

**EXPLOITING TECHNIQUES IN ASANTE INDIGENOUS HAND
EMBROIDERY FOR ADINKRA CLOTH PRODUCTION**

BY

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**KWAME NKURUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,
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CERTIFICATION

I hereby declare that this submission is my own work towards the MFA and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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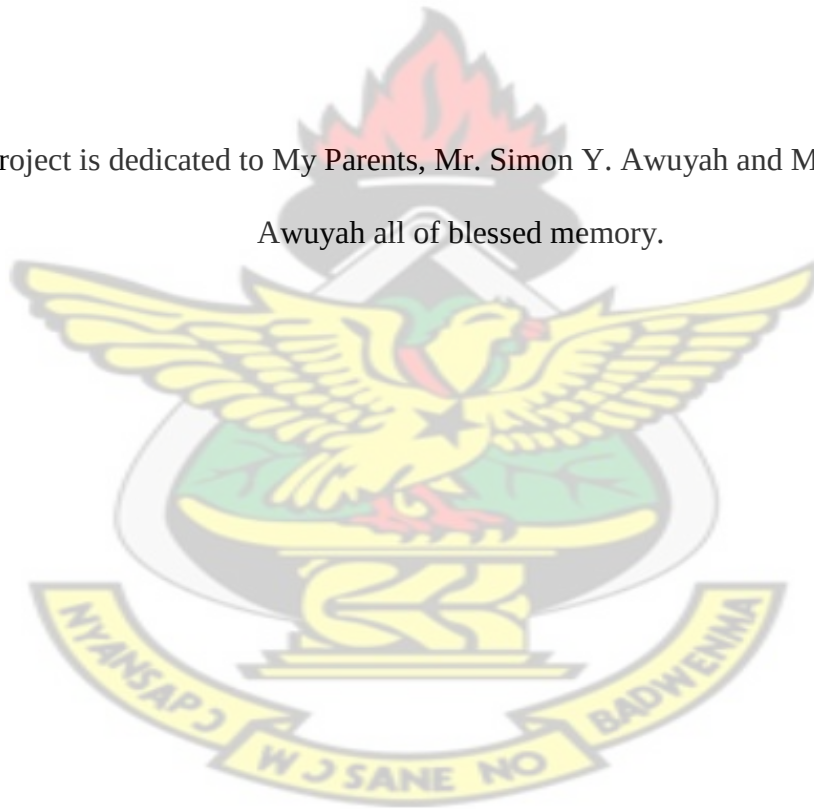
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This project is dedicated to My Parents, Mr. Simon Y. Awuyah and Mrs. Susanna A.
Awuyah all of blessed memory.



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TABLE OF CONTENTS

	Page
Acknowledgements	iv
Table of Contents	v
List of Figures	x
List of Plates	xii
List of Table	xvi
List of Appendices	xvii
Abstract	xviii
 CHAPTER ONE: INTRODUCTION	
1.0 Background to the study	1
1.1 Statement of the problem	3
1.2 Hypothesis	4
1.3 Objectives	5
1.4 Delimitation	5
1.5 Limitations	5
1.6 Definition of terms	6
1.7 Abbreviations used	7
1.8 Significance of the study	7
1.9 Arrangement of the rest of text	8

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.0 Introduction	10
2.1 Textiles	10
2.1.1 Brief history and development of textiles	11
2.1.2 Brief history of African Textiles	14
2.1.3 Fabrics in Africa	15
2.2 Textile processes and products	21
2.2.1 Textile processes	21
2.2.2 Textile products	22
2.2.3 Finishing processes	23
2.3 Yarn	25
2.3.1 Characteristics of yarn	25
2.3.2 Types of yarn	26
2.3.3 Uses of yarn	27
2.4 Design	28
2.4.1 Elements of design	29
2.4.2 Principles of design	32
2.4.3 Design concepts	35
2.4.4 Communication in design	36
2.5 History and development of Embroidery	37
2.5.1 The Norman Period	39
2.5.2 The Medieval Times	41

2.5.3 The Sixteenth Century Embroidery	42
2.5.4 The Seventeenth Century Embroidery	44
2.5.5 The Eighteenth Century Embroidery	44
2.5.6 Industrial Revolution and Embroidery	45
2.5.7 The Nineteenth Century Embroidery	45
2.5.8 Embroidery Today	46
2.6 Embroidery stitches	47
2.7 Brief history of Asantes and Asante clothing	50
2.7.1 The origin and history of Asantes	50
2.7.2 Styles and techniques of cloth production among Asantes	55
2.8 History and production of Adinkra cloths among Asantes	57
2.9 Traditional hand embroidery among Asantes	62
2.10 Symbolism and value of traditional colours and symbol.....	62
 CHAPTER THREE: METHODOLOGY	
3.0. Introduction	66
3.1 Research design	66
3.2 Library research	67
3.3 Qualitative research	67
3.3.1 Experimental research method	69
3.3.2 Descriptive research method	69
3.3.3 Population for the study	70

3.3.4 Sampling and sample size used	71
3.4 Data collecting instruments	72
3.4.1 Interview.....	72
3.4.3 Observation	75
3.5 Primary and secondary sources of data	76

CHAPTER FOUR: TOOLS, MATERIALS AND GENERATION OF DESIGNS

4.0 Introduction	77
4.1 Tools and Materials	77
4.2 Description of existing <i>Nwomu</i> designs	82
4.2.1 <i>Kukrubo</i>	82
4.2.2 <i>Kawo</i>	89
4.2.3 <i>Ntatamu</i>	90
4.3 The significance of colour in <i>Nwomu</i> designs.....	91
4.4 Design concepts developed for the project	91
4.5 Processes involved in <i>Nwomu</i> cloth design	98
4.6 Rules and guidelines	115

