# ADAPTATION OF TRADITIONAL DESIGNS ON CRAFTS OF SOUTHERN KADUNA AS MOTIFS FOR TEXTILES RESIST TECHNIQUES

**BY**

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A Ph.D dissertation submitted to the Postgraduate School, Ahmadu Bello University, Zaria, Nigeria in partial fulfillment of the requirements for the award of Doctor of Philosophy (Ph.D.) in Industrial Design (Textiles)

**DEPARTMENT OF INDUSTRIAL DESIGN**
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**ZARIA – NIGERIA**

**SEPTEMBER, 2006.**

## DECLARATION

I, Donatus Dennis Alau hereby declare that this Ph.D dissertation has been written by me and is a record of my own research. It has never been presented in any previous application for a higher degree.

All quotations made are indicated by quotation marks or indentations and sources of information are specifically acknowledged by means of references.

_____ _____

September, 2006. Donatus Dennis Alau.

## CERTIFICATION

This dissertation, entitled “Adaptation of Traditional Designs on Crafts of Southern Kaduna As Motifs for Textiles Resist Techniques” by Donatus Dennis Alau, meets the regulations governing the award of the degree of Doctor of Philosophy in Industrial Design (Textiles) of Ahmadu Bello University, Zaria, Nigeria and It is approved for its contribution to scientific knowledge and literary presentation.

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## ACKNOWLEDGEMENT

Glory be to GOD, the Most Holy, Merciful and Omnipotent for permitting, directing and accomplishing this study. The Lord is further glorified for keeping all the members of the supervisory committee of this research and my unworthy self alive and making me to work within the cycle of His Holy will.

I wish to express my sincere appreciation to all the people the Lord has used in one way or the other to contribute to the successful completion of this study. In particular, I am deeply indebted to the chairman of my supervisory committee, Associate Prof. B.A. Kparevzua, for all her sleepless nights of constructive suggestions, academic guidance and criticisms in shaping and reshaping this work.

Similarly, my unalloyed appreciation goes to my second supervisor, and indeed my mentor, Prof. P.O. Nkeonye of the Department of Textile Science and Technology for his tireless support and encouragement. Prof. Nkeonye was an academic leader and the live wire of this study. My encounter with both Associate Prof. B.A. Kparevzua and Prof. P.O. Nkeonye is the greatest academic experience I have had in my academic life and I will always remember them individually and collectively.

I am deeply indebted to Prof. A.M. Ahuwan, the HOD Industrial Design and Dean of the Faculty of Environmental Design, for his contribution to the success of this research. The PG coordinator Dr. S. Maiwada, is equally

acknowledged for the academic leadership and the encouragement he gave to this research. The contribution of other lecturers like the immediate past HOD, Mr. S. Sanusi, Dr. A.O. Aboderin, Mr. W. Gwary, Mr. M. Aluwong, Mrs. R Ali, and others that cannot be mentioned, are greatly appreciated. Mama Sarah Ayet, a renowned Attakar Women Association (AWA) President, who provided the *dangyet, bangles*, and other traditional items and the contributions of fellow students, too many to be mentioned, are sincerely acknowledged. I am also grateful to Mr. P. Osafemi, Mr. Y. Bobzom and Alh. Yusuf of the Textile Design Section for all their support during the practical exploration. Equally acknowledged are the Departmental Library attendants Mr. A. Gambo and Mr. Joel Maidawa, of the Data Processing Unit, IAR, Faculty of Agriculture A.B.U Zaria, for the library support and the data analysis respectively. Mr. Ogunniyi Olasunkanmi is equally acknowledged for the type-setting and final production of this dissartation.

Most importantly, Prof. J. U.Umoh, the Dean of Postgraduate School A.B.U. Zaria is profoundly acknowledged for the administrative and academic leadership he gave to the success of this research. The researcher identifies with all his leadership qualities and wishes him and his family many more years of fruitful life and God's abundant blessings.

The Academic Board (AB) of the Kaduna State College of Education Gidan-Waya is profoundly acknowledged for its permission for me to proceed on this program in 2000, when it was obvious that the part-time

fellowship earlier awarded to me was not feasible for this programme. The Provost, the Registrar, the Deputy Provost, and the committee of Deans are profoundly acknowledged for the opportunities given to me to pursue this study to a successful end. I wish to also acknowledge all the support I received from all of my colleagues and friends. They were all positive to this research.

The love and untiring support of my wife Mrs. Celina T. Alau, and the understanding of my children throughout the period of this study is profoundly appreciated and acknowledged. Finally, my late parents Mr. Alau Kukhuyep (father) and Mrs. Justina N. Alau (mother) are fondly remembered and acknowledged for their parental care. My mother is greatly acknowledged here because even though she was an illiterate, she valued education, perhaps because she valued the life-style of my maternal uncle, her immediate junior brother who was a primary school teacher in the early 1940s. Although she was interested in acquiring formal education as one of the senior princess of her father who was the chief of Kadarko, she was caught up in the web of sex gender discrimination of female education of her time. She enthusiastically sponsored my education right from the primary school to the University until she died in 1990. May her gentle soul, the soul of my father and the souls of all the faithful departed, through the mercy of God, rest in peace and may God bless and keep all those that have made this study a success. Amen.

## ABSTRACT

The problem of this study is that of the selection, documentation, explanation and preservation of some of the traditional motifs found on the crafts of Southern Kaduna and adapting them for contemporary use on fabric using Resist Techniques of fabric decoration.

The general objective of the study is to select and manipulate traditional designs on crafts of Southern Kaduna and adapt them for use as motifs on contemporary resist fabric decoration, thereby ensuring the sustainability of such motifs. The purposes of the study are:

1. To identify the traditional crafts of Southern Kaduna and the design motifs on them.
2. To extract some of these motifs and adapt or transfer them onto fabrics using resist techniques of textile decoration method.

The study adopts survey method for data collection to obtain relevant information from the subjects in the sample as suggested by Adetoro (1997). Exploratory approach and product development (R&D) was used for sourcing for designs on crafts as suggested by Itten (1997), Belfer (1976) and Anderson (1961). Other parameters of investigation used in exploratory methodology include population of the study, sampling, pilot study and experiments for adaptation of designs to textile fabrics using resist techniques. Three survey instruments were used in the study. The first one which is a questionnaire (Appendix II) was used for pilot and the second one Appendix III (A) questionnaire was used for collecting data of the fifteen traditional crafts of Southern Kaduna. The third one (Appendix III B questionnaire) was used for the assessment of the resist pieces of fabric produced from the modified traditional design motifs extracted from

the crafts of Southern Kaduna for comparison with those produced within the recent period. This was done by presenting the two motifs to a randomly selected sample of 117 respondents, comprising 51 lecturers and 66 textile students comprising 33 students each from the Fine and Applied Arts and Home Economics Departments of the Kaduna State College of Education, Gidan-Waya. The comparative assessment questionnaire is a five Likert scaled instrument.

The randomly selected, modified, and adapted motifs used in this study are:

1. Nok-head which is a symbolic motif that articulates the artistic culture of Southern Kaduna.
2. Dangyet is a symbolic motif of women maturity and dignity.
3. Kikyak is a symbolic motif of weaving and peace.
4. Udung is a symbolic motif of crown of terracottas excellence
5. Chon is a symbol of sharpness and strength.

Based on the analysis of the study, the following findings were made:

1. The production of traditional crafts in Southern Kaduna is on the downward trend.
2. Fifteen different crafts are still being practised in Southern Kaduna.
3. The traditional crafts of Southern Kaduna have symbolic motifs with traditional names and are adaptable on textile fabrics, using the resist techniques of fabric decoration.
4. Cultural and environmental factors such as festivals, annual cultural day celebrations, naming ceremonies, marriages, burial, initiation rites and aesthetic values are guiding the use of the traditional Southern Kaduna design motifs.

5. Print fabric and vat dyes are quite suitable for the practical adaptation of the Southern Kaduna design motifs on fabrics using the resist techniques.

The general conclusion is that although the production of crafts in Southern Kaduna is on the downward trend, it is still being practised with symbolic motifs that are adaptable on fabric using resist techniques.

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## DEFINITION OF OPERATIONALTERMS AND ABBREVIATIONS

| | | |
|---|---|---|
| FSQ | - | Abbreviation for "Field Survey Questionnaire". |
| L.G.As | - | Local Government Areas. |
| S.K. | - | Abbreviation for Southern Kaduna. |
| S.Q. | - | Abbreviation for Survey Questionnaire. |
| Abyai/bibyai | - | Net – zit's name for a traditional wooden tray used for carrying loads and as a delivery stool. |
| Afan | - | Net-zit word for a rocky hill where hunting and cutting grass for thalching houses take place |
| Agwab | - | Penis sheath which was a symbolic dress of Maturity for the male. |
| Aegwa/Aegwi | - | Net-zit's words for a flute or horn. |
| Akpang | - | Another name for *Kikyak* or mat among some sub-groups of Net-zit. |
| Alan | - | A common name for a pot among the Net-zit. |
| Anniih | - | Net-zit's (Attakar) name for traditional woman Bangle. |
| Chon-unu-ufiyan | - | Attakar's (S.K.) traditional double edged-blade |
| Chuo | - | Takad's (Net-zit) name for leopard whose colours |

| | | |
|---|---|---|
| | | are presented in yellow/white, orange/white, brown/white and black/white spots. |
| Dangyet | - | A woman's traditional handcrafted hip or girdle skirt used up to the 19th century. |
| Hyam | - | Ham dialect |
| Ikenga | - | Ibo traditional family idol believed to be ancestral Spirit, guiding, protecting and linking the physical Members of the family with those in the spiritual Sphere. |
| Imepuri | - | Aninka word for pottery |
| Izinonue | - | Pottery word in Hyam |
| Jinjio | - | Raffia raw material used in SK traditional mats weaving. |
| Kampala | - | Southern Kaduna resist craft. |
| Kikyak/Akpang | - | A woven mat of the Netzit group of Southern Kaduna |
| Kpien | - | Traditional rite performed on the bride before she was formally married . |
| Kporo | - | *Hyam* name for the traditional wooden tray |
| Ku/Kursak | - | Hyam/Netzit words for a dancing masquerade always dressed in knitted fabrics and woven raffia costumes. |
| Lan'awurang | - | Southern Kaduna (Attakar) cooking pots. |
| Nok'lan | - | Netzit word for pottery. |
| Ohanke | - | Ninami word for wooden tray |
| Resist technique | - | S.K. Kaduna kampala making, which includes dyeing, tie-dye, batik and resist printing. |
| Shan | - | Netzit word for a staff/stick |
| Swup | - | Net-zit name for a brewing pot. |
| Tam | - | Ridge or rib as in weaves or farming used for demarcation. |
| Tsetse | - | Another resist name for kampala in Taraba state. |

| | | |
|---|---|---|
| Tsuo | - | The traditional red colour of the Net-zit |
| | - | sub-groups of S.K. developed from red soil. |
| Udung kwad | - | Net-zit word for hair-do. It refere to the hair-do of |
| | - | the ancient Jema'a terracotta head or a bangle of |
| | - | a dignified woman |
| *Ufuwong* | - | Attakar/Atuku *(Net-zit)* name for wooden spoon |
| Ukhuon | - | Net-zit name for an axe. |
| Unhakpa | - | Aninka name for wooden tray |
| Uvia uuwohn | - | Pottery in Adara dialect |
| *Wawa* | - | Raffia made traditional ankle – rattle used by dancing troops such as the 'Kodai' and ku/kursak |

# CHAPTER ONE

## 1.0 INTRODUCTION

In Africa, generally, traditional designs and crafts have tremendous influence on the lives of people, including Nigerians. Willet (1973) supports this point of view by emphasizing that the life styles of Africans are linked with their political, social and religious practices. He further expressed regret over the alarming speed with which this rich cultural heritage and tradition are declining. Newman (1974) also observed that African traditional heritage is likely to disappear as he predicted thus:

> *We are in the dearth of all that is best in Africa... and this is a well known phenomenon where patrons and paramount kings have lost their power, rituals are dying, carvers are putting down their tools, Arts forms flourish and die everywhere, dyeing pots and pits are drying up. Newman (1974,p.9).*

As rightly observed above, the traditional dyeing pots and pits that are drying up now, are perhaps never to be wet again to enkindle the fire of the flamboyant designs, crafts and culture in Africa including Nigeria.

## 1.1 Background of study:

This study was motivated through the observation that various designs found on crafts in Southern Kaduna may be very suitable as motifs on resist fabric in textile design decoration. A pilot study was conducted

which made the study feasible and encouraged further work in the area. From the pilot study a number of craftspeople were found practising different crafts in Southern Kaduna..

Nigeria as a pluralistic society with a teeming population of creative individuals and groups of diversified cultural background, offers immense opportunity to study different types of traditional designs and crafts. According to Akodu (1985), several cultural groups with distinct beliefs and crafts exist in Nigeria. Postulating the same view, Sigo (2001), opines that there are two hundred and fifty distinct groups that enrich Nigeria culturally and distinguish themselves in designs and crafts. Out of these cultural groups, is Southern Kaduna, upon which this study is focused.

Comprising the Nok Culture area, Southern Kaduna is the nucleus of the well known ancient design civilization. According to Fagg (1990), this fact was unveiled and revealed when the first discovery of its figurines was made in the alluvial tin mining in 1921. Sharing a similar view, Eyo (1990) describes Nok Culture area as the entire area within the radius of 250km, from Nok village in Jaba Local Government Area. Jamkur (1992) equally shares the same view and describes Nok as the founding name of the ancient Nok Terracotta culture.

Dike and Oyelola (1998) reported that Nok Culture consists of early designs and crafts of Nigeria which date back to the era of fabrication and implementation of tools by Nigerian ancestors. They further opine that Nok

Culture, which flourished between 500 B.C and 200 A.D. and which is considered to be the oldest in Africa South of the Sahara, emerged from the deep socio-politico-religious beliefs and philosophies of their generation. Suffice to say that the present inhabitants of this area have a design culture, which seems to be disintegrating and needs documentation. The disintegration is due partly to lack of patronage by the consumers. This, development, according to the unanimous views of Nkrumah (1971) and Daoud (1974), is attributed to the effect of colonialism which makes Africans and indeed Nigerians crazy for foreign goods. Thus, the terracotta traditional cooking pots and dishes, have today been replaced with aluminium pots and plates from Europe, America and China. Similarly Nigeria home-made textiles have been replaced with such foreign textiles like English wax, Hollandaise, China checks, and a host of other foreign goods. Now the craftsmen are dieing and getting older and weak while the youths are reluctant to take their places. This situation keeps on re-echoing the puzzles of whether the crafts should also die and disappear into extinction. The search for the answers to these re-echoing puzzles is the core of the problem and the background of this study.

Standfield (1971), Eicher (1976), Wangboje (1985), Alder and Bernard (1993), unanimously opined that Nigeria has always produced diversified crafts. According to Ahuwan (1976), and Adetoro (1972), some of these crafts include: weaving, pottery, dyeing as well as Textile Resist

Techniques, (known as adire-eleko in Yoruba), cotton spinning, embroidery, wood carving, leather work and blacksmithing which carry geometrical shapes and figurative motifs such as lizards. These crafts are commonly practised in our pluralistic society, where undue attention is given to larger ethnic groups, while the smaller groups such as the Southern Kaduna group are forgotten or downtrodden to the background. Due to the imminent decline of the crafts of Southern Kaduna and the fear that some of the design motifs like the Nok-head, Nok-hair-do and kikyak will become extinct with the crafts, the need for this study becomes more and more imperative.

## 1.2 Statement of the Problem.

The problem of this study is the selection, documentation, exploration and preservation of motifs found on crafts produced in Southern Kaduna and adapting them for contemporary use on Resist Technique of fabric decoration.

## 1.3 Conceptual Framework

In order to treat this problem effectively, it was necessary to critically survey, identify, unveil, study and document some of the traditional design motifs found on the crafts of Southern Kaduna for adaptation on textile fabrics using contemporary resist techniques of tie-dye and batik. Also

questionnaire was developed to survey the assessment of Southern Kaduna indigenes with regard to the traditional designs and their adaptation.

### 1.4 The general objective of the study

The general objective was to select and manipulate traditional designs on crafts from Southern Kaduna and adapt them for use as motifs on contemporary Resist Fabric design, thereby ensuring the sustainability of such motifs.

### 1.5 Specific objectives of the study

The specific objectives of the study are to :

1. Select some designs from a defined population of traditional crafts in Southern Kaduna.
2. Examine the cultural and environmental factors guiding the use of such designs.
3. Manipulate motifs on the designs in contemporary format.
4. Use the newly developed motifs from traditional types on fabrics as Resist techniques of fabric decoration.
5. Select through random sampling, a sample from a defined population of Southern Kaduna to respond to a questionnaire

developed to assess the relationship of the newly modified southern Kaduna mofits with the traditional ones.

6. Collect samples of motifs from the traditional crafts and those fabrics designed from their adaption and present them to selected subjects for their comparative assessment.
7. Develop a questionnaire validated by the supervisors, which are used to guide the study.
8. Prepare the analysis of the survey in Tables and present results to enable conclusions and recommendations of the study to be made

## 1.6 Research Questions.

Hypothesis according to Adetoro (1997), connotes one of the many ways of expressing a broad research problem in a condensed testable form. It provides a framework for interpreting research findings in a simplified and meaningful manner. Kerlinger (1977), states that a research problem is just a broad question which is not directly testable. In this study research, questions are opted for because they provide findings and a solution to a research problem.

The basic purpose of any research, according to Kolo (1998), is to answer questions, solve problems or develop theories of interest to the researcher and to add to the reservoir of knowledge already available on the subject. Sulaiman (1998), further opines

that research questions are used to guide the research. In line with these views, the following research questions were proposed and used to guide this study:

1. Which are the traditional crafts of southern Kaduna from which the Nok-head, kikyak, dangyet, udung and chon are extracted?
2. What cultural environmental factors are guiding the use of such designs?
3. Which of the motifs on the crafts of Southern Kaduna can be manipulated in contemporary format?
4. Which of the newly developed motifs from the traditional types can be used in resist techniques of fabric decoration?
5. What randomly selected subjects from the defined population of Southern Kaduna will respond to questionnaire developed to assess the relationship of the newly discussed motifs with the traditional types?.
6. What available samples of motifs from the traditional crafts and the fabric designs from their adaptation can be selected for their comparative assessment?.
7. How are the traditional design motifs of Southern Kaduna, the contemporarily modified and the resist samples produced from them are assessed

8. How is the analysis of the survey prepared and presented to enable conclusions and recommendations as well as contribution to the study to be made?

## 1.7 Justification/Significance of the Study

Investigations carried out so far reveal that scholars like Fagg (1990), and Eyo (1990) have written extensively on Nok culture which Southern Kaduna is part of. Nevertheless, most of these scholarly documentations are on sculpture. Commenting on these efforts, Vansina (1970), emphasizes the need for African students to diversify their research, rather than limiting themselves to the aesthetic appeal of sculptures. In response to these scholarly views, this study is focused on the design motifs of the crafts of Southern Kaduna. It is fascinating to note that Southern Kaduna people who, as opined by Alao (2001), constitute 53 groups out of the estimated 250 ethnic groups in Nigeria, have some originality in some of their aspects of design and crafts. Some of these, like the 'agwab' which was used as penis sheath by male adults and 'dangyet' which was used by dignified women as hip wear, have disappeared. Even pottery and matting which used to be popular crafts have started to disappear, and will disappear completely, if they are not recorded.

The need to document and attempt to revitalize Southern Kaduna people's crafts is imperative.

Similarly, Wangboje (1985) encouraged the conduct of local research into the tradition and local materials in order to meet the challenges of the time, and to produce products that are relevant to the need, taste and culture of a society. This study further responds to the call by Jamkur (1992), for more relevant research on Nok culture, and also responds to the government incessant call for Nigerians to look inwards rather than outwards for their needs. The fact that Nigerians are living in an era of democracy with some economic hardship that is making the people to patronize home-made goods, makes this study relevant. According to Jari (1985), the home-made goods which many Nigerian now rush for include textile products such as adire, eleko, okene, akwete, aso-oke and aso-obi. This recent development makes this study not only justifiable and imperative but timely. In the present democratic dispensation and the seemingly rising feelings of nationalism, cultural inclination with the ardent desire for industrialization and economic emancipation, the significance of this study, in this direction therefore, cannot be underrated.

## 1.8 Scopes and Limitation

This study attempts to investigate designs on randomly selected traditional crafts in Southern Kaduna, adapting them to contemporary forms for use in resist textile fabrics and presenting the two types of designs to a selected group in Southern Kaduna for assessment. In order to make the study feasible and to accomplish it within the specified period, it was delimited to the study of the design motifs from four randomly selected crafts of Southern Kaduna which is the present Nok culture area of Kaduna state from which 33 design motifs have been identified. 33 design motifs were randomly selected from four crafts for the resist techniques production. These are: weaving, pottery, carving and resist production known as *Kampala*. The four selected crafts represent 20% of the 15 different crafts that were identified during the pilot study, which is twice the 10% population sample recommended by Roscoe (1969). Since it is not possible for a researcher to cover every member of a population in research, especially when the population is too large, Roscoe, (1969) recommends 10% of the population as a study sample, provided the population is not less than 30 and not more than 5,000. In this study, the identified motifs are more than 30 and less than 5,000 and therefore suitable for Roscoe sample. The four randomly selected motifs represent 10% of 33 design motifs identified.

The Nok culture geographical area of Kaduna state from which this study sample was drawn, comprises 12 Local Government Areas (L.G.As.) lying south, within and slightly North of Kaduna town. The adapted design motifs and the design of the traditional crafts are compared for their similarities and dissimilarities. Only 10% of the design motifs identified based on the recommended study sample by Roscoe (1969) as already explained above are randomly selected for the practical adaptation on textiles using resist techniques (batik and tie-dye comprising starch resist printing, and wax painting) production, to determine their suitability as textile design motifs for textile fabrics. Questionnaire was developed, validated by supervisors and administered to randomly selected respondents. (Appendix III B).

Due to the cultural inclination of this study, data collection was limited to the socio-political area of the Southern part of Kaduna state. It was confined only to the crafts of the Southern Kaduna people living in Kaduna state.

## 1.9 Pilot study:

Adetoro (1997) contends that pilot study is a preliminary survey embarked upon by the researcher to test the feasibility of the study. In line with this view, a pilot study was conducted between

December 2000 and March 2001 in Sanga, Kaura, Jema'a, Lere and Zango Kataf local government Areas. It was continued in the ancient town of Nok in Jaba, Kagarko, Kachia, Kauru, Chukun and Kaduna South local government areas where different crafts and crafts-people were identified using the introductory letter and the questionnaire in Appendices I and II respectively.

During the study, 1303 crafts people were found practising the 15 different crafts with some design motifs. This made the study feasible and encouraged the researcher to prepare for the actual study. The findings in the pilot study were used in determining the samples of crafts and craftspeople.

# CHAPTER TWO

# REVIEW OF RELATED LITERATURE

## 2.1 Introduction

This chapter reviews related literature on the designs and crafts of Southern Kaduna in order to identify certain valuable symbols and develop motifs from these symbols, obtained from the traditional arts and crafts of the people and attempt to preserve them by reforming and reproducing them on textile fabrics using resist techniques (Tie-dye/Batik). The review of the literature of this study therefore focused on the following sub-headings:

1. Introduction
2. Concept and historical origin of the name Southern Kaduna.
3. Historical background and origin of the design and crafts of Southern Kaduna.
4. The contemporary crafts and designs of Southern Kaduna.
5. The influence of traditional design and crafts on the contemporary crafts of Southern Kaduna.
6. Relevant researches and documentary evidence to the study.
7. Summary.

Information collected from the review of the literature was synthesized to determine similarities and differences in the designs of the traditional period to the contemporary and to identify those designs that are

most valued by Southern Kaduna people in order to test or examine their values on textile fabrics through the use of resist technique methods.

According to Graves (1951), Trowell (1960) and Wong (1972) designs and crafts are visual creation. They connote the whole process of planning the whole shape of an object and its construction. Design also connotes the manipulation of such design elements as lines, shapes, texture and colour in a way which is not only functional but satisfactory, pleasing to the eye and touch. In a similar view, Wangboje (1982), stated that today modern people are living in a world surrounded with designs that are either natural or man-made. Subscribing to this view, Talabi (1988), Itten (1997) and Makanju (2002), unanimously describe design and craft as a development common to all human tradition, while Colchester (1993) and Labuz (1993) describe design as both a process and product, which they further refer to as the practical artistic creation or execution of a craft product. Contributing further to these views, Heathcote (1976 and1979), describes design as a purposeful plan that results into anything that can be seen or held or walked into or something that is two-dimensional or three-dimensional. It is against this background that writers like Robertson (1962), Newman (1974), Sieber (1974) and Dendel (1975) concurrently refer to the design and the making of crafts as both utilitarian and aesthetic. They further described functionality and aesthetism as fundamental to designs and crafts-making.

Furthermore, Dueden (1975) and Rishante (1998) both refer to the crafts technology, as the expression of the human creative talent, especially in visual form with aesthetic and utilitarian purpose. Agreeing with Dueden on this view, Canady (1980), Ted-Smart (1994) and Tulloch (1997) describe design and crafts as traditional technologies of cultural significance, while Labuz (1993) who subscribes to this view further describes design as both a process and a product. Canaday (1980) further maintains that design has existed right from the day the pre-historic man smeared his body with coloured clay up to this time when any one reading these words, cannot look away from them without setting his or her eyes on a design or an object or product of design of some sort. It is along this view that Mang (1986) refers to design as a visual form for which a nation records its history. This view agrees with those of Henigman (1963), Willet (1971) and Peter & Murray (1976), who apart from unanimously referring to design and crafts as mirror and language, further state that artistic design is the manifestation of the undying soul of a people, usually in the great works, not less than the cultural life of the people, manifested in the day-to-day utensils which they use, the clothes they wear and the ornaments with which they adorn themselves. In all these crafts and more, the merits of artistic design can be seen and recognized.

Designs are influenced by environmental factors: In a study conducted by Adetoro in 1974 on the environmental influence on designs, he examined ten motifs on the cloth named 'Ibadan dun' and found that the motifs were derived from Ibadan environment and stylised by the designers.

In Africa, as reported by Nkrumah (1971), craft-making was known to be a flourishing trade before the advent of colonialism and westernization. In Nigerian traditional societies, craftsmanship, as opined by Dike and Oyelola (1998) manifested itself in terracotta culture and bronzes of the ancient Nok culture, Ife art and the famous Benin bronzes respectively. Among the African flourishing textile crafts of today are the Ashanti and Ewe weaving of Ghana; described as 'African majesty' by Alder and Bernard (1993), the Yoruba, Hausa, Akwete, Okene weaves and

the Yoruba traditional resist technique known as 'adire-eleko' of Nigeria, are textile crafts of international repute that stand out as African contribution to textile crafts. This is further attested by research work conducted by Adetoro (1972) whose study on adire-eleko proved feasible for contemporary production, Ahuwan (1976) whose study on data collection and the marketing of Nigerian crafts with particular reference to Kaduna state, proves feasible in sustaining the crafts and the crafts people, while the study on the Hausa crafts of dress embroidery by Heathcote (1979) unveils many West African design motifs. Similarly, studies on the educational significance of the art and crafts of the Birom by Hassan (1991) unveils, evaluates and documented the Birom crafts. In a similar manner the studies by Saliu (1994) unveils and documents the decorative arts, crafts and some of the crafts people of the Ebira. Similar studies by Adon (1988) on traditional floor making in Southern Zaria, unveils some design forms from Southern Kaduna. While these studies reveal and extol the consummate nature of the crafts of these cultural groups, they also profess their cultural decline.

It is this view that Akodu (1985) in his comparative study of the traditional and contemporary arts of the Maguzawa of Kaduna and Kano States, concludes that design mirrors the society and can be used in educating members of a society about their culture. It can also be used for informing people about the culture of other people of diverse societies as

well as their creative attributes. These creative attributes which exist in designs and crafts, avail themselves in the ancient Nok terracotta culture which articulates the artistic culture of the Southern Kaduna. These attributes also avail themselves in the historical factors that evolve round Southern Kaduna.

## 2.2 Concept and Historical Origin of Southern Kaduna

According to Jamkur (1992), James (1997 and 2000), Southern Kaduna is the product of political manipulation of the colonial administration and the Emirate council of Zaria. It is a socio-political entity of 'Kaduna State' whose etymology came from the *River Kaduna* which also derived its name from 'Kadunna', the Hausa plural word for crocodiles, which abundantly inhabited the river at that time. As further stated by Jamkur (1992), James (1997) and Tanko (2002), Kaduna which became established in 1913 by the British colonial administration, later became the headquarters of the old Northern Region and the founding name of Kaduna State. It also became the Southern Kaduna region or Netzit respectively. According to Tanko (2002), Netzit, simply means 'our people'.

As further opined by Jamkur (1992), and James (1997), Kaduna State which measures 45,567km$^2$, represents only 4% of the total area of the Federal republic of Nigeria. It is within this socio-political landmass that

the ancient Nok Head and the Jema'a Head, sourced from Eyo (1990) and Fagg (1990), as presented in plates I (a) and )b), below, respectively, were recovered.



