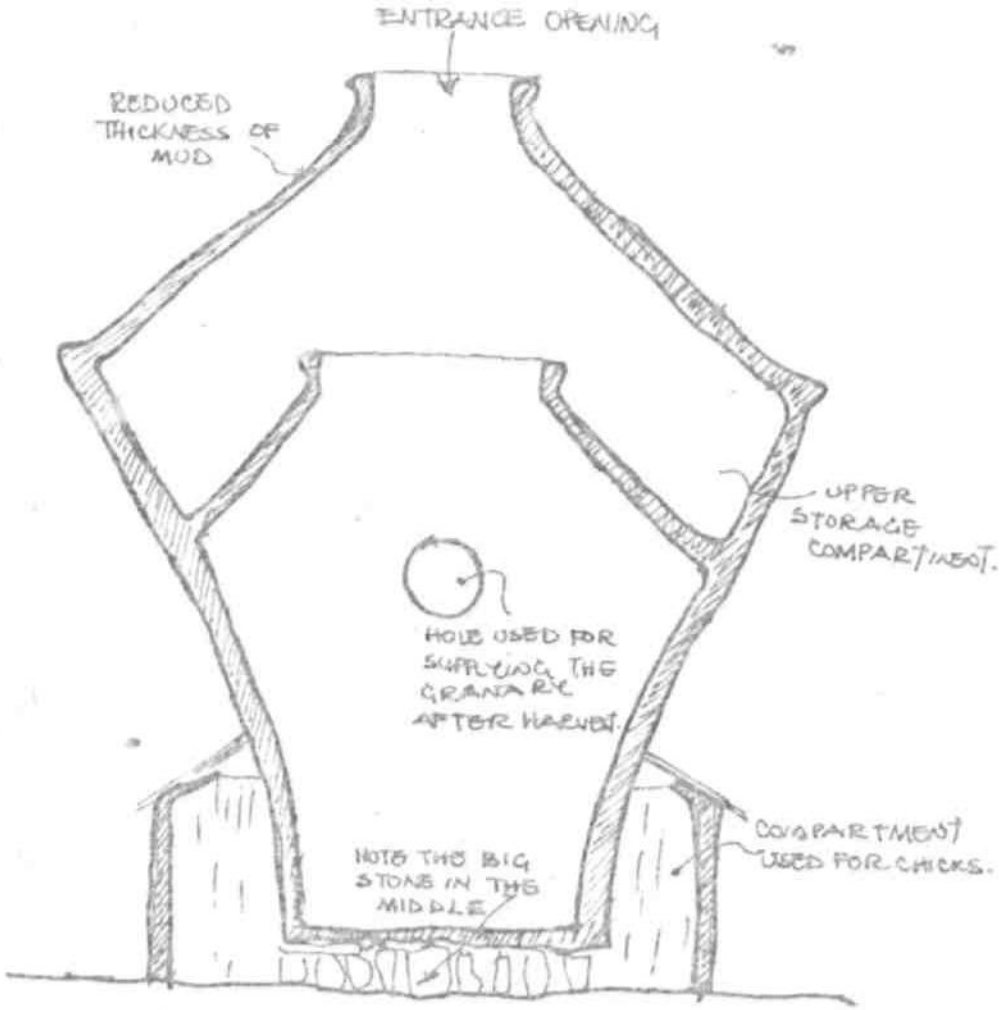


FIG. 5 SECTION THROUGH A GRANARY.

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Dawok implies courtyard. There are two types of Dawoks located at two different positions within the Ngas compound. There is the public DAWOK which is encountered on entering the compound, and it is the link to the various family units within a particular compound. The other is a private 'DAWOK' located within a family unit mostly after the 'Kalng'. It serves as a kitchen courtyard and a 'connector' of the elements (ie. bedroom(s) kitchen(s) granary(ies) and kalng) that make up the family unit. 'BANGLANG' is also associated with the private 'dawok'. It is a raised platform on four wooden legs used for drying pots and calabashes.

'KALNG'

This is the entry hut from the public 'DAWOK' to the family unit and also forms part of this unit. It serves as a living-room as well as a bedroom for the father and as a passage way into the other huts (kitchen and bedroom) via the private courtyard. In compounds where the local beer 'mos' is prepared, the kalng is also used to entertain customers.

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This is the bedroom. Associated with this is a raised mud platform serving as a bed; usually with a cavity underneath where heat is applied during harmattan with hot chacoal.

'LUYOM'

'Luyom' is the firewood storage hut. Until recently when this hut is being ignored, every housewife used to have her luyom.

KITCHEN

This like any other kitchen is used for cooking. Other functions include the preparation of the local beer Mos. Also associated with the kitchen is the grinding stone, but in some compounds a separate hut is built for this function.

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Gyier is the granary. It is a characterristic feature of Ngas architecture; which is present and forms the 'backbone' of every Ngas compound. Every housewife in a Ngas compound is entitled to at least one granary. The granary is used for storage purposes especially corn and millet. Granaries appear in many forms throughout Ngasland, as illustrated in the diagrams, but constructional techniques are similar.
fig. 5

This is the commonest type of granary in Ngasland; having two basic compartments. The upper compartment is used for storing valuables in pots and calabashes; while the lower compartment is used for storing corn and millet. A small hole in the lower compartment is used as a supply hole to the compartment after harvests.
Fig. 6

This is a combination of granary and kitchen, that is, it serves two functions, storage and cooking. The upper division is used for storage purposes, and the lower for cooking activities. The heat from the lower part helps in drying the foodstuff above and therefore preserving it.

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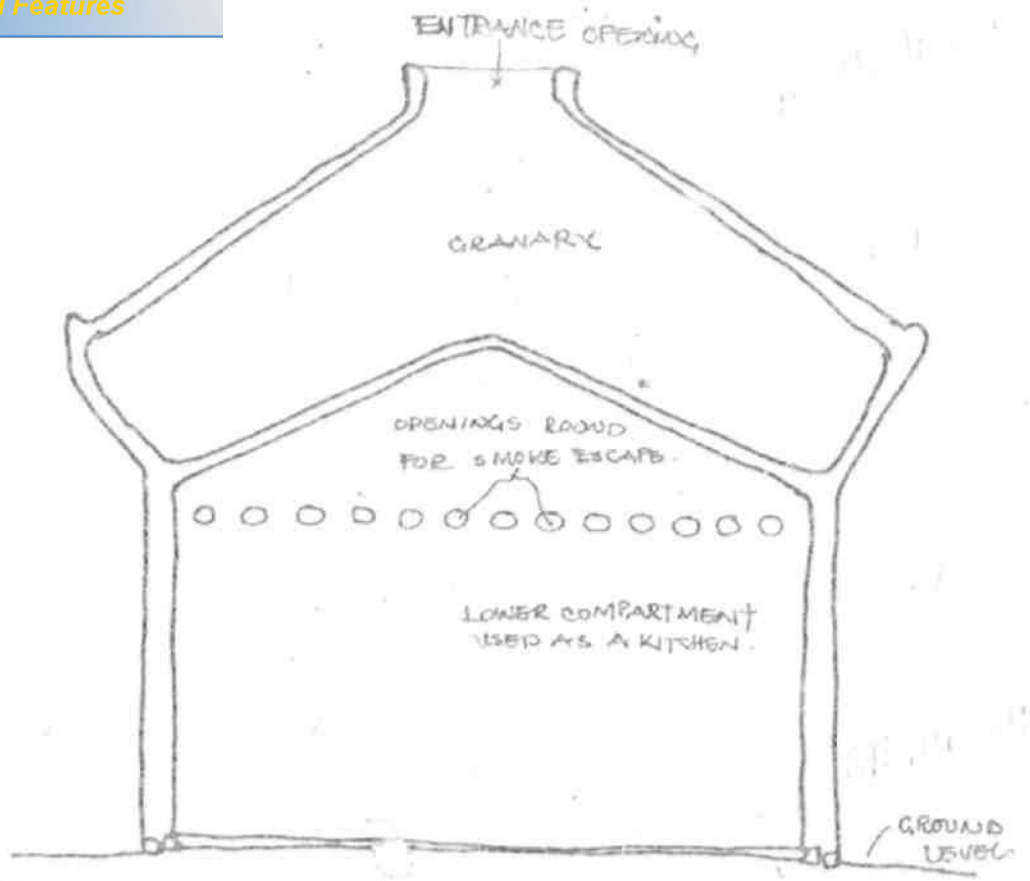
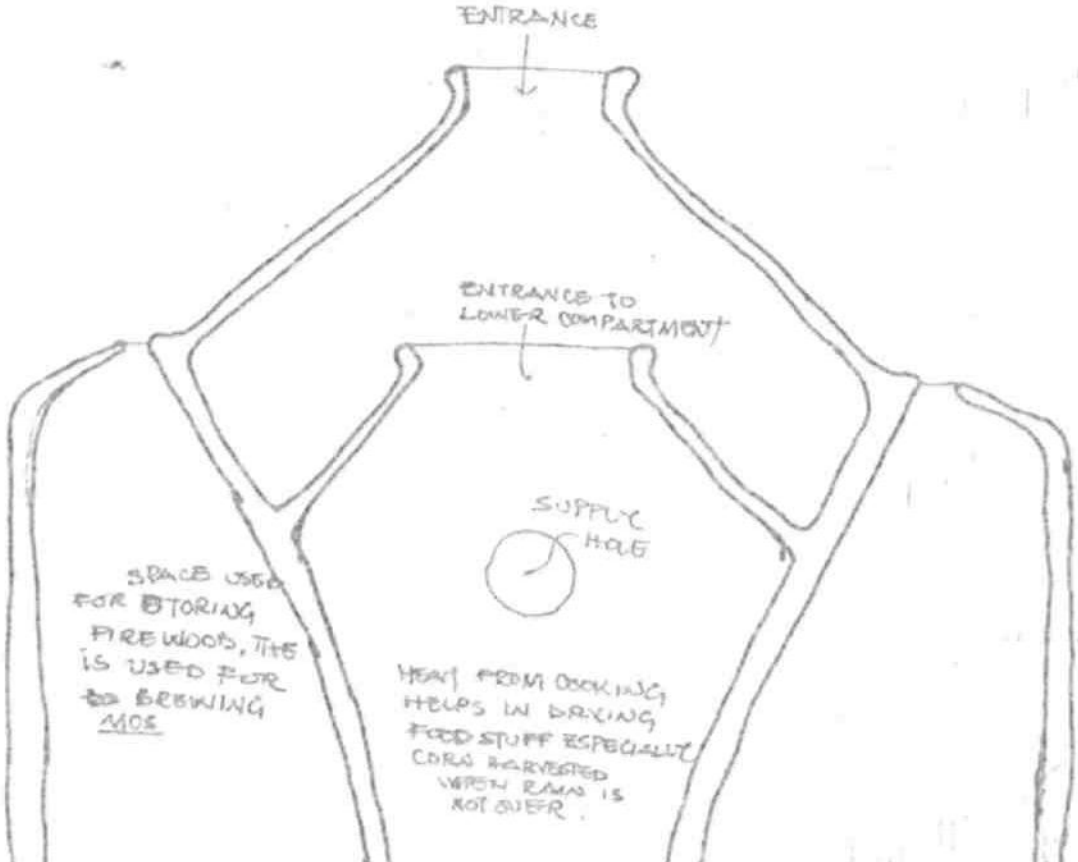


FIG. 6. SECTION THRU' GRANARY



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ification of the granary in Fig. 5 round the granary, with the space so formed used for firewood storage. The local beer 'Ilos' is brewed just after the entrance into this space. Thus the unit performs three functions foodstuff storage, firewood store and brewing 'mos'. The heat generated from the cooking activities also helps in the preservation of foodstuff.

MATERIALS AND METHODS OF CONSTRUCTION.

MUD:-

Mud has been a universal building material for a very long time, it was even used in the temperate zones. It is the basic building material in Ngasland.