CHAPTER FIVE: DISCUSSION OF THE RESULTS

5.0 Introduction	116
5.1 Results and discussions of samples produced	116
5.2 <i>Kawo</i> (legs of millipedes and centipedes).....	130
5.3 The final cloth.....	131
5.4 Naming the designs.....	137
5.5 Field Research Findings.....	140

CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction	143
6.1 Summary	143
6.2 Conclusion	145
6.3 Recommendations	145

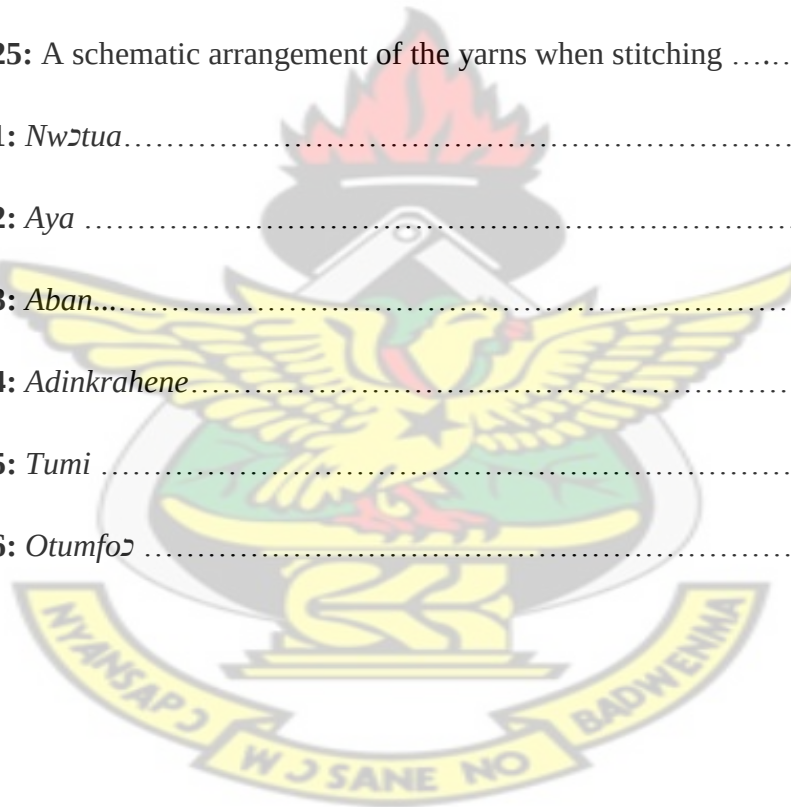
REFERENCES	148
------------------	-----

APPENDICES	154
------------------	-----

LIST OF FIGURES

Figure	Page
Figure 2.1: Types of fancy embroidery stitches.....	49
Figure 4.1: Tensioning pole and cross bar.....	79
Figure 4.2: Sketch one	92
Figure 4.3: Sketch two	92
Figure 4.4: Sketch three	93
Figure 4.5: Sketch four	93
Figure 4.6: Sketch five	93
Figure 4.7: Sketch six	93
Figure 4.8: Sketch seven	93
Figure 4.9: Sketch eight	94
Figure 4.10: Sketch nine	94
Figure 4.11: Sketch ten	94
Figure 4.12: Sketch eleven	94
Figure 4.13: Sketch twelve	94
Figure 4.14: Sketch thirteen	94
Figure 4.15: Final cloth design, sketch one	95
Figure 4.16: Final cloth design, sketch two	95
Figure 4.17: Final cloth design, sketch three	96

Figure 4.18: Schematic illustration of how the ends of the yarns are knotted.....	99
Figure 4.19: Stages involved in preparing the ‘etiri’	101
Figure 4.20: Wrapping the thread around the needle	106
Figure 4.21: Pressing the yarn around the needle	107
Figure 4.22: Inserting the thread through the eye of the needle	107
Figure 4.23: A threaded needle ready for use	108
Figure 4.24: Cross section of the stitching process	109
Figure 4.25: A schematic arrangement of the yarns when stitching	109
Figure 5.1: <i>Nwɔtua</i>	135
Figure 5.2: <i>Aya</i>	135
Figure 5.3: <i>Aban</i>	136
Figure 5.4: <i>Adinkrahene</i>	136
Figure 5.5: <i>Tumi</i>	137
Figure 5.6: <i>Otumfoɔ</i>	137