**PLATE 1(a): Nok Head (side, front and back views).Sourced from Eyo (1990)**

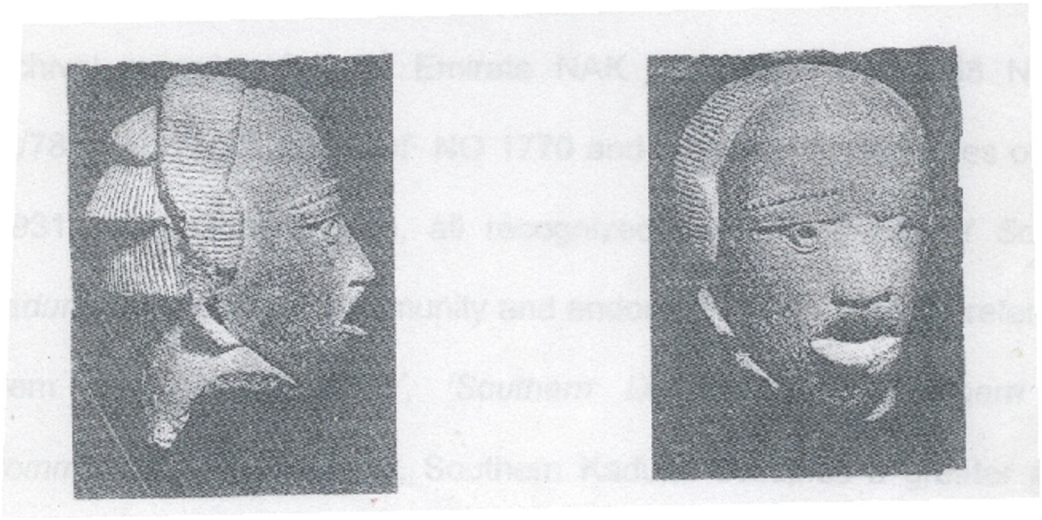


**PLATE 1 (b): Jema'a Head (side and front views). Sourced from Fagg (1990).**

The Nok heads were recovered during the tin mining on the Jos Plateau and were preserved by Mr. B. Fagg who was the anthropologist

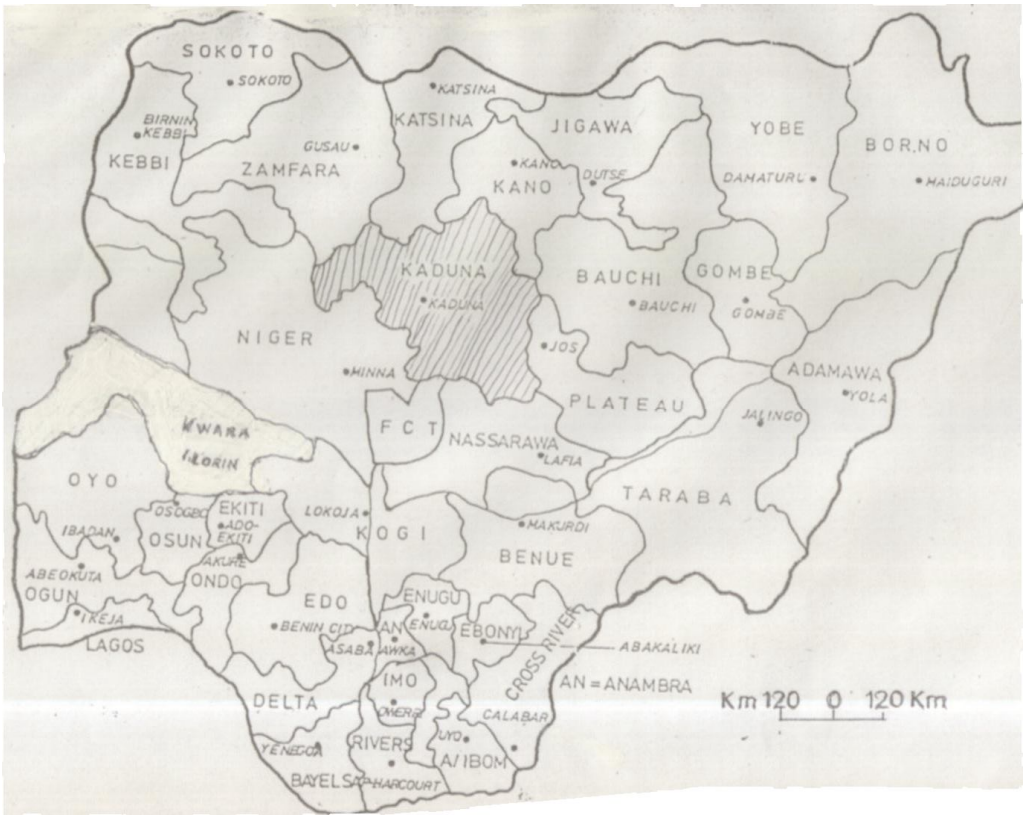
that first resided in Nok. He later became the founder of the Jos National Museum and Monument. It is within this area that most of the ancient Nok figurines like the Nok-head and Jama'a head were discovered. It is to be noted that the symbolic Noh-head and the udung motifs were both extracted from the Nok-head and Jamaa head figurines respectively.

According to James (1997) Southern Kaduna is a geographical entity considered as the nucleus of the entire Nok culture region. It started with *Southern Zaria* and graduated to '*Southern Kaduna*' covering an area South of Zaria city. This geo-political entity which has existed since the era of pre-colonialism came into official parlance when the area and the people were first annexed to the Emirate of Zaria and consequent to the creation of this Southern Kaduna division by the colonial administration of 1904. The records in the Zaria Emirate archiving, No NAK ZAPROF ACC 1558 NAKSNI 10/785P and NAK ARPROF NO 1770 and the publications by Meek (1931), and Gunn (1956), all provide unique information on *Southern Kaduna as a Nok culture* community. These publications further refer to the Southern Kaduna people as: '*distinct tribes', 'Southern Districts*' and '*Southern Zaria Communities*', respectively. Southern Kaduna occupies a greater part of Kaduna state which is located in the central part of the political map of Nigeria.

Subscribing to the views of Meek (1931), Audu (2000), and James (1997), refer to the inhabitants of the complex area known as Southern

Kaduna as multifarious, distinct, linguistic, cultural and social Bantoid speaking groups, belonging to the Nigerian- Congo linguistic and artistic qualities of the ancient Nok culture. This socio-political and geo-political entity as further stated by James (1997) and subscribed to by Alao (2001) is located in Kaduna state between latitudes $7^0$ and $10^0$ North and longitudes $5^0$ and $7^0$ East as in Fig.2 (a & b). The location of Kaduna state on the political map of Nigeria, and Southern Kaduna on the socio-political map of Kaduna state are contained in Figs 1 and 2, pages 20 and 21.

***LOCATION OF KADUNA STATE IN NIGERIA***




KADUNA STATE

**Fig. I: Location of Kaduna State in the Political map of Nigeria:**

Source: *GEOGRAPHY DEPARTMENT A.B.U. ZARIA*

**KADUNA STATE: AREA OF STUDY**



**Fig. 2 : Location of the socio-political map of Southern Kaduna (The study area). Sourced from James (1997:7) and Alao (2001).**

Comprising about 13 Local Government areas (L.G.As) of Kaduna state, Southern Kaduna is inhabited by over 50 sub-groups of the Nok culture origin. According to James (2000), Southern Kaduna belongs to the proto-Plateau Ethno-linguistic clusters of the entire ancient Nok culture area of the socio-political Middle Belt of Nigeria, which is the political child of late Joseph Tarka and his allies in the 1940s.

## 2.3 Historical Background and origin of the Designs on the crafts of Southern Kaduna:

The historical position of this study is based on the philosophy of design and crafts as a product of history and culture of the Southern Kaduna society which in the opinion of Alao (2001), lies the Southern part of Kaduna state, stretching from Jaji to Sanga. The study surveys the designs available on the crafts of Southern Kaduna from the flourishing period of Nok culture of 900BC through 200AD to the nineteenth century, as unveiled by Fagg (1990), Jamkur (1992) and James (1997, and 2000). According to Tanko (2002) and Alao (2001), this Nok culture area, currently known as Southern Kaduna stretches from Jaji, covering Kaduna town down to Jema'a, Sanga and Kagarko Local Government Areas (L.G.A's) in the South and extend from Kauru and Lere in the East to

Chukun and Kajuru in the North –West, covering about 13 L.G.A's out of the old 25 L.G.As of Kaduna State.

In reviewing the existing literature on some of the existing crafts and design of the people of this geographical area known as Southern Kaduna, it is pertinent to attempt to study and understand the concept of Southern Kaduna, vis-à-vis the etymology of the name Kaduna and the historical origin of Nok culture as earlier mentioned. The traditional designs on the pottery and carving crafts of Southern Kaduna are essentially figurative, comprising of human and animal motifs, within which geometric shapes or sub-motifs are incorporated. According to James (2000), Nok culture truly articulates the artistic cultures of Southern Kaduna which is the Nok culture area of Kaduna State.

### 2.3.1 Nok Culture

Nok culture as unanimously stated by Eyo (1990), Jamkur (1992) James (1997 and 2000) is essentially terracotta and iron culture. It is called terracotte and iron culture, because it is survived by its iron and terracotta figurines. According to Fagg (1990), the ancient Nok terracottas culture once flourished in the West African savannah area of the middle Belt of Nigeria. It was first revealed to the modern world through an accidental discovery of one of its figurines in the alluvial tin mining at the Nok village of the present Jaba Local Government Area of Kaduna state, a few

kilometres away from Plateau. The discovery was made in 1928, by Col. Young, who was a co-owner of the Jos tin mining. It was this accidental discovery that led to further recovery of the figurines and the name of the ancient Nok culture.

According to Jamkur (1992) and James (2000), the 1943 tin mining of the Jos Plateau in the vicinity of the village of Nok, in the present Jaba L.G.A, of Southern Kaduna, led to the discovery of what Fagg (1990), Eyo (1990) and Jamkur (1992) describe as *Male Nok Head* which unveiled the oldest known terracotta culture christened by Fagg (1971) as '*Nok culture'* at the time of their recovery. Subscribing to this view, Audu (2000), and James (1997), observed that Nok culture which is believed to have flourished between 500 BC and 200 AD, articulates the artistic culture of Southern Kaduna. In other words the origin of the design culture of pottery and other popular crafts of Southern Kaduna as opined by James (1997 and 2000), is linked to the ancient Nok culture in popularity, techniques and forms. James (ibid), and Audu (2000), further state that pottery which is the most popular Southern Kaduna traditional craft is similar to the surviving ancient Nok terracotta culture in techniques and designs. Just like the ancient Nok culture figurines were dominated by snake motif, the decorative and ritual pots of Southern Kaduna pottery are dominated by snake motifs of coil techniques and finial used on apex of roofs of shrines

and thatched roofs on huts of tutary priests as contained in Plate 2 (a-c) and Fig 3 below respectively.



A B C

**Plate 2(a - c): Nok figurines showing evidence of coil-built technique. Sourced: from Fagg (1990.77)**



**Plate 3 : Nok terracottas thatch finial. Sourced and modified from Fagg (1990)**

The finial can be observed on the apex of the thatched roof in Plate 2(b) above. It is used as emblems to denote the sanctity of buildings or shrines that contain sacred objects. The finials which were usually lashed

through the thatch to the apex of the traditional conical roof structure, have the appearance of highly stylized human figures, especially among the Koro and Gwari traditional societies.

As reported by Fagg (1979), the traditional snake motif dominates the ancient Nok culture figurines and has continued to be used on the ritual and decorative pots of Southern Kaduna. Both Audu (2000), and Nok (2000), state that the snake motif depicts continuity between the Nok terracotta culture and other Southern Kaduna clay crafts of the ancient Nok culture. They could not ascertain that the present Southern Kaduna people are descendants of the ancient Nok culture people. The Nok Head mouth lip and the Jema'a head hair-do, are among the ancient Nok terracotta motifs that were used in this study.

### 2.3.2 The symbolic Nok Culture Motifs

The historical review of the artistic culture of Southern Kaduna is incomplete without the mentioning of the ancient Nok Terracottas culture, which includes the symbolic Nok Head. One of the first findings of Nok culture is the *Nok Head,* which is a symbolic motif that articulates the artistic culture of not only the Ham and the Gwon, but the multi-cultural sub-groups of the entire Nok culture area of Kaduna state including the Afan, Baranza, and Aka'at sub-groups of Sourthern Kaduna.. According to Fagg (1977), the Nok head was the first accidental recovery of the first

remains of Nok culture that motivated and necessitated the assignment of late Bernard E.Fagg to Jos, to investigate and document the findings. As a result of his efforts the Nok Head and other Nok culture figurines, unearthed through the 1943 tin mining were documented at the National Museum of Antiquities now in Jos. The Nok Head was found at the bed of the stream of the Nok valley which is today known as 'Rafin Sayi'. By the bank of this stream on the old road to New Nok town is the cement-built replica of the symbolic Nok Head.

The observable designs on the ancient Nok terracottas are figurative and geometrical. According to Audu (2000) the female traditional aprons that can be observed in Plate 7(A1-3) provide geometrical designs traceable not only to an indefinite date in Southern Kaduna but the ancient Nok culture. This phenomenon which is observed in the ancient Nok design, rhymes with the findings expressed by Trowell (1960) that the decorative arts of most tribes of West Africa (Kingdoms), made use of both human and animal forms which are depicted in every degree of stylization from almost natural, realistic representation to near abstract symbol. Similarly, the coil-built technology of the Nok head and torso figurine already mentioned in Plate 2(a), on page 25 represent circles and spiral design motifs similar to those of the mollusc shell, Nok Head hair, mat design and weave band. The triangular shape of the Nok figurine, eye and mouth provide exciting geometric motifs along with those of Southern

Kaduna contemporary crafts which are explorable for adaptation on fabrics through resist techniques.

Nok Head has continued to be a Southern Kaduna recurrent design motif in both the traditional and contemporary crafts. Souvenirs, greeting cards, calendars and other paraphernalia are also made from the ancient Nok motifs. As a link between this ancient Nok culture and Southern Kaduna, a replica of the ancient craft form (Nok-head) is used as a symbolic design motif among the Southern Kaduna people in general and the Ham sub-group in particular. The Nok head represented on Plate 3 below is a symbolic motif of the artistic culture of Southern Kaduna.

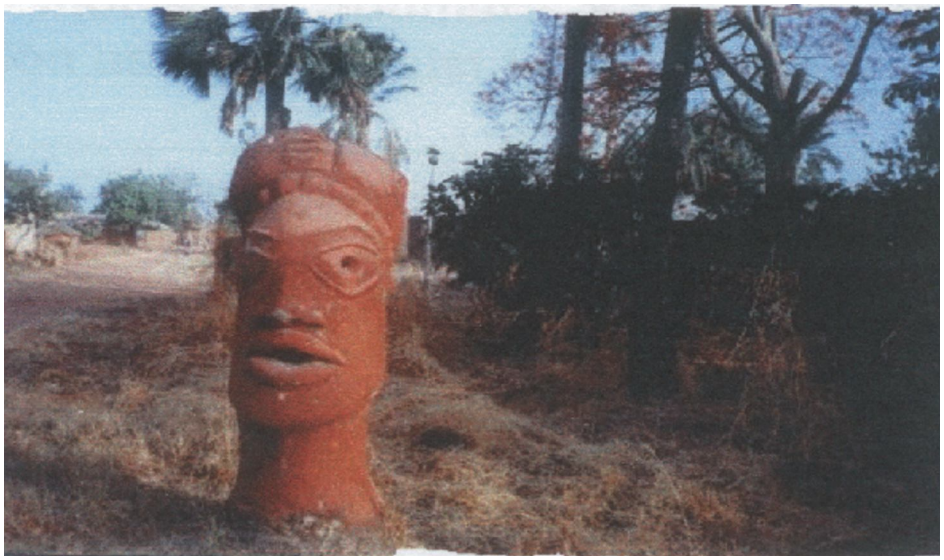
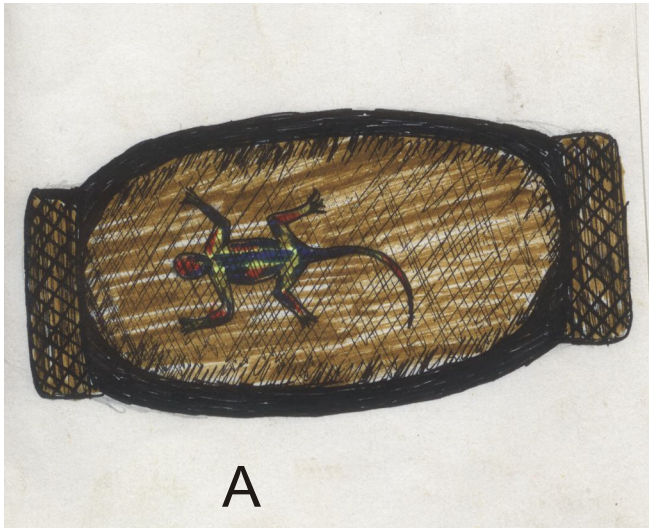


**Plate 3: A replica of Nok Head sourced from James (2000:15).**

Trowell (1960) and Ezegbe *et. al*. (1993) reported that matting, carving and pottery are popular Southern Kaduna crafts that have been in

practice among the people from the pre-historic period. Traditionally, among the Takad group of Southern Kaduna, mat motif is a symbol of peace. Due to this reason, traditionally couples sleep on it and it is also offered to visitors and friends to sit on. According to Ezegbe *et. al*. (1993) among the Netzit groups of Southern Kaduna, particularly, the Attakar, the use of 'Nok head' and lizard motifs in carving and pottery on Fig 4(a-d) below has been and is still a common practice.




*Abiyai* or *Kongo* with engraved lizard motif, sourced from Ezegbe et al (1993:48)




A pot lid designed with a female figure motif lying face-down sourced from Ezegbe et al (1993:48).



C 1 C 2 D

Two carved traditional staff with symbolic design motifs staff C1 has a symbolic feather motif of traditional prestige. Staff C2 has a symbolic power of lizard and sanke motif. Sourced from Ezegbe (1993:48)

A female figure typical of traditional Attakar woman of Southern Kaduna with a scarified lizard motif on her belley. She is in the mood of presenting her child to the tottary priest for naming ceremony.
Sourced from Ezegbe (1993: 48)

**Figs 4 (A-D). Some Southern Kaduna crafts with symbolic Design motifs. Sourced from Ezegbe et al (1993)**

### 2.3.3 Design Characteristics of the Ancient Nok Terracossttas

Fagg (1990), opines that, although the variations of the date of the carbon tests on the Nok figurines suggest that terracotta continue to be made for nearly a thousand years, there are only small difference in their form and more in the techniques of construction. As already stated, Nok culture is referred to as terracotta culture because, its surviving crafts were essentially by the terracotta pieces. The characteristic of the Nok sculpture is the clay body which is made up of decomposed rock gravel frequently incorporating small pieces of quartz and mica ingredients,

often used by traditional potters of Southern Kaduna. As further maintained by Fagg (1990), all, except the small Nok sculptures, are modelled into hollow shapes with a generous supply of access holes. All the pupils of the terracotta eyes of both human and animal heads of the ancient Nok terracotta culture have been pierced through to the interior. The shape of the eyes is triangular and it is in this shallow triangular base that the perforated pupil of the eye is suspended from what Fagg (1979), describes as the supra-orbital triangle, which is sometimes horizontal. The nostrils, mouth and ears are all given the same treatment. Most of the Nok terracottas represent heads or figures of humans or animals. Nok figures, were often coil-built as evident in the already mentioned Nok figurines showing evidence of coil-built techniques, measuring 16.5cm high, which was recovered during the tin mining at Nok and it is available in the Jos National Museum.

According to Adon (1988) and James (1997) who both support the views of Fagg (1979), the coil techniques and the decorative figurines production of pottery craft, is still in common practice by traditional potters in Southern Kaduna today. Fagg (1979), further stated that the decorative features were achieved by deep or shallow incision while combed or stamped impressions were made to add surface decoration. Not only were the heads and limbs sometimes modelled separately but much of the surface details, tresses of hair beads, necklaces and bracelets were made and then applied to the main figures. Fagg (1979), further maintains that there is great variety in the shape of the heads. These include spherical, ovoid or elongate. There is no clear sign of scarification. Nevertheless a few with highly scarified lines on the cheeks and on the forehead, emphasising the structure of the face or providing sculptural decoration may be an example of traditional marks. In Southern Kaduna pottery crafts and designs are made by incisions.

### 2.3.4 **Snake motifs in the Ancient Nok-fugurines**

According to Fagg (1990) snakes characterised Nok culture designs more than any other creature shown in the Nok figurines. They are most

commonly represented in relief either climbing over the side of the pot or balancing on the rim which is described to be a symbol of power to such sub-groups like the Attakar and most Southern Kaduna of the recent times. Among the traditional potters of Southern Kaduna, snake-pots are still produced especially with the ritual and decorative pots. Some Southern Kaduna traditional brewing and storing pots can be observed in Plate 4(a & b) on page 33.



Plate 4(a): Southern Kaduna decorative pots



Plate 4(b): Beer brewing pots (swup)

**Plate 4(a-b): Southern Kaduna traditional brewing and storing pots sourced from Shemang (1985-5&8)**

Snake pots as further maintained by Fagg (1990) have been traced back to the second millennium B.C, when they were common especially in the near East. According to Fagg (ibid), the paraphernalia and custom associated with serpent worship are to be found in the mythology of many countries or traditions in the world. Across the continent of Africa from the east where Abyssinian history, as further stated by Fagg

(1977), is said to begin not with the queen of Shebba and King Solomon, but with the reign of the serpent, to the far west, described in the earliest records as a land where people worshiped a black snake, it seems that from the beginning of formalised belief, there were elements of serpent worship. This, as Fagg further maintained, has been included in the religion of the Nok people. It however, seems eroded by Christianity and Islam as the killing of certain snakes nowadays is no longer forbidden as it used to be in the past.

Today the use of snake motifs on decorative pots and other decorative design for aesthetic purpose rather than ritual or traditional religion is a common practice. On the surviving ancient Nok terracottas as reported by Fagg (1979), snake motifs were presented in relief form. Similarly, in the pottery craft of Southern Kaduna, snake motifs are still presented in relief form, either climbing over the side of the pot or balancing on the rim. When the snake was not presented in relief form it was presented in abstract zigzag, linear and roulette motif with no illustration which like an *ikenga* symbolizes power to both the designer and the user. This view agrees with those of Fagg (1971) on the Nok terracottas and Okeke (1985), in his study of the traditional weaving patterns in Ibo land in which the snake pattern is unveiled as a symbolic power. In the Southern Kaduna traditional mat weaving which is as popular as pottery craft, the snake motif is presented in Zig-zag form, representing snake movement, formed by the mat plaiting technique to symbolize power

and arrogance. Some of these Southern Kaduna weaves can be observed in the Southern Kaduna hand-woven, storing and winnowing baskets shown in Plate 5(A&B) on page 36.

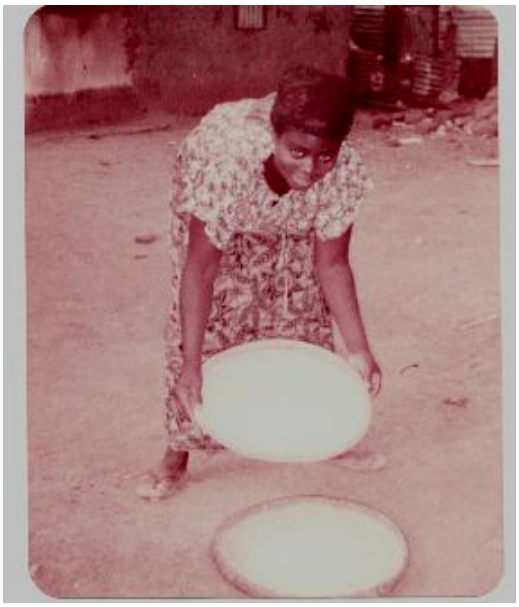


**Plate 5(a): Southern Kaduna lady with a winnowing basket**



**Plate 5(b): Southern Kaduna storing basket**

**Plate 6(A and B): Southern Kaduna woven baskets**. Sourced from Kamboi (1984:21).

According to Fagg (1990), the Nok terracottas may have influenced the Ife sculpture but the sophistication and the technical excellence of the Nok works suggest that they also may well have been derived from a much earlier ceramics tradition. It is possible to speculate that ancient Nok culture derived from ceramic work. Nevertheless, the same cannot be said of Textile Design since textiles have no surviving evidences.

### 2.3.5 Design on Nok Traditional Costumes

According to Fagg (1979), whose views are subscribed to, by James (2000), it does not seem that fabrics were used in the era of ancient Nok culture, because such evidence has not been revealed in the available ancient Nok terracottas. From the available findings on the ancient Nok culture, what has been revealed on its terracotta pieces and can be considered, as its textiles are twisted twines, or ropes, sashes, straps and aprons probably made from leaves and raffia. Some of the terracotta figures show twisted ropes, sashes, strops and other adornments as exemplified in the most recent ancient Nok traditional aprons in Fig 5(A1-3) below.



Fig 5 (A1)

Fig 5(A1): A woman's apron spread out to show how it was made. It was purchased for the Jos Museum in a village a few miles from Jos in 1963. Various forms of these skirts worn at the front and the back of a woman were fashionable in many parts of Nigeria including Southern Kaduna until quite recent times.



Fig 5 (A2)

Fig 5(A2): Apron as worn; looped over a waist girdle of many strings of knotted fibre. Compare this with the skirts shown in the figures in figs. 6(b).

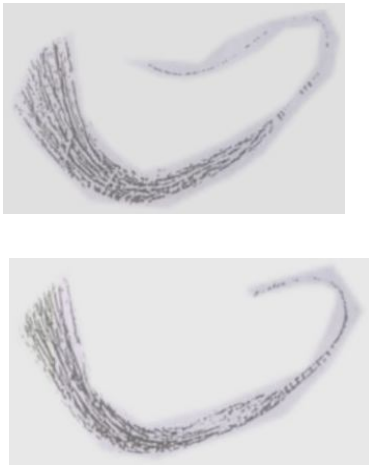


Fig 5 (A3)

Plate 5(A3): Two strands from the apron showing the details of their structure.

**Plate 5(A1-3): Nok traditional textiles (Apron) – Sourced from Fagg (1990:29).**

According to Fagg (1977), there are many types of aprons discovered in Nok culture and worn by the people as can be observed in Fig. 5(A1-3) above which depicts sketches of different Nok terracotta culture, aprons including the penis sheath which according to Hassan (1991) and Audu (2000) has continued to be handcrafted by the Southern Kaduna crafts people into the early part of the nineteenth century. The wearing of the covering such as the penis sheath by men and pubic aprons by women did not display any sexual meaning but symbolized male and female fertility. According to Fagg (1977), there are some 25 examples of male pubic covering that have been found. Apart from the male and the female pubic covering, comprising the *agwab, dangyet,* the hats and caps, all other dresses of the ancient Nok cultures, appear to be ornamented

with circular spiral, triangular and broken lines in twill form pattern, this is contained in the coil-built techniques of Nok culture as presented in Plate 2 of this chapter. Some of these traditional costumes of the nineteenth century as reported by Alau (1998) and the female figures in the historical costumes sourced from Fagg (1977) can be observed in Fig. 5(B1-4) and Plate 6(A-C) on pages 40 and 41.



1. A strand of a female apron
2. Traditional female
3. A female girdle apron
4. A traditional female pubic apron

**Fig 5(B1-4): Southern Kaduna traditional costumes sourced from Fagg (1977) and Alau (1998) respectively.**



6(A)

Plate 6 (A) : A woman in traditional outfit (back view) sourced from Alau (1998-59)



6(B)

Plate 6 (B) A Woman wearing a pubic apron, garter and necklace. Sourced from Fagg (1990.26)



**C**
**A woman with a contemporary cloth wrapper tied round her chest.**

**Plate 6(A - C): Contemporary Southern Kaduna female costumes. Sourced from Alau 1998:59**

The above figures and as well as preceding plates, represent typical ancient Southern Kaduna costumes. Similarly Plate 6(c) represents a Southern Kaduna woman in contemporary casual wrapper tied round her chest.

## 2.4 The Contemporary Crafts and Designs of Southern Kaduna

According to the views of Peter and Murray (1976) and Eicher (1976), Nigeria is an exciting country with a wide variety of people and terrain capable of providing raw materials not only for textile craft, but also for all crafts. It is a country currently undergoing change at rapid pace, rich

in traditional crafts presenting a wide variety of technologies, common to West Africa. Similarly, Ayilla (1991) states that Southern Kaduna has a variety of crafts and designs that are fast declining.

> According to Ahuwan (1976), the crafts in Nigeria, with particular reference to the Southern part of Kaduna state have been a family tradition.They are also categorized into: the household utilitarian crafts and the craft made for religious functions. The religious objects, as further maintained by Ahuwan (1976) had and still have prescribed standard. They also have determined function, aesthetic appeal and design concept. Symbolism in colour patterns and decorations were also prescribed by the committee of elders. The utilitarian household object had the set values of functions on traditional design concept. The fact that a craft was a family tradition in itself was a set value because no family likes to disrepute itself by producing unacceptable and sub-standard craftsmanship.

Makanju (2002) who describes crafts as a type of creative work of mechanically and semi-manually produced functional objects, listed the crafts found in Kaduna state and indeed Southern Kaduna as: pottery, basketry, mat-weaving, body decoration, cloth weaving, calabash decoration, mural decorations, leather work, blacksmithing and ivory and bone carving. Tulloch‘s (1997) views are supported by Akodu (1985) who reported that traditional designs and crafts are believed to be those designs and crafts that have been in existence in Southern Kaduna before the contemporary era. It ushers in Islam and Christianity along with their

corresponding Eastern and Western ideas. Contemporary crafts and designs, on the other hand, are those crafts and designs whose changes are brought about by infiltration of ideas and techniques through cultural interaction. As opined by Ayilla (1991), scientific and technological developments have reduced the world to a global village. This implies that, no culture, including the Southern Kaduna artistic culture is completely isolated and static. The review of these Southern Kaduna traditional crafts therefore, includes: weaving, pottery, dyeing and wood carving, among others.