'Mud' is soils with low silt content and varying proportions of sand and clay. While soils with this characteristics are poor for agriculture they are an advantage to building. The clay makes the soils sticky and the sand is responsible for the strength. In other words the determining factor of how mud could be applied in constructional processes is the proportion of these constituents. Mud can be used

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form, a wide variety of roofing solutions are possible, domes vaults, flat roof e.t.c.

Susan days

'If the surfaces of walls of mud buildings are kept weel maintained to prevent water from seeping into the cracks, they will sometimes outlive their original builders'.5

STONE:

In Ngasland stone is used as a foundation layer underneath mud walls. It is a very important material in the construction of granaries, 'POPANG' and 'NEFUR'.

'NRAZZ' (SABECC)

This is a tropical plant that grows very high, but slender and strong in compression and tension.

Other materials include, Azara, twigs, cornstalk, elephant grass, straw e.t.c.

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S'

There are no professional construction specialists in Ngasland, nonetheless, some men are recognised for their skill and their suggestions are followed. Although housebuilding involues no moretary expenses, a man must have ample surplus of millet so that his wife can prepare food and beer ('mos') for the many who help.

CONSTRUCTION STAGE

This can be treated under the following:-

i. SETTING OUT AND LAYING OF FOUNDATION.
ii. ERECTION OF WALL.
iii. ROOF FRAME WORK CONSTRUCTION.
iv. ROOF THATCHING.
v. MUD ROOF CONSTRUCTION.
vi. PLASTER AND FLOORING.
vii. GRANARY CONSTRUCTION.

SETTING OUT AND LAYING OF FOUNDATION:

The building construction process starts with the invitation of the people that would help, by the

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could prepare the mud to be used and make it available on site, or alternatively wait for his helpers who may have better skills in this.

The setting out is carried out as illustrated fig. 8. A peg is hammered around the middle of the cleared land, a robe is tied from the peg to a nole or ankle, the length of rope represents the radius of the proposed hut. With the robe kept in tension a circle is inscribed round. Selected stones are then laid round the inscribed circle. These stones serve as the foundation, without any digging involved.

ERECTION OF WALL:-

This stage is started after water and straw is added to the mud and are well mixed. The process involves wet construction. The wet mud is then put round the foundation. When the wall reaches around 40cm, the construction is stopped for sometime for the raised wall to dry. The construction is then continued for almost the same height and stopped to allow the part to stiffen or dry. The process is continued with intermissions until the desired height is reached. Openings in the hut during construction are taken cared of as shown in fig. 9

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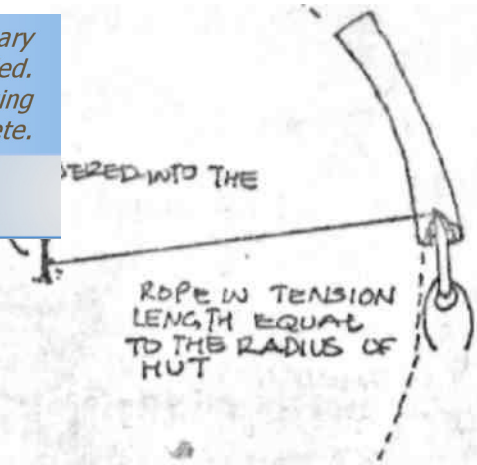


FIG. 8

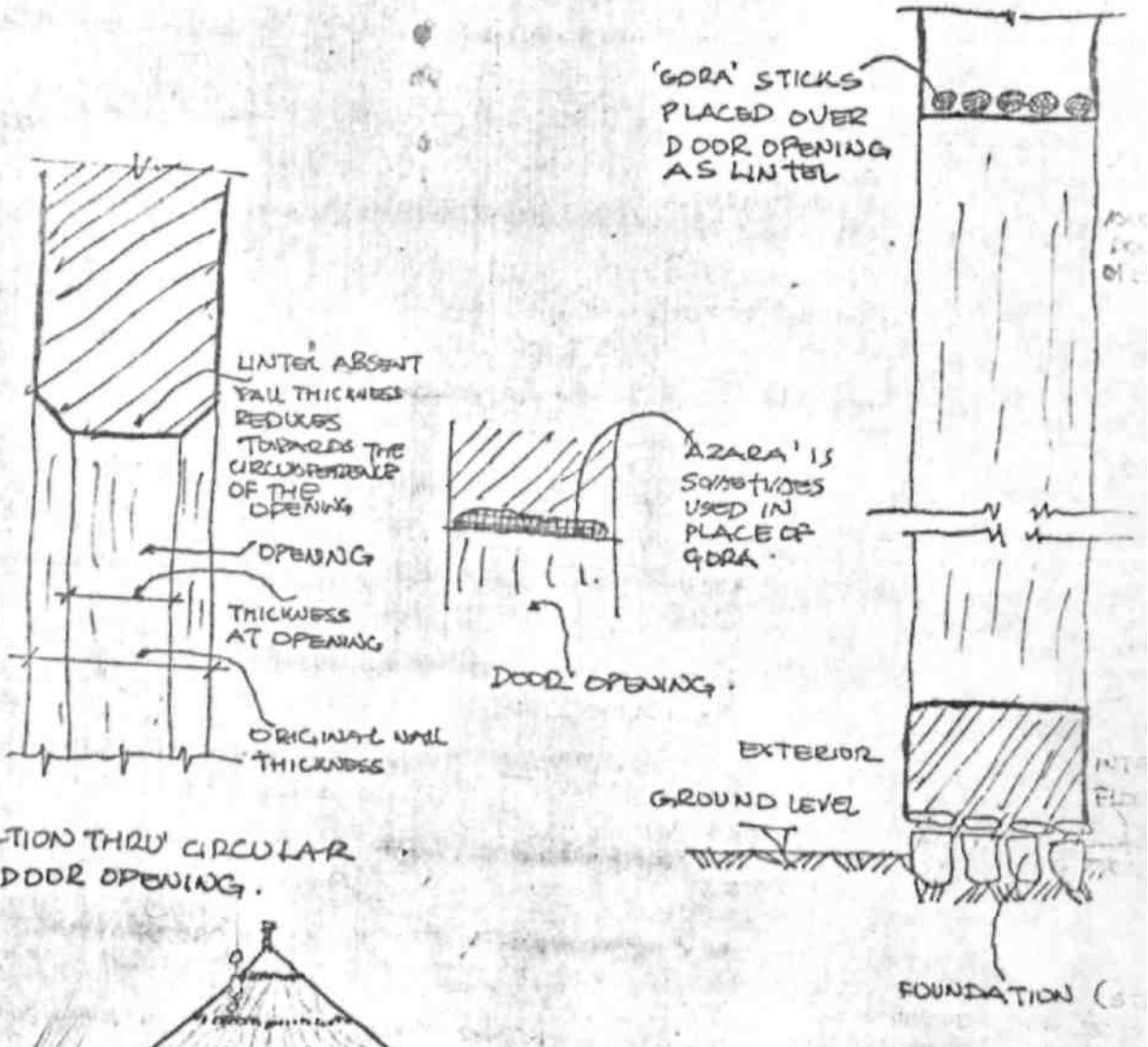


FIG. 9

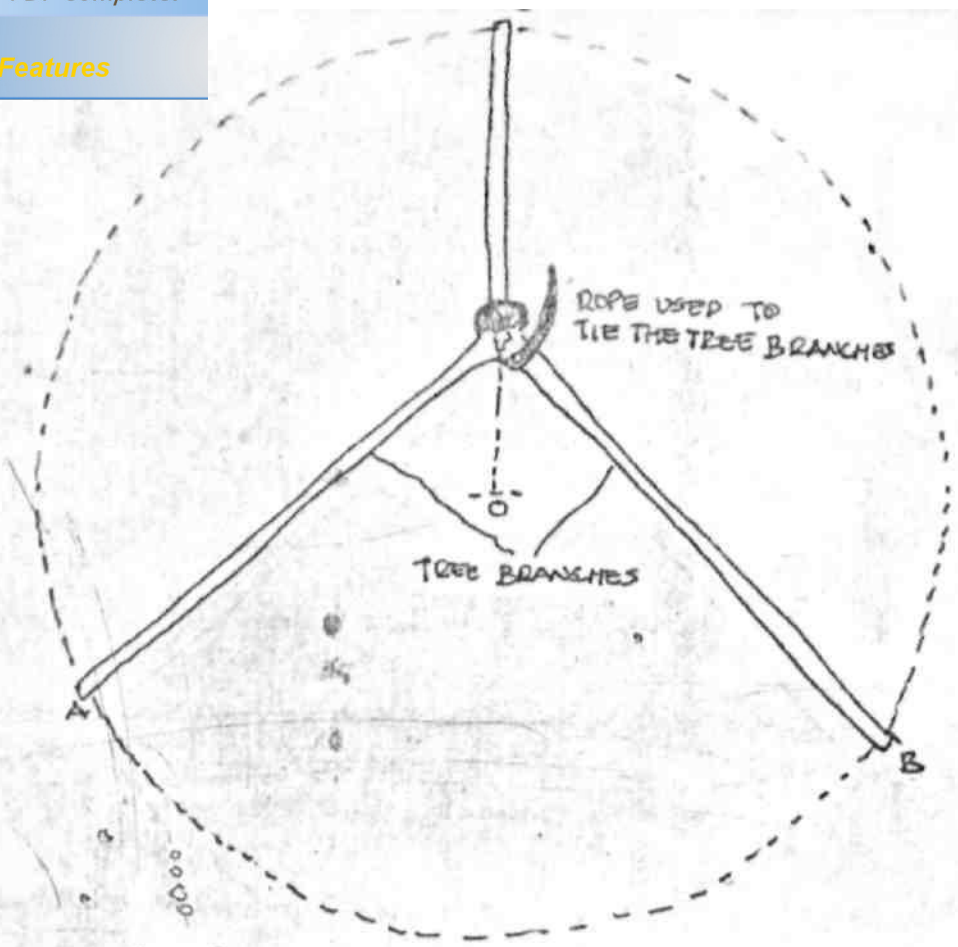
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ROOF FRAME WORK CONSTRUCTION.

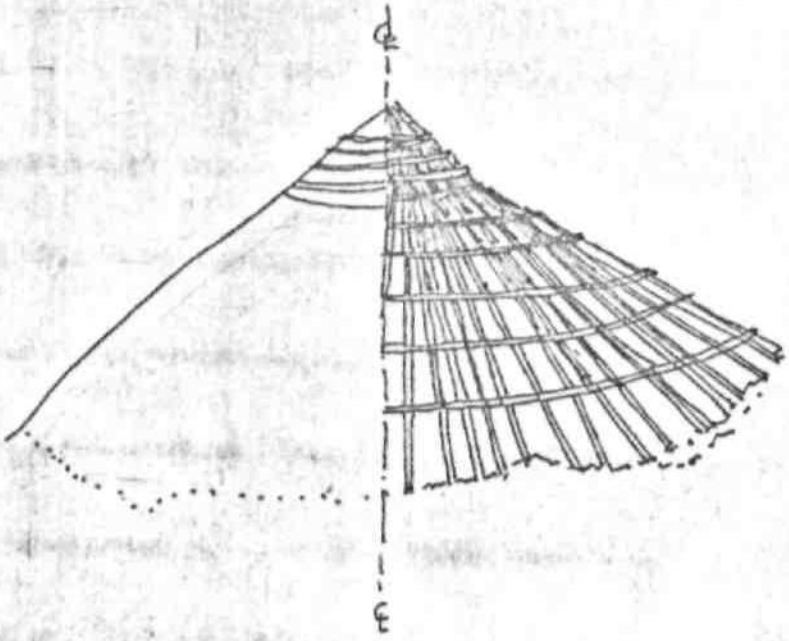
The roof frame work could either be made on the ground and then carried to the top or made on the top of the completed wall itself. (see figs. 10) The construction of roof frame work on the ground involves setting out using thin tree branches, Gora or Cornstalk. The number of mentioned elements involved at the setting out stage depends on the diameter of the hut, but they are normally three in number at positions A B and C. The ends of the tree branches (having 'Y' ends) are inclined and tied at an angle as shown in the diagram. Cornstalks of the same lengths are placed round and tied in position with twigs. The completed roof frame work is then carried to the top using 'Ship' - a type of ladder. (see fig.) sometimes thatching is completed on the ground before the whole structure is carried to the top.