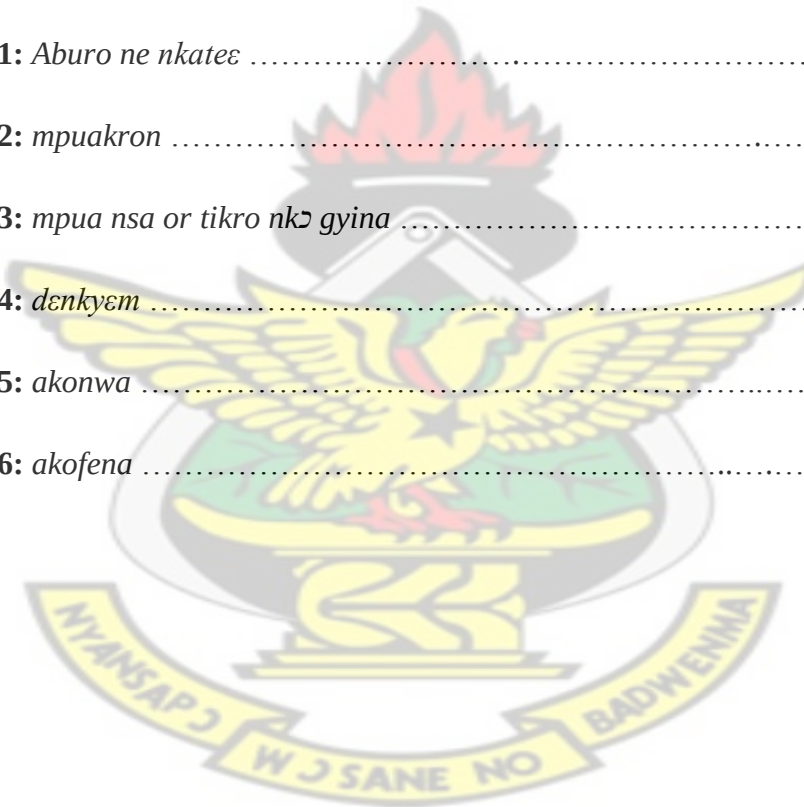
LIST OF PLATES

Plate	Page
Plate 2.1: Section of ‘ <i>The Bayeux Tapestry</i> ’	40
Plate 2.2: Duke William crosses the sea	40
Plate 2.3: The Syon Cope	42
Plate 2.4: An example of machine embroidered fabric	47
Plate 2.5: Adinkra cloth designer at work at Ntonso	60
Plate 2.6: A stamped <i>kuntukuni</i> cloth	60
Plate 2.7: Adinkra cloth with embroidery	60
Plate 2.8: A display of Adinkra cloths for sale	61
Plate 4.1: ‘ <i>etiri</i> ’ (tensioning cord)	80
Plate 4.2: Set of Kente strips (<i>ahwepan</i>)	81
Plate 4.3: <i>Sikafutro</i> – gold dust	83
Plate 4.4: <i>Asanteman</i>	84
Plate 4.5: <i>Hausa ntwɔɔyɛ</i>	85
Plate 4.6: <i>Aburo ne nkateɛ</i>	86
Plate 4.7: <i>Black and White</i>	87
Plate 4.8: <i>Kukruboɔ</i> design in red, maroon and black.....	88
Plate 4.9: “ <i>Kawo</i> ” – Centipedes	89
Plate 4.10: <i>Ntatamu</i> strips fixed in a lace fabric	90

Plate 4.11: Final design one – Stair case	96
Plate 4.12: Final design two - Combination of Kente designs	97
Plate 4.13: Final design three – Combination of Kente design	97
Plate 4.14: Yarns in hanks	98
Plate 4.15: A hank tied at a section with a blue coloured yarn.....	99
Plate 4.16: Knotted yarns	100
Plate 4.17 and Plate 4.18: Indicates position of stitched strips	102
Plate 4.19 and Plate 4.20: Edges of the strips folded	103
Plate 4.21: After folding - in	103
Plate 4.22: Aligning the ‘etiri’ to the edge of the kente strip	104
Plate 4.23: Stitching the ‘etiri’ to the folded strips	104
Plate 4.24: Tying the ‘etiri’ to the tensioning pole	105
Plate 4.25: A tensioned fabric ready to be stitched	105
Plate 4.26: The position of the needle used to secure the folds	106
Plate 4.27 and 4.28: The initial stages of the stitching process	109
Plate 4.29: Position of the needle during stitching	109
Plate 4.30: A border design for Sample sixteen	109
Plate 4.31: Image drawn onto the fabric	110
Plate 4.32: Stitching the design	110
Plate 4.33: Stitched design of ‘Gyawu atikor’	110
Plate 4.34: An embroidered strip under tension	111

Plate 4.35: Joining two plain Kente strips together	111
Plate 4.36: Sewing the Nwomu strips to the remaining plain Kente strips	112
Plate 4.37: Joined strips	112
Plate 4.38: Cloth laid on a printing table	113
Plate 4.39: Printing the first set of design	113
Plate 4.40: Position of the screen on the fabric when printing	114
Plate 4.41: Printing the second set of designs.....	114
Plate 4.42: Drying the cloth after printing	114
Plate 5.1: Sample one – <i>denkyembo</i>	116
Plate 5.2: Sample two – ‘Crisscross’	117
Plate 5.3: Sample three – ‘ <i>Kakata</i> ’	118
Plate 5.4: Sample four – ‘ <i>apremo</i> ’	119
Plate 5.5: Sample five – ‘K N U S T’ I.....	120
Plate 5.6: Sample six - ‘K N U S T’ II	120
Plate 5.7: Sample seven – ‘ <i>atwedee</i> ’	121
Plate 5.8: Sample eight – ‘ <i>denkyembu</i> ’	121
Plate 5.9: Sample nine – (untitled)	122
Plate 5.10: Sample ten – ‘ <i>nwotua</i> ’	123
Plate 5.11: Sample eleven – ‘C N C’	124
Plate 5.12: Sample twelve – ‘totemic symbols’	124
Plate 5.13: Sample thirteen – ‘ <i>Owuo atwedee 2</i> ’	125