### 2.4.1 Weaving:

According to Colchester (1993) and Chetwynd (1975), weaving connotes the traditional technology of producing any web material, embracing fabric construction, matting and basketry. In the textile industry, weaving is one of the commonest, oldest and universal methods of fabric production through which man satisfies his needs of clothing, furnishing, and ritual expressions. While textile weaving provides fabrics for clothing and furnishing, matting and basketry provides traditional functional materials for praying and for sieving, storing and carrying grains respectively. Subscribing to this view, Trowel (1960), McJimscy (1973), Jefferson (1974), Thomson (1975), Hall (1977), Lamb and Holmes (1980) all describe weaving as the process of interlacing splints, reeds, palm

fronds in the case of matting and basketry or two sets of yarns (warps and wefts) under tension, for the purpose of producing clothing materials. It is the process of producing fabrics through the use of looms which may be hand, motorized or non-motorised looms on which warps and wefts are manipulated. This is achieved through interlacing them into webs, called fabrics.

Afolabi (1992), attributes the origin of textile fabric and embellishment to the materialistic man's ardent desire to primarily clothe himself, define and distinguish his social status. Against this background, Belfer (1976) refers to the art of fabric production and embellishment as the most important invention of the civilized man. It is not surprising therefore that the art of textile production and embellishment is universal and the difference is only in the degree of the sophistication of the technology and the materials involved.

According to Kambai (1984), it is in mat weaving, rather than cloth weaving that the Southern Kaduna groups are popular. Whereas mat- weaving is known to be practised from the pre-historic period, the idea of cloth weaving, as she further maintains, is a borrowed tradition from the neighbouring Hausa and the Ibo who came to the zone in the early 1920s through the then newly connected railway line from Port Harcourt to Jos. Unlike pottery and cloth weaving which are crafts for the female, mat weaving is a common craft among all sexes and groups of Southern Kaduna. An example of a contemporary cloth weaving on a bamboo frame loom from Zonkwa and a weave

draft, and starting base of a traditional mat can be observed in the Southern Kaduna weaving and weaving mechanisms in Plate 7 below and Fig 6 respectively. It is sourced from Kambai (1984:42).



**Plate 7: A Southern Kaduna Bamboo frame-loom weaver from Bajju Zonkwa. Sourced from Kambai (1984:42).**

The commonest designs observable on the mats and fabric pieces are simple plain and broken twill weaves. Weaving designs which are done on the horizontal vertical bamboo frame loom and horizontal narrow strip loom, similar to that used by Hausa weavers, is also based on what Chetwynd (1975), Thomson (1974), Joseph (1977 and 1980), describe as plain and twill weaves in colour strips of symbolic meaning, which can be observed in Fig 6(a) below. The yarns used for cloth weaving are bought from

the local markets, while the raffia fibres used for mat weaving are collected from the appropriate bush plants bush.

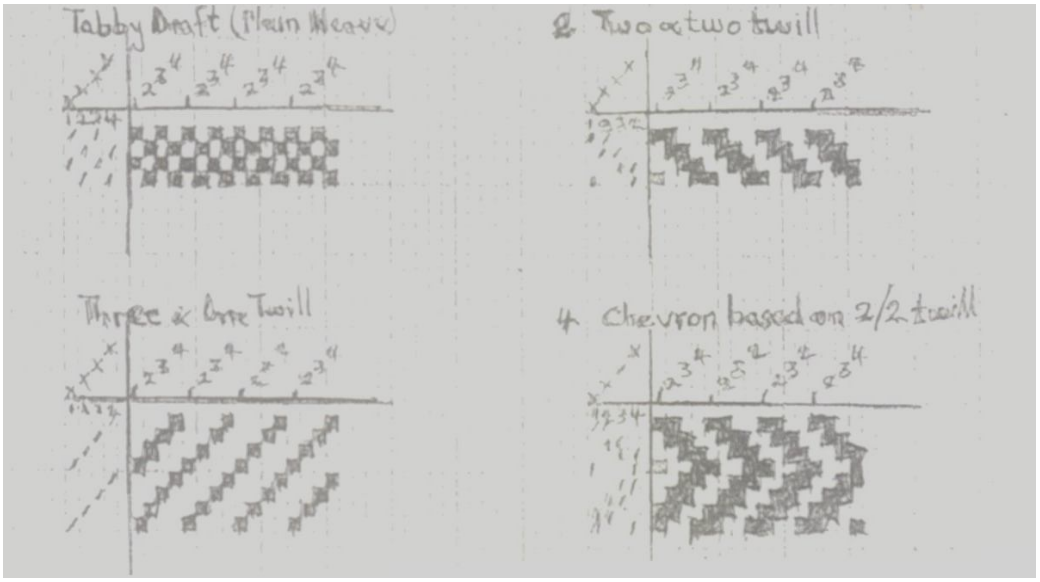



**Fig. 6(A) Common weaves in contemporary Southern Kaduna cloth Weaving, Sourced from Chetwynd (1975)**

Referring to weaving and pottery making as man's ancient cottage crafts, Chaffers (1965), further describes textile weaving as the fundamental method of fabric production which provides a variety of weaves on the textile woven fabrics and which Adeyemi (1986), believes, are basic to man's existence. The invention of weaving (fabric production) is considered by scholars like Adeyemi (1988) and Joseph (1977) as the

most important achievement of civilized man. The origin of textile weaving seems to be uncertain but available information favours the eastern world like China, India and Japan. One theory that seems to be versatile is that since fabric provides clothing which is one of the materialistic man's basic needs of life and an index of affluence and happiness in what has become our materialistic world and age, it was practised independently and its transfer was very fast.

Traditional textile weaving craft has a long history of origin. It is practised in Africa, including Nigeria and Southern Kaduna by both male and female on two types of looms, namely: horizontal narrow strip treadle loom and vertical looms respectively. The narrow strip loom produces narrow strips of fabric which are joined together to any desirable length and width.

According to Adler and Bernard (1993), narrow strip loom has for over 2000 years been a domestic industry of what Makama (1992), describes as cottage industry of nomadic and village families. Strips weaving enjoys various names and uses in the land of nomads, where it is most practised because of the portability of the loom. It is known as *'ghujeri'* among the Afghan Uzbeks and as 'jajim' among the Shahsavan and 'Qashquai' of Persia. Strip weaving is a flourishing craft from the steppes of central Asia to Caucasian, the empty quarter and into the Eastern North Africa to west Africa, where tribes like the Ashanti of Ghana

and the Ewe of Togo have developed it to an astonishing sophistication of pattern creativity in immemorial traditional weaving, inspired by the demand of royalty and ceremony of the wealthy. Describing the Ashanti and Ewe weaving craft as the 'African majesty' 'and marvelled by the technique of their strip crafts, Adler and Bernard (1993-8), state thus:

> *The patterning of the cloth and band of different colours and design is particularly fascinating form of decoration practised by weavers of tribal world, when colours and patterns are associated in strips or stripes-the creative energy of the weaver is released and flows through the cloth so that it becomes a celebration of man's ability to manipulate his practical talents with natural ease of expression.*

Indeed, West African people have adapted the narrow strip weaving loom to their culture. The fact that the narrow loom is used today in our society is a confirmation of both its success and adaptation. It also restates the natural conservation of the West African and Nigerian culture in general and Southern Kaduna in particular.

According to Eicher (1976), and Standfield (1971), tremendous progress has been made in weaving among some Nigerian tribes, particularly among the Hausa, Yoruba, Ibo, Tiv, and Okene. Kano Emirate council is reported to have a reputation for skilful weaving as early as 1512 and its woven fabrics were reported being used as currency in the 1950s, while her main products in 1951 were woven and dyed fabrics. Eicher (1976), further states that evolution of textile weaving in Nigeria can be traced through archaeological discoveries in Eastern Nigeria over a

thousand years old, woven from bast and leave fibres. She states that woven fabrics that are most popular in Nigeria include the 'Aso oke', "Akwete" and "Okene". She maintained that Yoruba people have a long traditional reputation for traditional weaving, which they have also matched with their traditional '*adire eleko' products*.

According to Audu (1976), while mention is made about these other Nigerian tribes, no mention is made of any Southern Kaduna sub-groups either because of the inconsistency of the name 'Southern Kaduna' which as stated by James (1997), metaphorsed from "Southern Districts" to "Southern Zaria" and then "Southern Kaduna". It is possible that Eicher was not aware of any difference between the Southern Kaduna and the Hausa in Kaduna state. This can be explained by what Akodu (1985), refers to as problem of pluralistic society, or the research did not cover the area, or the researches are over–shadowed by Hausa as the major tribe in the North, or textile weaving is relatively contemporary and the traditional matting and basketry are not significant textiles. According to Sarki (1997) textile weaving in which yarns other than raffia fibres are used, is contemporary craft whose designs are simply plain, twill and strips of colours of symbolic meaning.

The origin of textile weaving in Southern Kaduna is uncertain. Kambai (1984) opines that it was introduced into the area through the Hausa/Fulani traders. She further stated that textile weaving in Southern

Kaduna was skeletally existing in the early 1960s, but became contemporarily popular when some enthusiastic Southern Kaduna military ladies who learnt the techniques while in transit, came back to base and started to weave using the frame loom and the horizontal narrow strip loom combining plain and twill weave into colour strips.

Today, traditional contemporary woven fabrics are used as festival costumes of the sub-groups of Southern Kaduna. It is against this background that the Attakar people of 'Takad Chiefdom,' use traditional woven fabrics of white, brown and green stripes for the annual festival of their founding ancestral father known as Aka'at, while the festival is known as 'Aka'at Cultural Day'. There are proliferations of these festivals. These include: Afan, Ham, Bajju and Adara Days which are celebrated between January and April every year.

According to Wada (2003), the head-dress of the Agwam Takad 1 and those of his village heads (wards heads) have design and colours of cultural significance to the Attakar people. The stripes of white, yellow-Ochre and green are symbolic colours to the Attakar (Takad) people. The white colour, as Wada (2003) further maintains, signifies peace, and friendship for which the Attakar people are known for, while yellow –ochre strip, signifies the colour of the soil of the location of the Attakar people, and the colours of the leopard which the traditional Attakar hunters loved to hunt, eat its meat, wear its skin and celebrate its killing in a traditional

leopard dance which attracts designs of significant importance. The strip of the green colour symbolizes the green plains and the undulating green valleys of Attakar Hills that are presently the inherited location of the Takad (Attakar).

The strips of the woven fabrics are produced by traditional weavers from Southern Kaduna. The weaves, mostly *majanye* and *ashobi* which are produced on request are woven in stripes of colours. Most of the weaving is done in the festive periods, between November and April, when there is little or no rain. In the rainy season, the weaver abandons her loom for farming and returns to the weaving shade after farming so as to produce textile fabrics for domestic and commercial purpose. Southern Kaduna contemporary loom and weave can be observed in the afore-mentioned Fig. 6(A) on page 44 of this chapter.

According to Colchester (1993), textiles are among the most hybrid of contemporary crafts, spanning a broad variety of development and techniques, including embroidery, felting, matting and basketry which have been absorbed into the textile family because they all involve the interlocking of fabrics. These techniques, as Colchester further maintains, are practised by different kinds of crafts- people with diverse capabilities.

### 2.4.2 Basketry

Trowell (1960), refers to basketry as the ornamental crafts of basket making with splints, reeds, bark of woven fibres, which are interlocked to

form variation of texture and geometrical motifs very much similar to cloth weaving and mat-weaving (matting) practised in all African societies, especially in the lower Niger, Benue, and Congo basin areas. The technique of basketry consists of central core of reed which is sewn with fibre threads and pattern is introduced through colouring (usually black, brown or red) with natural coloured fibre for the stitching using reed, and raffia, barks fibres and ribs. The technique consists of a central core and the main products include trays or winnowing and a variety of baskets as observed in the aforementioned Plate 5(a&b) on page 36 which is sourced from Kambai (1984). The typical weaves are based on what Thompson (1974) and Joseph (1980) unanimously describe as, Hop Sack, broken crow, Mock Sateen and double tabby.

There are different types and sizes of baskets for various functions. These include winnowing baskets which are tray-like for drying farm products and sieving chaps for grains. There are also small and medium sizes of baskets that are used as traditional gifts and as sieves. The big baskets are essentially used as storage facilities and brewing malt for local liquor.

In basketry, a basket is started by cris-crossing two bunches of fronds of reeds which are extended by introducing new fronds and interlacing them, until the desired size and shape of the basket is achieved. The basket is then finished by sewing the edges to keep them

intact and then colouring the basket to give it life and meaning. As a fundamental principle of producing a basket for a functional objective of cultural significance, its starting base is a formulated motif of weaving. The motif symbolizes continuity.

Matting is another method of traditional weaving similar to basketry but differed in style, materials and function. According to Leuzinger (1964), matting like basketry is the craft of mat-making with hand loom in which palm or raffia leaves or any related material are interlaced into a variety of mats, for sitting, lying, burial and other cultural functions. Matting has been in practice in Southern Kaduna from time immemorial.

James (2000) and Audu (2000) were unanimous in their opinion, that, mat weaving, like pottery, is a continuity of the ancient Nok culture technology. According to Sarki (1997) and James (ibid), other traditional articles of mats-weaving include the '*agwab*' (penis sheath), dangyet, (female hip, or girdle skirt), and this was traditionally produced to meet the cultural needs for clothing, before the advent of contemporary textile weaving in Southern Kaduna.

Although mat weaving is in the decline, it is minimally produced in plain and twill weaves with striking natural and synthetic colours. Mats are still used in religious funeral rites, sleeping and as special gifts. Symbolic designs are based on tabby and varieties of twill weaves as in the afore-mentioned Fig. 6(A) of this chapter, page 44. The raffia plant that provides

the raw materials for the mat weaving grows wildly. The fresh raffia leaves are pruned from the raffia palms of the wild fields of Southern Kaduna, dried and trimmed to the desired size, dyed and tied in bundles before weaving is started. Mat weaving is also a common practice in Southern Kaduna. As a common craft in Southern Kaduna, it is an inspiration for the Kikyak and other formulated motifs of weaving. This starting base of Southern Kaduna traditional mat weaving can be observed in Fig 6 (B) below.

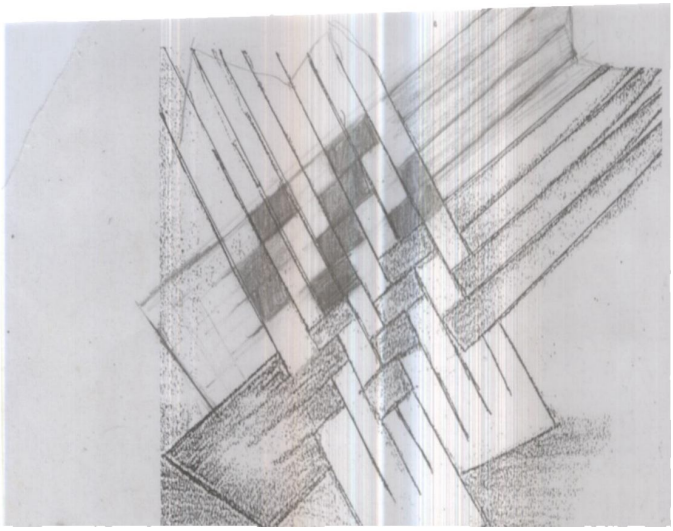


Fig 6(B): The starting Base of a Southern Kaduna mat Sourced from Kabirat (1990:13)

### 2.4.3 Pottery:

According to Chaffer (1965), pottery and weaving are man's ancient cottage crafts. Similarly, Newman (1974), describes pottery as a craft that is as old as history of man's ancient civilization. It provides comfort for man's basic needs for food and drink, just as weaving provides need for clothing. It is along this line that Newman (1974) explained that the word

pottery is a general term that originally describes all objects modelled out of clay and fired in kiln. Its modern usage excludes the hardest wares porcelain and China whose production processes are highly technical with a high degree of firing. The term is now used to describe the various types of earth-wares and stone-wares. Pottery, as described by Leoni and Prichet (1978) and Ogun (1987), is simply the potter's craft. They further opine that although pottery is not practised by everybody it is used by nearly everybody in one form or another. It is a craft in which pots are produced for cooking, storing liquids and other valuable items.

Pottery is used to express cultural heritage. It is against this background that Gukas and Datiri (2001) conceptualize pottery technology as any clay production which is hallowed and fired to serve a specified cultural function in a particular society. Johnson (2001), further opines that pottery is a craft, design and an industry, as well as an academic discipline. It is a craft in which basic material, known as clay is manipulated to produce pots and other pottery items like dishes, cups and flower vessels. It is academic discipline whose technology is taught in schools as an applied art.

In view of the universality of pottery, and its basic function, its origin is shrouded in uncertainty. It is in this vein that Chaffer (1965) further states that, it is a vain attempt to endeavour to particularize any specific country or race as the origin of the craft. To do otherwise, as Chaffter

(1965) further maintains, is to ignore the fact that pottery, like textile, is one of the oldest branches of human industry. It arose from the human requirements of finding a convenient mode of conveying the fruits and liquids of the earth to his mouth, in order that his appetite may be appeased and life sustained. The craft of pottery terminated the era of the uncivilized man's ways of life. This includes eating of raw food and drinking from ponds with his mouth like animals. The discovery of the crafts of pottery ushers in the civilized man's era of drinking in decent containers and eating well cooked stored, and served food.

According to Shamang (1985), the craft of pottery has been in practice among the Southern Kaduna cluster groups from time immemorial where the Attakar people are second to none in the area, in terms of the quality of clay and the craftsmanship. Adon (1988) found out that, the clay body from most Southern Kaduna clay depots and the technique of production have remained related to that of the ancient Nok culture. The crafts women produce pots of various sizes for various functional needs, including rites of passage. Some of the contemporary Southern Kaduna pottery products from potters of Southern Kaduna can be observed in Plate 8 below, in which a contemporary Southern Kaduna lady is presented cooking in a Southern Kaduna clay pot, while Plate 9 following it, represents some traditional 'clay' bottles known as 'buta'used for boiling

water. They are both sourced from Kambai (1984) and Shemang (1985) respectively.



**Plate 8 : A modern Southern Kaduna Lady Cooking in some contemporary Southern Kaduna pots: Sourced from Kambai 1984:27.**

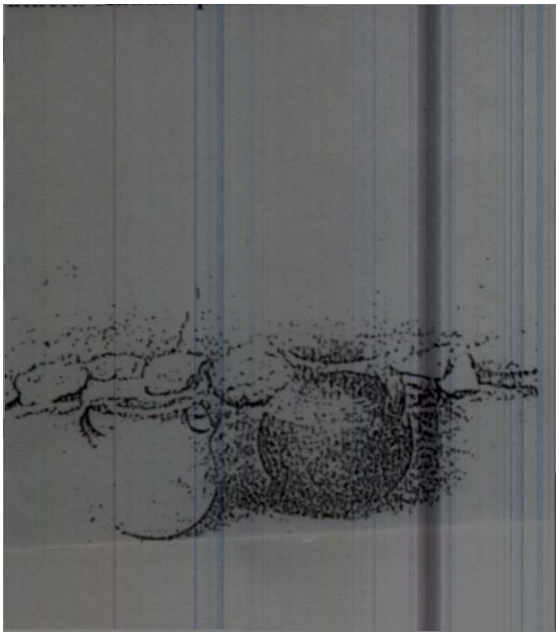


**Plate 9 : Some Southern Kaduna Traditional 'Buta' (Bottles) for Boiling Water Sourced from Shemang (1985.6)**

> The designs on the Southern Kaduna pottery are usually impressed, incised and painted with gloss paint and burnished. Appliqué design, which is a way of using additional clay to bring up designs in relief form, is practiced. Burnishing which is polishing by smoothening the surface of the pot with polished stone and impressionalism is done at the later hard stage. It is done by stamping patterns of cultural symbolism. These traditional techniques of pottery design in Southern Kaduna coincide with those techniques advanced by Gukas and Datiri (2001).

There are different types and sizes of pots produced in Southern Kaduna. These include: 'akhirang' or zumade which is a mighty pot (tank) used for brewing and storing native liquor known as brukutu. Udong is a water tank, 'alan' is a general name for pot to the netzit while 'swup' or 'ivutade', among the Netzit and Ham respectively is a pot for storing liquor to ferment. Others like Chichio or 'itaringh' which is a bowl or dish, and the family cooking and soup pots are names of different pots common to Southern Kaduna pottery crafts.

The potters get their clay from the clay depots which are scattered along the valleys and streams of Southern Kaduna; which are opened only in the dry season after all crops have been harvested. The wet clay as a medium of pottery craft, when brought from the clay depot must be prepared for pot-making by separating the impurities, such as vegetable matter and other unwanted lumps in the clay and crushing it into smaller particles to remove the gravels. The clay is then grogged with feldspar which is made up of sand and crushed terracottas. The prepared lumps of

clay are put in a storing pot and covered with wet leaves or pieces of cloth in readiness for pottery production with possible design motifs.

The Attakar sub-group of Southern Kaduna, which is second to none among the Southern Kaduna sub-groups in the craft of pottery production, adopts the coil and the pinch methods of its construction which is similar to the ancient Nok. Among the Attakar a pot is started by rolling a lump of clay with the two hands on a flat stone or any hard surface and then forming it into a cylindrical lug-like lump symbolizing feminine power. The woman then begins the pot by deeping her hand in the centre of the lump clay and then begins to pinch it round. Among the Attakar, pottery is a craft of the women, giving them economic power in the families.

All over the world, pottery wares are decorated with various patterns or motifs of cultural significance. In the study of the traditional pots of the Igbo, Igwilo (1983) asserts that the designs of the pots are based on the traditional 'ulu' design with which geometric patterns and animal motifs like lizards, snakes, birds and fish are incorporated. Hecht (1970) earlier observed in a similar manner that decoration on pottery were made with fingers and straws. In Southern Kaduna pottery decoration especially among the Attakar group were made with fingers and straws, grooved, ridged and burnished before they are fired. Human, animal, reptile, and geometric shapes are the common design motifs. Bisque is the commonest method of firing. The fired pieces are usually given a black

colour appearance achieved by applying a solution of locust bean husk on the fired pieces while they were still hot. All these are inspiration for extracting motifs for this study.

### 2.4.4 Dyeing

Bikai (1986), Achi (2000), Ambi (2000), and Amue (2003) unanimously stated that dyeing of raffia, fibres, including Ikat techniques for exciting colourful patterns in mat weaving are traditional crafts that have been in practice in Southern Kaduna from time immemorial. Traditional dyeing of textiles known as kampala, like the weaving of textile, is relatively more recent. Today dyeing and resist techniques are part of the traditional contemporary crafts of Southern Kaduna and constitute two different ways of applying colour on a fabric to make them meaningful and fashionable for consumers, with fashionable taste. They also form the practical aspect of this study. Scholars are of the opinion that, Nigerians are fashionable and colour is an important element of fashion. Storey (1978), opines that fabrics to most textile consumers, do not exist or are meaningless without colour. It is at this background that Ireland (1971), professed that expression and response through the use of colour are among the most primitive, basic and at the same time sophisticated and subtle instincts. Indeed colours are used to express feelings.

Colour is defined as the perception of light stimuli by the eye. Webber (1979), describes colour as a very private and personal response to what we see, while Smith (1994), describes it as a powerful component of any painted picture or design which communicates its mode and message of a picture, making an immediate impact on the sense and conditioning a variety of emotional responses. Professing this same idea in discussion on dynamism of colour, Oguntona (1984) describes colour as a phenomenon, denoting visual sensation in general, whether caused by external stimulus or expressed objectively to give life to a given design. For him, colour gives life and as a textile dye, it gives life to fabric. It is in this light that Standfield (1971), describes the Yoruba attire of traditional resist technique (adire-eleko) from the traditional indigo dye as the 'aesthetic of the cool'. This simply means the beauty and coolness of the blue colour exhibited by the indigo dye of the Yoruba traditional "adire-eleko.

In this study the knowledge of dyes and dyeing will be required in adapting the identified and randomly selected design motifs from the traditional crafts of Southern Kaduna. It is therefore imperative to have a review on dye and dyeing. Dye is defined as the colour substance, which can be applied in a solution or dispersion to a substrate.

Halsey *et-al* (1968) and Nkeonye (1990), both define a dye as a substance used to colour materials permanently in such a way and manner

that the imparted colour seems to be part and parcel of the materials and not merely applied to the surface as in painting. Nkeonye (1993), and Adedekun (1996), describe a dye as a deeply coloured organic compound usually, soluble in water. They further maintain that the retention of colour as well as stability are required functional properties and are accomplished by chemical and physical forces.

Classifying dyes into natural and synthetic dyes, Storey (1978), defines natural dyes as those obtained from plants, animal, insects and minerals. According to Belfer (1976), until the late half of the nineteenth century, natural dyes were the only available textile colour before the invention of synthetic dyes from aniline by William H. Perkin in 1956. It was this accidental invention that marked a new chapter in the chemistry of dyes, not only to the Western world but the entire world of textile materialism. Today, as further opined by Nkeonye (1990), there are over 400, different synthetic dyes available for textiles application or colouration.

There are different methods by which textile fabrics are coloured with dye, design created on them and to give them life, meaning and make them more functional. The commonest methods of fabric colouration are dyeing, printing, painting and spraying. Dyeing which is the focus of the practical aspect of this study is the process of giving a permanent coloured appearance to a fabric.

Dyeing is referred to as the process of colouring a fabric or any substrate permanently, in such a way that the dye and the material which is dyed cannot be separated physically except by chemical means. Textile dyeing, according to Trotman (1975), is usually understood to mean giving them colour, which is of comparative permanence. This implies that it should not be possible to wash the colour out easily in laundering nor should it fade rapidly when exposed to light. This knowledge is relevant and important in this study of adapting some of the identified design motifs of Southern Kaduna on textile fabric using the textile fabric resist techniques.

Attempt to explain the origin of fabric dyeing, according to Kaufman and Johnson (1967), has resulted in a variety of theories. This is so because archaeological investigation has not been quite fruitful since the colours are destroyed with time and a few actual samples of pre-historic textiles have been discovered. It is for this reason that Kairfman and Johnson (ibid) further state that it is difficult if not impossible to pin-point the beginning of the art of dyeing, but it is also obvious from available evidence that it was an important development in culture widely separated in time and geographical location. In addition, Held (1973) postulates that dyeing is known to be in practice since the time of early man. He further maintains that man learnt to colour his fabric almost as soon as he learnt to make them. Joseph (1980), maintains that dyes and dyeing are as old as textiles themselves and predates written history. Describing dyeing as

an ancient craft whose history can be traced to at least four thousand years, Giles (1974), opines that dyeing was an art that demanded a high degree of skill and details of the methods used by dyers, were jealously guarded. The same high degree of skills and details of the methods used is required in this study.

Nkeonye (1993) states that before the invention of synthetic dye called mauveine in 1956, all dyes were natural. Prominent among this was woad, Tyrian purple, madder, logwood and indigo in which the Yoruba people through the production of *adire-eleko*, which is relevant to this study, has excelled tremendously. Indigo which, as opined by Rys and Zollinger (1972), is obtained from 'Indigofera tinctoria' is indigenous to Asia. So also is 'carthamus tinctoria' as stated by Trotman (1975).

Egypt being the cradle of African civilization, had the advantage of being in contact with the outside world (where the craft of dyeing is believed to have long been established), had the advantage of learning the craft of textile dyeing. According to Sieber (1974) indigo dyeing was reported in Africa in 1985 and indigo dyeing, as reported by Eicher (1976) has been in practice in Senegal, Sierra Leone, Liberia and Nigeria for centuries. Dendel (1975) stresses the resourcefulness of African traditional dyers with natural dyes and concludes that the craft might not have after all been transmitted into Africa from anywhere as opined by scholars. He buttressed this with the expressed view, 'God made every

plant with beautiful colours but the knowledge of how to get them out for man's use is a secret between God and plant'. Expression like this cannot be said to have come from caricature, other than resourceful traditional African dyers to which this study strives to contribute.

In Nigeria, dyeing as opined by Eicher (1976) is a legacy of Nigerian craftsmen. Dyeing among the Yoruba and Hausa in their traditional dye pots and pits respectively, though in the decline, are well documented. Traditional dyeing among the Hausa was the prerogative of men while it is confined to women among the Yoruba. Other Nigerian groups known for dyeing include the Tiv and Nupe while the other unknown smaller groups include the Southern Kaduna people who are believed to have been practising dyeing of raffia fibres with traditional dyes for weaving for time immemorial. According to Kambai (1984), dyeing of raffia fibres for raffia fabric or matting materials is an ancient craft that has been in practice in Southern Kaduna from time immemorial.

### 2.4.5 Resist Dyeing

According to Meilach (1973) the demand for multi-colour dyeing gave rise to the resist techniques of dyeing. Resist techniques as further maintained by Hiremath, (1985) is a dyeing process in which pre-determined portions of the fabric are treated to resist the dye colour when

the treated fabric is immersed in the dye-bath. The two common methods of resist dyeing are Batik and Tie-dye.

The resist process as further stated by Meilach (1973), and Hiremath (1985) involves waxing or tieing and dyeing and then re-waxing and re-tieing continuously, until the desired colour scheme is achieved. It is through this process that the achievement of more than one colour scheme in dyeing is obtained, or made possible. Resist technique of dyeing is simply the process of producing multi-colour effects on dyed fabrics, using such techniques as painting with melted wax, printing with starch paste, folding, stitching and tying with twines before dyeing

While the resist technique has been perfected in Western Nigeria, through the adire-eleko technique, using cassava and corn starch, in Southern Kaduna, it is achieved through "Kampala" using bees wax. In this technique, known as batik, the bee wax is dissolved by melting the substance in a pot or plate and applying it hot with brush discriminately on the fabric while cassava or corn starch paste is printed on the fabric and allowed to dry before it is dyed. Most of the dyers in Southern Kaduna use both the natural and synthetic dyes in mats colouring and in kampala making, which include tie-dye and batik and which is not quite an ancient craft of Southern Kaduna .