In cases where the construction is done on the top, three men would stand at positions A, B, and C, and another man on a high platform at D. The process then carried out as discussed. see fig. 10

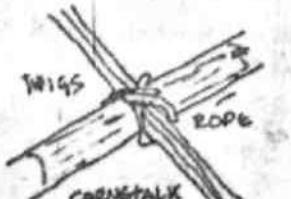
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SETTING OUT OF ROOF FRAME WORK OF THE GROUND



FRAME WORK CONSTRUCTION.



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The preparation of the thatch before the actual process is done by women. After which the prepared elephant grass is rolled in bundles and kept around trees or behind completed huts, ready for the thatching.

Roof thatching on the ground level is not very common with the Ngas partly because of the difficulty involved in lifting the structure to the top of the completed hut. However, the process is easier on the ground and it is employed by some. The alternative, thatching on the roof frame already on the completed hut, is made less tedious by the used of a long strong cross stick (fig. 13); which is used to carry the bundle of thatch on to the roof frame. The roof thatching process is done in an asending order, with men positioned at reasonable intervals (within prepared bundle length). The bundle is then rolled round, with the men secrurring it to the roof frame; by tieing the robes at both ends of each bundle to the roof frame, additional tie enchorages are also applied at intervals between the ends. The process is continue to the apex, with each new starting 'circumference' (after each complete rotation round the hut) some twenty centimetres or so above the

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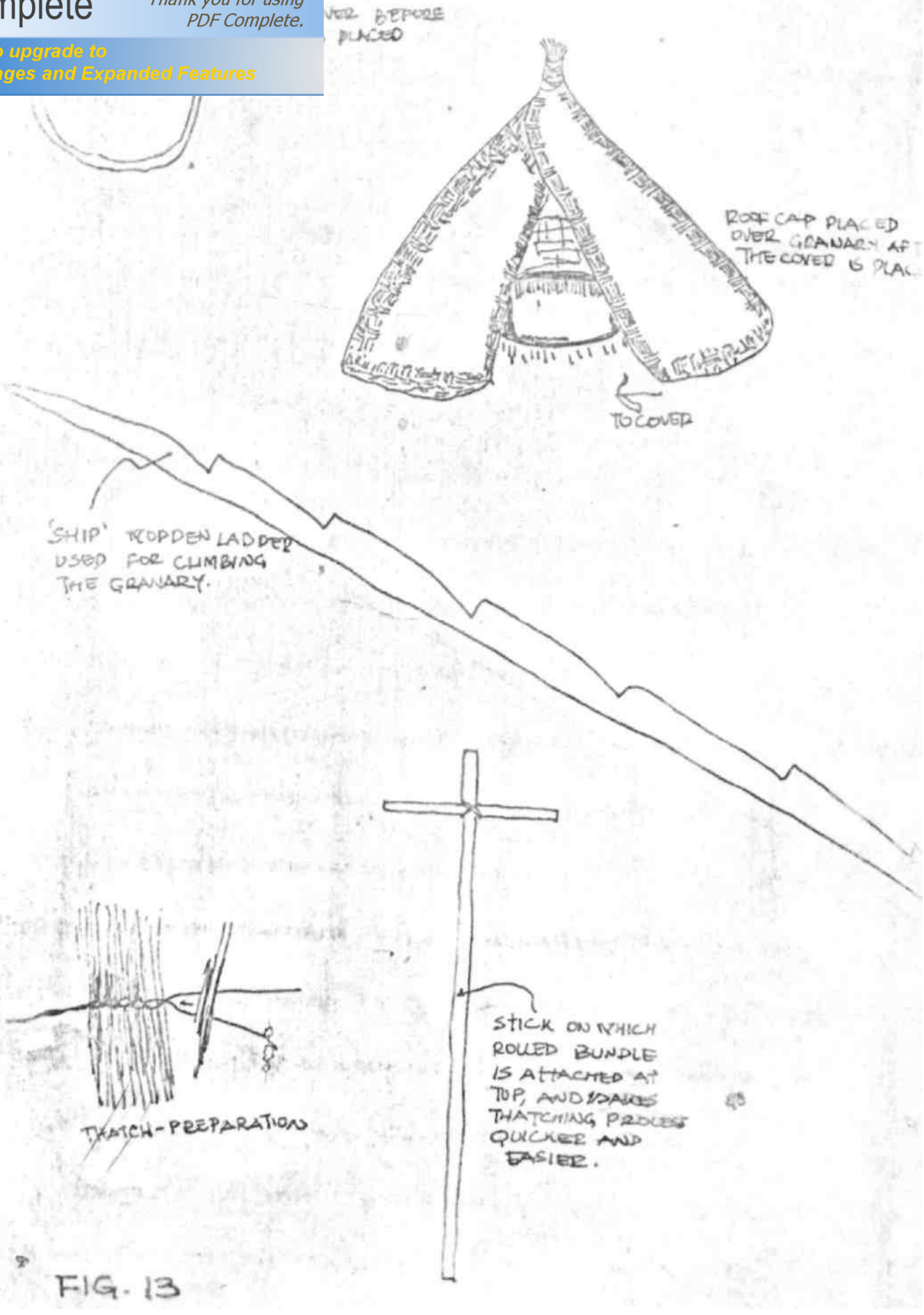


FIG. 13

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immediate previous 'starting circumference'. A roof cap is finally securred to the apex after completion. (see fig.13a).

MUD ROOF CONSTRUCTION.

Mud roof construction in Ngasland shows some technological advancement in the application of mud as a building material. This is seen in the 'shell' like structure achieved withoutany reinforcement (apart from the dried grass in the mud which serves as the only reinforcer), or formwork.

No centering is employed in Ngas mud roof construction. The construction is carried out in stages. After every three to four layers (ie rounds of application) of wet mud, it is allowed to dry after which the process is repeated. Each time reducing the thickness of the wall (so that the 'finished product' has thinner walls towards the apex and tilting the wall at an angle for the eventual meeting at the apex. Thatch is then applied to the completed mud roof. (Unlike in Hausaland where the mud roof is exposed to weather).

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OORING.

Plastering and flooring are both associated mostly with the interiors of Ngas huts. The material used for plastering is 'fine mud' acquired from ant hills. The mud from ant hill is mixed with water, the plaster is then applied by hand. Smooth finish or shell patterns, is produce on the plaster. The former is achieved by using a small smooth stone (obtained from riversides or streambanks) whose surface is dipped in water and rubbed gently on the wet plaster thus producing a smooth finish. In the latter, shell patterns are traced in different directions depending on the intended pattern so desired, along the wet plaster walls with the fingers. This forms the principal type of interior decoration in Ngas architecture.

Mud is used for flooring. The wet mud is spread evenly round the hut, then children and women are called to ram it. A flat surfaced object is then used for the final levelling and finishing.

GRANARY CONSTRUCTION.

The Ngas granary is an interesting architectural

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element with a 'shell like structure' whose construction is similar to that of Ngas mud roof construction. Ngas granary construction (and the mud construction) requires a beat of professional specialization, thus not everyone that can build a hut in Ngasland can be successful with the granary.

The construction involves two stages, the making of the foundation and the erection of the granary wall. The foundation is made of stones arranged together in a small round form, with a big one in the middle. This Big Stone in the middle is very important (it collects most of the load in Ngas granaries when in use), thus it is characteristic of Ngas granary construction. Relatively flat stones are placed on these stones to form a level surface, after which mud is added and left to dry in preparation for wall building.

The wall erection is carried out as discussed in hut construction, only that in the case of the granary the wall is not built straight upwards, but inclined outwards giving a letter 'V' impression in elevation. At a height of between 1.5 - 2.0 metres, the outwards wall erection is stopped, and the inward wall erection begins. (making provision for the upper compartment). This continuous as in mud roof construction with an entrance opening left at the apex. This is the general method used in

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granary construction in Ngasland. But with types like fig. 7, the mud roof is first constructed, (serving as a roof to the kitchen below and as the base for the granary above), after which another sort of 'mud roof' is constructed above the first with an entrance opening on top.

NGAS PALACES. 'LUWARANG'

Ngas Palaces are the official residences of the 'Ngolongs' and their families - extended families inclusive. The various communities in Ngasland all have their 'LUWARANGS' (Palaces), thus there is luwarang Pwel, luwarang Amper, luwarang Kabwir e.t.c. These palaces are the most respected of all the compounds within any set up in a Ngas community. Except for the distinguishing features discussed below, a Ngas Palace is just a replica of a typical Ngas extended family traditional compound having very similar planning concepts, spatial organisation, building form and components. These differentiating features are:-

LOCATION

NEFUR

LUKUM

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LOCATION.

This is the most prominent distinguishing feature of Palaces from ordinary extended family compounds in Ngasland. Palaces in Ngasland are located on top of hills, except in communities where hills do not form part of the topography; in which case they are located on the most elevated parts of the plains. The 'peak' location associated with Ngas Palaces was (and in some instances still is) due to security and socio-political reasons.

The location served as for security purposes during inter-tribal wars and the jihadists from Bauchi Province. The high location provided a good view of the approaching enemy and also made it difficult for the enemy and the jihadists who were on cavlry difficult to climb the hills on their horses. The difficulty involved in throwing spears or using bows and arrows on people on top of hills can not be disputed. It also gives the Ngolong a good view of his people.

The location also facilitated quick and easy dispersion of messages from the Ngolong to the rest of the community. In those days all important messages for the people originated from the luwarang and is dispersed through 'MWOT KI NWO', that

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message through shouting. This was
ugh compound heads or household heads.
The message from the luwarang (Palace) is 'shouted' to the nearest compoundhead or household head, who it turn 'shouts' it to the compound head or household head nearest him. The process continuous untill the message was delivered to the whole community. This method is still practiced in some parts of Ngasland.

In Ngasland 'height' is closely associated with power and respect, and therefore this also explains the location of Ngas Palaces on top of hills. The Ngolong being the most - powerful and respected within any particular Ngas community, is linked with this 'height'.

'NEFUR'.

This feature is only linked with palaces in Ngasland. It is a marked open area used for mourining activities of dead Ngolongs. (Sort of a 'mourning square') The sole use of this area, makes it redundant as long as the Ngolong lives.

Also found in the Palaces in 'LUKUM'. This is a hut used by the Ngolong for his sacrifices.

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The shrine is also closely situated to the Palace, and is used for activities as discussed. The large size of the luwarang is another distinguishing element, though some compounds could exist within a community of similar size.

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FOOTNOTES.

1. Susan Denyer, African traditional Architecture (areat Britain: BAS Printers limited) 1978, pp.

2. Programme for installation of Ngolong Ngas, 1978, pp. 1.

3. Labelle Prussin.

4. Susan Denyer, African traditional Architecture (areat Britain: BAS Printers limited) 1978, pp. 133.

5. Ibid. pp. 93.

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CHAPTER FOUR

CASE STUDIES.