Plate 5.14: Sample fourteen – ‘ <i>Edwene asa</i> ’	126
Plate 5.15: Sample fifteen – ‘ <i>adinkra symbols</i> ’	127
Plate 5.16: Sample sixteen – ‘ <i>adinkra symbols 2</i> ’	127
Plate 5.17: Sample seventeen – ‘ <i>nton</i> ’	128
Plate 5.18: A developed colour arrangement of the Kawo technique	129
Plate 5.19: Combination of <i>Kukrubo</i> and <i>Kawo</i> technique	129
Plate 5.20: Final cloth – ‘ <i>Sikafutro kwasiada adinkra</i> ’	130
Plate 5.21: <i>Aburo ne nkates</i>	132
Plate 5.22: <i>mpuakron</i>	132
Plate 5.23: <i>mpua nsa or tikro nkɔ gyina</i>	133
Plate 5.24: <i>denkyem</i>	133
Plate 5.25: <i>akonwa</i>	134
Plate 5.26: <i>akofena</i>	134



LIST OF TABLE

Page

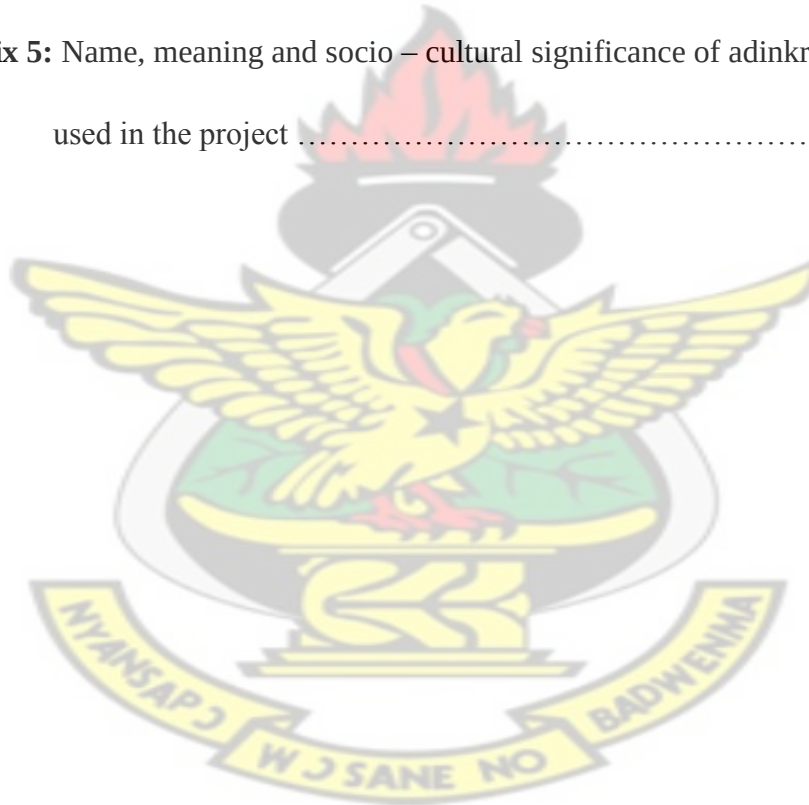
Table 3.1: Interviewee Respondent	73
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LISTS OF APPENDICES

Appendix	Page
Appendix 1: Interview guide for Sectional / Organisational heads and Supervisors....	154
Appendix 2: Interview guide for producers and manufactures of Adinkra cloths	155
Appendix 3: Interview guide for sellers and users of Adinkra cloths	156
Appendix 4: Variations of Nwomu yarn colour arrangements	157
Appendix 5: Name, meaning and socio – cultural significance of adinkra symbols used in the project	158



ABSTRACT

TITLE: EXPLOITING TECHNIQUES IN ASANTE INDIGENOUS HAND EMBROIDERY FOR ADINKRA CLOTH PRODUCTION.

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Adinkra cloth production is one of the common textiles surface designing found among Asantes today. Adinkra cloths are becoming increasingly useful and people are now developing interest on the use and preservation of this traditional textile. Even though Adinkra cloths serve as a representation of the history, culture, norms and values of the Asante people in symbolic form, this area of Asante traditional textile has not been given enough recognition. Moreover, there are other aspects of the “Nwomu” technique that needs to be exploited. In view of this, the study identified and developed some design concepts as well as incorporates symbols and motifs in the Adinkra cloth using the “Nwomu” technique. Comprehensive studies were made on the origin of Adinkra cloths as well as the art of “Nwomu” among Asantes. Design concepts were developed from existing “Nwomu” techniques, geometric shapes, totems, kente designs as well as adinkra symbols. These designs were carefully selected and exploited to suit the purpose of the study. Some samples were also produced to give more understanding on the subject. The study employed both descriptive and experimental research methods based on the qualitative research approach. As part of the study the researcher observed that the symbols and colours used in the production of Adinkra cloths are representation of the cultural values of the people of Asante and not fully abstracted objects. Indigenous cloths

such as *Birisi*, *Kobene*, *Kuntukuni*, and *Nwomu* are all part of “Adinkra cloth collections”.

A study into indigenous cloths such as the Adinkra cloth should be encouraged in vocational schools, colleges and tertiary institutions.

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CHAPTER ONE

INTRODUCTION

1.0 Background to the study

Textiles products have been used since prehistoric time with the prior aim of covering the nakedness of man. It is also considered as one of the indispensable needs of humanity. Many of the textile products seen today are produced either by weaving, knitting, crocheting, felting, embroidery, bonding, printing, dyeing, or laminating etc. With the advancement in technology, textile products as well as the techniques have gone through several modifications and developments. One of the textile decorative techniques that have survived through the test of time is embroidery.