According to Meilach (1973), batik is Indonesian in origin and its meaning is simply wax writing. Referring to batik as a craft Hiremath

(1985) further states that it is a household word and an ancient craft whose resist method of printing design on fabric in India can be traced as far back as 2000 years, before any other nation took it.

The process involves brushing on paraffin or bees wax to penetrate specific portions of the fabric in a design fashion, so that when the waxed fabric is immersed in dye solution, the waxed portions will resist the dye colour. Each time a new dye colour is introduced on the fabric, portions of that colour are waxed and held on to the fabric until the desired coloured scheme is achieved. Once the desired colour scheme is achieved the wax is removed by pressing the fabric with hot iron between new screen papers.

Batik fabric is recognizable by its characteristic crackles or veining that appears all over the surface of the fabric and unifies its entire composition of the design elements, including the dyeing. In Southern Kaduna Kampala (batik) production, the crackles created on the resist pieces are the results of cracks of cooled wax through which the dye penetrates.

The origin of batik, as opined by Hiremath (1985), is traced to Indonesia where the people are said to have been familiar with its method as early as the first century A.D. At that time Indian dyes were the only available brilliant colours for batik. Whatever the origin, batik was a highly

accomplished craft in Indonesia by the thirteenth century as a pastime for fine ladies.

With the spread of the crafts of batik all over world societies, including Nigerian, it has attained marvellous achievement especially among the Yoruba group in the name of adire eleko. According to Eicher (1976), indigo cloth with intricate pattern as in adire, stand out vividly as Nigeria's contribution to textile craft.

Batik fabrics are known by different names in different societies. In Southern Kaduna, textile resist techniques, whether batik or tie-dye is simply referred to as 'Kampala'. It is believed that, this craft was introduced in Southern Kaduna in the sixties and it became known as 'Kampala'. The name Kampala is derived from Kampala the capital of Uganda where the peace accord between the two faction leaders of Nigeria (Gowon) and BiafraIn (Ojukwo) was held during the Nigerian civil war between 1967 and 1969. During this period, austerity was introduced and the resist technique of fabric colouration flourished. This made some societies including Southern Kaduna to adopt the name for it. In Southern Kaduna, batik is practised by individuals under the name kampala. Using free-hand drawing, painted and stamped geometric, figurative and household objects form the common design patterns on the contemporary . In Taraba State, it is known as 'batse-tse, while it is known as 'adire' among the Yoruba group.

Like batik, 'tie-dye as opined by Meilach (1973), is a more universally practised technique than batik and this factor of universality makes its origin more obscure. It is accomplished by variation of tieing, knotting, binding, folding, clamping and or sewing of the portions of the fabric so that when, (the fabric), is immersed in the prepared dye solution, such treated portions will repel or resist the dye colour, thereby creating a tie-dye pattern. Variation of the techniques includes tieing the fabric with objects such as rice, seeds, bottle-corks, beads, stones, and tin cans. Tie-dye fabrics exhibit variation of unusual textures caused by dyes as they creep around the ties that protect parts of the cloth.

The basic design in the Southern Kaduna Tie-Dyeing techniques, is the general Tie-Dye variation, achieved in folding, clamping and tying, suitable for the extraction of design motif for the study. Mabling is a common technique while the diagonal diamond shape achieved through folding is common design pattern among the traditional and contemporary tie-dyers of Southern Kaduna. The technique of tie-dye is basically the same in all cultures. The only difference is on the dyes. With the contemporary weaving textile printing and resist fabric colouration crafts, the modern Southern Kaduna person looks fashionable in contemporary textile costumes as can be observed in the afore-mentioned Plate 6(c) on page 41 which is sourced from Alau (1998).

Another tie-dye technique is the Ikat which according to Meilach (1973), is a Malaysian word describing a technique in which the yarn is tied and dyed before it is woven. In Southern Kaduna, the technique is predominantly practised in the raffia hand woven fabric (mat).

### 2.4.6 Dye selection and the choice of print fabric/preparation for the practical exploration

Print fabric is 100% bleached cotton fabric. Trotman (1975), Nkeonye (1993), Colchester (1993 and Adedkun (1996) all state that print fabrics are more absorbent to vat dyes, hence some of the fabrics were mercerized to increase their absorbency. According to Joseph (1980), mercerization is the process of treating cotton fabric/yarn in caustic soda solution of 20gm caustic soda dissolved in 100ml of water. The fabric was entered into it for about five minutes and rinsed thoroughly. It was then immersed in dilute (1%) acetic acid solution to neutralize any alkali still present in the cloth, rinsed thoroughly in water and allowed to dry at room temperature in readiness for resist dyeing or printing.

According to scholars like Nkeonye (1990), dye is a deeply coloured organic compound usually soluble in water. Textile dyes must have affinity for fibres. They dyes are classified in two ways, according to the chemical constitution, and their method of application. The dyes that were used in this practical dyeing were vat dyes which are water insoluble colourants

that are solubilised during dyeing by alkaline caustic and hydros reduction process called vatting. Vat dyes are the fastest cotton dyes with excellent fastness to washing and light.

### 2.4.7 Wood Carving

According to Tulloch, (1997) and Trowell (1964), wood carving is the art of shaping wood into sculptural forms or objects of cultural needs such as statues, masks, carved stools, door-panel and other decorative objects, including, wooden staff, "*shan*", wooden tray "*abyai*", as in the afore-mentioned Fig. 4(a & c). Others include decorative objects and sword, hoe, cutlass, sickle, knife handles and other traditional agricultural implements. Subscribing to these views, Shekari (1994), listed the carving tools among the Kataf people of Southern Kaduna as cutlass and axes for cutting logs of wood, while axes and a variety of drilling and carving knifes are the various carving tools.

Although carving is practised by most of the savanna dwellers of Southern Kaduna, the Kuturmi people are second to none. Other existing, though fast declining contemporary crafts of Southern Kaduna, include: blacksmithing and calabash decoration. The designs on these crafts are similar to the zig-zag lines and lizard shapes found on pots. Plate 10(A) below shows some contemporary Southern Kaduna girls pounding in traditionally carved mortar with a typical diamond shape and lines while

Plate 10(B) shows a small girl holding a carved calabash with spiral lines, moon and conical shapes, depicting the typography and the undulaling hills of Southern Kaduna and decorative calash in Plate 10(c), all sourced from Kambai (1984.17) and 1984:25 respectively.



**Plate 10 (a): A Southern Kaduna lady and a small girl in contemporary costumes pounding in a contemporary carved mortar. Sourced from Kambai (1984:17)**



**Plate 10 (B): A small Southern Kaduna Girl with carved calabash. Sourced from Kambai (1984:25)**



**Plate 10 (C): A decorative calabash showing the carved designs**

### 2.4.8 Design Motifs on the Southern Kaduna Crafts.

According to Anderson (1961), and *Cheatham et.al.* (1987), motifs are building blocks in art generally and in textile design in particular. They are sourced from nature and environment and often influenced by cultural symbolism. The cultural values attached to motifs influence their use in the society. It is for this reason that the Maya Indians of today according to Itten (1997) continue to weave and embroider some of the same design motifs that have been popular since the classic period (AD.150-900). Due to poor preservation conditions, images on polychrome, ceramics, lintels and wall mural reveal the design motifs used in textiles. The same situation can be applied to the ancient Nok culture.

In design there are environmental and cultural influence on motifs. In line with this view, Itten (1997), further states that the most common design motifs from classic and contemporary times are derived from natural surroundings and geometric patterns that symbolize natural environment such as hills, and snakes that influence the formation of motif in designs. The contemporary design motifs; however have a greater percentage of natural surrounding motifs than in the past. These motifs include multiple of flora and fauna, native to Guatemala and Mexico.

Contributing in favour of design motifs and their change in use, Colchester (1993), further states that a culture's symbolic imagery is subject to change with the course of time as well as with the influence of outside forces. This has indeed been the case with the African traditional designs in general and Southern Kaduna in particular. Some examples of the design motifs of the symbology of the Maya India can be observed in Fig 7. (A-C) under sub-heading I-III below respectively.

I. **Spiny state Design** which is a geometric motif formed by an equatorial diamond outline by stairs in the form of triangle as in Fig 7 (A) below:



**Fig 7 (A) Spiny state Design motif of celtic symbology, Sourced from unpublished sketches by Ambi (2000).**

II. **The sky Band** is another motifs which is composed of series of rectangular glyphs representing celestial bodies as in Fig 7 (B) below.

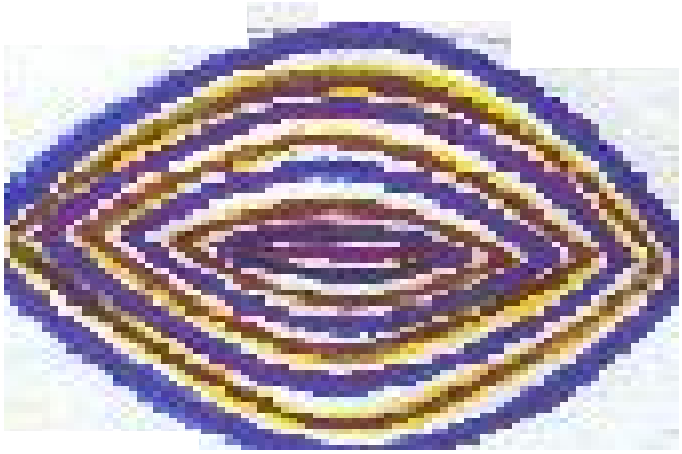


**Fig. 7(B). Sky band motif of celtic symbology. Sourced from unpublished sketches by Ambi (2000).**

III. **Toad:** Depictions of toads are common in Maya textiles, past and present. This amphibian animal is associated with rain and fertility. In Southern Kaduna, reptiles like snakes and lizards are used as motifs

in designs. In Maya law-lands for example, the coming of rain is announced by the emergence of toads and their croaking sound. The traditional Maya folk-lore asserts that while the toad sings at the mouth of the Earth-lords mountain cave, the earth-lord daughter dutifully fluff cotton which will be transformed into sound and lightening. The toad motif can be observed in Fig 7 (C) below



**Fig 7(C) The toad as a motif of celtic symbology. Sourced from unpublished sketches by Ambi (2000).**

Ted-Smart (1994), defines a motif as a decorative design or pattern or a theme repeated in a work of art. Designers and particularly textile design scholars, subscribe that a motif is a unit of design that can be repeated to form a large and more defined design in any desired pattern. Motifs are the live wires of textile design in that they give meaning to it. In her studies of the African design, Trowell (1960), found out that the motifs used in traditional African designs have symbolic meaning to the designer

or the society. She further maintains that the motifs, are as varied and diversified in symbolism as the African cult. Other than textile design, traditional motifs are used in the design of such traditional crafts as weaving, pottery, wood carving, blacksmithing and calabash decoration. Trowel (1960) further opines that motifs for design may be divided into three types, namely those of textural, representational, and geometrical forms. In practice, there is no hard and fast boundary to these groups, because one can slide imperceptibly into the other, while a designer is working along the edge of impenetrable jungle of symbolism.

According to Adler and Bernard (1993), the common weaving motifs observable in weaves include: ant-eaters, combs, hands, letters, geometrical shapes, aeroplanes and abstract forms which provide a vocabulary of information for the owner and the on-lookers. i.e. an indication of prestige or rank, which are simply a reflection of the key elements of life. Lamb and Holmes (1980), opine that the Yorubas use fascinating weaving motifs from names, words, proverbs, representational picture of animals, fish, and birds. These types of weaves and motifs are found interchangeably in the contemporary weaving of various Nigerian tribes, including Southern Kaduna.

According to Trowell (1960), a study of African motifs can be approached in different ways. For a designer or craftsman, she suggested that the interest can be in the choice of material and techniques. In African

weaving, for example, even the most simple weave found in basketry, matting and woven textiles, have very satisfactory textural motifs, ranging from lines or ridges, zig-zag lines or broken ridges or other geometric shapes or stylized animal or human motifs. In wall decoration, motifs are also used. According to Walz (1975), the art of decorating houses is a common phenomenon, throughout African traditions, from Morocco to Zululand and from Hausa land through Ibo territories to Mozambique. The motifs used may range from simple geometric, or symbolic scratching on the house walls as in Egypt to highly sophisticated and disciplined pattern dressing of the wall as it is done in the Hausa traditional land tenure of Northern Nigeria.

Hill (1974), Heathcote (1976) and Haskett (1987) believe that all things made by man have been designed in a way at a given time in a particular place by someone. Heathcote (1979) and Cheathman *et. al*. (1987) further state that the question most often asked about the crafts of the people of any society, is whether the designs that are used on them have any special meaning. The special meaning in design of any crafts as presented by Heathcote (1979) is usually expressed by the design motifs in them.

In Africa, arts and crafts have been influenced by either Western/Christianity civilization or Eastern/ Islamic civilization or both. Whatever is the degree of influence, it is certain that it was preceeded by a long history of traditional African development. There is no doubt that the people of West Africa including Southern Kaduna like the rest of Africa discovered for themselves some design elements from which more complex patterns develop. These elements are straight and heavy lines,

dots, circles, spirals, cheviots and zig-zags. The different design motifs commonly used by West African crafts people listed without meaning by Heathcote (1979. p.18) can be observed in Fig. 8(A-J) below. That the West African people were using them from early stage is clearly born out of pottery unearthed by archaeologists.

## Common West African Design Mofifs

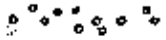
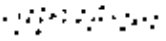
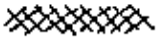
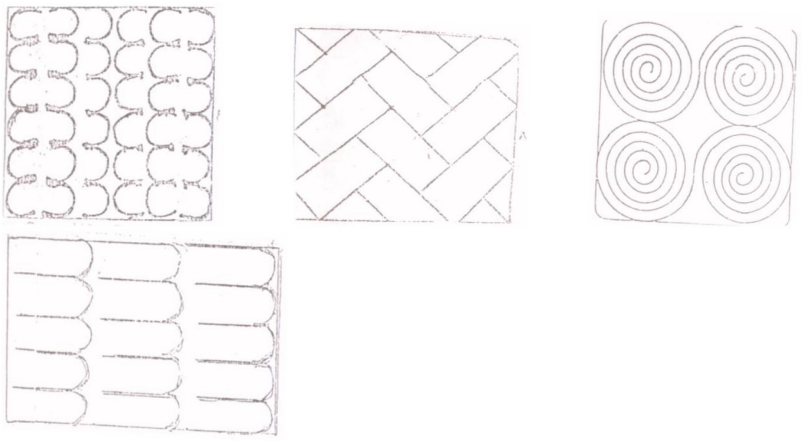
| Design/Element | Symbolic meanings |
|---|---|
| a  | A line (lai) depicting regidity |
| b  | Undulating (jujuyewa) |
| c  | Dal-dal (throbbing of a normal pulse) |
| d  | Cin gara (eaten way of termites or difficult task |
| e  | Yafin acca (complicated) |
| f  | Bakin zarto – saw edge and snake movement |
| g  | Kaya-kaya (thorns) or kan tebur (dangerous) |
| h  | Figini and mafaci (fan) or gidan gizo (spider web) |
| i  | Gidan dala |
| j  | Sakan zuma (honey comb) depicting industry |

**Fig. 8: Common West African Design Motifs (Sourced from Heathcode (1979.18)**



a b c d

A) The Crocodile-Design Motif

B) The Mat-Design Motif

C) The Mollusc Shell Pattern Motif

D) The Nok IIead hair style

Similarly, Adon (1988), in his feasibility studies of the traditional floor making and design forms in Southern Zaria identifies some design motifs relevant to his study as observed in Fig. 9 (A-D) below.

Contributing further on this issue, both Ambi (2000) and Bikai (1986) state that the lizard, snake and the eagle are symbolic animal motifs in the Southern Kaduna design. The lizard is a symbolic motif of simplicity. It is because of its simplicity that traditional married women were scarified on their bellies with the symbolic shape of the lizard. This same lizard mofit was usually engraved on a carved wooden tray and delivery stool known as 'bibiyai/abiyai' among the Netzit group, It is also known as 'Kporo' among the Ham and 'Kongo' in Hausa. The women used this wooden tray to carry their loads and to sit on. They also use it for eating and as a delivery stool. In times of dispute, the traditional woman uses this to take an oath to portray her innocence. Once a woman swears to the abiyai/bibiyai, the case is considered closed. This is because if the woman is guilty and she swears to this wooden stool, on the day

of delivery, she must confess before she can seat on it to deliver her baby, otherwise she will die without delivering her child. The Nok Head on the other hand links the artistic culture of Southern Kaduna with the ancient Nok culture.

According to Ojo (1988), the use of decorated murals, designed with local materials such as charcoal, indigo dye and snail, is practised while cow-dungs and clay, as reported by Trowell (1960), are used to cover the surface of the wall, as a form of wall decoration in South Africa. Walz (1975), further maintains that the motifs used in wall decoration are generally grouped into two, namely, representational motifs, comprising of flowers, palm tree, camels, crocodiles, lions, scorpions and human parts; and non-representational motifs which are made of geometric shapes, including lines.

In Southern Kaduna, there are various design motifs in use on the crafts of Southern Kaduna which are non-representational (geometrical), or representational (sourced from nature or from the socio-political background of the people). The traditional religion of the tottery worshiping in which masquerade dancers ('kursak'- among the Netzit and 'Ku' among the Ham) are brought into full operation for the sanctification of the society and indeed the social and political well being. As the ancestral spirit worshiping, the Southern Kaduna traditional tottery religion has with it additional design motifs on the traditional arts, crafts and the costumes. Some of this rich but declining artistic culture are re-enacted in the proliferation of the 'Cultural Days' now being performed in memory of the founding ancestral fathers of the various contemporary Southern Kaduna sub-groups. According to Maguet (1971), ancestor was the reference point of determining the kinship network of the tribe. Some of these 'Cultural

Days' include: the 'Aka'at cultural day, the 'Baranza Day', the 'Afan Day' the 'Ham Day', 'Gwong Day' and the 'Adara Day' for the Takad, Bajju, Agworok, Ham, Kagoma and the Adara respectively.

Some of the design motifs of Southern Kaduna, as further opined by Ambi (2000), include the following;

**a)** **The Nok head:** This is representational motif in Fig.10, representing one of the ancient Nok figurines already mentioned and presented in Plate 1(a) on page 17. It epitomizes the ancient Nok culture and articulates the artistic culture of Southern Kaduna

**b)** **The Lizard:** The lizard is another representational animal motif of Southern Kaduna design especially in cicatrisation and carving as already mentioned and presented in Fig.4(a&d) on page 31. It symbolizes simplicity, and innocence and it is usually scarified or incised on the abdomen of married women and 'abyai' or 'bibiyai' respectively as a cultural sign of submissiveness, faithfulness and sacred oath against infidelity. The lizard motifs with the traditional blade are also scarified, incised and etched on the traditionally carved wooden tray known as Kongo as observed earlier in Fig 4(a) of this chapter.

**c)** **The Mat:** The mat (kikyak/akpang as it is known among the Netzit cluster and '*far*' among the *Ham*) of Southern Kaduna respectively,

is a common woven product. It symbolizes peace and mutual unity of a couple who use it as a sleeping and a sitting sheet. Important visitors to the family are usually offered a new or fairly new mat to relax on as a sign of peace, love and warm acceptance. At the termination of life, the body of the diseased is wrapped in a mat and lowered into the grave to rest in peace.

d) **Snake Motifs:** According to Fagg (1971), and (1979), there are more snakes than any other creature shown in the ancient Nok terracotta materials. They are most commonly represented in relief, either climbing over the side of a pot or balancing on the rim.

e) **Finial:** The pottery finial used as emblem on the top-end and thatched roof of a shrine or the building housing a tuttary priest containing sacred objects to denote their sanctity. The finials on roofs are usually extended to the apex of the conical roof of the traditional round or semi-round mud-building.

### 2.4.9 Motifs in Objects of Rites of Passage:

According to Ezegbe, *et. al.* (1993), artistic design of objects of rites of passage, such as traditional naming ceremony, marriage and burial rites also constitute traditional motifs in Southern Kaduna. Among these are flutes from bamboo and other related hollow plants and grass, beads,

spears, hoes, cutlasses, bows and arrows, pots, baskets, carved stools and other objects. Sometime the child is named after these motifs or birthdays like Sunday or Monday, `season like *Awan* or occupational period at the time of the birth of the child such as *Uyit* or *Afan*. Some of these objects of motifs of rites of passage can be observed in Fig 10 (a) and (b) below respectively.



**Fig 10 (A): Southern Kaduna symbolic motifs of rites of passage. Sourced from Ezegbe et al.(1993. 76 and 84).**



**Fig 10(B): A male child and mother at a typical naming ceremony of the Attakar sub-groups of Southern Kaduna. Sourced from Ezegbe (1993.80)**

## 2.5 The Influence of Historical Designs and crafts on the Contemporary traditional Crafts of Southern Kaduna

Since most cultures and traditions in Nigeria and Africa, generally are passed on from generation to generation, it has become a practice for families to impart certain skills to their children. Therefore the process of designing on certain objects and embellishment of crafts is either inherited or learnt through apprenticeship training. This is particularly so with the resist, and the weaving crafts.

To this regard therefore, symbols, emblems, patterns, styles used by Southern Kaduna, in the historical period have affected the nature of handling and processing contemporary patterns on crafts, today. Nevertheless, constant changes in our society, resulting from interaction with other people within the country and even other nations affect

traditional lifestyles. Kent (1971) and Eicher (1976), emphasized the impact of the changing society on the traditions of Africans and associated it with the changing environment in which the arts and crafts are practised. In addition, industrialization and modernization, coupled with changes in the needs and demands of the people also affect their' traditions and culture.

According to Trowell (1960), craftsmanship aims at meeting man's personal desire to create things of beauty, his need to use his product in the services of his community and his need to link himself with the spiritual power behind the visible world. This is done by offering his own creation. There are historical and contemporary traditional modes of decoration in Southern Kaduna. The historical modes, have little or no outside influence, while the contemporary designs or patterns are affected to a large extent by outside influence.

The ancient Nok culture which articulates the artistic culture of the designs and crafts of Southern Kaduna, is purely traditional because at the time of the culture it is assumed that there were no Western and Eastern contacts. According to James (1997), there exists today some influence of traditional designs on the contemporary crafts of Southern Kaduna. This fact is portrayed not only in the adoption of the Nok Head and replicating it, as the symbol of artistic culture of Southern Kaduna, but by making 'Nok' town the area after which Nok culture was named a district, a cultural

centre and a proposed L.G.A. A visit to Nok cultural town brings one face-to-face with a replica of the cement-built Nok Head along the old road, at the lower end of the Rafin Sanyi stream where the original Nok terracotta head and other figurines were found.

Nok design did not only stimulate the tradition of terracotta portrait and bronzes that later developed in Ife and the subsequent Benin art form, but set the design pace for Southern Kaduna design culture as a basic link to it. James (2000), is of the view that the distinctive features of the ancient Nok figurines are elaborate adornment with ornamental circles worn round the legs, wrist, neck and heads that have influenced the designs of Southern Kaduna. The perforated quartz beads, necklaces of beads, tin quartz, ear-laps and lip-plug bracelets, pubic aprons, penis sheaths, loin covering, of grass basket works are some of the recent artistic ornaments in the early to the late nineteenth century Southern Kaduna that have been found in Nigeria by anthropologist like Fagg and which resemble and depict those observable on the recovered Nok figurines. Some of these ancient Southern Kaduna symbolic motifs, which are closely related to the ancient Nok culture could be observed in Fig 11 below:

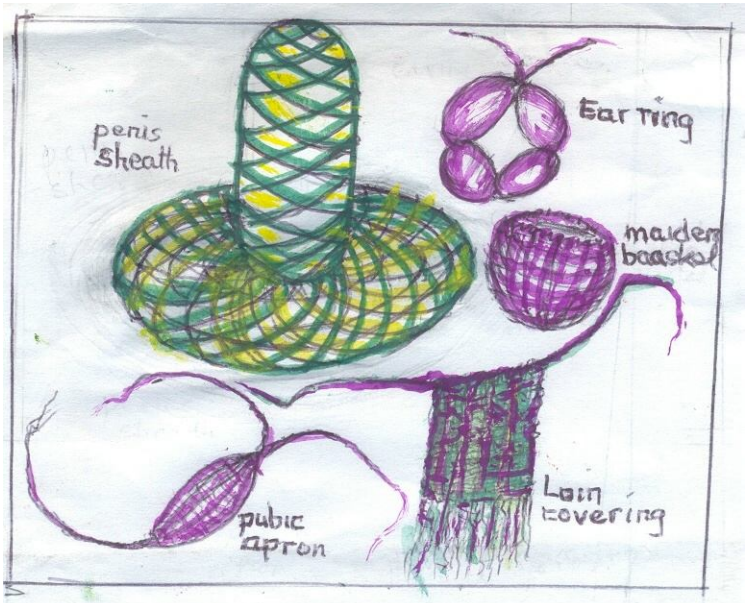



**Fig 11: Some ancient Southern Kaduna symbolic crafts. Sourced from unpublished sketches by Ambi (2000)**

Symbolic crafts like the penis sheath which symbolizes male maturity, the loin and the pubic aprons which symbolize female maturity and the madden basket which symbolize simplicity of gratitude can be observed in Fig 11 above.

It is against this background that Kato (1975) while agreeing that there is an existing strong relationship between the Southern Kaduna people and Nok culture people, states that the myths of western and eastern origin by some clans of Southern Kaduna is in the cradle of Christianity and Islam. He concludes that the fact that groups like the Bajju,

Takad and Gwong-Kagoma, do not claim distant origin, outside the Nok region, points to Nok culture origin.

According to James (2000), another strong influence or continuity of the ancient Nok culture are the agricultural tools like the hoes, utensils, pottery and the religious cults. The Nok Head which symbolizes Nok culture has continued to be engraved or incised on carved staff, wooden stool or chairs. It is also printed or painted on logo and other graphic production. The Nok head is also used on printed textiles.

The design of a lizard which is a symbolic motif of simplicity of submissiveness based on traditional mythology of some sub groups of the Southern Kaduna people that the lizard is always nodding its head in firm agreement and not otherwise. The use of lizard design (motif) on cicatrisation and carved delivery stools of married women as depicted in the afore-mentioned Figs. 4(a) and (b) of this chapter clearly explain this.

## 2.6 Relevant Researches and Documentary Evidence to the Study

Although this whole chapter deals with the review of related literature, some of the reviews are more related to the study than others. Some researches and documentary evidence with the same attributes as this study, deserve to be given prominence especially with respect to the methodology, techniques of the production and materials required for the research development of adapting some of the identified Southern Kaduna design motifs on textile fabric using the textile resist techniques.

Resist techniques production whose origin is traced to Java has become an international craft of fabrics decoration with varied names from one society to another. In the studies of "adire-eleko" by Adetoro (1972), he listed some of the materials used. These include dyeing pots, cassava paste, tjanting panting traditional beating sticks, motifs, stencils and the traditional indigo dye, while the techniques include hand painting and stencil printing. Describing resist printing as one of non-structural methods of fabric multi-colour colouration, Hall (1977) and Storey (1978) state that, dyeing is the process of its colouration. A good knowledge of research techniques was also considered not only relevant but vital.

Byers (1964) and Malvein (1980), contend that the richest of research information must ultimately be digested into manageable data, units. In order to conduct this research therefore the research books of Adetoro (1986 and1997) were well reviewed. Other research books reviewed alongside with these are Roscoe (1969), Deobold (1973), Kerlinger (1977), Nwana (1981), Ndagi (1987) and Suleiman (1998). They offer very useful and relevant research methods to this study.

In research, it is not difficult for a researcher to meet every member of the population especially when the population is too large. Researchers usually, however employ a scientific method of getting a representational group called sampling. Research scholars like Krejae and Morgan (1970), Leedy (1974), Nee et al (1975) and Segun (1996) recommend fairly large and reasonable samples. Roscoe (1969) suggests 10% of the population provided it is not less than 30 and it is not too large. Borg and Gall (1971) suggests 10% for a population that is from 1000 up to 5000. Adetoro (1997) contends that the size of a sample should be large enough to ensure

representativeness. This depends on the acceptability of error margin as well as availability of subjects and the nature of available data. Okeke (1985) and Singha (1993), describe the population of the study as the univers, or totality of the elements, objects or members that possess one or more common characteristics which a researcher must cover in a study.

Basic Design book by Ogunlona (1984) was also reviewed for colour dynamism along with Thomson (1974), Joseph (1986), and Nkeonye (1993). They were very relevant literatures for the types of fibres, fabrics, dyes, dyeing and mercerization of cellulosic fibres. In a similar manner, relevant research documents of research scholars like Adetoro (1972), Healthcote (1979), Kparevzua (1983), Kambai (1984), Shemang (1985) Akodu (1985), Adon (1988), Okundaye (1991), Afolabi (1982), Saliu (1994), Haruna (1995), Babalola (1981 and 1998) and Alau (1998) were reviewed. All these mentioned and reviewed studies have some similar attributes with this study and have been found to have suitable extracts for adoption in this study.

Similarly, documentary evidence in the form of research reports, articles in journal and conference papers, as well as information and evidence on the designs and crafts in Nigeria in general and Southern Kaduna in particular, were used. In view of the anticipated scarcity of written documents on the crafts of Southern Kaduna, oral evidence from expert crafts people, experienced elders were considered in the pilot study and are still considered during the field survey.