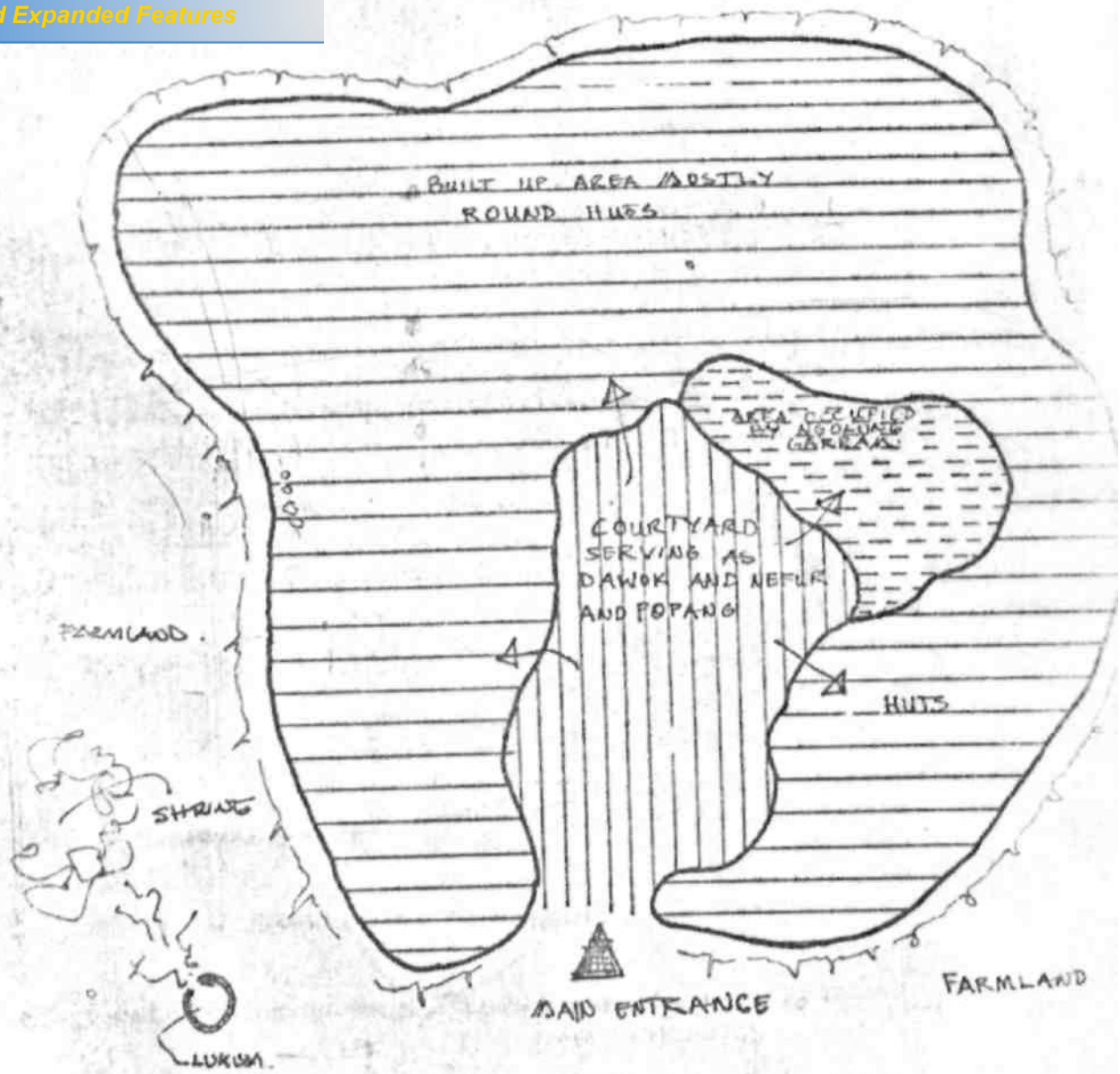
These are carried out with particular attention to the site concepts, the spatial organisation and internal relationship of the various units of both the palaces and ordinary Ngas traditional compounds. Below are analyses of each of the case studies carried out. (figures 15 to 18).

GARRAM PALACE. (LUWARANG GARRAM)

Figure 15, shows the site concept of the Garram Palace. This palace is not located on a hil as most Ngas Palaces. However it used to be located on an elevated area long time ago, but was moved to the present location. The reason for this movement was given as lack of space for expansion.

The prominent feature at the entrance situation of this palace is the 'BONG-NING', a sort of a cattle kraal surrounded by raised stone wall in a circular form, which gives the entrance a false impression of

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GARRA/S - PALACE.
(SITE CONCEPT)

FIG. 15.

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a popang from a distance. Also at, the entrance situation towards the left, is the corn threshing and pounding area located under a tree. Detached from the Palace huts is a hut some few metres further left of the threshing area, which is the lukum.

A large entrance leads into a large almost enclosed courtyard. This courtyard is referred to as 'NEFUR'. It performs the function of the Nefur discussed in addition to the functions of the popang and the central courtyard, dawok. Talking drums are kept in the middle of the Nefur and are used during festivals and ceremonies; except during Rainy Season when they are removed into the Gantang, they are always in this position. As one enters the Nefur, directly ahead is the Ngolongs' house which is the only rectangular form of buidling apart from the court house which is detached from the other huts. Beside the Ngolong's house is an unroofed hut built of stone only, with a height of about 4.5 metres. Its entrance is screened from the public and opens into the Ngolong's courtyard as shown in figure 15. The people prefer to be silent about the function of this unroofed stone hut. The lit is linked to the lukum as shown in the sketch.

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LUWARANG WOKKOS)

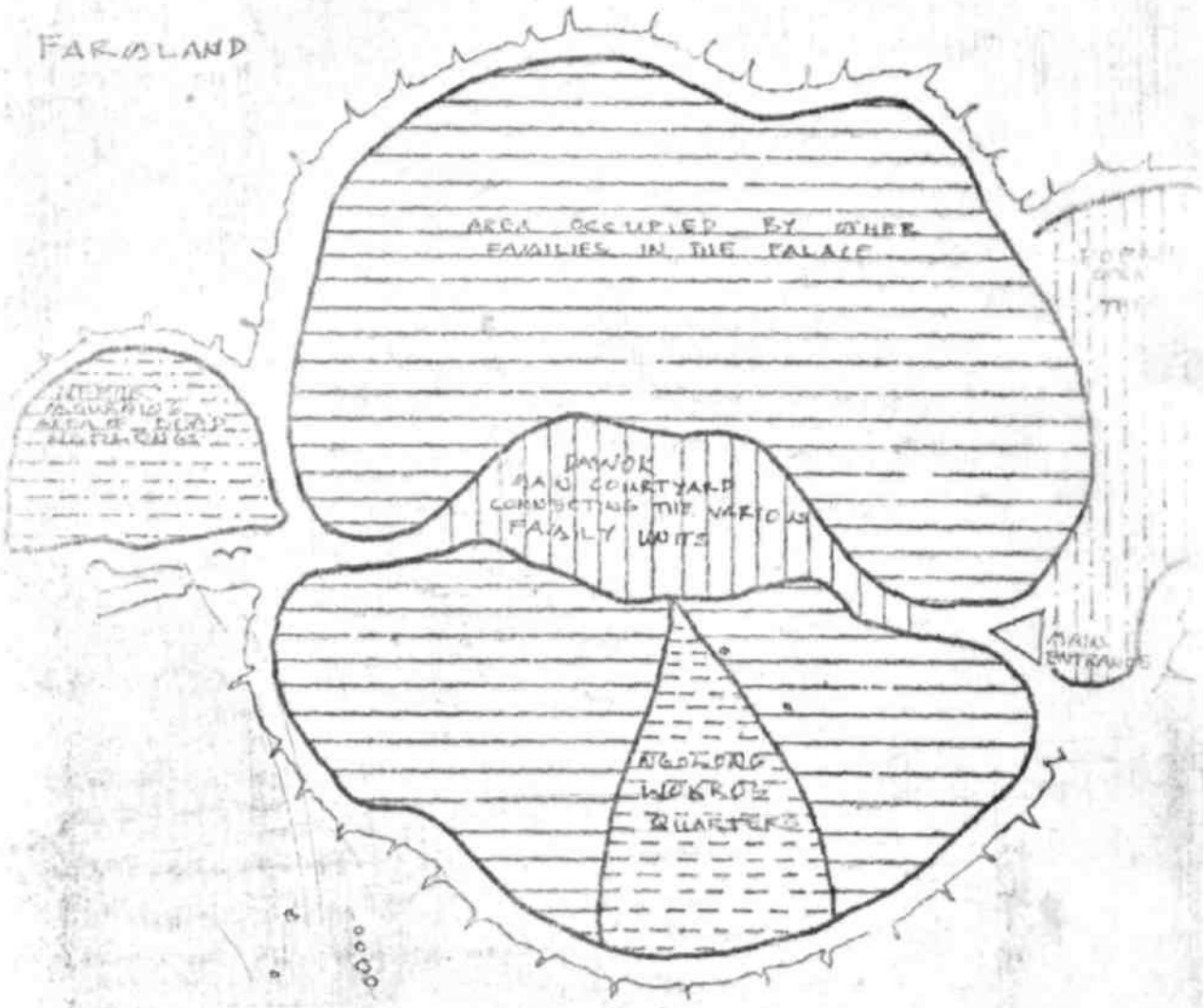
The site concept of Wokkos Palace is shown in figure 16. It is located on a hill. At the main entrance is the corn threshing area which is linked to the popang. While at the other subsidiary entrance is the Nefur. It is semi-circular in shape marked with stone platforms and performing the primary function associated with Nefurs, that is for mourning ceremony of dead Ngolongs. At one end of the 'stone wall' of the Nefur are two tiny huts that serve as lukums during the mourning ceremony.

The Palace is 'compacted in a round form, with narrow passages connecting the various household units through a small dawok; with a resultant intricate network of passages within the Palace. There are differences in levels within the Palace, with the Ngolong's unit situated on the higher level. It is the only unit with a rectangular building in the Palace and also associated with the unit is the lukum.

AMPER PALACE (LUWARANG PER)

Amper Palace has the characteristic hill location of Ngas Palaces, but lacks the features associated with

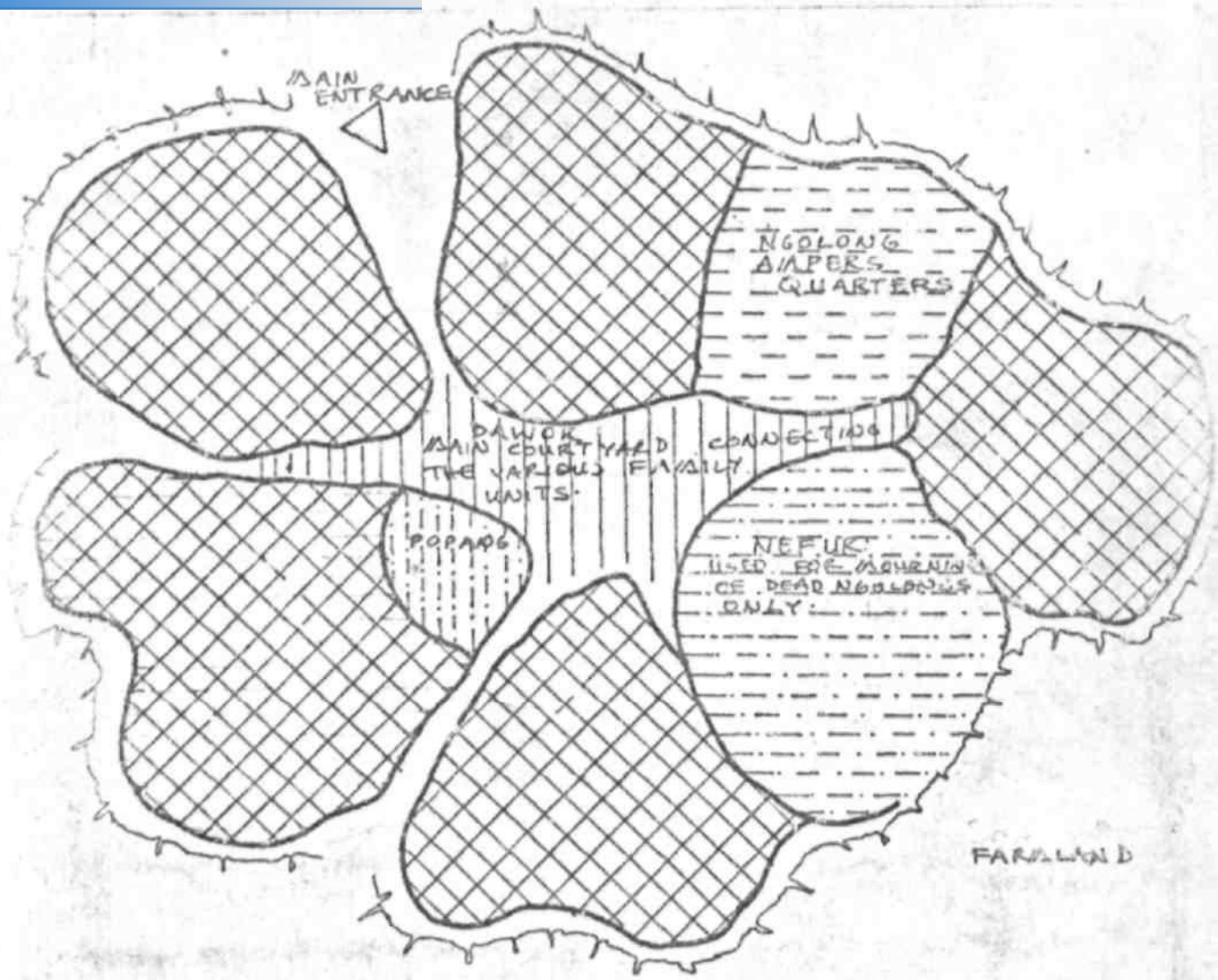
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WOKKOS – PALACE.
(SITE CONCEPT)