Embroidery is a method of decorating and embellishing clothing. The use of embroidery to decorate clothes and apparels has been in existence since the prehistoric era where man began to wear clothes. Embroidery as an art form has origins that can be traced far back to the Iron Age. Historical records available (Encyclopedia Britannica, 2006) indicates that embroidery started as early as the prehistoric era and further study reveals that ancient Egyptian tomb paintings show clothes, couch covers, wall hangings, and tents decorated with embroidered materials. Greek vase paintings also show quilt suits covered with embroidery from the 7th and 6th centuries BC, and some years later the Greeks were seen dressed and adorned in embroidered garments.

The earliest surviving embroideries are Scythian, dated between the 5th and 3rd centuries BC, roughly from AD 330 until the 15th century. The Byzantium Era dominated with embroideries ornamented with gold. Meanwhile ancient Chinese embroideries have been excavated, which were believed to be dating from the “T'ang

dynasty” period (AD 618–907). Earlier records also show that a piece of embroidered fabric made of linen and woolen thread was found in the eleventh century (11th century) during the Romanesque period (art) in the year 1066 at England (Encyclopedia Britannica, 2006).

In India, embroidery was also an ancient craft, but it is from the ‘Mughal period’ (from 1556) that numerous examples have survived. Many of these embroidered works found their way to Europe from the late 17th to the early 18th century through the East India trade. Embroidery is also commonly used for decoration and beautification purposes in the western part of Africa and in Congo (Saho, 2009). Embroidery is still being used in almost all parts of the world today and it can be done either by hand or machine.

The used of hand embroidery techniques have developed over the ages into the present day Africa and subsequently into Ghana. Although hand embroidery is a widely practiced craft, today most commercially produced embroidered textiles are made by machine. Asantes, as an ethnic group, has various decorative styles and techniques of enhancing their textile products. One of such decorative styles is the traditional hand embroidery commonly known as “*Nwomu*”.

“*Nwomu*” is done basically in a plain Kente cloth to enhance its aesthetic qualities and it is characterised by vertical stripes of coloured yarns stitched in sections along the lengthwise direction of the cloth. This cloth is then printed with a dye prepared from the bark of a tree to produce a cloth known as ‘*Adinkra cloth*’. This Adinkra cloth possesses some traditional significance to Asantes, for this reason it was originally made for the ‘*Asantehene*’ and his sub chiefs. The cloth is used during funerals and other festive

occasions with the prior aim of bidding farewell to a beloved one. Today, other fabric types can also be hand embroidered with the “*Nwomu*” technique without printing the Adinkra symbols or designs in them and these fabrics can be used along side the printed ones.

1.1 Statement of the problem

The Adinkra cloth is the second most cherished cloth among Asantes apart from the Kente. Its values and significance cannot be overemphasized. Even though Adinkra symbols and designs are well known over the world, there is not much recognition of the traditional hand embroidery (*Nwomu*) among Asantes. The uniqueness of this form of art has not been fully exploited. “*Nwomu*” as a technique of traditional hand embroidery is different from the Adinkra designs (symbols). Even though some of these Adinkra symbols can be embroidered on woven fabrics, not all Adinkra cloths are treated this way.

A lot has been written on Adinkra symbols and some of the Adinkra cloths which are mostly used by Akans, but education on the “*Nwomu*” technique has not been given the due recognition. Although “*Nwomu*” cloth is part of the Adinkra cloth collections, less attention is given to this aspect of indigenous hand embroidery and the various stitching techniques that can be used. Even though the study of indigenous cloths and dyeing processes is in the syllabus of some educational institutions in the country, the interest has died out due to the inability of the instructors to encourage the youth to practice the art.

Indigenes who decorate cloths with this technique are not interested in improving the style and technique, thus resorting to the use of old designs and methods. This has resulted in the monotony of the art. Yarns easily fray off after washing and this is due to the open nature of the stitches.

Another major set-back of the “*Nwomu*” technique is the difficulty involved in using a hand needle to sew an intricate design in the form of images and symbols that join Kente strips together. This method is difficult to render in a cloth, time consuming and very expensive to produce. Not all Adinkra producers know about this technique, and even the few who have knowledge about it do not want to apply it. They rather stick to the old technique which is simple but varies in the arrangement of yarn colour. Consumers also prefer the old designs to the modern ones; as a result “*Nwomu*” designers produce these old designs to meet the demand on the market. In view of these, the study intends to identify and describe some existing “*Nwomu*” techniques used in Adinkra cloth production, and to develop new stitching techniques which will enhance the aesthetic qualities of the Adinkra cloth as well as project its philosophical values.

1.2 Hypothesis

There are other Ghanaian indigenous hand embroidery techniques that can be exploited to yield highly aesthetic and philosophical embroidered fabrics.

1.3 Objectives

The following are the objectives of the study;

1. To identify, describe and discuss some existing indigenous stitching techniques used in Adinkra cloth production.
2. To develop new design concepts incorporating inscriptions, images, and geometric shapes.
3. To produce a number of samples and a full Adinkra cloth using the new stitching techniques.