## 2.7 Summary

This chapter deals with the review of related literature on this study. It covers the historical background of the designs on the traditional and contemporary crafts and designs of Southern Kaduna. It also bothers on the influences of the traditional designs on the contemporary crafts of Southern Kaduna and exploring the possibility of adapting them (the traditional design motifs) on textile fabrics.

# CHAPTER THREE

## 3.0 RESEARCH DESIGN AND METHODOLOGY

### 3.1 Introduction

This chapter of the study deals with the method and procedures used in the selection, collection and treatment of the data for this study. It deals precisely with the research design according to the views of many scholars. The quality and success of research depends on the adequacy of research design, the investigators on the job, sample selection, the tabulation and reporting of the findings and the validity of the procedure employed (Lucas and Britt 1963, Seltiz et al 1965, Okeke 1985 and Osuala 1987). In the same vein, Adetoro (1997) describes research design as the blue print of research “architect” or “engineering” and state that, a well planned research design could be picked and replicated by any competent researcher.

Wunmer and Dominic (1983), state that, the scientific evaluation of any problem must follow a sequence of steps. Furthermore, it is established by Franklin and Thrasher (1979), that the suitability of evaluation of design and techniques depends on the definition of the evaluation, the objectives and the intended application of the results.

The research was focused on identification of the traditional and contemporary crafts of Southern Kaduna and some of their design motifs for exploratory adaptation of some of them on cellulosic textile fabrics for

functional purpose using the textile resist techniques. Resist techniques involves dyeing of textile material by applying resist substance on its portions to repel the dye when it is immersed in a dye solution. A reapplication of resist pastes and redyeing of the same textile material, produce a resist fabric, which has more than one colour. The technique is the same in both traditional and contemporary resist techniques. The difference is in the materials and tools used.

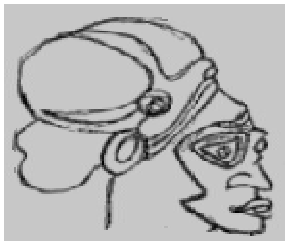
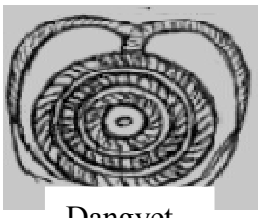
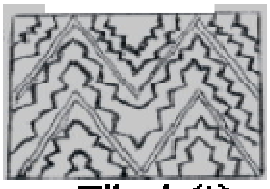
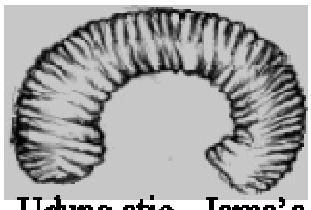
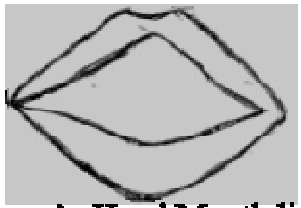
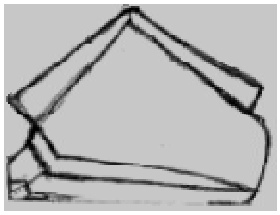
Traditional dyeing, especially of raffia fibres with vegetable dyes has been a traditional craft in Southern Kaduna from time immemorial. There has also been some tie-dye and batik production, all referred to as “kampala” which affords the Southern Kaduna people the opportunity to produce traditional textiles for functional use. Because the research involved crafts, which are parts of the culture of the ancient Nok and Southern Kaduna people, some of the design motifs from the crafts of Southern Kaduna were adapted and transferred to textile fabrics using resist techniques. This type of research according to Adetoro (1997) is sometimes called product development. It is more commonly used in Education, Environmental Science, Engineering, Pharmacy, Medicine, Veterinary and General Science. It consists of a cycle in which a conversion of a product is developed and field tested.

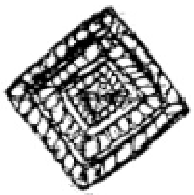
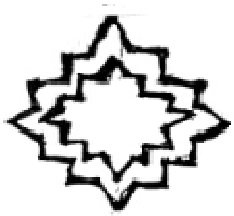
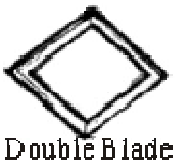
## 3.2 Research Methodology and Design

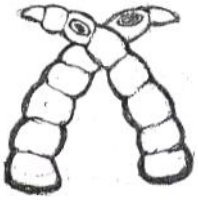
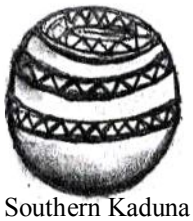
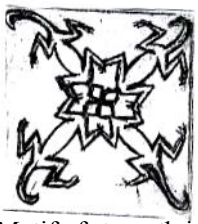
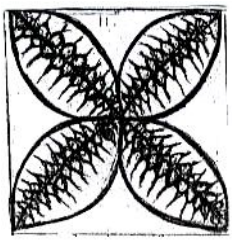
The review of relevant literature provided a clear understanding of the method of production of the resist techniques of textiles, the Research and Development (R&D) and the descriptive survey adopted as the research methodology for the study. The specific objectives presented in chapter one of this study, were outlines with the view of actualizing them using practical experimentation to produce the design motifs the resist techniques and survey questionnaire.

## 3.3 Collection of Southern Kaduna Crafts and Extraction of motifs

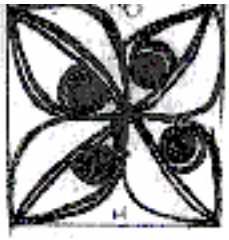
From the collection of the traditional crafts of Southern Kaduna, inspiration was drawn. Altogether 33 design motifs were identified and extracted by sketching for use in the study. These 33 design motifs are presented with their meanings and sources of inspiration in Figs 12 – 44 as follow.

| MOTIFS | MEANING AND SOURCES OF INSPIRATION |
|---|---|
|  Nok Head | Fig 12: A symbolic motif of Southern Kaduna design culture derived from the replica of the ancient Nok head |
|  Dangyet | Fig 13: A motif of girdle skirt of women dignity – it is a traditional attire design of craft form used up to the early 19th century by some Southern Kaduna women. It is used in the female role of womanhood. |
|  Kikyak (1) | Fig 14: A symbolic motif of weaving signifying peace and mutuality. It is sourced from traditional mats |
|  Udung atio - Jama'a and Aniih-ayang | Fig 15: Jema'a head hair-do. Udung motif of crown of terra-cottas excellence. It is derived from the Jema'a head of the ancient Nok culture/traditional bangle for the ancient Southern Kaduna ladies of substance (Bikai 1986, Achi 2000, and Ambi 2000). |
|  Jama'a Head Mouth lip | Fig 16: A symbolic motif of maturity and of a departing genius or elder. It is derived from the structural lips of the ancient Nok terracotta head. |
|  Wawa | Fig 17: Symbolic motif of rhythmic/acrobatic dance, derived from handcrafted ankle-rattle known as wawa among the Net-zit. |

| MOTIFS | MEANING AND SOURCES OF INSPIRATION |
|---|---|
|  Mat / Diamond (1) | Fig 18: A diamond shape of mat-motif known as kikyak (2). Sourced from the traditional mat. |
|  Kikyak (2) | Fig 19: Kikyak (3) motif, used in forming tam. It is a symbol of peace and strength. Sourced from traditional mat. |
|  Aniih (Ring) | Fig 20: Anniih is a symbol of feminine dignity. It is known as anniih to the Net-zit and it is commonly used in such traditional forms like dangyet, bangles and basketry (known as nok-uchirang) among the Takad, Agworok and Tuku. |
|  Double Blade | Fig 21: A symbolic double blade motif known as chon-unu-ufiyang, signifying sharpness and strength. It is sourced from a traditional blade and mat. |
|  Chon | Fig 22: A Traditional blade motif known as chon, signifying carving designs. |
|  (2 Mat / Diamond | Fig 23: Mat / Diamond (2) motif is a symbol of peace, used in matting, pottery and carving designs. |
|  Jyuai | Fig 24: Jyuai motif signifying the parasitic teak sturdiness used on ritual, liquor and decorative pots. |
|  Snake Motif | Fig 25: Snake motif signifying power, used in kikyak, shan, abyai and ufuwong/afong design. |
|  Snake Trap | Fig 26: Snake trap motif, signifying danger, used in decorating ritual walls, pottery and carving. |
|  Kwi / Kwad-chuo | Fig 27: Leopard spots signifying fearcefulness, hunting or war. It is beauty in disguise. Source from Kampala design of a leopard skin |

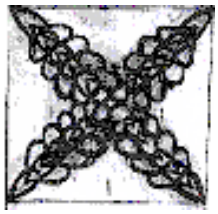
| MOTIFS | MEANING AND SOURCE OF INSPIRATION |
|---|---|
|  Traditional motif of royalty | Fig. 28*: Musical Flute of Royalty (gugwi or ugwa/dagba/serwa)* is a symbolic motifs of royal celebration. Sourced from a carved horn resembling that of wild bull. |
|  Southern Kaduna save motif | Fig. 29: *Alan kwurum (Save)* is a symbol of financial self-discipline. Source from a clay safe |
|  Stylized mat-motif | Fig. 30: Mat (4) Motif is a symbolic motif of love and peace. |
|  Motif of strength in unity and simplicity | Fig. 31: *Four - Lizards (Agbad) motif*: symbolizing wealth, peace and feminine strength in unity. The lizard is a simple four-legged animal which is always nodding its head in agreement and never in disagreement. |
|  Cowrie motif | Fig. 32: *Cowrie*: is a symbolic motif of wealth |

**MOTIFS**



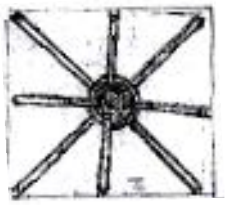
Nok head eye motif

Fig. 33: *Nok-Eye (Ali Nok) Motif*: is a symbol of wisdom and experience.



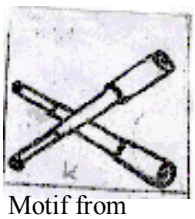
Nok head hair style motif

Fig. 34: *Nok Head Hair Style*: a symbolic motif of artistic excellence and hair-do



Utsi or Utsan A symbolic motif of weaving

Fig. 35: *Utsi/Utsa (utsen)* is a symbolic motif of unity, Courage and wisdom in starting anything. Sourced from basketry



Motif from wooden/horn syringe for royal rites

Fig. 36: *Wooden/Horn Flute*- a symbol of traditional public address system/musical instrument of royalty. Sourced from carving



Motif of maturity

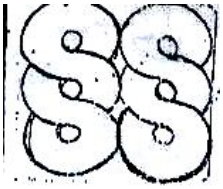
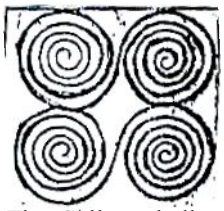
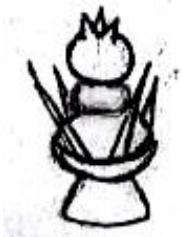
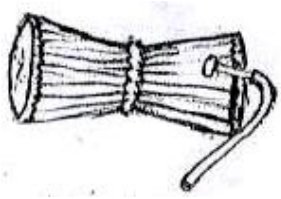
Fig. 37: *Agwab*-According to Achi (2000), is a symbolic motif of maturity. It is a form motif that was used by male adults. Soured from penis sheath



A symbolic motif of weaving

Fig. 38: *Web*: Is a symbolic motif of continuity.

Sourced from basketry

| MOTIFS | MEANINGS AND SOURCES OF INSPIRATION |
|---|---|
|  Weaved hand pattern motif | Fig. 39: *Weave-Band (bad)* motif – a symbol of unity and strength. Sourced from weaving |
|  The mullusc shell pattern motif | Fig. 40: *Mullusc motif* – is a symbol of spiral parallelism. Sourced from ceramic tiles and snails |
|  Finial motif is used on thatched roofs of shrine huts | Fig. 41: *Finial* motif– is a symbol of traditional priestly dignity. Source from clay pots |
|  Abyai a wooden tray & stool for carrying food & delivery | Fig. 42: *Abyai (bibyai)* – is a symbol of Southern Kaduna traditional feminine loyalty. Sourced from carved wooden tray |
|  Takad motif of traditional crown of royalty | Fig. 43: *Bung-Tyok* – According to Wada (2003) is a symbolic motif of Takad traditional royalty |
|  A symbolic motif of merriment from traditional drum | Fig.44: Tanbrum (talking drum) – is a symbol of musical ecstasy especially among the Netzit's tottery cult, known as `aboi'. |

The identified design motifs of Southern Kaduna presented in Figs.12-44 earlier is the population of interest from which a study sample of five was randomly selected for the third phase of this study.

### 3.4 Population of the Study

The population of this study is the 33 traditional design motifs identified and extracted from the traditional crafts of Southern Kaduna. They were extracted by sketching from matting, basketry, carving and pottery crafts and are to be randomly sampled and adopted on textile fabrics, using the resist techniques of fabric colouration.

### 3.5 Sample Size of the Design Motifs

From the 33 different designs motifs extracted from the crafts samples collected from Southern Kaduna and studied, five (5) different motifs, representing 10% of the population of 33 motifs were abstracted and randomly selected as the sample size for studio practical explorative resist techniques of this study. Thus: $\frac{10}{100} x 33 = 3.3 = 4$ motifs (approximately). These motifs were further approximated to five motifs. These are:-

a. **Nok head** which symbolizes the artistic culture of Southern Kaduna
b. **Kikyak** is a raffia handwoven craft signifying peace

c. **Dangyet** is a motif derived from a woven craft symbolizing woman dignity and maturity.

d. **Undung/Bangle** is a symbolic motif of aesthetic excellence

e. **Chon-Unu-Ufiang** is a symbolic motif of sharpness and strength derived from Netzit's traditional double edge ledged ancient blade

These five randomly selected motifs are presented in Figs 45(A-E) below.

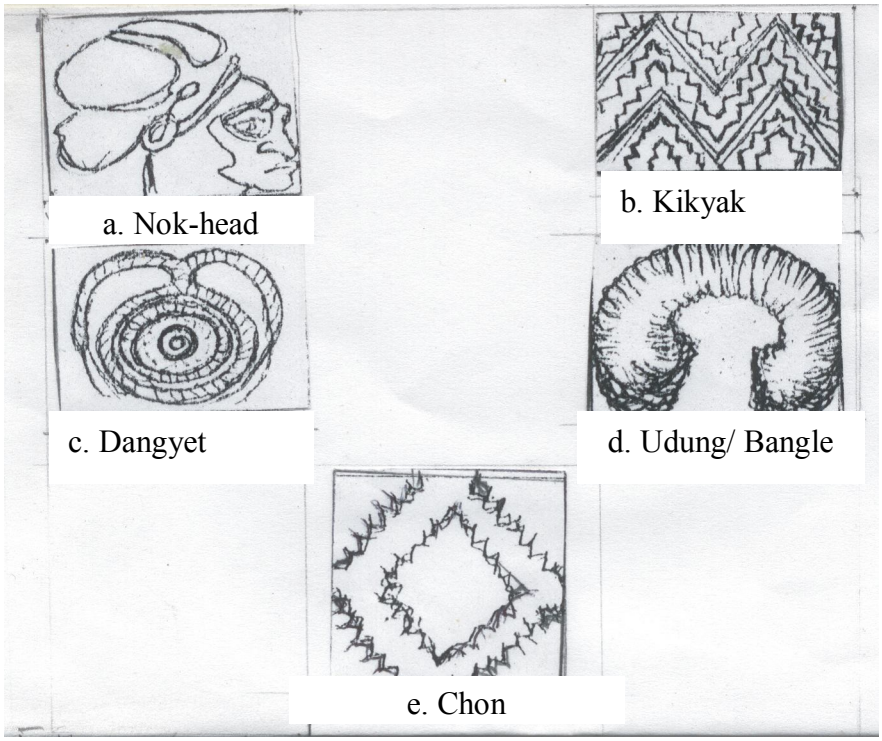



Fig 45 (A-E): Randomly selected Southern Kaduna Design motifs

The random sampling was achieved by assigning numbers one to thirty-three (1-33) to the identified design motifs. Another set of numbers one to thirty-three (33) was written on pieces of papers, folded and mixed up in a tin. The researcher then dipped his hand in the tin and picked up one piece without looking at the tin or trying to select. The first piece of paper so picked was unfolded and it revealed one (1) which was the number assigned to Nok-head and so Nok-head became the first (a) randomly selected motif and its piece of the paper was not returned into the tin. Another piece of paper was again picked and when unfolded it revealed six (6) which was the number assigned to Kikyak, which is (b), and which became the second randomly selected motif. When the same process was repeated for the third, fourth and fifth times respectively, numbers 11, 16, and 21 were picked and so dangyet which is (c), dung/bangle which is (d) and chon (e) were randomly selected as the third, forth, and the fifth design motifs for the practical adaptation on textile fabric using the resist techniques.

With this selection of the study sample, the resist materials were put in place before the studio practical of the research was begun.

### 3.6 Resist Material/Dyeing Equipment

Tie-dye and batik are the two methods of designing fabrics in resist method on which this research was based. The materials and the dyeing

equipment needed for this studio practical adaption of the five randomly selected Southern Kaduna design potifs on textile fabrics include the following:

a. **Fabric and silk mesh** – The fabric selected was 100% cotton, free from size, grease and mercerized to increase the dye absorbency, while the silk mesh was used in producing the screen used in the cassava resist printing. In order to achieve this purpose, the Funtua woven fabric which is 100% cotton was acquired along with the silk mesh and shown to the team of the supervisory body and later used for the studio practical exploration of the adaptation of the randomly selected Southern Kaduna design motifs. A sample of this Funtua textile fabric and silk mesh are shown in Plate 11 on page 105:

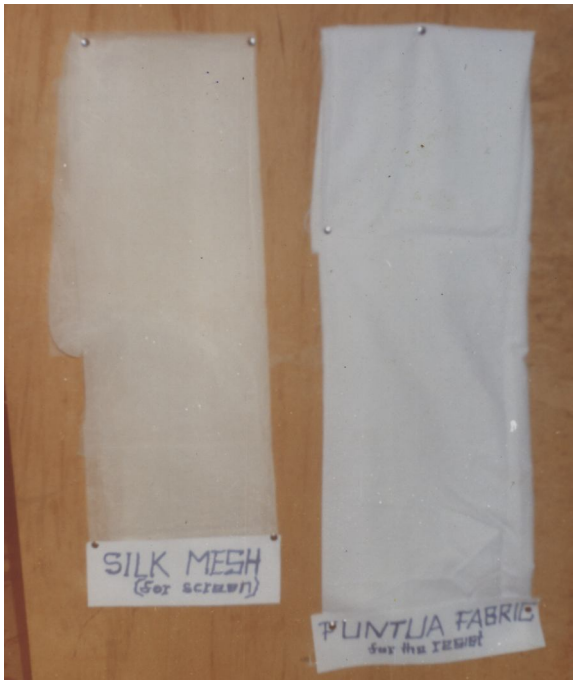



**Plate 11: A sample of the Funtua fabric and silk mesh acquired and used for study**

b. **Resist pastes and dyes** which comprised of bees wax and cassava starch vat dyes as well as the alum used in preparing the cassava pastes were acquired. These materials can be observed in plate 12 below.




**Plate 11: A sample of beewax, cassava starch, alum and vat dyes used in the study.**

c. Motifs, which were essentially, coloured sketches of the colour-swash designs of the randomly selected motifs earlier presented in Fig 45 of this chapter. The colour-swash designs were meant to guide the designer in achieving the desired design motifs and the colour during the studio practical. A cross-section of the colour-swash designs are displayed in Plate 13 below:



**Plate 13 :colour swashes of the design motif used in this study.**

d. Dyeing vessel. The dyeing vessels used in this study include plastic buckets and bowls used in preparing the dye liquor, stove and stainless pots used for melting the bee wax and for preparing the cassava pastes. These objects can be observed in Plate 14 on page 107.



**Plate 14 plastic vessel buckets, bowls and stove used in this study.**

e. Weighing balance/measuring spoons for taking weight of the fabric, dyes and the chemicals – hydros and caustic soda respectively. Others are the wooden frames and stick used for producing the resist fabric,preparing the dye, producing the screen and stiring the fabric material in the dye liquor during the dyeing process respectively. These materials can be observed in Plate 15 on page 108.



**Plate 15 Weighing balance / measuring spoons and stiring sticks used in the study**.

f. Screens: These comprise the screens used in the resist printing of fabric decoration. These can be observed in Plates 16 and 17 respectively on pages 109 and 110.



**Plate 16 A mirror repeat screen of the Kikyak.**

The above screen was produced by mounting silk mesh under tension on a wooden frame. Blue emulsion with seriset were used to fix the design on the screen. The resist piece was executed by printing starch paste on plain fabric and then rinsed to keep the screen clean. The starch printed fabric was dried and then dyed in the prepared vat dye solution.



**Plate 17: A simple repeat screen of the Kikyak**

The screen was produced using a wooden frame, silk mesh, seriset and blue emulsion as in the screen on Plate 16 of page 109. The resist piece was executed by printing the starch paste on plain fabric. The starch printed fabric was dried before dyeing in the prepared vat dye solution and then hung to drip – dry before washing off the starch from the dyed piece, after which it was finally dried and ironed.

f. Hand-gloves and pressing iron: The hand gloves are used for protecting the palms and fingers from the concentrated alkali of the

dye solution while the iron is used for pressing the resist dyed fabric. These materials can be observed in plate 18 below.

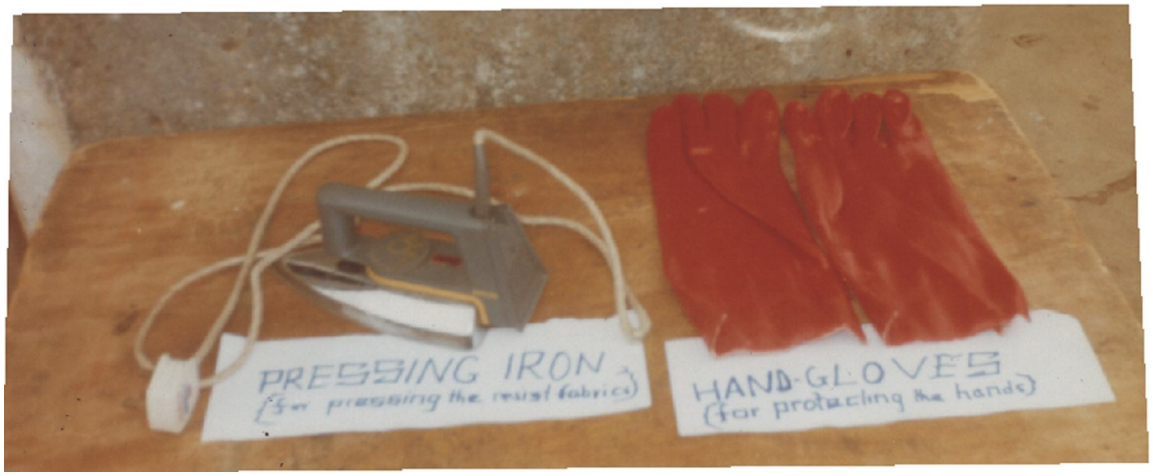



**Plate 18: Hand gloves and pressing iron used in the study.**

With these materials and equipment the practical exploration of this study was fully designed and put on course.

## 3.7 Analysis

Information obtained from the completed questionnaire in Appendices (III A) and (III B), were coded, analysed and presented in table form. First of all, all these survey questionnaires were developed and submitted to the supervisory committee members for approval. The questionnaire in Appendix (II) was used for the pilot study, while the questionnaires in Appendices III A and III B were used for the field survey of this research and development. The questionnaire in Appendix III A was administered to a sample of 130 randomly selected respondents of the

Southern Kaduna crafts-people. The data collected were analysed in table forms and the results discussed in chapter four. Similarly after the modification of the Southern Kaduna design motifs into contemporary form and their subsequent development into resist fabrics the questionnaire in Appendix III B was administered to randomly selected 117 lecturers and students of the Department of Fine and Applied Arts of the Kaduna State College of Education, Gidan-Waya, Kafanchan for the comparison and assessment of motifs and the resist fabrics produced from them. The data collected were presented in table form, analysed and discussed in chapter four.

The target sample of the population of lecturers, secondary school teachers and students of the Fine and Applied Arts (F.A.A) of the Kaduna State College of Education, Gidan-Waya was considered knowledgeable enough to respond to the questionnaire in Appendix III B and assess the motifs and the resist fabrics during the field survey. The choice of 130 respondents, emanated from calculation of 10% of 1303 crafts-people, identified in Southern Kaduna during the pilot. Roscoe (1969) and Adetoro (1979) recommend 10% as a sufficient sample of study in a research. The Data Processing Unit at the Institute processed the data collected from the survey questionnaires for Agricultural Research (IAR), Ahmadu Bello University, Zaria. The responses of the respondents were analysed using percentage. The resist pieces of fabric assessed were first of all analysed

by the studio technicians of the Department of Industrial Design, A.B.U. Zaria during the dyeing process. This was followed with the analysis by the 117 respondents of the population of Southern Kaduna comprising 51 lecturers of the School of Vocational and Technical Education, 33 Textile students of the Departments of Fine and Applied Arts and 33 students of Home Economics, Kaduna State College of Education, Gidan Waya.

Before the resist production with which this research and development study was concerned, selection of dyes and fabrics for the practical exploration were done bearing in mind the theoretical views of Trotman (1975), Storey (1978) and Nkeonye (1990 and 1993). that to vat dyes generally tend to have high affinity for mercerised cellulosic fabrics. These theoretical principles strongly guided the research for studio adaptation of the motifs of Southern Kaduna on cellulosic fabrics, using resist techniques of dyeing. This aspect of the research on resist dyeing entails using melted bee wax, cassava paste and tie and dye techniques. The research also included photographic silk-screen printing using cassava pastes and such photographic chemicals like blue emulsion and Seriset or sensitizer to coat and expose the screens to be used for the cassava resist printing. All these were provided. Other resist printing techniques include stencilling using stencilling paper and straw-boards, and block printing using wood with engraved design. The screens, block

and stencils were all produced by the researcher and the vat dyes with the auxiliaries and the required recipes were purchased from the market.

### 3.7.1 Preparation for Dyeing

The aim of this research was to adapt some of the identified Southern Kaduna design motifs to fabrics, using the resist techniques and to determine the affinity of the printed resist fabric for vat dyes. This aim was achieved through dyeing. The pieces of the fabric that were used for the experiment were two metres in length. Their weights were taken along with the dyes and the corresponding dye auxiliaries, namely: caustic soda and hydros thus:

| **Materials:** | | **Weight** |
|---|---|---|
| 2 metres print fabric | = | 249.46g |
| Yellow vat dye | = | 15.70g |
| Caustic soda | = | 22.86g |
| Hydrosulphite | = | 14.50g |
| **Total weight** | **=** | **302.32g** |

The dyes and the chemical auxiliaries were dissolved in six hundred millilitres of water and stirred. The liquor was raised to 2 litres with cold water. The fabric was wetted and entered into the dye bath and stirred for 30 minutes until the dye molecules in the liquor were absorbed. The resist fabric was removed and dried under room condition. The bee wax was

removed from the resist batik pieces with hot water while the cassava paste was removed with cold water. The whole process of sketching and modifying the motifs, production of colour – swashes, production of screens and blocks, adapting the design motifs on them using the screen and cassava pastes with blocks and melted bee wax in resist printing and dyeing, all constitute the practical exploration of this study.

## 3.8 Practical Exploration

Having acquired the resist materials as presented in sub-chapter 3.6 to 3.6.1 above, the prospects of the research development of the study through the practical exploration of adaptation of the five randomly selected Southern Kaduna design motifs on fabric using the resist techniques became more feasible. This sub-chapter, 3.7 entitled practical exploration, deals with the production process of resist fabrics techniques of fabrics production.

The practical exploration was essentially started with pencil and colour sketching, painting with bee wax, block printing with melted wax, cassava resist printing and dyeing with vat dyes. It was preceded by design sketches and colour swashes by the researcher. This can be observed in the already presented Plate 13 and in the colour sketch study of a mat from Nok. This is presented in Plate 19 on page 116.

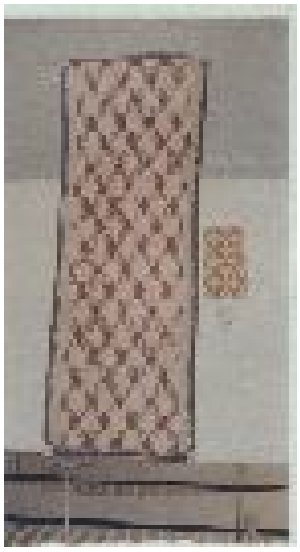


**Plate 19: Colour sketch of a mat sample from Nok**

Production of the sketches and repeat methods of the design motifs were the next steps in this phase of practical resist exploration on fabrics. In line with the views of Ezegbe (1990), that the utmost aim of any textile design motif is to repeat it into a larger design using any of the conventional repeat methods. In this practical exploration, different repeat methods were used. These include simple, mirror, and random repeats. Some of these repeat methods can be observed in the colour sketches and the finished fabric resist samples produced from the randomly selected motifs during the practical exploration of this study. These include the *Nok-head*, *kikyak*, *dangyet*, *Jema'a-head hair-do*, *double-blade* and the *Nok-head mouth lip* motifs as earlier presented in Fig 45 of this chapter. The resist practical exploration which includes tie-dye and batik was

carried out using direct bee wax/cassava starch painting, block printing and resist screen printing.