FIG. 16

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AMPER-PALACE.
(SITE CONCEPT)

FIG. 17.

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uations. These features include [illegible], Pepangs, corn threshing areas and Nefurs. (see figure 17).

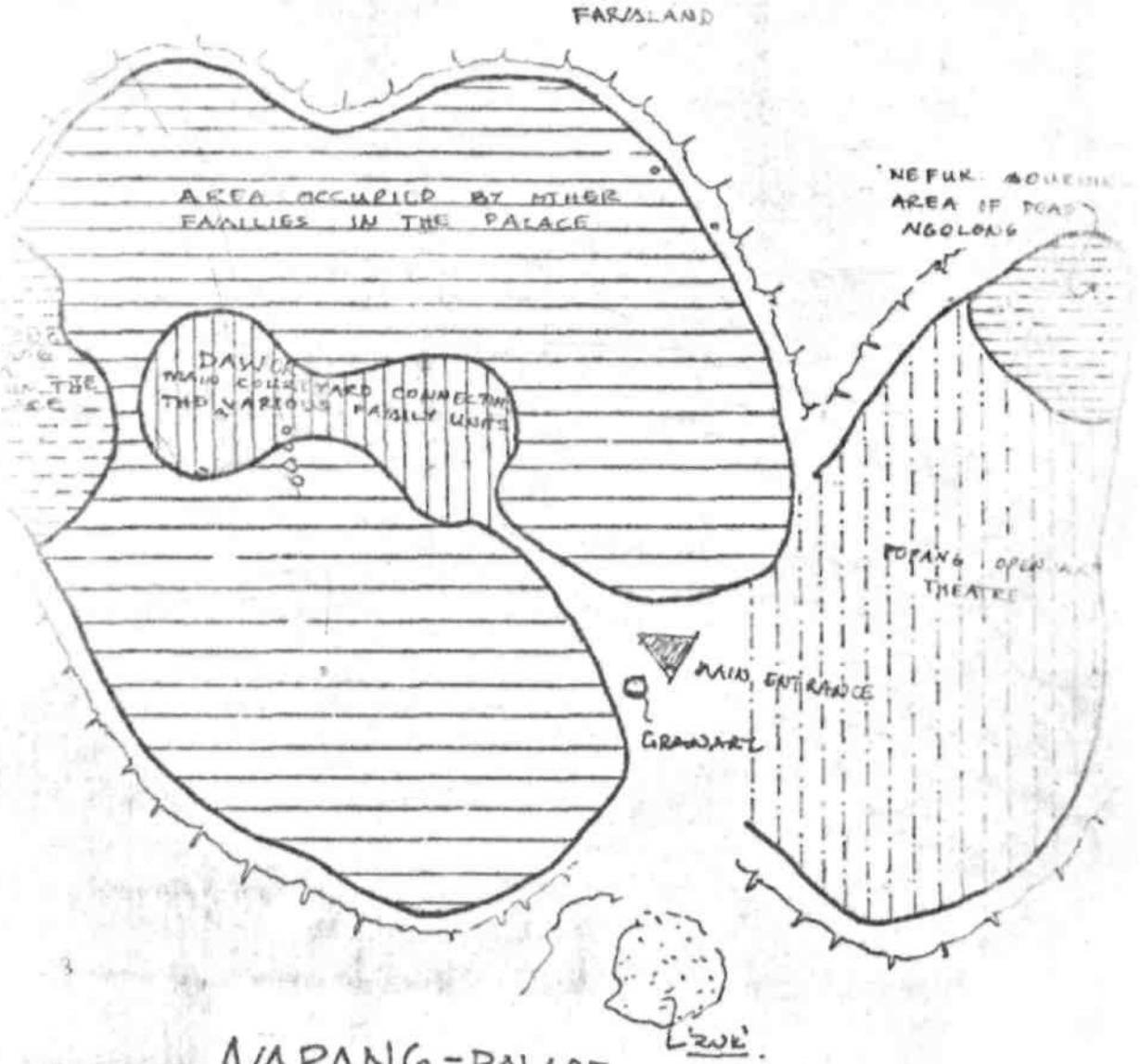
The Palace is composed of detached small family compounds linked by marked foot paths through the dawok. The Nefur is situated at the other side of the main entrance as shown. It is also bounded by raised stone arrangements and used only during mourning ceremony of dead Ngolongs

AMPANG PALACE (LUWARANG PANG).

This has the highest location of all the Palaces discussed; and there are marked differences in levels of up to 2 metres ('vertical interval') within the Palace. The Ngolong's unit is located on the highest level of these, on which the roofs of some huts within the Palace could be clearly seen.

At the entrance situation are Pepang and Nefur which are partially joined the corn threshing area located under a tree near the ZUK, which is a hip of deposited ash from previous household activities within the Palace. Some few metres to the right of the Nefur is a cemetry for deceased Ngolongs.

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AIMPANG - PALACE

(SITE CONCEPT/SPATIAL ORGANISATION).

FIG. 18

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Popang is surrounded by stones arranged in a descending order from heights of about 1.5 metres on the left side to heights of about 0.30 metres on the right near the Nefur. People sit at this low part and play dak or rest. The high part to the left of the narrow passage through the stone arrangement, is used exclussively for displaying fresh corn during a festival performed prior to the planting season. The main motive of this festival is to ask the gods for rain in anticipation for good harvest. Fresh corn is stored in the detached granary at the entrance after the festival. The Popang like all popangs is also used by itinerant dancers paying visit to the Palace.

The Nefur like most Nefurs is used for mourning ceremony of dead Ngolongs. The area is prohibited to everybody, even small kids when playing ball and it happens to roll into this area, they have to wait for an elderly man to help them pick it. Women, most especially, are not allowed into the Nefur, but Ngolong's wives are allowed into the area annually to clear the weeds. Deceased Ngolongs are buried inside a hut in their cemetry, these huts are not maintained, thus the cemetry is characterised by ruins of huts. In otherwords the extent of damage of any hut in this cemetry determines the duration of time since the Ngolong was burried.

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NGAS ARCHITECTURE AND ITS CLIMATE.

This section deals with 'pre-conclusion' drawn from the previous chapter on Ngas traditional architecture, and the case studies discussed in the early part of this chapter on one hand; versus the climatic conditions in Ngasland on the other. It analyses how the former takes care of the hardship induced on it by the latter.

The type of climate experienced in Ngasland is characterised by hot and humid weathers, and two distinct seasons Rainy and Dry seasons. The Rainy season is experienced between the months of March to October with peak falls in July and August (figure 3). Both convectional and relief types of rainfall are experienced. The Dry season is experienced between the months of November and February, with harmattan in December and January.

Climate is the fundamental determinant in the design of houses. As H.S. Murison and J.P. Lea (1974, 68) put it-

> 'There is no such thing as a universal house. The humid tropics require one sort of house, deserts another, cold regions another and upland in the tropics yet another'.[1]

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ction of any dwelling is to provide the inhabitants with protection from hostile factors in the environment, such as heat, cold, high winds, dust, rain, dangerous animals and even human enemies.[2] The Ngas people achieved some of these functions as discussed below.

The roof of a Ngas hut is the most exposed part to the climate which means that its construction and the materials used are the primary determinants of interior conditions. As schwerdtfeger says-

> 'The roof of any building recieves the maximum solar radiation which as a result determines the climatic indoor condition of rooms, and hence human comforts'.3

The Ngas roof has steep slopes with acute angled overhangings. Figure 19. The steepness of the roof facilitates fast drainage of rainwater and therefore checking the possibility of rainwater damaging or even linking through the thatch. The acute overhanging checks the possibility of the roof structure being blown off on windy or stormy days. This possibility is encouraged by the little or no anchorage between the roof structure and the wall structure.

The air space formed by this high and steep roofs also acts as an insulating agent against the

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erefore does not allow the heat from the sun into the interior. figure 20. The low thermal conductivity of mud walls also helps in keeping the interior cooled on hot days, and increases the storing capacity of the interior at night which is welcomed especially during harmattan.

The Ngas 'builder' though ignorant of the scientific explanation of the effect of the thickness of mud walls and its thermal conductivity discussed below; make his wall thickness between 15 cm to 25 cm unlike his counterparts in Hausaland where wall thickness could be up to 40cm. Schwerdtfeger experimented on this effect and thus concludes:-

> 'Hence, the thermal conductivity of a mud wall is not linked to its thickness. Thus a 40cm thick wall will not give 17.5% better insulation value than a wall which is only 33cm thick'.4

CRITICISM.

This remarks on the lopeholes found in Ngas traditional architecture based on the materials and forms used. There are many problems in using mud as a building material.

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limitation

Mud has some structural limitations as a building material. For instance one can not go above two floors using mud as the building material. This in essence means that there is height limitation to buildings using mud. This loss of height and the subsequent coverage of more land on the ground level is not welcomed in architecture. The occupied land could be conserved for other purposes, moreover the technological advancement linked with height in architecture can not be achieved with this material (___ height in buildings is civilized ____ personal riew).

ii. Maintenance Cost.

To prevent water from seeping into cracks of mud buildings, the surfaces of these buildings must ~~be~~ constantly be maintained, and this cost money.

iii. Climatic Conditions.

Climatic conditions, particularly heavy rainfall, hot and humid conditions, affect mud as a building material. This is experienced by the uncomfortable interiors of mud huts created

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s hostle conditions as already above.

There is also a lot of maintenance cost involved in the use of thatch as a roofing material in that for the efficiency of the material it has to be changed regularly. There is fire risk associated with this material due to its inflammable nature, this risk is further increased by the cluster character of Ngas traditional compounds. The rigidity in form discussed below is partly due to the use of thatch as a building material, that is roofs with steep slopes for fast drainage of rainwater.

There is rigidity in form in Ngas traditional architecture, which is mainly the circular form; and rigidity is not welcomed in architecture. The lack of initial planning inform of design plans, or at least estimation of the number of people a compound is being built for, or making provision for probable future expansion, all lead to the resultant intricate ..ework of passages within most extended Ngas traditional compouds. This 'maze effect' produced in Ngas Palaces especially could be solved with initial planning.