1.4 Delimitation

The study is focused on traditional hand embroidery among Asantes. It includes some selected users, producers and sellers of Adinkra cloth in Kwabre East District and Kumasi Metropolis in the Ashanti Region of Ghana. The study is limited to areas such as Wonoo, Bonwire, Adawomase, Ntonsu and Aboasu in the Kwabre East District. Other areas include the Centre for National Culture, Bantama, Manhyia, Asafo, and Asokwa in the Kumasi Metropolis. Cotton, rayon and polyester yarns were used for the project. The main fabric type used is cotton in hand woven strips, drill fabric and lace.

1.5 Limitations

The difficulty in assessing data relating to the study was of great concern since there is not much documented literature on the subject. However, there was over reliance on primary sources of data, and most resource persons interviewed were not willing to give

detailed information on the subject. This, the researcher believes was due to lack of education. This was a great challenge during the analysis and interpretation of the data. The study was limited to the use of hand needles and yarns to develop new stitching techniques.

1.6 Definition of terms

Adinkra cloth - One of the royal Asante textiles mostly made of cotton and stamped with Adinkra symbols (design).

Appliqué - Is the cutting of small pieces of cloth or other materials that are attached to the surface of a larger textile.

Ata - A traditional equipment used to convert yarns from cones and cheeses to hanks.

Embroidery - The art of decorating a textile fabric, by means of a needle and thread. This may be done either by hand or machine.

Motif - The main symbol in a design; a single element or design unit which is repeated to form a complete design.

“Nwomu” - A traditional hand embroidery technique used in Adinkra cloth production among Asantes as a way of enhancing its aesthetic qualities.

Stitch - The repeating unit formed by a thread on an embroidered cloth.

1.7 Abbreviations used

- AD** - Anno Domini (In the Christian era; used before dates after the supposed year Christ was born)
- BA** - Bachelor of Art
- BC** - Before Christ (Before the Christian era; used following dates before the supposed year Christ was born)
- CNC** - Centre for National Culture
- KNUST** - Kwame Nkrumah University of Science and Technology
- MFA** - Master of Fine Art
- MSc** - Master of Science
- WWW** - World Wide Web

1.8 Significance of the study

Adinkra cloths play myriads of roles in the preservation of the culture of Asantes. The Adinkra and the Kente cloths project the values and beliefs of the Asante people wherever they may be found. These show how important and significant these royal cloths are to the people of Asante.

The necessity and demand for Adinkra cloths have however urged the researcher to identify and discuss the various stitching designs available and to unearth the possibilities in exploiting this traditional hand embroidery technique. The study is also intended to promote and projects the culture and tradition of Asantes and subsequently Ghana through hand embroidery with the introduction of indigenous symbols and images.

Adinkra cloth producers would be encouraged to produce more dynamic and interesting designs which will attract buyers as well as bring variety into the art and this will economically bring money into their pockets. With the introduction of symbols, images, inscriptions and geometric forms, users of the Adinkra cloth will appreciate the art better and this will also help improve the usage and popularity of the Adinkra cloth. In addition to these the project would serve as a source of reference and a teaching aid to lecturers, students and researchers who would like to research into this aspect of indigenous hand embroidery among Asantes.

1.9 Arrangement of the rest of text

The introductory chapter of this project report outlines the background of the study, statement of the problem, objectives of the study, hypothesis, delimitation, limitations, definition of terms, abbreviations used, as well as the importance of the study.

Chapter two is the review of related literature which deals with definition, history and development of textiles, yarns and fabric. In addition, the chapter discusses the history and development of embroidery, the origin of the Asante people and the styles and techniques of cloth production among Asantes.

Chapter three highlights the methodologies used in executing this project. The chapter outlines and discusses the research design; population of the study, the sample size and the sampling method as well as the data collecting instruments.

Chapter four identifies the tools and material used, discusses some existing traditional hand embroidery designs used in Adinkra cloth production; and outlines the procedures followed in creating the samples and the final designs.

Chapter five deals with the discussion and interpretation of the results, as well as the main findings obtained during the study.

Summary of the study, conclusion and some recommendations are discussed in the final chapter. This is then followed by the list of references and appendices.



CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

Textiles experts over the years have played major roles in improving textile processes and products; thanks to the advancement in industrial technology. Some of these textile products and processes have achieved enormous successes both in quality as well as in production. This has made it necessary for the researcher to identify, explore and discuss one of these textile processes. The process identified is embroidery and more specifically, hand embroidery among the people of Asante in Ghana and subsequently the production of the Adinkra cloth. In view of this, literatures relating to the study that will help understand the subject matter and also to solve the research problem were reviewed.

2.1 Textiles

The term *textiles* as defined by the Encyclopedia Britannica (2006) is derived from the Latin word *textilis* and the French word *texere*, meaning “to weave”, and it originally referred only to woven fabrics. It has, however, come to include fabrics / products produced by other methods using threads, cords, ropes, braids, lace, embroidery, nets, and fabrics made by weaving, knitting, bonding, felting, or tufting. Some definitions of the term textile would also include those products obtained by the paper making principle that have many of the properties associated with conventional fabrics.

Totorra and Merkel (1996) agree that the term *textile* is derived from the Latin word *textilis*, which is based on the verb *texere*, meaning to weave but further explain textile as;

1. A broad classification of materials that can be utilised in constructing fabrics, including textile fibres and yarns.
2. Designates the constructed fabric including woven, knitted, and non - woven structures as well as lace and crocheted goods.
3. Descriptive of processes, organisations, personnel association with the manufacture of products from fibres or yarns.

2.1.1 Brief history and development of textiles

Adams (1999) explains that, the use of textiles started as far back as the prehistoric era, and development of textiles has ever since improved. Historical evidence suggests that human beings may have begun wearing clothing as far back as 100,000 to 500,000 years ago.