Apart from the structural design, textile fabric can be coloured in two different methods, viz, dyeing and printing. Hall (1977), Storey (1978), and Nkeonye (1990 and 1993) unanimously state that dyeing is the process of giving a permanent colour to a substrate. When more than a colour is produced on fabric through dyeing, the process is resist. It is resist because portions of the fabric, are made to resist the colour: Printing on the other hand is the process of reproducing a multicolour design on a fabric. This is usually on the surface of one side of the fabric. When the process of printing is employed in dyeing, using wax and other resist agents, the process is Resist Printing. This process was adopted in this practical study under the following techniques: block printing, stenciling and screen printing as presented later in the next page of this chapter. In all cases, vat dyes were used because their fastness properties and solubilization methods are suitable for dyeing of cotton fibres. The first resist process of this study was the block resist printing.

### 3.9 Block Printing:

According to the views of Haskett (1987) and Nkeonye (1990), block printing is the oldest textile printing which dates back to 2500BC. In this process, designs were engraved on wooden block and on a sheet of

rubber which is neatly fixed on a piece of wood with a handle. The design areas in the block were raised while the background was carved or etched out. A handle was fixed to the block and the surface of the block design was dipped into the melted wax and stamped on the cloth to create the impression of the design. In this process, a block was made for every colour. In this practical study, block designs for *Nok-head, dangyet* and *Jema'a hair-do* motifs were produced and used. The Nok head and the *dangyet* design were engraved on pieces of linoleum and glued to pieces of rectangular block wood with handles white the Jemaa hair-do/bangle was engraved, directly on a wooden block with a handle as presented in Plates, 20 - 22 below;



**Plate 20: Block design of the Nok head motif**



***Plate 21: Block design of the dangyet motif***



**Plate 22: Block design of the *Jama'a-head hair-do.***

Block printing is one of the oldest methods of reproducing multi-colour patterns. With the block designs presented above and other basic materials like print (mercenerised) fabric and the required vat dye colours put in place the resist printing using melted bee-wax as the resist paste was embarked upon. In the case of the Nok-Head block design the motif itself was derived from the ancient Nok head, a replica of which is presented in Plate 23 below.



**Plate 23: A replica of Nok-head produced by E. Wyuah who is presently a student of the Kaduna State College of Education, Gidan Waya.**

### 3.9.1 Nok-Head/ Block Resist Printing Production

Nok head is a symbolic motif that articulates the artistic culture of the Southern Kaduna people. In order to produce the Nok-head block design, the Nok-head form motif was engraved on linoleum and was neatly glued on a piece of plywood with a handle as already presented in Plate 20 in this chapter. This instrument was carefully dipped into the melted beewax and was discriminately stamped on a mercerized white fabric, that was neatly spread on a printing table to create the impression of its design, giving the fabric a yellowish appearance When the printed wax was well-dried, the fabric was entered into a yellow vat dye solution and hung to dry under room temperature. The process was repeated and the same piece of fabric was entered into a blue vat dye solution to give the piece a greenish outlook. The bee wax was removed with hot water and the resist piece was rinsed, dried and ironed. The process was repeated on the second piece of white fabric using the same simple repeat method but different colour wheel. The fabric was entered into a yellow, green and blue vat dye solution to give it a whitish, yellowish and dark-greenish Nok-head block resist fabric. The third piece of the Nok-head design was achieved by a combination of stencilling and block printing to give the piece a light brown black background. The dark dye was printed using the stencilling method. The printed fabric was then dipped in a light orange dye for half of a minute .The fabric was hung to dry and discriminately

rewaxed and dried before dipping into a deep orange before rewaxing rinsing, and drying. The result of these samples are presented in Plates 24, 25, and 26 respectively as follows:



**Plate 24: Nok-head-block resist printing with melted bee wax, yellow and brilliant green vat dyes on a white fabric.**

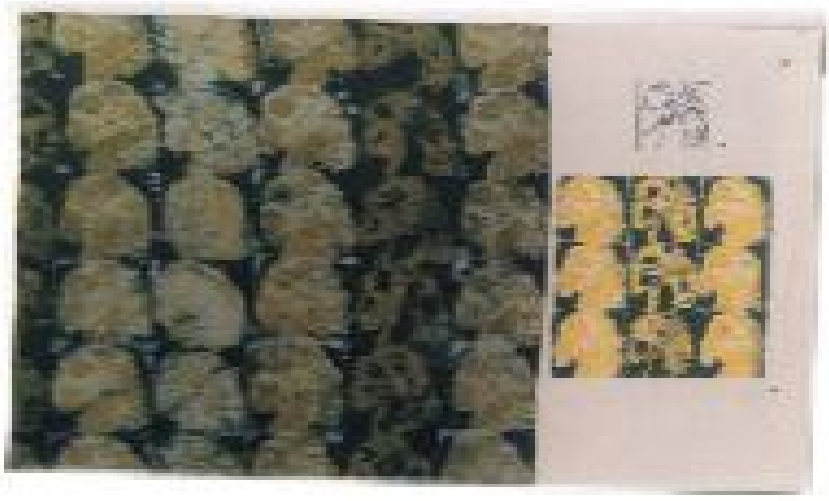


**Plate 25: Nok-head-block resist printing with melted hot wax, yellow and green vat dyes.**



**Plate 26: Nok-head, block and stenciling resist printing with yellow, orange, brown and black vat dyes giving a light brown background.**

### 3.9.2 Dangyet:

The dangyet motif was the second motif used in the block resist printing. It was derived from the traditional girdle skirt costume of ancient times among the Net-zit and other sub-groups of Southern Kaduna. In some rural areas, it was used up to the middle of the nineteenth century. This traditional craft-form according to Bikai (1986) and Achi (2000) symbolized feminine maturity and dignity. This craft-form from which the dangyet motif was derived, can be observed in Plate 27 below.



**Plate 27: The dangyet craft form, woven as depicted in pink colour with the block motif on its left side.**

For the dangyet block motif used in the resist printing, the same simple repeat method but different colour wheels using melted hot wax resist printing paste was adopted. The result of this effort can be observed in Plates 28, 29, and 30 below respectively. For the sample in Plate 28, yellow, orange, green and black vat dyes were used on a white print (mercerized) fabric to give it a green/orange/yellow appearance. In the sample in Plate 29(b) yellow, blue and black vat dyes were used on a print fabric to give it a light green/yellow appearance. For this particular piece, a simple repeat method was adopted. A green pigment dye was printed in alternate vertical rows along the length of the white fabric and with the aid

of a big brush, melted beewax was painting on the rows containing the green vat dyes and allowed to dry. The fabric was dipped into a prepared solution of yellow vat dye and allowed to dry again. The melted beewax was again printed with hot melted beewax on the yellow background in alternate rows to the green and them dipped into a solution of vat dye and hung to dry. The orange row was then painted with melted beewax, dried and dipped into a concentrated green vat dye and allowed to dry before dewaxing the fabric with hot water. It is then rinsed and ironed. It should be noted that block printing entails dipping the block into hot melted wax and stamping it on the fabric to create the design impression on it. This gave the fabric a light green yellow appearance. The sample in Plate 28 below was produced by simple repeat method, using yellow and green vat dyes.



**Plate 28: Dangyet resist fabric produced using the dangyet block design in Plate 21 and yellow, orange and green vat dyes.**

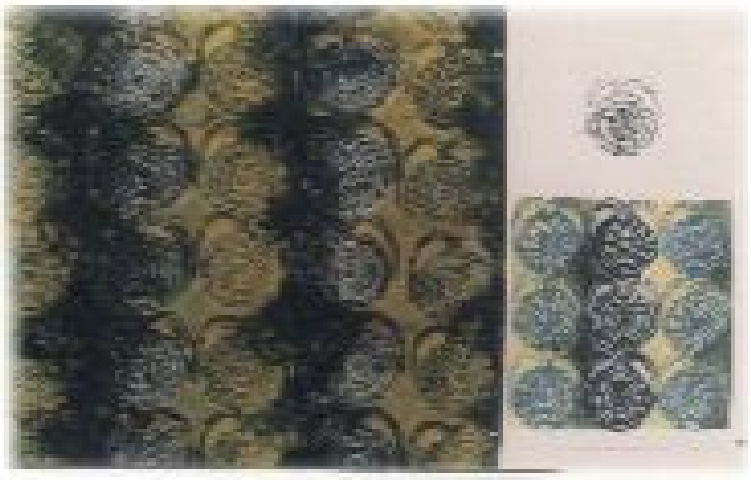


**Plate 29: Dangyet resist fabric production in the same colour-wheel as in Plate 28 but using yellow, blue and black vat dyes.**



**Plate 30: Dangyet resist sample of simple repeat method using yellow green vat dyes**

### 3.9.3 Jema'a-Nok-Head Hair-do:

The Jema'a Nok-head hair-do is one of the ancient Nok terracotta head commonly referred to as Jema'a-Head. The motif was also sourced from the ancient women bangle known as anniih. Like in the Nok-head and the dangyet motifs the Jema'a Nok-head hair-do motif was engraved on wood and the same block resist process was used to produce the *Jema'a-Nok head hair-do* resist sample of yellow, orange and green vat dyes as in Plate 31 below.

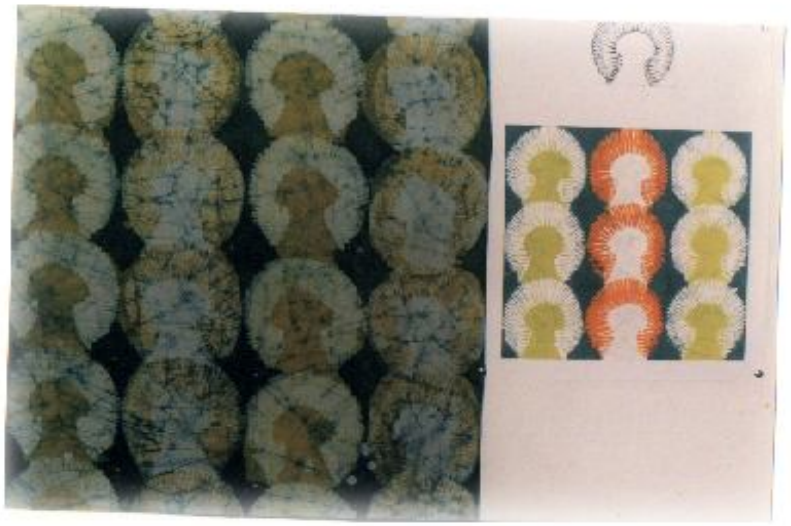


**Plate 31: Resist sample of yellow orange and green vat dyes produced from Jama'a Head hair-do/bangle.**

### 3.10 Screen Printing:

Before any textile printing is embarked upon, there must be a design or colour sketch of how the printed work should be like. In other words a paper design should preceed printing and the motif of any design must have a source. A good design must therefore show the motif and the source of such a motif. These fundamental principles were considered in the practical exploration of this research study. The design motif used in the resist screen printing techniques of this study is from the *kikyak* motif which was derived from the traditionally woven mats of Southern Kaduna. First of all, studies were made on two mats which were among the crafts samples collected from the study area during the field survey. An example of these mats and a colour sketch from its study can be observed in the mat sample from U/Rimi in Plate 32 below;



**Plate 32: A colour sketch study of mat sample from U/Rimi Bajju with a colour sketch.**

From the studies of the above stated sample of mat sample from Unguwa Rimi Bajju, the kikyak design was developed modified and produced for the cassava screen resist printing. Screen printing is considered by many textile scholars to be the newest method of textile colouration. The different ways of producing screen include: paper stencilling, shellac paintings, profilm cutting and the photographic method. Although there are many ways of producing screen, the underlying principle of permeability, remains the same in all. In this study, the photographic method was preferred because of its ability to withstand intricacies despite its delicacies. Photographic method was used to transfer the designs on to the screen frame. First, the silk mesh was mounted on the wooden-frame under tension. The recipe of the photographic liquor that was used to coat the screen was as follows:

Blue emulsion (chemical) = 0.25 litre

Seriset (Sensitizer) = 0.10 litre

Total volume of the solution = 0.35 litre.

The 0.35 litre solution above was stirred properly until the emulsion and the sensitizer were properly mixed and the solution turned bluish-green. This was painted on the screen in dark room condition, and was allowed to dry. The colour separation was done and each colour painted black on bond paper. Engine oil was applied on the bond paper to make it transparent and to serve as the negative for photographic printing. It was

placed on each of the painted screens, covered with glass and then exposed to the sunlight for 30 seconds for a dull sunlight and 15 seconds on a bright day and then the screen was washed, dried and kept for the resist printing using print fabrics which were bleached calico of 100% cotton. This was how the A and B screens of two different colour wheels presented in Plate 32 below were produced. C represents the negative for the screen A.

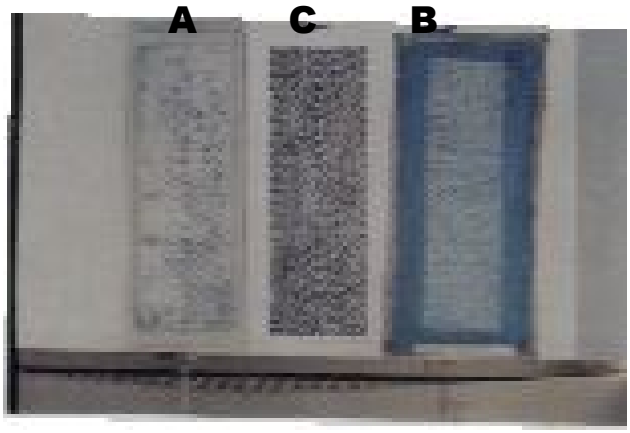



**Plate 33: Two screens of the different colour wheels produced and used for the cassava resist screen printing.**

### 3.10 Resist Screen Printing with Cassava Paste

After the production of the screens and the selection of the dyes, preparation of the cassava paste as the resist paste for the resist printing was imperative before the dyeing process. The cassava paste was prepared by dissolving two milk tin-fulls of cassava flour into a cup of warm

water in a tin or small pot placed on fire. Alum was added to the contents (paste) and left on fire to boil while stirring until the desired thickness of the cassava paste was achieved. It was then allowed to cool down and the printing was done by pouring the paste on the screen and using a squeegee to push the paste through the screen mesh into the print fabric.

The kikyak motifs sourced from the traditional mats of Southern Kaduna was used in producing kikyak designs of different colour-wheels. The first sample was produced by using the screen in Plate 33 (a) to print the already prepared cassava paste on print fabric. The paste was allowed to dry before the piece was dipped into black vat-dye solution for three minutes and was hung to drip-dry under room temperature. It was then washed and rinsed in cold water. The piece of resist sample so produced is presented in Plate 34 below.

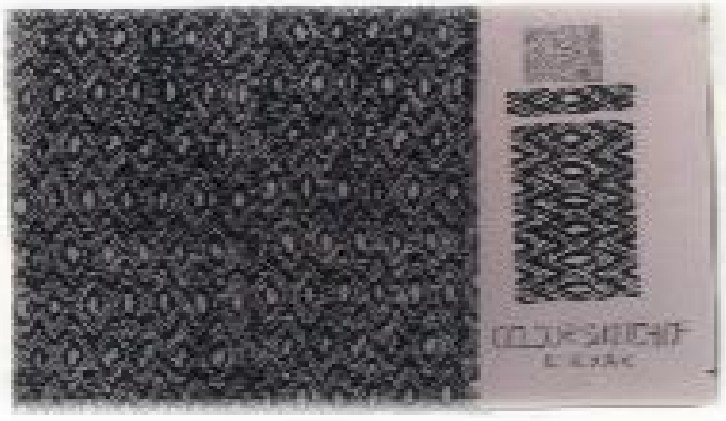


**Plate 34: Black and white cassava print resist sample produced using the kikyak and black vat dye.**

Using the same screen of the kikyak motif, the white cellulosic fabric was printed with resist to protect the yellow background. The resist was well dried, the piece was dipped into a concentrated black vat dye solution and left to drip-dry before it was washed and dried. The dry piece was dipped into a yellow solution of vat dye to produce a yellow and black resist sample in Plate 35 that follows.



**Plate 35: Brilliant yellow vat dye resist sample produced using the kikyak motif.**

Using the same screen but different colour wheel, the third resist sample was produced by printing cassava resist paste on a white fabric and then dipping it into a purple vat dye solution. The piece was then washed in cold water and rinsed. The result of this effort can be observed in Plate 36 below.



**Plate 36: The kikyak resist sample produced using cassava resist paste and purple vat dye.**

The fourth kikyak resist sample was produced by using different screen as in Plate 32. The result of the resist technology of the kikyak motif using a different colour-wheel, is presented in the green and white resist sample Plate 37 below.

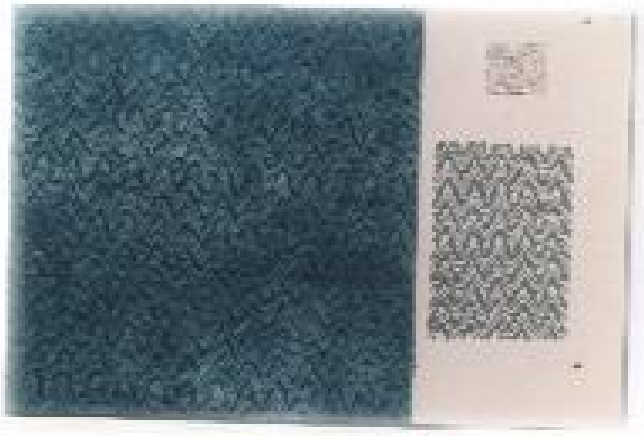


**Plate 37: The kikyak resist sample produced using cassava resist and different colour-wheel.**

### 3.11 Tie-Dye

Apart from the batik (block and screen resist printing adapted in this research as already discussed above) tie-dye resist technique was also employed. The folding technique of tie-dye resist was used for the double blade motif known as *chon-unu-ufiyang*. This diamond shape motif was derived from the traditional blade of the ancient people of Southern Kaduna. The first sample was produced using the traditional colour of yellow and red (*chuyo* and *tsuwo*). The paper colour sketch was first produced and then reproduced on fabric using the folding technique of tie-dye. The material was carefully folded and dipped into yellow vat dye and then into red vat dye and then hung to drip-dry. The paper colour sketch and the resist sample can be observed in Plate 38 below.



**Plate 38: Yellow/red vat dye resist sample made with the Southern Kaduna traditional blade motif known as Chon.**

The second piece of the resist sample using the double blade motif was produced using the traditional Southern Kaduna colours of yellow (for hunting and celebrating the killing of the fierceful leopard) and green for the predominantly agricultural group. Using the same techniques of folding and dipping as in Plate 38 above, another sample was produced by folding the print fabric in-and-out a vertical strip of folds of 14 cm wide. It was then folded in and out into compact folds of 14 $cm^2$. These folds were clipped together by tacking from one diagonal corner to the other. One diagonal corner of the folded fabric was dipped into a prepared yellow vat dye solution to a level not exceeding the diagonal dipping centre for 30 minutes. The fabric was removed and hung to drip – dry. The other diagonal corner was then dipped into green vat dye solution to the level not exceeding the diagonal line for another 30 minutes and then removed to drip-dry. It was then unfolded soaped and rinsed. The result was the chon motif resist fabric which can be observed in Plate 39 on page 136.

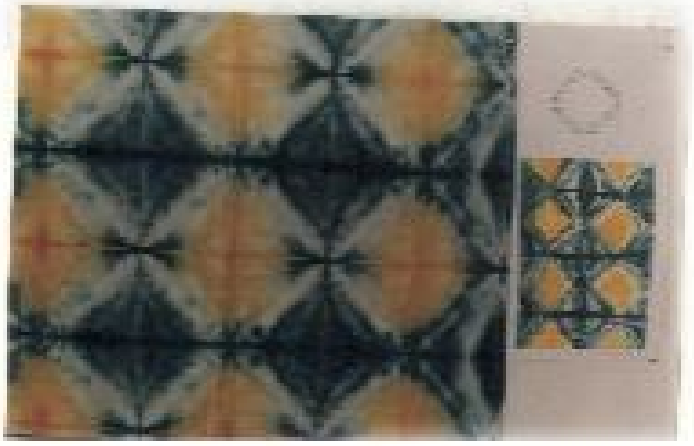


**Plate 39: Yellow/green vat dye resist sample using the traditional double blade motif known as chon**

## 3.12 Dyeing and the Weight of the Fabric, Dyes and their Auxiliaries.

The pieces of the fabric that were used for the experiment were two metres in length. Their weights were taken along with the dyes and the corresponding dye auxiliaries, namely: caustic soda and hydros. The dye liquor for dyeing every resist piece of fabric was prepared based on the recipes already stipulated in sub-section 3.6.1 of this chapter.

### 3.12.1 Print Fabric

Print fabric which is 100% bleached cotton was preferred in this practical research based on the views of scholars like Trotman (1975), Nkeonye (1993) and Adedekun (1993) which state that print fabric are more absorbent to vat dyes. Unmecerised fabric were mecerized to increase their absorbency by immersing them in caustic soda solution of 20gm dissolved in 100ml of water for five minutes. It was then, removed

and immersed in dilute (1%) acetic acid solution and then rinsed thoroughly to neutralise any alkali that might still be present in the cloth. It was then dried at room temperature in readiness for the resist dyeing and printing.

### 3.13 Resist Pieces From The *Kikyak, Chon, Dangyet and Jema'a Nok-head Moth-lip* Motifs

Three-resist pieces of fabric were explored using different motifs and repeats of the kikyak motif. Traditionally the kikyak is a symbol of peace. Hence it is shared by couples and is also offered to warmly accepted visitors to sit or lie on, to express love and mutual understanding in life. In the olden days, it was woven and presented as a special gift to loved ones. Apart from using the mat to lie down, it was also used to bury the dead. The *kikyak* motif has been used to produce the akpang or ufar fabric as earlier presented in Plate 34 of this chapter.

***Akpang Resist*:** The first kikyak resist design titled akpang, was sketched in pencil and colours and a resist screen, using the photographic method. These sketches can be observed in Plate 40 below;

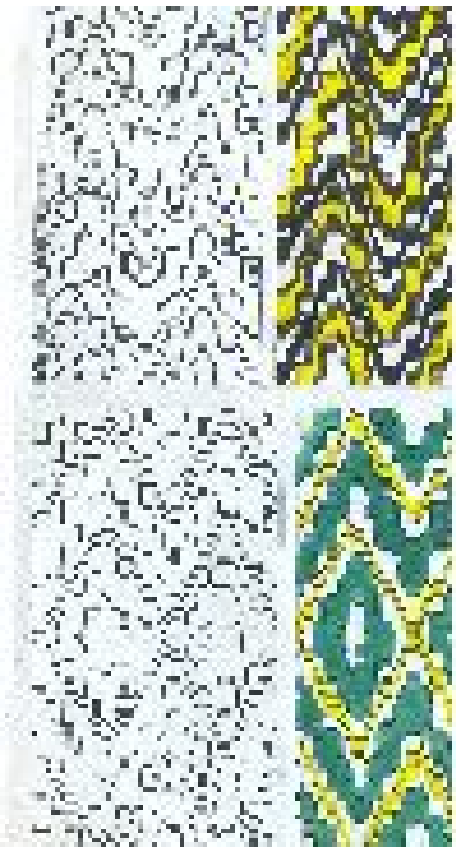


Plate 40: Pencil and colour sketches of akpang resist motif.

The Akpang resist fabric was produced using cassava paste as the resist printing paste to print six-parallel grey lines of motifs along the length of the fabric. The dotted grey spots between the ridges of the kikyak motif were first painted using the photographic resist on a white print fabric. This was then dipped into a liquor of orange vat dye and dyed for 30 minutes. It was removed and dried at room temperature. The kikyak motif was then printed using the cassava paste to retain itself in orange colour and then dipped into a blue purple dye liquor. The fabric was then dried, rinsed, dried and ironed.

***Kikyak/Ufar Resist:*** Pencil and colour sketches of designs of black and white, green and white, yellow and brown and purple white diamond shaped kikyak motifs were made. The screens of these designs were produced using the photographic method in which a wooden frame, screen mesh, blue emulsion and seriset were used and the kikyak resist fabric also known as Ufar were produced, washed, dried at room temperature and then ironed as the resist piece already presented in Plate 34 of this chapter. The traditional black symbolizes deadliness. It is used to invoke and neutralize evil forces. Kikyak and *ufar* are two different names for the same thing by two sub-groups of Southern Kaduna. These are the Nezit and the Ham. Kikyak is for the netzit while *ufar* is for Ham.

***Chon (Resist):*** The name chon resist fabric was derived from its diamond shaped motif which is derived from the double edged traditional metal blade. Chon is Net-zit's name for blade. This resist was produced using the folding technique of tie-dye resist techniques. The production was preceeded by pencil and colour sketches of the blade motif. Two pieces of fabric were then folded and dipped into three dye liquors of Yellow and Red and Yellow and Green respectively to produce two different resist fabrics of simple repeat of the *Chon* motif as earlier presented in Plates 38 and 39 of this chapter.

***Dangyet:*** *Dangyet* is a resist fabric produced from the *dangyet* motif of woman dignity in the practical exploration of this study. The *dangyet* motif is a craft form that was used by dignified Southern Kaduna women up to the late nineteenth century. The motif was produced on a wooden block and was printed by stamping method using melted bee-wax on the print fabric. It was dyed, rewaxed, redyed and dried under shade. The wax was removed by immersing the fabric in hot water.

***Jema'a (Nok) Head Mouth-lip*** This is a painted resist technique fabric produced using a motif derived from the ancient Jema'a and Nok head. The pencil and colour sketches of this motif were first produced. The colour sketch design was enlarged and paper stencil was cut. It was traced on print fabric using a simple repeat method, the bee wax was melted, and discriminately applied on the fabric and dyed. It was rewaxed, redyed and dried. The beewax was removed using hot water with Omo detergent. The fabric was then dried and ironed.

The Jema'a-Nok resist technique design is a symbolic link between the ancient Nok culture and the present day Southern Kaduna. The motif was derived from the ancient Nok figurines, Nok-head and the Jama'a-head presented in Plates 1 (a and b) of chapter two and the replica of Nok-head in Plate 23 of this chapter respectively. This Resist sample of fabric can be observed in Plate 41 on page 142:

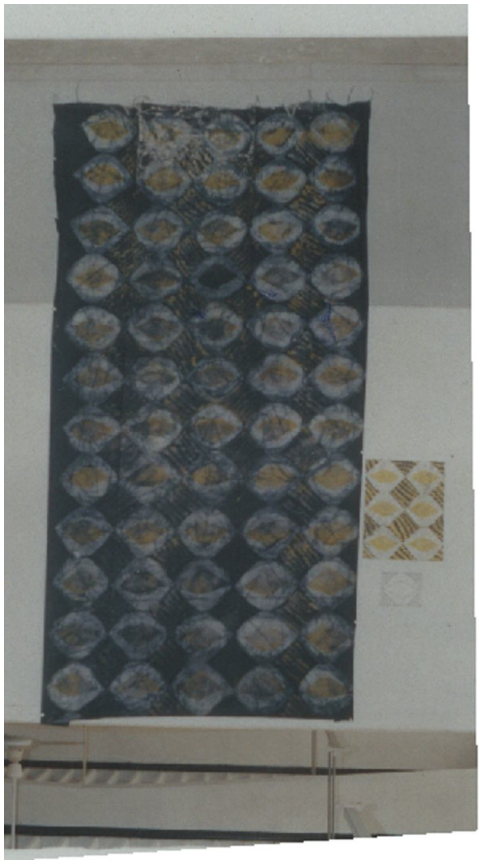


**Plate 41: Resist pieces of Jema'a (Nok) Head Mouth-Lips produced by stenciling and painting of melted beewax.**

The above plate is a product of golden yellow and dark green with a small amount of black vat dye. The waxed material was first dipped into the dye liquor of golden yellow and hung to drip-dry. It was rewaxed and dipped into a dye liquor of dark green and black vat dye, removed and then hung. The material was dewaxed in hot water and detergent, rinsed and ironed.

# CHAPTER FOUR

## 4.0 DATA PRESENTATION AND ANALYSIS

### 4.1 INTRODUCTION

The study was conceived and built within the periphery of history, culture and crafts of Southern Kaduna with special interest and focus on the design motifs and the possibility of their practical adaptation on textiles using resist techniques. According to Belfer (1976) there are a few links with the ancient past that have not been completely rejected by our immersion in the daily marvels of our mechanised age. These links such as in craft production and embellishment seem worth caring about continuously.

Among the crafts of man, the primitive man knew the arts of textile production and embellishment and their mastery is considered by some scholars as some of the most significant achievements of civilized man. In some areas, their skills developed with some astonishing sophistication. As cultural, social, political, economic and religious changes occurred, the mastery of their skills became lost and are survived only by documentary and oral evidences. This is so with the ancient Nok iron and terracotta culture and could be so with the Southern Kaduna design culture. It is with this background that the study became imperative.

The focus of this study was broadly on the identification of the design motifs on some crafts of Southern Kaduna and modification of some of them for adaptation on textile fabrics using the resist techniques of

textile colouration for their continuity and the crafts. Its main objectives were to identify some of the crafts of Southern Kaduna and their design motifs and explore the possibility of adapting them unto textile fabrics, using *kampala* which is the Southern Kaduna tie-dye and batik. This was achieved through the systematic collection, identification, sketching and production of colour swashes as well as wooden blocks and resist printing screens of the design motifs from the crafts of Southern Kaduna and production of the resist fabrics during the studio practical production.

This chapter therefore, deals with the data presentation, analysis and results on the field work on some of the crafts, the craftspeople and some of the design motifs of the Southern Kaduna people. The studio production and assessment of the modified motifs and the resist fabric through administration of the questionnaire in Appendix III B to a randomly selected Southern Kaduna population sample. These are presented in this chapter accordingly, as follows:-

1. Data presentation and analysis from the field survey on the crafts and the design motifs of Southern Kaduna.
2. Data from the studio sampling.
3. Data from the field survey of the assessment of the resist pieces of fabric produced through the administration of the survey questionnaire in Appendix III B to a randomly selected population of Southern Kaduna.