The presence of cracks and crevices, dark ill-lit 4. huts in Ngas compounds provide breeding places for cockroaches and bedbugs which are a nuisance to the

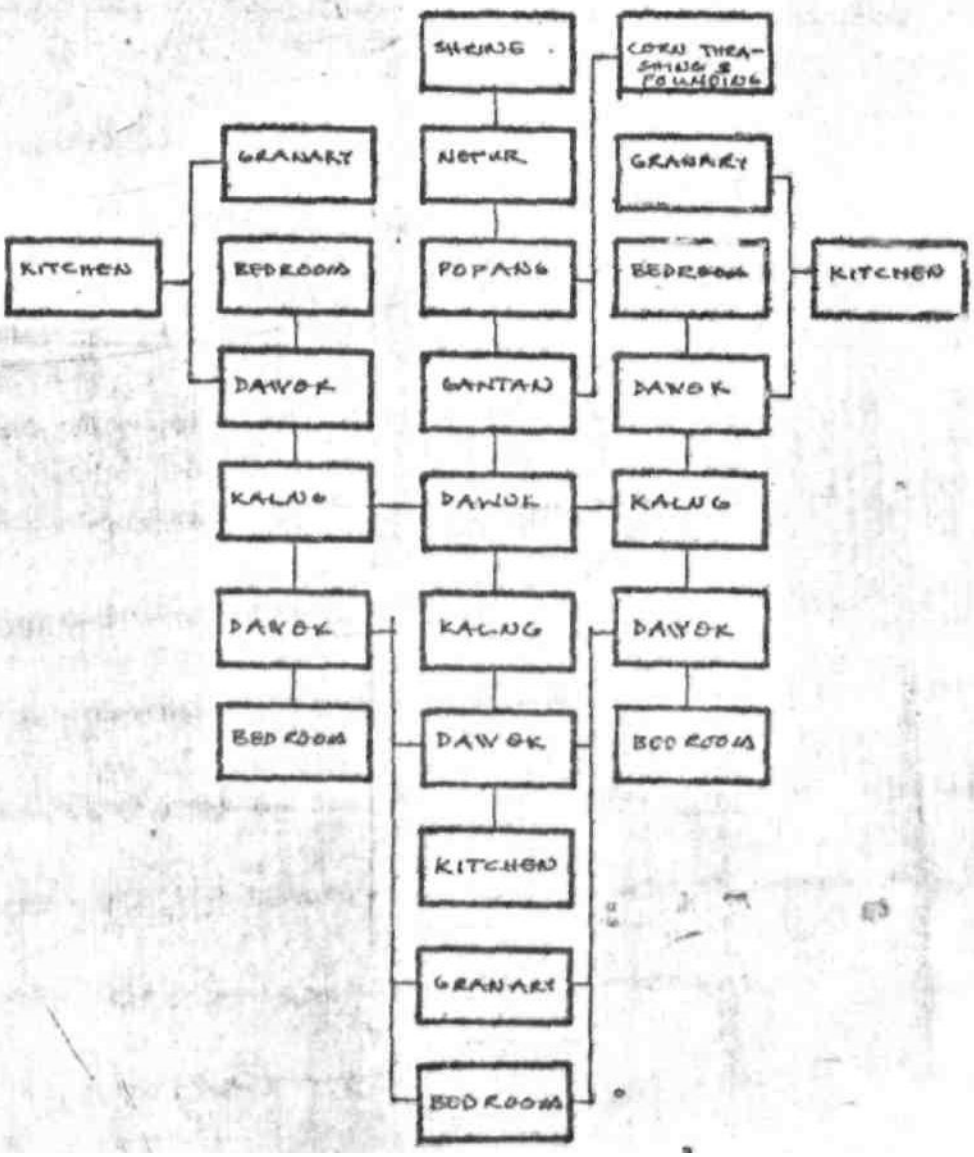
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inhabitants. The fitting of modern equipment such as drainage systems, electrical applices plumbing works e.t.c. in a Ngas traditional compound with little or no damage to the structure is almost impossible.

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FUNCTIONAL DIAGRAM OF A T
NGAB COMPOUND



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FOOTNOTES.

1. Murison, S.H and Lea P.J. Housing in thirch world countries, perspective on policy and practice. (London, Macmillan Press Ltd.) 1979, pp. 68

2. Ibid. pp. 68

3. Schwedtfeger W.T., Paper on thermal comditions in traditional urban Houses in Northern Nigeria. 1984 pp. 75.

4. Ibid. pp. 72.

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PART THREE

DESIGN.

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CHAPTER FIVE.

DESIGN.

The preliminaries necessary for this design stage have been discussed in the previous chapters. This chapter involves the application of conclusions drawn from data collected from these preliminaries. That is; historical background and social needs of the culture of the Ngas, the analysis of chietaincy institution in Ngasland and a close study of their cultural expression, which in essence means their architecture. The planning and spatial organisation concepts of the design concept is evolved from traditional Ngas architecture; based on case studies carried out.

LOCATION AND SITE ANALYSIS (PANKSHIN)

Pankshin town was founded in 1905 and became the headquarters of Ngas District, made up of present Kanam, Mangu and Pankshin local government councils, of Bauchi province in 1908.[1] Pankshin was the colonial resident because of the wider field of vision and the cooler weather offered by its height. With the creation

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of Plateau Province in 1926 as a result of the re-organisation of the Northern Province, the status of Pankshin rose from that of a district headquarters to divisional headquarters.[2] (1 & 2, Installation programme 1978 pp. 1 and 2 respectively).

Pankshin town, now being the headquarters of Pankshin local government area automatically became the resident of the paramount chief in the local government area. The town is divided into three sections in terms of development, the old section, New layout and Government Reservation Area. (G.R.A).

The old section is predominantly of unplanned old mud buildings accomodating the largest population of the inhabitants of the town, who are mostly indigines. Also found in this section are, a Post Offic, Antenatal clinic, School of Health technology, Churches, Mosques, primary school, Motor station, shops, e.t.c. The New layout as the name suggests, is a planned area with modern buildings built of conventional buildings materials. It accomodates building as, Bank of the North, Coorperative centre, Youth Centre, General hospital, local government ministries, two post primary schools, Market, Dam, bottle cover factory (which has not started operation), Federal College of Education (F.C.E); and liesure and entertainment areas as Wayside Annex, Nenpin Club, Kuda club, Chorbe Nite Club, Gents-Nite Club, e.t.c, e.t.c.

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servation Area is an extension of the
composed mainly of government residential buildings, a local Government Secretariat, low cost houses, Police station/barracks, large water storage tank e.t.c.

Pankshin town is supplied with the basic social amenities which are, Health services, electricity supply and water supply.

The next task is the selection of an ideal site for the project within the given location of Pankshin town. The site selection criteria is mainly based on conclusions from case studies of Ngas traditional Palaces, ratification of faults associated with the so called unoccupied 'Ngolong Ngas' Palace' and the topography of Pankshin town. As mentioned earlier on, the most important factor of Ngas Palaces is site location, and for reasons already discussed they are sited on hills or elevated plains.

Pankshin town is surrounded from all directions by hills, with this landscape the former option (hill siting) is the most probable solution if some of the design objectives are to be achieved. With the 'hill siting' of the proposed Palace, the main fault of the unoccupied so called 'Ngolong Ngas' Palace' which is sited on a lowland is solved.

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this thesis is hoped to be a life project in the near future, and the enormous capital involved in constructing a road up hill (this problem is worsen by the poor economic situation in the country) leaves me with only but one option of using the only accessible hill by road found in the old section of the town as my site. Moreover this hill (site) is characterised by some exceptional features that make the remaining unaccessible hills unfit for this thesis. These features are discussed below under site analysis.

The site analysis is based on the careful and arcurate intergration of information under the following below:-

a. Site Potentials
b. Site Problems
c. Site Amenity
d. Site danger signals.

The site gives a good view of Pankshin town and its environs of beautiful scenery. The genenral character of the site can be described as an open land with clusters and scattered trees and scrubs around; with steep slopes in all directions leaving an undulation land at the top. Some parts of the site has been developed and therefore there are some buildings on it. (fig. 20) The climatic data of the site is as discussed for Pankshin town.(see fig. 3)

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access to this site is already provided and the thought of constructing a different one is unwise for reasons already given. The site is supplied with amenities as, a constant supply of electricity from Nepa and a gaint standby generator, and pipe-borne water.

In terms of weather, most people feel that Pankshin is colder than Jos. This weather is slightly modified on the site and this could be the reason why the V.I.P. guest house on the site used to be the favourite resting place of late Sir Ahmadu Bello[1] -

([1] programme for the installation of Ngolong Ngas. 1978. pp 5).

DESIGN BRIEF AND SPACE REQUIREMENTS.

The design brief is grouped into five core areas.

1. ADMINISTRATIVE AREA
2. RESIDENTIAL QUARTERS
3. RECREATION AND RELAXATION AREA
4. SERVANTS' AREA
5. PARKING.

These core areas are further subdivided into smaller units depending on the functions performed

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the breakdown of these areas and the spaces required.

1. ADMINISTRATIVE AREA.

a. Elaborate entrance lobby: This serves as the main entrance into the administrative block, it also takes care of enquiries and reception, Concrete seats are provided for the dogarai who act as receptionists in addition to their main work discussed above (AREA: 45m^2.)

b. Ngolong's Office: (AREA: 30m^2)

c. Private secretary: This is also the waiting room for the Ngolong Ngas. (AREA: 26m^2)

d. Council chamber: This is the room used by the Ngolong Ngas and his ungraded Ngolongs with their title holders for weekly delibrations. It is designed to accomodate 80 persons. The chamber serves as an office for the Ngolong's Deputy on other days apart from the day used for the delibrations. (AREA: 90m^2)

c. General Office: This accomodates two typists, two clerks and two messengers. (AREA: 35m^2).

f. Banquet Hall: To accomodate 200 people (AREA 120m^2)

e. Reference Room: Where Documents are kept, and to act as a mini library (AREA 32m^2).

2. RESIDENTIAL AREA

This is made of four sections:

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s section

s' section

c. Children's section

d. Guests' section

e. Popang

Each section is further subdivided into its various units depending on their functions as below:

i. Ngolong's section: This is composed of two major parts, public and private parts.

Public Area:- This is made of units below:

LIVING ROOM - This room is for the entertainment of Ngolong's numerous guests, thus the size. (AREA:65m^2)

DINING AREA - To accomodate maximum of 20 people (Ngolongs in Ngasland hardly eat alone this is for security purposes) (AREA: 30m^2)

BEDROOM - (AREA 30m^2)

KITCHEN.

STORE

Private Area: - This area has similar facilities as for the public area above, only that in this case they for the use of the Ngolong's family and trusted outsiders, that is it is screened from the public.

LIVING ROOM - (AREA: 65m^2)

BREAK FAST CORNER -(AREA: 15m^2).

STUDY/TEACHING ROOM - The function of this room depends on whether Ngolong Ngas is learned or not. (AREA: 20m^2)

TWO BEDROOMS - (AREA OF EACH: 35m^2)

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on

There is a provision for a maximum of six wives in the design. Each wife with her unit which is inform of a two bedroom apartment as analysed below.

LIVING ROOM - (AREA: 24m^2)

2 BEDROOMS - (EACH AREA: 16m^2)

KITCHEN - (AREA: 15m^2)

BATHROOM/WC - (AREA: 4m^2)

STORE - (AREA: 4.5m^2)

DAWOK - Serves as kitchen courtyard and as open air kitchen (AREA: 28m^2)

iii. Children's section:

This is separated into two age groups, those on initiation into the Jep-zanga, and those already initiated. The Jep-zangs have a unit made of four bedrooms a living room and bathroom with areas as below. The bedrooms are of two different areas, that is two bedrooms have same area.