Sewing needles have been dated to around 40,000 years ago. The earliest definite examples of needles originate from the Solutrean culture, which existed in France from 19,000 BC to 15,000 BC. The earliest evidence of weaving comes from impressions of textiles, basketry and nets on little pieces of hard clay, dating from 27,000 years ago found in Dolni Vestonice in the Czech Republic. At a slightly later date (25,000 years) the Venus Figurines were depicted with clothing. Those from Western Europe were adorned with basket hats or caps, belts worn at the waist, and a strap of cloth that

wrapped around the body right above the breast. Archaeologists have discovered artifacts from the same period that appear to have been used in the textile arts in 5000 BC (Wikipedia Encyclopedia, 2010).

The discovery of dyed flax fibres in a cave in the Republic of Georgia dated to 34,000 BC, suggests textile-like materials were made even in prehistoric times. Early woven clothing was often made of full loom widths draped, tied, or pinned in place. However, for the main types of textiles, plain weave, twill or satin weave, there is little difference between the ancient and modern methods (Kvavadze et al., 2009).

Fabrics were made from animal fibres, plant sources, mineral source, and synthetic sources. Cotton was spun, woven, and dyed since prehistoric times. Cotton fabrics were used as clothing for the people of ancient India, Egypt, and China. Hundreds of years before the Christian era cotton textiles were woven in India with matchless skill, and their use spread to the Mediterranean countries, in the 1st century. Arab traders brought fine Muslin and Calico to Italy and Spain during this period. As textiles became more sophisticated, they were also used as currency for trading. Evidence exists for production of linen cloth in Ancient Egypt in the Neolithic period, thus 5500 BC. The earliest evidence of silk production in China was found at the sites of Yangshao culture in Xia, Shanxi, where a cocoon of bombyx mori, the domesticated silkworm, cut in half by a sharp knife is dated to between 5000 and 3000 BC (Boas, 1951).

Hairs from animals were used as clothing many years ago before the discovery of cotton. It is believed that the prehistoric man used animal skin as clothing to protect

himself from bad weather and animals. Hair, along with fibres from various plants and trees, were used to create bedding, clothing, blankets, window, door and wall hangings.

The production of textiles is a craft whose speed, rate and scale of production have been altered almost beyond recognition by industrialisation and the introduction of modern manufacturing techniques. During the industrial revolution, textile production was mechanised with machines powered by waterwheels and steam-engines. Sewing machines emerged in the nineteenth century. Developments of textiles continued in individual homes, market places and in the textile industries. Textiles were not only made in factories, before this they were made in local and national markets. Between 1810 and 1840 the development of a national market prompted manufacturing which tripled the output's worth. This increase in production created a change in industrial methods, such as the use of factories instead of hand made woven materials that families usually made, and developments of textiles have continued till today. Alongside these developments were changes made in the types and style of clothing worn by humans. Synthetic fibres such as nylon were invented during the twentieth century. Clothing and textile manufacture expanded as an industry so that such unions as the Amalgamated Clothing Workers of America and the Textile Workers Union of America were formed early in the twentieth century. Major influence on subsequent developments in the industry started during the 1960s (Wikipedia Encyclopedia, 2010).

2.1.2 Brief history of African Textiles

Ancient African indigenes were believed to have also used animal skins as clothing before discovering cotton fibre. Many of the ancient designs and weaving methods are still being use today and remain an important part of African lifestyles. The development of textiles in Africa over the years can be traced during the industrial trade in the Mediterranean into the northern part of Africa. This has resulted in the modernization of most ancient designs and weaving methods developed in Africa. Weaving methods and fibres used today varies within the African continent. For instance, narrow strip weaving is mostly used in West Africa and in the Democratic Republic of Congo (formerly called Zaire). However, the weaving is slightly different in the Democratic Republic of Congo in that they incorporate raffia palm leaf to create their *Kuba cloth*. Traditional handmade looms are still used today to weave various textiles. The looms are usually handed down from generation to generation. During the weaving process, they are placed in horizontal, vertical, or angular positions (Boas, 1951).

In Africa, textiles are often enhanced through hand-stamping, stenciling, dyeing, painting, or embroidery. Sometimes soil is used to make paint, and dyes can originate from herbs, leaves, tree bark, nuts, fruits, vegetables, and grasses; these are mixed with water or other chemicals such as zinc, sulfur, or iron to obtain the desired thickness and hue.

According to Hagan (2010), colours in African textiles hold different cultural meanings based on village or family affiliations. In some parts of Nigeria, red is a threatening colour worn by chiefs to protect them from evil, but it is a sign of

accomplishment in other areas, on the other hand red is used for mourning cloths by the Akans in Ghana and for burial cloths in Madagascar.

Traditionally, many African textiles were not cut or tailored. Instead, they were draped and tied to suit various occasions. But with the current interest in textiles outside of Africa, textiles and handmade fabrics are being cut and fashioned into contemporary clothing and home furnishings, including pillows, upholstered furniture, wall hangings, blankets, and throws. When authentic African textiles are fragile or rare, we recommend having them professionally mounted or framed for use as wall hangings (Boas, 1951).

2.1.3 Fabrics in Africa

African fabrics are some of the most interesting and distinctive fabrics in the world. This is because of its uniqueness among other fabrics (Polakoff, 2010).