## 4.2 Data From The Field Survey Of the Crafts of Southern Kaduna

During the field survey, fifteen different crafts were found to be in practice in Southern Kaduna. These identified crafts are presented in the summary of the data from the field survey in which the questionnaire in Appendix I was used, as presented in Table I bellow:

**Table 1: Summary of Data from the field survey using the questionnaire in Appendix I.**

| S/N | L.G.As | Districts | No of crafts | Types of crafts (description) | Crafts-men | Crafts women | Total no of crafts-people |
|---|---|---|---|---|---|---|---|
| 1 | Sanga | 19 | 7 | Matting(41), basketry(15), carving(15), blacksmithing(5), broom-making(13), floor decoration(4), leather work(5) | 25 | 73 | 98 |
| 2 | Kaura | 21 | 11 | Pottery(70), basketry(9), carving(7), matting(10), cloth-waving(5), knitting(5), blacksmithing/metal(10), dyeing(5), Kampala (6), net-making(8), ankle-rattle-making(5) | 50 | 90 | 140 |
| 3 | Jema'a | 23 | 9 | Basketry(10), matting(15), carving(10), weaving(10), dyeing(3), Kampala-making(2), knitting(10), blacksmithing, (5) bed-making(5) | 35 | 35 | 70 |
| 4 | Jaba | 19 | 8 | Pottery(5), carving(10), basketry(10), mating(10), blacksmithing(10), dyeing(5), hatching(8) and plaiting(2) | 20 | 40 | 60 |
| 5 | Kagarko | 18 | 6 | Carving(20), fishing-net-making(15), broom-making(30), blacksmithing(10), pottery(5), leather-work(5) | 30 | 55 | 85 |
| 6 | Z/Kattaf | 36 | 8 | Carving(10), basketry(15), matting(15), cloth-weaving(5), blacksmithing(4), dyeing(5), bed-making(3), broom making(3) | 20 | 40 | 60 |
| 7 | Lere | 8 | 5 | Carving(20), basketry(10), pottery(20), blacksmithing(10), matting(10) | 30 | 40 | 70 |
| 8 | Kauru | 8 | 8 | Carving(20), basketry(20), pottery(50), calabash(10) | 30 | 70 | 100 |
| 9 | Kachia | 31 | 9 | Pottery(50), carvings(50), basketry(30), calabash(10), blacksmithing(10), bed-making(20), dyeing(10), matting(10) | 80 | 110 | 190 |
| 10 | Kajuru | 4 | 7 | Carving(100), pottery(50), basketry(30), matting(20), blacksmithing(10), bed-making(10), thatching(10) | 110 | 120 | 230 |
| 11 | Chikun | 8 | 8 | Carving(60), pottery(70), Kampala-making(5), blacksmithing(10), dyeing(5), bed-making(10), gross thatching(10) and Pottery (30) | 80 | 120 | 200 |
| 12 | Kaduna/ South | 4 | 6 | Carving(5), Kampala (10), knitting(5), blacksmithing (8) metal(20), bed-making (12) | 20 | 40 | 60 |
| | TOTAL | 199 | 90 | 15 types of crafts | 530 | 833 | 1303 |
| | Mean | 16(16.6) | 7.5 | 15 types of crafts | 44 (44.1) | 64(64.4) | 108 (108.5) |

The preceding table presents the crafts produced in each of the 12 local government areas of Southern Kaduna. It presents 530 males and 833 females, making a total of 1303 crafts people identified in Southern Kaduna practising 15 different crafts. The crafts are: pottery, matting, carving, basketry, blacksmithing/metal work, cloth weaving, knitting, bed-crafting, carpentry, Kampala making, calabash carving, broom crafting, ankle-rantle making known as wawa, leather work and fishing net making.

Some of the crafts people found in action in Plates 42-47 and 48-53 on pages 145 - 153.



Plate 42: Southern Kaduna female potter from Tachira Attakar in Kaura LGA

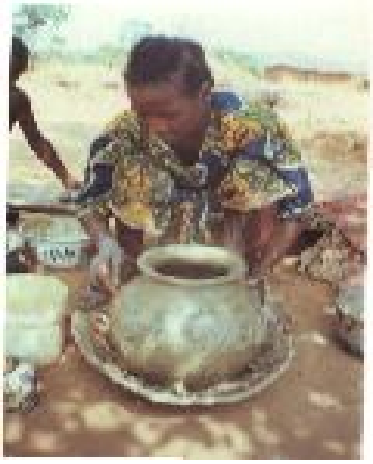


Plate 43: A creative Southern Kaduna traditional potter known as Mrs. Monica Abu from Tachira Attakar



Plate 44: A creative Southern Kaduna basket weaver from Fadan Attakar



Plate 45: A creative Southern Kaduna, raffia handloom weaver from U/Rimi, Bajju



Plate 46 : Some Southern Kaduna basket weavers from Kpak Kagoro



Plate 47 : A Southern female weaver on a traditional horizontal loom

**Plate 42 – 47 : Southern Kaduna crafts people at work**

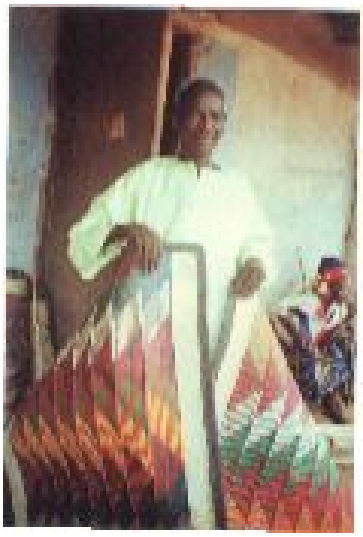


Plate 48



Plate 49

Plates 48 and 49 : A Southern Kaduna boy and masquerade in traditional hand-woven costumes from raffia or cotton yarns known as *wawa* and *jinjiyo* respectively



**(a) Plate 50**



**(b)Plate 51**

**Plates 50 – 51 : Samples of Southern Kaduna traditionally raffia woven mats (kikyak).**



Plate 52 : Hand-woven penis sheath as stated by Bikai (1986) and Achi (2000) was used up early part of the nineteen century by some groups of the entire Nok culture areas. It is a symbol of maturity.

**Plate 48 – 54 : Some Southern kaduna hand woven items and pots**

## 4.3 Data from the studio practices

During the studio practice of this study, four different crafts namely- pottery, carving, weaving and *kampala* making, out of the different types of Southern Kaduna traditional crafts were studied for their design motifs and the production of textile resist pieces. From the study, 33 different motifs were identified, modified and five of them were randomly selected for the contemporary resist production of this study. These five randomly selected motifs, have been presented in Figs. 45 (a-e) of page 102 in chapter three:

## 4.4 Validity of the Motifs And the Resist Fabrics.

Two questionnaires were used in the collection of the data of this study. These are the questionnaires in Appendix III A and the one in

Appendix III (B). The questionnaire in Appendix III (A) was used for collecting data for the crafts while the one in Appendix III (B) was used essentially for assessing and comparing the traditional motifs and the modified ones as well as the resist fabrics.

### 4.4.1 Questionnaire

The questionnaire titled Appendix III (A) and numbered 1-15 was administered to randomly selected 130 samples of Southern Kaduna crafts people while the questionnaire titled Appendix III (B) and numbered one to five (1-5) was administered to 117 randomly selected respondents comprising lecturers and students of the Kaduna State College of Education, Gidan-Waya. They were both validated by the team of the supervisory committee and the Data Processing Unit of the Institute of Agricultural Research (I.A.R), Ahmadu Bello University (ABU), Zaria.

First the questionnaires were modified from studies on the work of Ahuwan (1976) and Saliu (1994). The drafts were submitted to the major and minor supervisors, HOD, and PG coordinator for approval. They were scrutinized, corrected and returned to the researcher. The questionnaire was corrected and submitted to the data processing unit in I.A.R for further scrutiny before they were used.

The responses were initially coded onto computer data coding sheets by the researcher. Then they were, with the help of a qualified

computer data analyst in the data processing unit of I.A.R., A.B.U, Zaria, statiscally analysed.

The first item in the question in Appendix III (A) sought to know the crafts of Southern Kaduna, the responses of which covers the first objective of this study and the research question which state thus:

### 4.4.2 What are the Available Crafts of Southern Kaduna and their Design Motifs?

The responses of the respondents on the randomly administered questionnaire show 15 different crafts from Southern Kaduna which correspond with the population of crafts identified by the researcher during the field survey. Among the crafts of Southern Kaduna that were identified during the field survey are: pottery, carving, weaving (which includes matting and cloth weaving), basketry, kampala (which includes dyeing, tie-dye and batik), blacksmithing (which includes metal work), calabash decoration, knitting, leather work, bed-making and ankle-rattle wawa making.

According to the responses from the respondents of this study, the crafts of Southern Kaduna have been in practice from time immemorial and are still practised, although the production is in the downward trend in the various defensive settlements on the undulating hills, plains, valleys and Savannah forests of the Southern Kaduna people as discovered in the

field survey of this study. This finding has been analyzed and is presented in Table 2 below:

Table 2: **Some Areas of the crafts and Crafts-People of Southern Kaduna**:

| Crafts Area | Frequency | Percentage (%) |
|---|---|---|
| No Response | 41 | 35.0 |
| Nok | 20 | 17.0 |
| Chori | 9 | 7.7 |
| Sambang | 8 | 6.8 |
| Jaban Kogo | 8 | 6.8 |
| Tachira I | 3 | 2.6 |
| Fada Attakar | 8 | 6.8 |
| Tafan | 5 | 4.3 |
| Kagoro | 5 | 4.3 |
| Kpak | 4 | 3.4 |
| Atuku | 3 | 2.6 |
| Tachira II | 3 | 2.6 |
| **Total** | **117** | **100** |

The above table shows the crafts areas and the crafts people of Southern Kaduna as derived from the analysis of the data collected from

the field survey. The analysis reveals that Nok has the highest frequency of crafts, representing 17.0% of the whole study area (Southern Kaduna). This was followed by Chori with nine frequencies, representing 7.7%, Sambang and Jaban-Kogo with eight frequencies each representing 6.8%, while Tachira I and II had three frequencies, representing 2.6% each.

In Southern Kaduna, four indigenous plants were found to be a tremendous source of raw materials to the crafts people of Southern Kaduna. These plants which bear different names among the five sub-groups of Southern Kaduna were identified with the help of a botanist of the Department of Biological Sciences, A.B.U., Zaria. This can be observed in Table 10 below.

Table 3: **Names of some Southern Kaduna Crafts Raw Materials Yielding Plants**

| English Names | Scientific Names | Crafts suitable for | Southern Kaduna Sub-group Names | | | | |
|---|---|---|---|---|---|---|---|
| | | | Net-zit Names | Ham | Aninka Names | Adara/Gbagyi Names | Ninani Names |
| 1. Mohagany | Kyaya senegalensis | Carving Capentry | ukan/akau | wakpa | Itsin | Ihhwou | obizze(kurama) kabizal(Gure) |
| 2. Locust | Parkia-biglobasa | Post dyeing carving | ulan/alan | Nyino | Ilo | Aushihulral | Ukafa (kurama) |
| 3. Date-palm | Barassus nehiopum | Rafting carving basketry | hukhwot | Gyei | Ishir | Oukourina | Ijaha (kurama) |
| 4. Raffia | Pheonix datifera | weaving | jinjiyo | Innay | Ineh | ikyel | Jigina (kurama) |

Mahogany provides woods used in carving. Date-palm fibres are used in matting, basketry, while the stem is used as planks in rafting. Raffia are essentially used for mats weaving and basketry while locust juice in water solution derived from dissolved locust beans husk in water is applied on hot pots just brought out of fire in which they have just been fired to give them a black colour. The technique is common to the Attakar sub-group which is considered second to none in the crafts of pottery production in Southern Kaduna. It is also used for carving. The technique of painting pot black with the juice of locust beans husk can be observed in Plates 53 and 54 below.



**Plate 53: A Southern Kaduna potter from Tachira Attakar of Southern Kaduna colouring her pots with locust husk solution to give them a black colour**

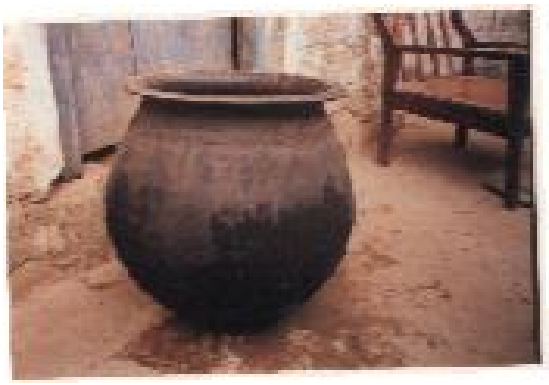


**Plate 54 : A finished Southern Kaduna water tank from Tachira Attakar of Southern Kaduna.**

Traditionally, among the sub-groups of Southern Kaduna, red is a hot colour that makes some elderly and middle aged people hilarious and stimulates restlessness, dancing and heating of oneself with hard objects. The individual at this stage is painted with a black sooth from a cooking pot or covered with a black cloth. Black therefore is a neutralizing colour that destroys evil, cools the mind and brings happiness. This is the significance of the black colour pots of Southern Kaduna.

From the Southern Kaduna population of 15 crafts, four (4) of them were randomly selected and studied. From the study of the four different crafts 33 design motifs were identified as the population of interest to the study. From these 33 design motifs, five of them were randomly selected and adopted on textile fabrics using the resist techniques.

The crafts which were studied and from which design motifs were identified, have dialectical names among the sub-groups of Southern

Kaduna. They have been categorized accordingly and presented in Table 4.

**Table 4: Names of some crafts among the Southern Kaduna sub-groups.**

| Crafts | Known Names crafts and symbols among the 5 Southern Kaduna Cluster Groups<br>SYMBOLS (MOTIFS) | | | | | |
|---|---|---|---|---|---|---|
| English | Alyem Net-zit 1 | Ham 2 Gwong/koro | Aninka 3 | Adara, Gbagyi 4 | Ninani 5 | Symbols (motifs) |
| Basket | Uchirang | Sisyein | | Ihkor (Adara) | Ubiando (kurama) Kachatag (Gure) | Utsi/ustsan web |
| Basketry | Nok uchirang | Nutsiyen | Wuruh | Uhfougrouh Adara | Ipine-uboro kanuga (Gure) | Dangyet kikyak (2) |
| Carving | Shyap-nkyang | Tseih-oben | Isii | Ousowu (Adara) | Nshaba (kurama) | Lizard alan-kwurum |
| Pot | Alan | Inui | Ampiri | Uhvila-uwouh (Adara) | Hyamto (kurama.) Kanu (Gure) | Jyuai shaki trap |
| Pottery | Nok-lan | Izinonue | Imeh piri | Uvia uuwou (Adara) | Uyalo-uyamto (kurama) Kusuga (Gure) | Nok Head udung Jema'a lip alan-kwurum |
| Resist fabric | Kampala (swrub) | | | Kumpala | Kabala | Chon kwi/kwa |
| Weaving | Nok/tadd/badd | Knon-kinona | iru | Uhgnat (Adara) | dumekasa (kurama) Kunuya (Gure) | Kikyak Agwab |
| Winnowing basket | Bibio | Tah | wuruh | Ufuu | | |
| Mat | Kikyak | Ufar | Kubag | Ihwouh (adara) | Uboro (kur) Kusadali (Gure) | Kikyak wawa Diamond |
| Wooden tray | Abyai | Kporo | Nuha-kpa | Ahwuh (Adara) | Ohanko (kurama) Kuposkolo (Gur) | Kongo chon lizard |

The techniques, designs and the cultural functions of the above stated crafts are basically the same among the Southern Kaduna sub- groups.

### 4.4.3 The state of the production of the Southern Kaduna Crafts.

The state of the production of crafts in Southern Kaduna is generally on the decline. This is presented in the analyzed responses of the respondents on the questionnaire in Appendix III A during the field survey on whether the production of Southern Kaduna crafts is declining or not The analyzed responses are presented in Table 5 below:

Table 5: **Is the production of crafts in Southern Kaduna flourishing?**

| Response | Frequency | Percentage (%) |
|---|---|---|
| No response | 6 | 5.1 |
| Yes | 50 | 42.7 |
| No | 61 | 52.1 |
| Total | 117 | 100.0 |

Looking at the above table, the `yes' response to the question of whether the crafts production in Southern Kaduna is flourishing or not has 50 frequencies representing 42.7% while the `No' response has 61 frequencies representing 52.1% This implies that although there is some crafts production in Southern Kaduna, this is generally declining. On the reasons for the decline, the `No response' has 12 frequencies out of 117, representing 10.3%. Lack of materials has 19 frequencies, representing 16.2%, while lack of patronage has 11 frequencies representing 9.4%. Both

lack of materials and patronage has 75 frequencies representing 64.1%. This implies that lack of materials and patronage are responsible for the decline of crafts in Southern Kaduna.

### 4.4.4 The design motifs identifiable on the crafts of Southern Kaduna.

According to the views unanimously expressed by Anderson (1961) and Cheatham *et al*. (1987), motifs are the building block in design and crafts. They may be forms or shapes of symbolic significance. Motifs are units of design that are repeated to form a larger meaningful and functional design. The use of motifs in all forms of design and in textile design in particular is quite significant. Crafts people create motifs on their crafts to captivate their consumers interest and to give symbolic meaning to them as the mirror of the society.

In the craft of Southern Kaduna, variety of motifs like the Nok-head, *dangyet, kikyak*, and *udung-aetio*-Jama'a/*anniih-ayang* are used. Others are the Jama'a head mouth lips, *wawa*, mat diamond and all the remaining part of the 33 Southern Kaduna design motifs as presented in Figs.4-36 which are largely representational and figurative. These include geometric shapes, lizards, snakes and human figures on carved wood like the *abyai* in fig. 4(A) on page 30 and Plate 56 on pages 158.



Plate 55: **A southern Kaduna carved calabash with symbolic motif**



**Plate 56**: **Abyai – A traditionally carved wooden tray with lizard/blade motifs.**



**Plate 57**



**Plate 58**

**Plate 57 & 58: A typical Southern Kaduna decorative and ritual pots with human figures and snake motifs produced by Mrs. Monica Abu, from Tachira Attakar.**

Having studied the crafts of Southern Kaduna, identified and, modified the motifs into contemporary ones and adopted them on fabric, they are assessed using the questionnaire in Appendix III (B).

## 4.5 The Environmental Factors Guiding The Use of The Southern Kaduna Design Motifs.

The use of the randomly selected Southern Kaduna Design motifs used in this study are guided by cultural and environmental factors which is what the second objective of this study strives to achieve. These cultural factors include cultural days such as the Afan cultural Day celebrated by the Kagoro people, the Akat cultural Day celebrated by the Attakar people and the Ham Day celebrated by the Ham people all of Southern Kaduna. The use of symbolic motifs in these celebrations is prominent. During the Ham

day celebration, the use of the symbolic Nok Head in decoration and other paraphernalia is quite enormous.

The ‘aboi’ is another Southern Kaduna annual festival for manhood initiation of young males. It is usually celebrated between April and May when the rains are just starting and farm work is not yet intensive. Other celebrations in which the use of symbolic motifs is prominent are, naming ceremonies, marriages, burial and initiation rites.

### 4.5.1 Examining the Cultural and Environmental factor Guiding the Use of Nok Head and Dangyet Motifs in Southern Kaduna.

In the item two (2) of the Likert scale questionnaire in which festivals, cultural Days celebration, naming ceremonies, marriages, burial and initiation rites were listed as the environmental and cultural factors affecting the use of Southern Kaduna designs, the respondents were to classify their responses into:

(a). Highly insignificant, (b). Insignificant, (c). Moderate,

(d). Significant and (e). Highly significant. In the case of the Nok Head and the Dangyet motifs, the responses were tabulated and presented in Table 6 below.

**Table 6: How significant are festivals, cultural Days, naming ceremonies, marriages, burial and initiation rites as cultural and Environmental factors affecting the use of Nok Head, and Dangyet.**

| | Nok head and dengyet motifs | | |
|---|---|---|---|
| S/No. | Value Scale | Frequency | Percentage (%) |
| 1 | Highly insignificant | 12 | 10.3% |
| 2 | Insignificant | 12 | 10.3% |
| 3 | Moderate | 2 | 1.7% |
| 4 | Significant | 20 | 17.)% |
| 5 | Highly insignificant | 71 | 60.7% |
| | Total | 117 | 100.0 |

Mean (X) = 4.077 std. dev. 1.403

Looking at the above table, 60% of the responses, representing 71 respondents are of the opinion that festival cultural days celebrations, naming ceremonies, marriages, burial and initiation rites constitute the cultural and environmental factors affecting the use of Nok-Head and Dangyet motifs in Southern Kaduna. Similarly, 10.3% of the responses representing 12 respondents each were of the view that the listed cultural and environmental factors are high in the use of the Nok Head and Dangyet motifs. Only 1.7% representing 2 respondents, considered the listed cultural and environmental factors as moderate.

### 4.5.2 The Cultural and Environmental Factors Guiding the Use of *Kikyak, Udung* and *Chon*.

The same cultural and environmental factors as in the Nok Head and Dangyet above were examined for the Kikyak, Udung and Chon. The responses were analyzed in tabular form and are presented in Table 7 below:

**TABLE 7: How significant are festivals, cultural days celebrations, naming ceremonies, marriages, burial and initiation rights as cultural and environmental factors affecting the use of Kikyak, Udung and Chon motifs?**

| | | | |
|---|---|---|---|
| 1 | Highly insignificant | 00 | 0.0% |
| 2 | Insignificant | 00 | 0.0% |
| 3 | Moderate | 12 | 10.3% |
| 4 | Significant | 23 | 19.7% |
| 5 | Highly significant | 82 | 70.0% |
| | Total | 117 | 100.0 |

Mean ($\bar{x}$) 4.598, std. dev. .670

Looking at the above Table, 70% of the responses representing 82 out of the 117 respondent rate festivals, cultural Days celebrations, naming ceremonies, marriages, and initiation rites, as cultural and environmental factors that are highly significant in the use of Kikyak, Udung and Chon motifs in Southern Kaduna. Nineteen point seven percent and ten point three percent (19.7% and 10.3%) of the responses representing 23 and 12 respondents consider the factors as significant and moderate. Insignificant

and highly insignificant have 0% representing no response and no respondents to their favour.

### 4.6 Comparative Assessment of the Modified and adapted Southern Kaduna Design Motifs Resist Fabric.

Item three (3) of the questionnaire titled Appendix III (B) concerns the comparative assessment of the Southern Kaduna traditional and modified motifs/the resist fabrics produced from them. The responses received from the respondents have been tabulated in Table 8 below.

**Table 8: How are the modified Nok Head and Kikyak Motifs and their adapted resist pieces compared to the traditional ones?**

| S/No. | Value scale | Frequency | Percentage (%) |
|---|---|---|---|
| 1 | Very Poor | 0 | 0.0 |
| 2 | Poor | 0 | 0.0 |
| 3 | Good | 22 | 18.8 |
| 4 | V. Good | 40 | 34.2 |
| 5 | Excellent | 55 | 47.0 |
| | Total | 117 | 100.0 |

The above table shows that 47% of the responses representing 55 out of the 117 respondents used for this comparative assessment, rate the modified Nok Head and Kikyak with their adopted resist pieces of fabric

'excellent'. In the same vein 40 of the respondents representing 34.2% rate them as very good, while 22 of the respondents representing 18.8 score good for the modified motifs and the adopted resist fabrics.

The same comparative assessment was done for the Dangyet, Udung and Chon motifs. The responses for the assessment were tabulated as present in Table 9 below:

**4.6.2 Table 9: How are the modifies Dangyet, Udung, and Chon motifs with their resist pieces compared to the traditional ones.**

| S/No. | Value scale | Frequency | Percentage (%) |
|---|---|---|---|
| 1 | Very Poor | 0 | 0.0 |
| 2 | Poor | 9 | 7.7 |
| 3 | Good | 12 | 10.3 |
| 4 | V. Good | 22 | 18.8 |
| 5 | Excellent | 74 | 62.2 |
| | Total | 117 | 100.0 |

Looking at the above Table, 63.2% frequencies representing 74 out of the 117 respondents of this comparative assessment of the modified Dangyet, Udung and Chon motifs with their adopted resist pieces and the traditional ones, score the newly modified ones excellent. Similarly, 18.8% and 10.3% representing 22 and 12 respondents respectively score the

modified motifs and their resist pieces very good and good respectively, while 7.7% responses representing only 9 respondent scored them poor and none for very poor

### 4.7. Assessment of the Newly Produced Resist Pieces of Fabric

Having produced the resist pieces of fabric through the adoptation of the five randomly selected and modified Southern Kaduna Design motifs, the pieces were subjected to assessment by the randomly selected respondents from the Southern Kaduna. This is contained in the last item of the assessment questionnaire titled Apendix III B. This item, which deals with the assessment of the resist pieces, was scaled in scores of

(A). Below 50, (B). 50-59 (C). 60-69, (D). 70-79, (E). 80-100. Each of the resist pieces of the Nok Head, Kikyak, Dangyet, Udung and Chon were presented to the respondents and their responses have been tabulated in Table 10 below.

**Table 10: Assessment of the resist pieces of fabric**

| Resist pieces | | Below 50% A | | 50-59% B | | 60-69% C | | 70-79% D | | 80-100% E | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Motfis | Freq. | % | Freq. | % | Freq. | % | Freq. | % | Freq. | % |
| 1 | Nok Head | 0 | 0% | 6 | 5.1% | 11 | 9.4% | 35 | 29.9% | 65* | 55.6*% |
| 2 | Kikyak | 0 | 0% | 0 | 0% | 33 | 28.2% | 15 | 12.8% | 69* | 59.0*% |
| 3 | Dangyet | 0 | 0% | 0 | 0% | 23 | 19.7% | 24 | 20.5% | 70* | 59.8*% |
| 4 | Udung | 0 | 0% | 6 | 5.1% | 24 | 20.5% | 36 | 30.8% | 51* | 43.6*% |
| 5 | Chon | 0 | 0% | 0 | 0% | 23 | 19.7% | 26 | 22.2% | 68* | 58.1* |

The columns with asterisk in the preceding table indicates the highest frequency and percentage for every resist piece of fabric analyzed. All the pieces were rated above 80% with only the Udung resist piece scoring 51 out of 117 frequencies representing 43.6%. Looking at the parameter of the scores, it graduates from 50-100 with no piece scoring below 50.

### 4.8 Practical Exhibition

The data of this study comprising the traditional crafts samples, the extracted motifs and the resist pieces of fabric produced through the adaptation of the randomly selected motifs were presented to the supervisory committee for the assessment. There was also a practical exhibition along side with the first and the final seminar presentation held on the May, 2004 and 11$^{th}$, Feb- 2005. The flash back of these presentations can be read and observed in Appendix IV of this thesis. All these activities enhance the quality of the production and validity of the resist pieces of the study.

### 4.9 Findings:

On the basis of the analysis of the data for this Study, the following major findings are pertinent:

1. Although the production of traditional crafts in Southern Kaduna is on the downward trend, it has been found that fifteen different crafts are still being practised.

2. The traditional crafts of southern Kaduna have some design motifs from which 33 design motifs have been found.
3. The traditional crafts of Southern Kaduna have symbolic motifs, which have traditional names and are adaptable on textile fabrics using resist techniques of fabric decoration.
4. Cultural and environmental factors such as festivals, annual cultural day celebrations, naming ceremonies, marriages, burial, initiation rites and aesthetic values are guiding the use of the traditional Southern Kaduna design motifs.
5. Print fabrics and vat dyes are quite suitable for the practical adaptation of the Southern Kaduna design motifs to fabrics, using the resist techniques of textile colouration.

**4.10 Summary**

This chapter deals with data presentation and Analysis. The analysis shows that 15 different crafts are still being practised in Southern Kaduna. Four of the crafts, namely pottery, carving, weaving and Kampala production were randomly selected and studied. From the studies of the randomly selected crafts, 33 design motifs were extracted and five of them were randomly selected, modified and successfully adapted to fabrics using the resist techniques. The motifs modified and successfully adapted to fabric using the resist techniques are the Nok head, Kikyak, Dangyet, Udung and the Chon.

# CHAPTER FIVE

## 5.0 SUMMARY, DISCUSSION, CONCLUSION AND RECOMMENDATIONS:

## 5.1 Introduction

This chapter is essentially a summary of this documentary study, comprising the introduction, review of related literature, objectives, procedures, methodology and analysis. It also comprises the observations, conclusion and recommendations proffered on the findings for this thesis.

This thesis report has been written in five chapters. Chapter one, essentially deals with the background, chapter two deals with selected literature review, chapter three confines itself to the research design and methodology, chapter four deals with the data presentation, analysis and discussion while, chapter five deals with the summary discussion, conclusion and recommendation. In addition to the discussion on the background which confines itself to the motivating factors behind the study, chapter one also discusses the socio- political area of Southern Kaduna as the study area, the justification and above all, the objectives of the study.

## 5.2 General Objective

The general objective of this study was to select and manipulate traditional designs on the crafts from Southern Kaduna and adapt them for use as motifs on contemporary resist fabric designs, thereby ensuring the sustainability of such motifs. This general objective correlates with the problem of the study which is the selection, documentation, exploration

and preservation of motifs found on the crafts produced in Southern Kaduna. The problem also includes adapting them on contemporary textile, using the resist techniques of fabric decoration and guided by the research questions:

## 5.3 Procedures

The research instruments designed by the researcher for this study were three different questionnaires (one for pilot study second one for the actual field survey and the third one for assessment of the modified motifs and the resist fabrics) and scheduled interview. This was done in accordance with the views unanimously advocated by Miller (1970) and Nwana (1981), on the need for multiple instruments along with supervisor inputs in research.