LIVING ROOM- (AREA: 24m^2)

BEDROOM (TYPE ONE) - (AREA: 18m^2)

BEDROOM (TYPE TWO) - (AREA: 16m^2)

BATHROOM/WC - (AREA: 4m^2)

The other group are housed in a unit of four rooms; each two sharing a bathroom and toilet. Each room has an AREA: 16m^2, TOILET: AREA: 4m^2.

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ion:

This is made of a unit with facilities the same as those of Jep-zangs analysed above.

v. Popang:

This forecourt serves as a traditional dance area by itinerant dancers paying visit to the Ngolong.

3. SERVANTS' SECTION.

This section provides accomodation for two house boys a gardener and a cook. Each houseboy has a room and they share a kitchin and bathroom.

AREA OF EACH ROOM:- $16m^2$

KITCHEN: AREA = $12m^2$

BATHROOM/TOILET: AREA= $4m^2$.

The gardener and cook, each has a parlour and bedroom, sharing bathroom and kitchen with dawok connecting them and the shared facilities. Below are the areas.

PARLOUR - AREA: $16m^2$

BEDROOM - AREA: $16m^2$

KITCHEN - AREA: $12m^2$

BATHROOM/TOILET - AREA: $6m^2$

Another unit within this section is the laundry unit,

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low.

STORE - AREA: 12m^2

IRONING SPACE - AREA: 14m^2, also to take care of arranging the clothes and other associated activities.

MACHINE WASHING AND DRYER - AREA: 16m^2

WASHING SPACE (MANUAL) - AREA: 16m^2

OPEN DRYING SPACE - AREA: 24m^2.

Other facilities within the complex include a plant room, and a water storage tank with a capacity of 8,000 litres. This tank is to serve 20 people for two days, based on the fact that a person uses 200 litres of water a day.

CONCEPTS.

As mentioned in my objectives, the concepts of this design evolved from Ngas traditional architecture, with particular attention to planning, spatial organisation and visual concepts representing Ngas traditional arechitecture. These concepts, their evolution and development are treated as below.

a. SITE CONCEPT

b. PLANNING CONCEPT

c. VISUAL CONCEPT.

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There are two alternatives of the site concept fig. 21 and fig 22, that is first and second alternatives respectively. Both concepts evolved from the site concept of Garram Palace (fig, 15) whereby the 'Nefur' is almost enclosed by cluster of huts. The two alternatives are similar except that in the first alternative fig. 21; the administrative block is detached from the residential section, while in the second alternative fig. 22, the administrative block is made a part of the residential section. The first alternative was developed based on the excuse that the administrative block and the function it performs is new to the Ngas traditional architecture so should be treated separate, thus it is detached from the residential section. The relationship of the core areas is as shown in the figures above.

PLANNING CONCEPT.

The planning concept of the Ngolong and his wives' section is typical of that of Ngas traditional compound. Whereby from the entrance through the gantang or entrance passage, leads into the dawok (central courtyard) which connects the other units. Fig. 23 shows this

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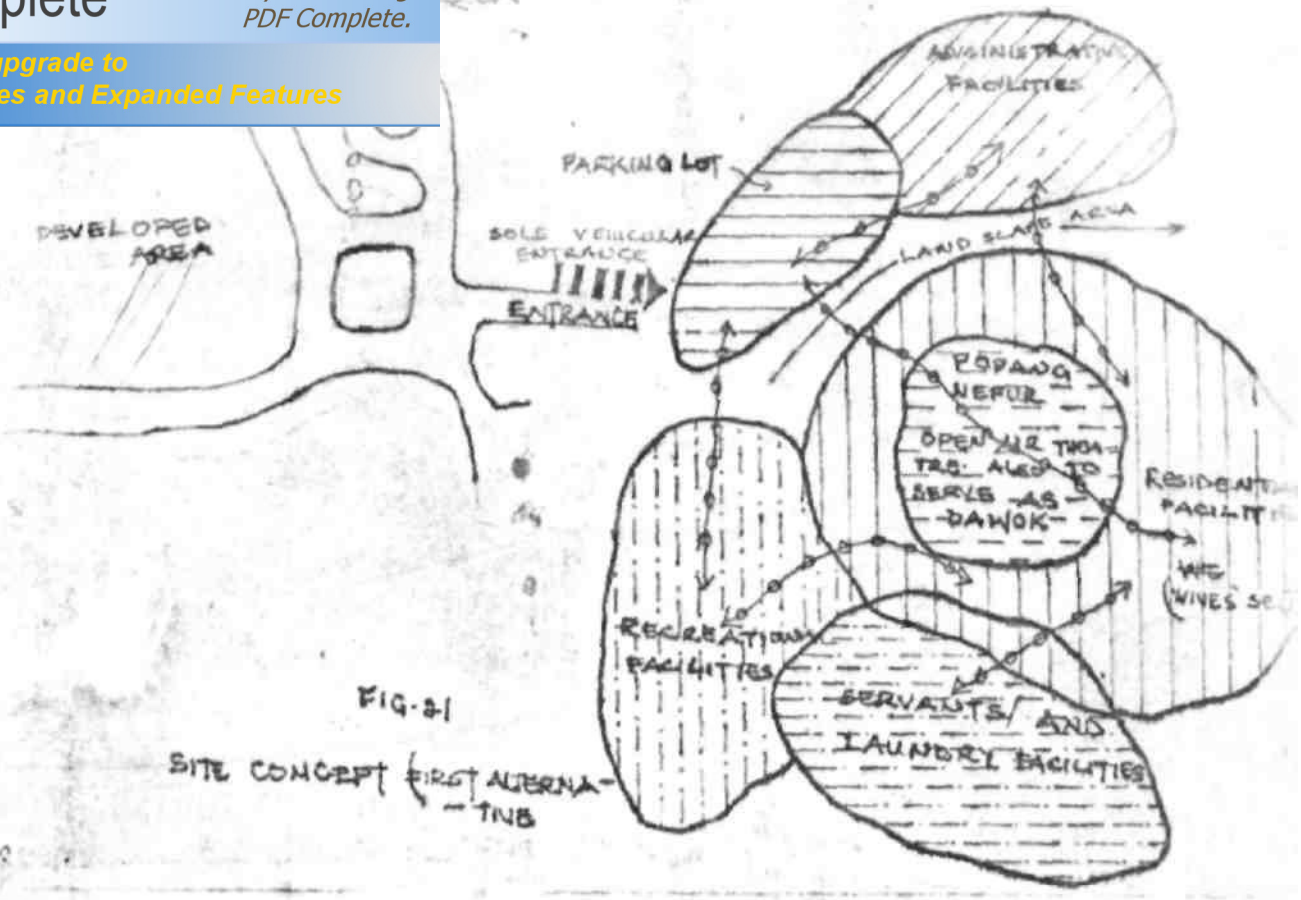


FIG. 21

SITE CONCEPT (FIRST ALTERNATIVE)

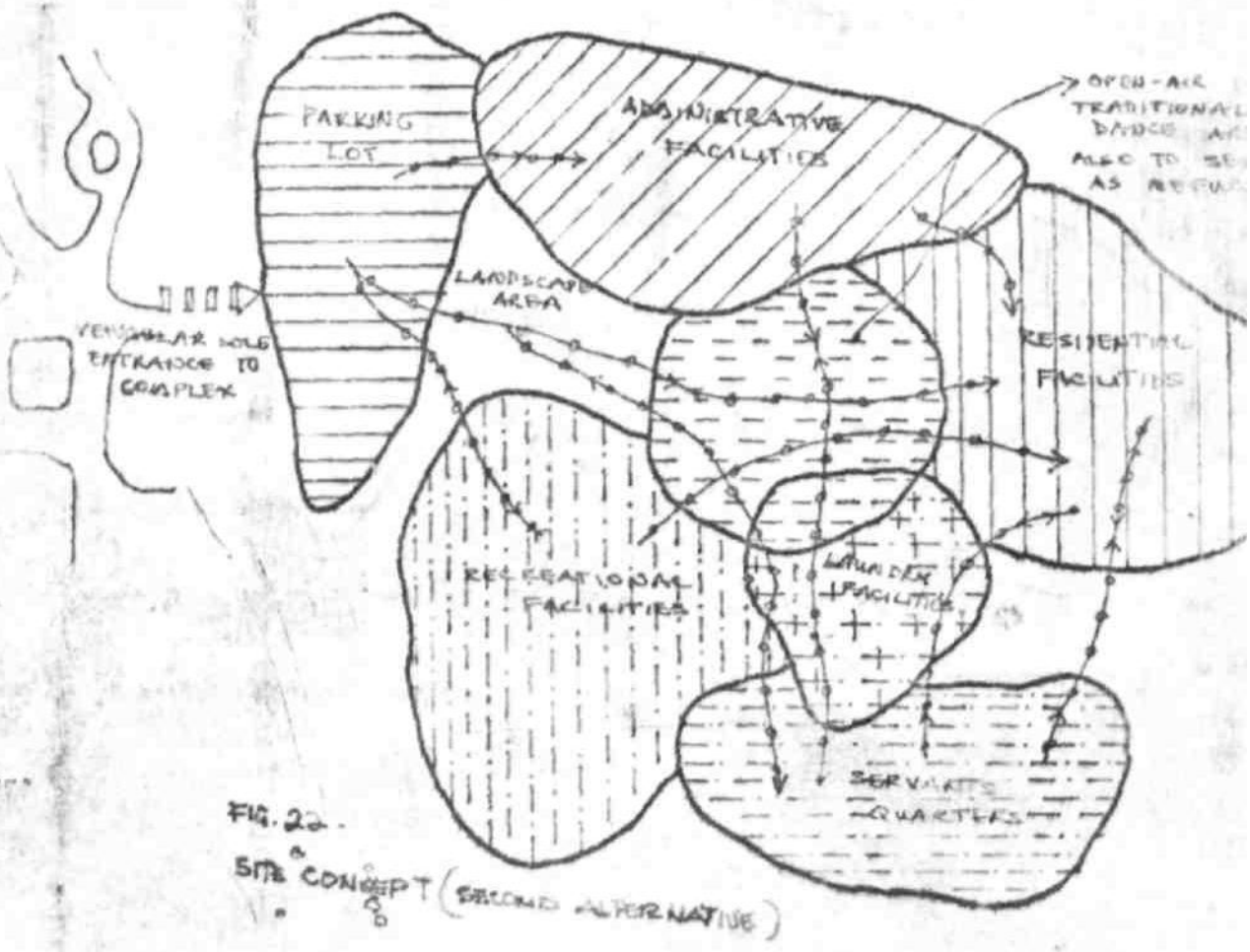


FIG. 22

SITE CONCEPT (SECOND ALTERNATIVE)