The study was preceded by production of sketches from the studies of randomly selected crafts from Southern Kaduna. Altogether 33 design motifs were identified as the population of the study. From these population of design motifs, five of them were randomly selected, modified and adapted on textile fabric using the resist techniques of fabric colouration.

## 5.4 Discussion

The crafts of Southern Kaduna from which the symbolic motifs of this research were derived, have functional uses. The crafts objects are commonly used for rituals, domestic and for carrying and storing farm

produce. Sometimes, some of the traditional objects are used for rituals. Some of the rites are accompanied by and are accomplished with dance. Nowadays, during festival or special occasion, these rites are re-enacted. This can be observed in Plate 59 below,



**Plate 59: Modern Attakar ladies of Southern Kaduna in modern attires, demonstrating womanhood dance step with the traditional *abyai* (wooden tray) and axe (*ukhuon*).**

The preceding plate shows some Attakar women demonstrating womanhood dance step with the traditional *abyai* and *ukhuon* in Arewa House, Kaduna during the book launch of 'one year in office' by the paramount chief of Attakar, H.R.H. Mr. T.N. Wada in 2003.

Sometimes specific motifs are brought by clients. Attractive design motifs are easily integrated by crafts people in their products. When this happens, then the design becomes a fashion or design as it was the case with the kampala techniques. Stylized, possessive objects like the traditional blade and abstract and geometry shape, all feature as motifs in Southern Kaduna design.

The economic, social, cultural and political importance of sourcing fabrics for apparel and other functional uses and the role of motifs in designing and giving symbolic meaning and enhancing their function cannot be over emphasized. Fabrics, to many people do not have meaning if they are without colours. There are different ways by which textile fabrics are coloured. One of these is through the resist techniques whose origin is traced to Indonesia (Java).

Resist fabrics have been put into tremendous use in the world of fashion. They are used in apparels as dresses, gowns, skirts, blouses, jumper and shirts, just for example. Resist fabrics are also used in decorative arts and cultural representation and documentation. These factors were fundamental in motivating this research of identifying the symbolic motifs in some of the traditional crafts of Southern Kaduna, modifying and adapting them on textile fabrics using the resist technique. Bee wax and cassava starch were used as the resist agents along with vat dyes and print fabrics.

The choice of bee wax and cassava starch as the resist agents was deliberate because of their abundance in the study area. This was done in response to the government and scholars call for the need to look within, to tap the abundant resources in order to produce products that are relevant to the need and culture of the societies. The choice of the print fabric with vat dyes to be used on them was also deliberate. It was informed by the study of the related literature that print fabrics are most

suitable for vat dyes. This is why this material was used in adapting the identified randomly selected and modified Southern Kaduna symbolic motifs used for this contemporary resist techniques production.

Design motifs are the building blocks of textiles design. The meaning of the symbolism of motifs, determines its importance popularity and usage in the society. The expression of philosophy of life through symbolic motifs is quite eminent in the design on the crafts of the Southern Kaduna people. Through the expression of symbolic Nok Head, the Kikyak, *dangyet, Udung, Chon* and the lizard, different philosophies are disseminated. The symbolic Nok-head expresses cultural link between the ancient Nok culture and the present Southern Kaduna people. It articulate the artistic culture of Southern Kaduna while the Kikyak is a symbol of peace which covers southern Kaduna. Dangyet is a symbolic motif of women dignity and *Udung* is a symbol of terracottas excellence, while *Chon* symbolizes sharpness. The lizard is a symbolic motif of peace which embraces the Southern Kaduna people and the area.

The process of adaptation of these motifs on fabrics was quite tedious and demanding but the determination to achieve these objectives and answer the research questions of this study was the persevering weapon of the research. The screen printing of the cassava resist paste, especially the Kikyak, was quite a difficult task that was conquered with patience, endurance and determination. This was followed by the block

printing of the dangyet. The yellow, red, orange and the green vat dyes predominantly used in the production yielded brilliant colours. From the results of the assessment of the resist piece presented to a randomly selected population of Southern Kaduna the resist pieces were rated very high which implies that the symbolic motifs were successfully adapted on fabrics using the resist techniques. The crafts of Southern Kaduna though on the decline are still being practiced with some symbolic motifs that are quite adaptable on textile fabrics.

Ordinarily, there is difference between traditional and the contemporary design. In the case of Southern Kaduna both similarities and differences exist in the traditional and contemporary crafts, especially in pottery which is a common craft of Southern Kaduna. This craft has maintained its traditional method of clay preparation and bisque firing which differs from the contemporary kick wheel method of production and kiln firing. In the traditional dyeing methods, dyeing with *galura* and *jan-kara* are gradually giving way to dyeing with synthetic dyes.

In textile design, some of the traditional motifs have been integrated into the contemporary motifs. The reason is that some of the indigenous contemporary designers have taken some traditional motifs and incorporated them in their contemporary designs.

To determine the ability of the fibres of the printed fabric to dye, the colour appearance of the dye liquor after dyeing and the shade of the dyed

fabric were carefully observed by the researcher and the textile technicians in both the Departments of Textile Science and Technology and Industrial design. The rating was put above 85% dye up-take for the yellow, green, red, orange and blue vat dyes. This was so because the left over liquor in the dye-bath was almost colourless, implying that the print fabric has good affinity for the dyes. Considering the outcome of the dyed pieces, it is conclusive that the choice of the dyes and their auxiliaries were appropriate. The ratio of the liquor to goods which was 100:1 and the additive used were also appropriate.

The only short-fall in some of the resist pieces is the accidental dots and patterns of splashes of hot melted beeswax, resulting from the block in the process of block resist printing of dipping the melted beeswax and stamping it on the fabric. The printed fabric of the cassava paste must not remain too long in the vat dye solution, or else it will not resist the dye and thereby affect the design of the motifs.

***a. CONCLUSION***

Based on the analysis and findings of the study, the following conclusions are made:

**1. The State Of Crafts Production**

Contrary to the assumption that crafts production in Southern Kaduna has declined to the point of extinction, this study has revealed fifteen different traditional crafts which are being practiced in Southern Kaduna. Although some of the crafts may not be flourishing, they exist in practice, since not less than one of these crafts is practiced in every local government area in Southern Kaduna, as revealed in the findings of the pilot study in Table 1.

## 2. Relationship Of The Southern Kaduna People And Their Crafts With The Ancient Nok Culture.

Although this study could not conclude with certainty to establish that Southern Kaduna people are descendants of the ancient Nok culture, it is from the crafts of Southern Kaduna pottery that, it has inherited the ancient Nok terracotta culture. Nok culture is known today because of its surviving terracotta- pieces as unveiled by Fagg (1971, and 1990). Like the ancient Nok terracotta culture, pottery is a popular craft of the Southern Kaduna with very similar and unique techniques. For instance the use of coarse sand as grog in the wedging of clay, the coiling and the open firing techniques used by the ancient Nok cutting, are found to be practised in the pottery crafts of the Southern Kaduna people.

## 3. Symbolism Of The Southern Kaduna Design Motifs

This study reveals that Southern Kaduna has design motifs that are symbolic to the culture of the people. Among these symbolic motifs is the ancient Nok-Head which symbolizes and articulates the artistic culture of Southern Kaduna and creates a link between Southern Kaduna and the ancient Nok culture.

The use of such colours as white, brown, green and black is quite symbolic. White symbolizes mutual understanding, peace and friendship. Brown is used to symbolize the soil. When brown is used with black spots, it symbolizes the leopard skin which some sub-group warriors and hunters of Southern Kaduna people like the Attakar, used to hunt, kill and celebrate its killing. Green is used for vegetation symbolizing agriculture, which is the main occupation of the Southern Kaduna groups. Black symbolizes deadliness and is used to appeal, invoke and neutralize evil spirits/charms.

**4. Environmental factors Guiding the use of Southern Kaduna motifs**

The questionnaires, in Appendix III (B) were used for the assessment of the southern Kaduna motifs. Based on the analysis of the responses on this questionnaire, environmental and cultural factors such as festivals, cultural days celebration, marriage and naming ceremonies, burial and initiation rites and aesthetic values, influence the use of Southern Kaduna design motifs.

**5. A Comparative assessment of the Relationship Between the Newly designed Motifs with The Resist Fabrics Adapted from them and the traditional ones**

From the analysis of the responses from the five (5) Likert-scale assessment questionnaire on the contemporarily modified Southern Kaduna traditional design motifs with their corresponding resist pieces and the traditional one presented to 117 respondents consisting of lecturers and students of textile in the Kaduna State College of Education, Gidan-Waya. The responses were excellent for Nok-Head, Kikyak, Dangyet and Udung. Only *chon* was rated good. From these ratings, it is conclusive that the contemporarily modified motifs and their resist pieces are better than the traditional ones Similarly the assessment of the resist pieces from the *Nok-head*, *Kikyak*, *Dangyet*, Udung, and Chon were all rated above 70%. This implies that the five randomly selected motifs of this study were successfully adapted on fabric using the resist technique of fabric colouration.

From the analysis and findings on the field survey and the practical exploration of this study, it is conclusive that:

- Southern Kaduna has diversified crafts with symbolic motifs of cultural significance.
- The design motifs of Southern Kaduna are suitable for adaptation on textile fabrics using resist techniques.

- The crafts of Southern Kaduna are significantly homogeneous and insignificantly heterogeneous,
- Southern Kaduna remains the major consumer of its traditional crafts
- **Print fabrics are most suitable for the adaptation of the Southern Kaduna design motifs on textiles through resist techniques.**

## 5.6 Recommendations

Based on the analysis and findings on the field survey and the practical resist techniques exploration of this study, the following recommendations to research students, Government and the textile industries are made:-

### (a) Students

1. Further studies on the crafts and design motifs of Southern Kaduna for adaptation to other textile production methods using pigments and dyes are recommended for future research.
2. The design motif of any society that is not documented is an unwritten language of symbolism which is easily appreciated but difficult to apprehend and define, or simply interpreted by a stranger to the tradition if the interpretation has not been given to him or her. Symbolic motifs used in the crafts of many societies are dying with crafts people and may become extinct if efforts are not made to

document them. The research therefore recommends more search into many other traditions for the purpose of documentation.

3. Industrial resist techniques rather, than the conventional method should be explored.
4. It has been found that the design motifs on the crafts of Southern Kaduna are quite adaptable on textile through resist technique using print fabrics. Further research on different textiles using the resist techniques and various functional tests on the dyes and fabrics is recommended.
5. Students of textile design should always dwell more on traditional textile design, to bring out their symbolism. The finished design should always show the source and the sketch for better understanding.
6. Further research on contemporary modification of the Southern Kaduna traditional design motifs for contemporary production is hereby strongly recommended.

## (b) Government and its agents.

1. **This study recommends the production of textile fabrics with traditional motifs in order to promote the cultures of the society in which they are established. This can be done by promoting Nigerians into managerial positions. The economic well-being of any nation anywhere in the world is measured in terms of technological advancement. Industrialization in Nigeria is still in a formation stage. This is because Nigeria is a developing country with dwindling economy that is over-dependent on oil. Nigeria must strive hard towards becoming**

**a technologically advanced country with self actualization of the culture of her people. Up to now, Nigeria cannot boast of one well established textile industry owned by Nigerians or the government of Nigeria. The nature of Nigerian industrial policy allows foreign investors to acquire higher percentage of shares than the Nigerian counter-parts. Consequently the textile industries are controlled by foreigners with few Nigerians appointed to some key positions. For example, the Japanese, Chinese and the Indians that are manning our textile industries come to Nigeria as technical partners and end up occupying managerial positions. Their interest is maximal profit and as such will have no time for integration of traditional motifs and other interests that a Nigerian may have.**

2. The Kaduna State Government through its Council of Arts and culture, should embark on documentary research on the crafts and design motifs of Southern Kaduna and all other ethnic groups.
3. Government should commission reputable crafts people and designers to produce replicas of forms and design motifs of the ancient Nok cultures, including that of the ancient Nok Head.
4. Kaduna State government should create conducive market environment for the Southern Kaduna crafts people to sell their crafts while the Southern Kaduna elites should encourage the crafts people by patronizing their products.
5. Every local government area and chiefdom in Nigeria in general and Kaduna state in particular should endeavour to document the crafts and design motifs of their various groups.

**(c) The textile industries.**

1. The textile industries should cooperate with the universities and other higher institutions by providing research grants to researchers, opening up to research students who may wish to use the facilities of the industries for research. Above all, the industries should endeavour to employ young textile design graduates in addition to buying and using cultural design motifs produced by institutions.
2. Textile designers, using traditional motifs, should be the primary objectives of any textile industry involved in batik fabric production in order to make them relevant to the culture of the societies in which it is established and to publicize such traditional motifs to other societies in the universe.

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## APPENDIX I

### DEPARTMENT OF INDUSTRIAL DESIGN
### AHMADU BELLO UNIVERSITY, ZARIA

_____ Date:_____

_____

_____

Dear Sir/Madam,

**LETTER OF INTRODUCTION**

The bearer Mr./Mrs.:_____is a

_____ student in the Department of Industrial Design of

the Ahmadu Bello University, Zaria. He/She is undertaken a research on

_____

_____

The research will involve him/her going into places like _____

_____

_____

He/She is therefore soliciting for your co-operation in collecting the required data.

Thank you in anticipation.

Yours sincerely.

_____
Major Supervisor

## APPENDIX II

### DEPARTMENT OF INDUSTRIAL DESIGN
### AHMADU BELLO UNIVERSITY, ZARIA

Dear Sir/Madam,

You have been carefully selected for this pilot academic exercise. Be rest assured that you and the private information you will provide will be well protected, academically used and appreciated. Please respond to this questionnaires as objectively as possible.

**FILL IN OR TICK AS APPROPRIATE:**

State of origin:_____ LGA:_____

Highest qualification:_____ Occupation:_____

(1)i. Tick the crafts commonly practised in your LGA:-

Pottery ( ) Carving ( ) Baskety ( )

Mat weaving ( ) Cloth Weaving ( ) Dyeing ( ) Blacksmithing ( )

ii. Specify those not mentioned above: _____

iii. State five of the most flourishing crafts: (1) _____ (2) _____

(3) _____ (4) _____ (5) _____

(2)i. Tick the most appropriate to the state of crafts in your LGA.

(a) Retrogressive ( ) (b) Progressive ( ) (c) Dwindling away ( )

(d) All of these ( ) (d) None of this ( )

ii. Tick the most appropriate statement responsible for your answer in 2,I

(a) Cultural decline ( ) (b) Lack of raw materials and patronage ( )

© All of these ( ) (d) None of this ( )

iii. Specify any other reason(s) _____

iii. (a) Is there any striking resemblance between the motifs of the crafts of your people and any of the well-known ancient Nok culture?

_____

(b) Specify: _____

(3) Nigeria is a political grouping with divergent cultures:

(a) Agreed ( ) (b) Disagreed ( ) (c) Specify _____

(4) Scholars have agreed that African Arts have considerable impact in the world of arts and that Nok culture is one of the oldest in Africa.

(i) State any contrary view you have to this statement:_____

(ii) Do you profess that your LGA is part of Nok culture? _____

(iii) Nok today is (a) Hamlet ( ) (b) Town ( ) (c) Non of these ( )

(iii) What do you suggest Nok to be at this Era?

(a) Administrative centre ( ) (b) Cultural centre ( )

(c) Specify:_____

(5)i. Name the LGAs you consider as Southern Kaduna: _____

_____

_____

_____

ii. Any other comments:_____

_____

Alau D.D
Dept. of Industrial Design
A.B.U. Zaria
10th Dec, 2000

## APPENDIX III A

## QUESTIONNAIRE ON FEASIBILITY STUDIES ON THE DESIGN MOTIFS ON THE CRAFTS OF SOUTHERN KADUNA PEOPLE

(For crafts people and practicing designers/artists)

Dear Respondent,

It is postulated that Nok culture, which articulates the artist culture of Southern Kaduna, has a great influence on the contemporary arts and crafts of the people of Southern Kaduna.

Like the ancient Nok-culture people, the Southern Kaduna people of our time have a design culture, which is depicted on their arts and crafts. As a practicing crafts-person or specialist in the field, your resourcefulness is recognized.

You have therefore been carefully selected to contribute to the academic efforts of unveiling and documenting those designs and crafts by responding to this questionnaire as honestly as you can. Please be rest-assured that the information you will provide will be treated confidentially.

**A. BIO-DATA (Tick or Fill-in):**

Sex: Male ( ) Female ( )
Approximate age: ( ) LGA ( )
Marital status ( ) Level of education ( )
Area of crafts/art work:_____

**(B) CAFTS OF SOUTHERN KADUNA:**

Which of the underlisted crafts are practiced in your locality?

(i) Pottery ( ) (ii) Carving ( ) (iii) Mat-weaving ( )
(iv) Basketry ( ) (v) Carving ( ) (vi) Cloth weaving ( )
(vii) Blacksmithing ( ) (viii) Metal work ( ) (ix) Dyeing ( )
(x) Knitting ( ) (xi) Kampala ( ) (xii) Leather work ( )
(xiii) Bed making ( ) (xiv) Ankle rattle making ( )
(xv) Calabash decoration ( ) (xvi) Specify any other: _____

b. i. Since when have these crafts been in practice? _____
ii. Since time immemorial ( )
iii. Just recently ( )
iv. Since ( )

c. i. _____ ii. _____ iii. _____
iv. _____ v. _____ vi. _____
vii. _____

d. List the crafts that you are producing or used to produce:
_____
Why are you not producing crafts now? _____

e. List the tools you require for your craft: _____

f. Describe the techniques of your crafts _____
or rent the place ( )

g. What are the raw materials you require and how do you get them?
_____

**DECLINE OF CRAFTS:**

2. a. Do you think that craft production in Southern Kaduna is flourishing? Yes ( ) No ( )
   b. If not, state why _____
   c. The reason for the decline in crafts production, include the following:
      i. Cultural decline/social change ( )
      ii. Lack of raw materials for the craft production ( )
      iii. Lack of patronage ( )
      iv. All of the above ( )
      v. Specify any other reasons _____

SPECIAL CRAFTS:

a. What are the common woven crafts of Southern Kaduna?

i. Mats ( ) ii. Blankets (gwado) ( ) iii. Ashobi (aso-obi) ( )
iv. Baby-gauge (majanye) ( ) v. Basket ( )
vi. Woven raffia sun-shade hats ( ) vii. All of the above ( )
viii. None of the above ( ) ix. Specify any other craft: _____

b. What are the common pottery products of Southern Kaduna?
   i. Cooking pots (tuwo da miya) ( )
   ii. Brewing pots ( )
   iii. Water tanks ( )
   iv. Ceramic – sculpture for decoration ( )
   v. Ritual pots (names) _____
   vi. Specify any other type _____

c. The common carving products of Southern Kaduna include:_
   i. Wooden statues ( ) ii. Ritual items ( )
   iii. Traditional stools ( ) iv. Mortars and pestles ( )
   v. Hoe handles ( ) vi. Specify any other
   vii. What are the common resist techniques (kampala) product of Southern Kaduna? _____
   d. Is there any difference in the craft produced by the Southern Kaduna groups? _____

---

If so, state the differences: _____

3. How do you sell your crafts?
   a. Do you sell your crafts wholesale or retail? ( )
   b. How much do you realize from your craft in a week? ( )
   c. Do you feel you need more training in your field? ( )
   e. If yes, specify by ticking the area of your interest from the following list.
      i. Spinning and weaving ( ) ii. Batik and tie-dye resist ( )
      iii. Clay preparation, pottery production and glazing ( )
      iv. Quality control ( ) v. Marketing ( )
      vi. All of the above ( )

**DESIGN MOTIFS OF SOUTHERN KADUNA:**

4. What fascinates you on pottery, weaving, carving and dyeing crafts of Southern Kaduna?

a. i. The design ( ) ii. The finishing treatment ( )
iii. The media ( ) iv. All of the above ( )
v. None of the above ( ) vi. Specify any other factor _____

b. List any Southern Kaduna design motifs that you know: _____

c. Since when have these design motifs existed?
i. Since time immemorial ( ) ii. Before the era of colonialism ( )
iii. During the post-colonial period ( )
iv. Specify any other period: _____

d. Are you aware of the ancient Nok culture? Yes ( ) No ( )
If yes, do the design on the contemporary ceramic-sculptures wooden crafts or any crafts design of Southern Kaduna have some resemblance with the ancient Nok culture figurines available in the Jos National Museum? Yes ( ) No ( )

5. S.K. Design motifs related to Nok culture.

a. Do you think that Nok culture articulates the artistic culture of Southern Kaduna? Yes ( ) No ( )

b. Tick/write the S.K. design motifs that you think are common among the sub-groups and have a link with the ancient Nok culture.

c. Do you imagine that the design motifs on pottery, weaving carving, will be suitable on textile fabrics? Yes ( ) No ( )

d. If yes, which motifs do you suggest and why?
i. _____
ii. _____
iii. _____

e. Do you agree that Southern Kaduna people and a few neighbours are the major consumers of S.K. crafts. Yes ( ) No ( )

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10th Dec, 2000

# APPENDIX IIIB

**QUESTIONNAIRE ON THE PRODUCTION OF SOUTHERN KADUNA CRAFTS AND ASSESSMENT OF THE ENVIRONMENTAL FACTORS GUIDING THE USE OF SOUTHERN KADUNA DESIGN MOTIFS, COMPARISON OF THE NEWLY DESIGNED MOTIFS WITH THE TRADITIONAL ONES AND ASSESSMENT OF THE RESIST PIECES PRODUCED FROM THEM.**

Dear Respondent,

It was assumed at the initial stage of this research that Southern Kaduna like the ancient Nok culture, whose area it occupies, has a design culture. This research has identified, reproduced some of these design motifs, adopted them on fabrics and are presented before you for assessment. Please respond to the questions as objectively as you can ticking or filling in as may be required.

**BIO-DATA (TICK OR FILL IN)**

Sex: Male: [ ] Female: [ ]
Marital Status: [ ] Level of Edu [ ]

**PRODUCTION OF CRAFTS**

1) The production of crafts in Southern Kaduna can be described as:
   a) Very low [ ] b) Low [ ] c) Moderate [ ] d) High [ ] e) Very high [ ]

**ENVIRONMENTAL FACTORS GUIDING THE USE OF SOUTHERN KADUNA DESIGN MOFITS**

2) Tick most appropriate. The use of the underlisted crafts/motifs are guided by the environmental factors like festivals, cultural day celebrations, naming ceremonies, marriages, burial, initiation rites aesthetic values and aesthetic values.

I) **NOK HEAD**:
   a) Highly insignificant [ ] b) Insignificant [ ] c) Moderate [ ]
   d) Significant [ ] e) Highly significant [ ]

II) **KIKYAK**
   a) Highly insignificant [ ] b) Insignificant [ ] c) Moderate [ ]
   d) Significant [ ] e) Highly significant [ ]

III) **DANGYET**
   a) Highly insignificant [ ] b) Insignificant [ ] c) Moderate [ ]
   d) Significant [ ] e) Highly significant [ ]

IV) **UDUNG**
   a) Highly insignificant [ ] b) Insignificant [ ] c) Moderate [ ]
   d) Significant [ ] e) Highly significant [ ]

V) **CHON**

a) Highly insignificant [ ] b) Insignificant [ ] c) Moderate [ ]
d) Significant [ ] e) Highly significant [ ]

## COMPARATIVE ASSESSMENT OF THE RELATIONHSIP BETWEEN THE NEWLY DESINGED MOTIFS WITH RESIST FABRICS ADAPTED FROM THEM AND THE TRADITIONAL ONES

3) How are the stylized in motifs compared to the traditional ones?

I) **NOK HEAD**:

a) Very poor [ ] b) Poor [ ] c) Good [ ]
d) Very good [ ] e) excellent [ ]

II) **KIKYAK**

a) Very poor [ ] b) Poor [ ] c) Good [ ]
d) Very good [ ] e) excellent [ ]

III) **DANGYET**

a) Very poor [ ] b) Poor [ ] c) Good [ ]
d) Very good [ ] e) excellent [ ]

IV) **UDUNG**

a) Very poor [ ] b) Poor [ ] c) Good [ ]
d) Very good [ ] e) excellent [ ]

V) **CHON**

a) Very poor [ ] b) Poor [ ] c) Good [ ]
d) Very good [ ] e) excellent [ ]

## ASSESSMENT OF THE RESIST PIECES

**4)** What is your assessment of the resist pieces presented to you on the following motifs

I) **NOK HEAD**:

a) below 50 [ ] b) 50-59 [ ] c) 60-69 [ ] d) 70-79 [ ] e) above 80-100 [ ]

II) **KIKYAK**

a) below 50 [ ] b) 50-59 [ ] c) 60-69 [ ] d) 70-79 [ ] e) above 80-100 [ ]

III) **DANGYET**

a) below 50 [ ] b) 50-59 [ ] c) 60-69 [ ] d) 70-79 [ ] e) above 80-100 [ ]

IV) **UNDUNG**

a) below 50 [ ] b) 50-59 [ ] c) 60-69 [ ] d) 70-79 [ ] e) above 80-100 [ ]

V) **CHON**

a) below 50 [ ] b) 50-59 [ ] c) 60-69 [ ] d) 70-79 [ ] e) above 80-100 [ ]

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ABU, Zaria

## APPENDIX IV

### Synopsis of seminar presentations/practical exhibition:

With the completion of the first phase and the second phase of this study, in which the pilot study was conducted and the proposal defense was successfully done, field survey questionnaire were distributed and samples of crafts were collected, and studied. The study was at this junction punctuated with the first seminar which was held on the 7th May 2004 and was chaired by Dr. J.B. Kaltho, a former Dean of the Faculty of Environmental Design, in the presence of Dr. B.A. Kparevzua and Prof. P.O. Nkeonye the major and minor supervisors of this research respectively. Also present at this seminar, were the Head of Department of Industrial Design and the current Dean of the Faculty of Environmental Design, in the person of Prof. A.M. Ahuwan, the P.G. Co-ordinator in the person of Dr. S. Maiwada, the former Head of Department Mr. Sanusi, many distinguished lecturers and P.G. students within and outside the Department. This was followed by the final seminar presentation which was chaired by Prof. Kolo, the Dean of Faculty of Education, A.B.U., Zaria on Friday, 11, Feb., 2005 in the presence of the Head of Department of Industrial Design and Dean of the Faculty of Environmental Design, Prof. A.M. Ahuwan, the P.G. Cordinator, Dr. S. Maiwada, the supervisors Dr. B.A. Kparevzua and Prof. P.O. Nkeonye, distinguished lecturers within and outside the Faculty, P.G. and U.G. students.

Documentation of the cross-section of this academic rituals which is a pre-requisite for the attainment of this stage of academic pursuit for the acquisition of the Ph.D. qualification in Industrial Design (Textile) can be observed in Plate 60-76 of this Appendix.

Plate 60-71: Samples from the Post Graduate Seminar / Exhibition



Plate 60: From right to left are the major supervisor of this study, Associate Prof. B.A. Kparevzua and the first seminar chairman, Dr. J.B. Kaltho



Plate 61: From right to left are the HOD (DID) and Dean of the Faculty of the Env. Des. Prof.. A.M. Ahuwan and the major supervisor of this study, Associate Prof. B.A. Kparevzua.



Plate 62: From right to left are the first seminar chairman, Dr. J.B. Kaltho, second supervisor Prof. P.O. Nkaonye and the P.G. Co-ordinator Dr. S. Maiwada.

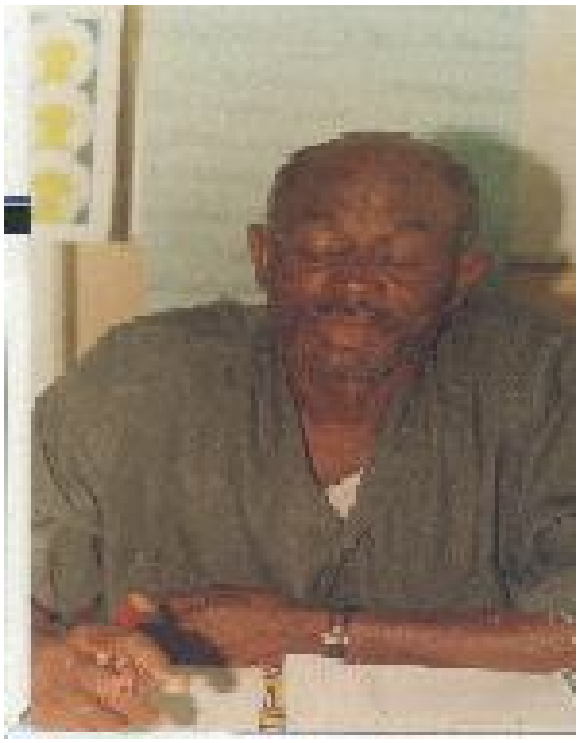


Plate 63: Chairman of the final seminar presentation, Prof. F. D. Kolo.



Plate 64: From right to left are the chairman of the first seminar, Dr. J.B. Kaltho, the second supervisor Prof. P.O. Nkeonye, the presenter and a cross section of the exhibition



Plate 65: The PG co-ordinator, Dr. S. Maiwada stressing a point during the seminar



Plate 66: The researcher at the first seminar presentation



Plate 67: The researcher discussing a replica of Nok Head sample produced by E. Wyuah during the seminar presentation



Plate 68: The researcher stressing a point on the practical samples while Prof. P.O. Nkeonye looks on.



Plate 69:  A cross section of the first seminar exhibition



Plate 70 : Cross section of the final seminar presentation / Exhibition



Plate 71: A Southern Kaduna lady (Mrs.) Alau wearing a typical embroided resist gown and Nok Hair-do