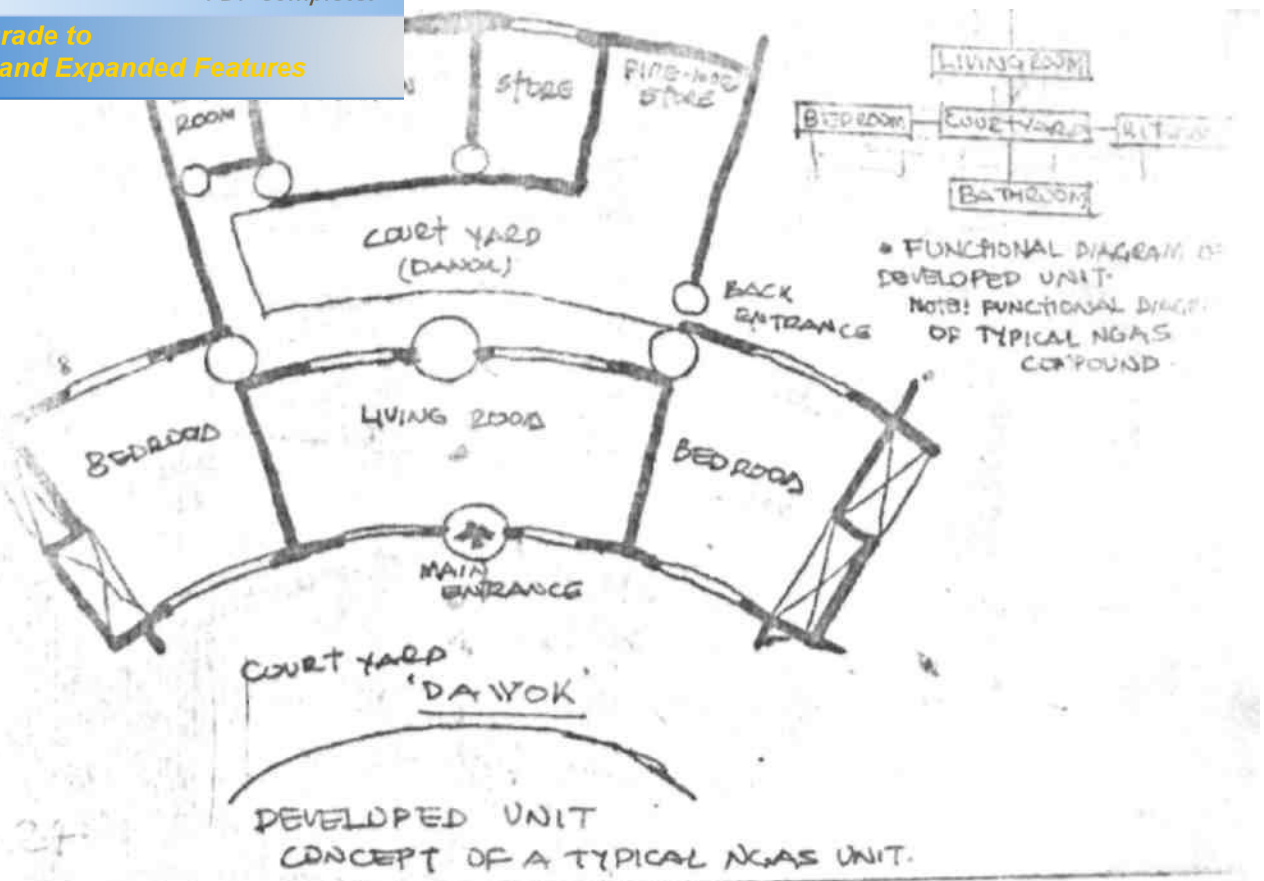
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As also discussed, the dawok is linked to the various household units through Kalng, from Kalng to a private dawok from which the other elements are linked. Fig. 24 shows this typical planning of Ngas traditional household unit within a compound. The closely linked units also gives the cluster character of Ngas traditional architecture. The other units, guests and children, have similar planning. The concept of gantang with foot paths serving as 'alarm instrument' as discussed, is applied in the planning of Ngolong's public living room. (see fig. 25.) The administrative block though new to Ngas architecture, has its planning concept, that is from entrance into a courtyard (dawok) from where the other units are linked figure 26.

VISUAL CONCEPT (CONCEPT OF ELEVATION)

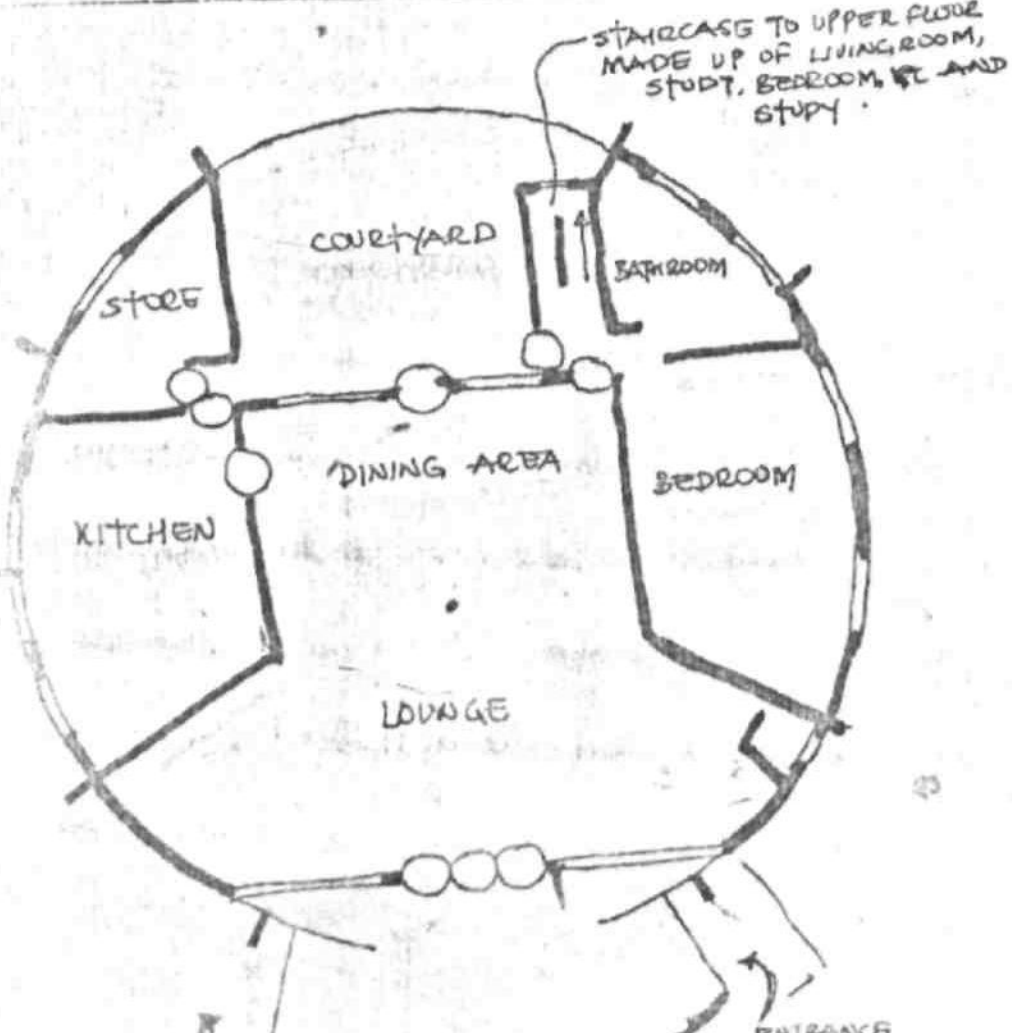
The visual concept of Ngas traditional architecture is that of triangles on rectangles, the sides of the triangles representing the high and steep slopes. This steep slopes (visual concept) of Ngas traditional architecture is represented in the elevations of the design.

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COURT YARD 'DAWOK'

DEVELOPED UNIT
CONCEPT OF A TYPICAL NGAS UNIT.



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BIBLIOGRAPHY

African arts Moufou Architecture, Nov. 1980. Vol. 1

African arts Traditional Asante Architecture, Feb. 1980 Vol. 2.

Binjin, J.T. History of the Ngas to the time of Bristish occupation, University of Calabar, 1984.

Gberikon, H.V., Tor tiv's Palace, Gboko, Ahmadu Bello University, Zaria, 1981.

Isichei, Elizabeth, studies in the history of Plateau state, 1982.

Installation of Ngolong Ngas, programme, Pankshin, 1978.

Kabwir development association programme, 1983

Murison, S.H. and Lea, P.S., Housing in the third world countries, perspective and policy and practice, Macmillan Press Ltd, 1979.

Mbiti, J.S., African religious and Philosphy, Heinmann London, 1969.

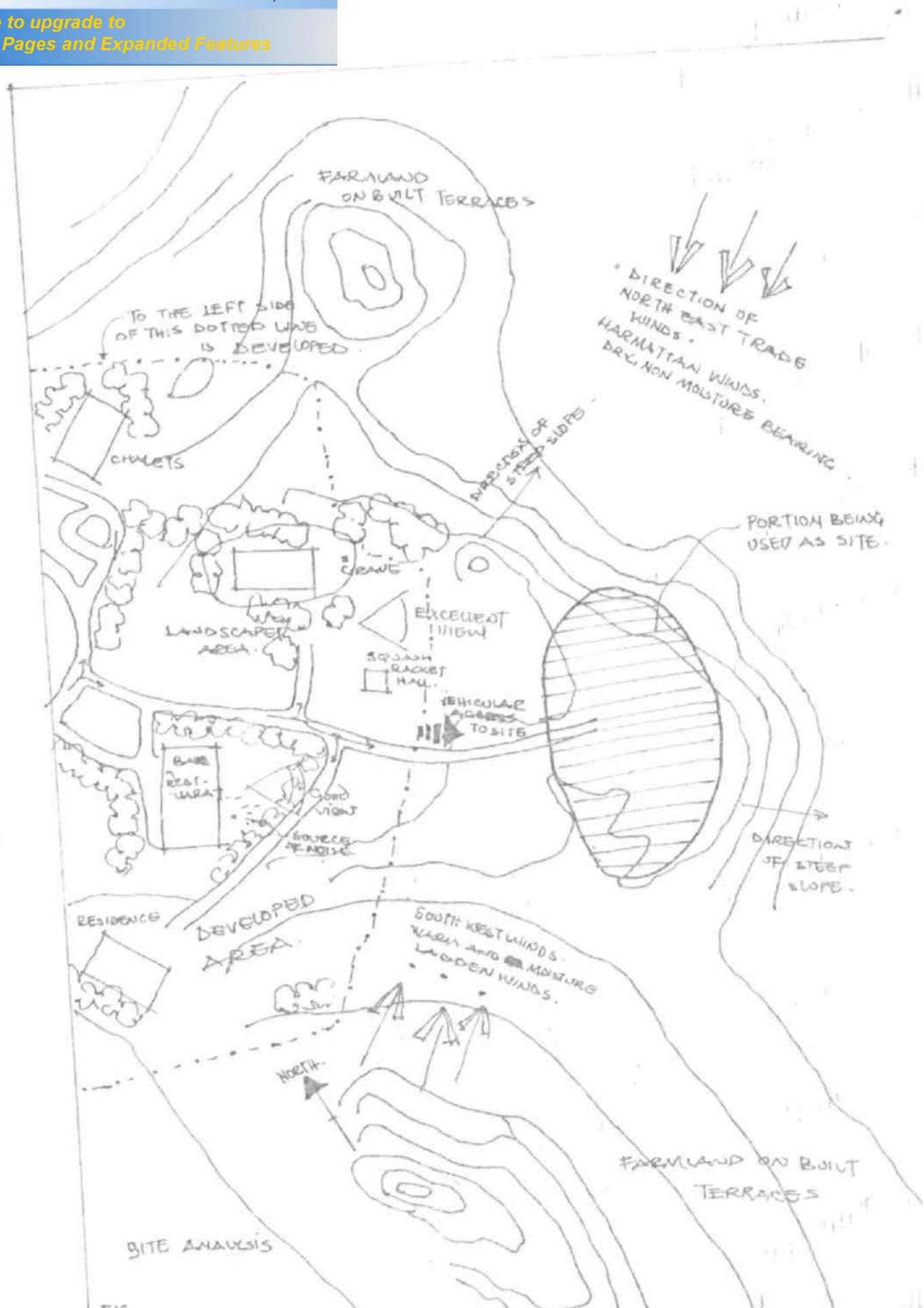
Susan Denyer, African traditional architecture, Great Britain, BAS Printer limited, 1978.

Saad, Tukur, Between myth and reality. Aesthetic of traditional architecture in Hausaland, University of Michigan, 1987.

Schwerdtfeger, W.F., Paper on, thermal conditions in traditional houses in Northern Nigeria, 1984.

Tuwan development association, Gantang Tuwan.

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