Gilfroy (1987) also postulates that:

“...fabrics made in Africa represent all of Africa's colours, wildlife, people, culture and values. African fabrics have different characteristics depending on the region where they are made. Strip weaving is well known in the western part of Africa, and most fabrics produced from these areas are made of individual strips joined together”.

From the production of cotton, spinning, weaving, designing, dyeing, printing, stamping, embroidery and other finishing treatments are all done by African indigenes. The following are some fabrics and cloths produced in Africa as described by Saho (2009); Aso oke cloth, Adinkra cloth, African Batik, Ewe cloth, Khasa, Korhogo cloth, Kuba cloth, Manjaka cloth, African Brocade fabric, African Tie Dye, and Africa embroidered cloth.

Aso oke cloth

Aso oke cloth is a woven fabric which is very strong and handy. *Aso* means cloth and *oke* means hill or top of something i.e. a high standard cloth. The Yoruba in Nigeria reserved this cloth for funerals, religious rituals, and other formal occasions. This cloth is woven in 4-inch wide strips that vary in length. Some older *Aso oke cloths* are characterised by their openwork or holes. It is known for supplementary inlays, which are generally made of rayon threads on a background of silk cotton (Saho, 2009).

Adinkra cloth

According to (Saho, 2009) *Adinkra cloth* is made by embroidering wide panels of dyed cotton and stamping them with carved calabash symbols. Adinkra patterns are numerous, ranging from crescents to abstracts forms; each of the symbols carries its own significance and represents events of daily life activities. Adinkra means “farewell” in the Akan language and was used for funerals to bid formal farewell to guests. Dark colours, like brick red, brown, or black, were associated with death while white, yellow, and light blue were worn for festive occasions. The cloth is still produced in Ghana today.

Adire cloth

Adire cloth comes from Nigeria. There are two types of *Adire cloth*. One is made by tie dying or by stitching a design with raffia. The second method is painted freehand or stenciled using a starchy paste made from cassava or yam. Both styles of *Adire cloths* can be found today (Saho, 2009).

Batik cloth

Batik cloth is produced by applying melted wax on the fabric. A design is first drawn onto the fabric before the wax is applied. To produce a multicolour effect, colours are applied on top of the other, beginning with the lightest colour. For instance, a cloth is dyed yellow, and then melted wax is applied to areas that are yellow to resist the yellow. The cloth is dried after each stage of the dyeing process, and then the wax is removed by scraping or boiling it off the cloth, a process known as dewaxing (Saho, 2009).

Ewe cloth

Ewe cloth is similar to the Asante Kente cloth. This cloth is named after the Ewe people who originated from the southeastern region of Ghana. There are two types of *Ewe cloth*. Wealthy people wear a type of *Ewe cloth* that is elaborately decorated. It is made of silk, rayon, or cotton, and typically contains inlays of symbols representing knowledge, ethnics, and morals as applied in one's daily life. The other type is made from simple cotton fibres and display modest patterns. It also contains smaller and simpler versions of the more elaborate designs, but they always have a beauty of their own (Saho, 2009).

Khasa cloth

Khasa cloth consists of heavy woolen striped blankets that are woven by the Fulani of Mali. The textile is typically 6 to 8 feet long and woven in 8-inch wide strips. Although the traditional blanket is white, it is also common to have yellow, black, or red strips. *Khasa* cloth is usually ordered for the cold season (Saho, 2009).

Kente cloth

Kente cloth is produced in Ghana by the Asante people. *Kente cloths* are typically woven in 4-inch wide strips on a hand loom. *Kente* patterns have religious, political, and even financial significance. Today, there's a pattern to indicate the importance of almost any special occasion, and colours are chosen to reflect customs and beliefs. Because of its vibrant beauty and regal legacy as a cloth fit for kings and queens. Currently, authentic *Kente* remains one of the most popular fabrics on the textile market (Patrick, 2005).

Korhogo cloth

Korhogo cloth is made by the *Senufo* people of the Ivory Coast. Approximately 5 - inch strips are hand-woven. Mud is painted on the cloth to create patterns of animals, men in ceremonial dress, buildings, or geometric designs. The soil used to make this mud is usually black, brown, or rust and is collected throughout West Africa. This textile, which comes in various lengths and widths, is used for clothing as well as for pillows, wall hangings, and folding screens (Saho, 2009).

Kuba cloth

According to (Saho, 2009) *Kuba cloth* originated from the Democratic Republic of Congo (also known as Zaire). This textile is tightly woven using strands from raffia palm leaves. Raffia strands are also interwoven between the warp and weft to create intricate geometric patterns. *Kuba cloth* comes in two styles. One has a rich and velvety pile; the other has a flat weave with little or no pile. To create *Kuba cloth*, vegetable dyes are used on raffia threads that are then embroidered onto finished cloth to create patterns such as

rectangles, lines, creative curvatures, and circles. *Kuba cloth* is used for ceremonial skirts, wall hangings, or mats for sitting and sleeping.

Manjaka cloth

Manjaka cloth is woven in 7-inch wide strips that are sewn together; this textile is distinguished by its intricate geometric patterns. *Manjaka cloth* originated from Guinea-Bissau and has complex designs. For example, if a section of *Manjaka cloth* has triangles, the background area will feature a different pattern (Saho, 2009).

Mud cloth

Mud cloth originated from Mali and once worn by hunters. *Mud cloth* is made from narrow strips of hand-spun and hand-woven cotton, which are sewn together in various widths and lengths. The cloth is first dyed with a yellow solution extracted from the bark of the *M'Peku* tree and the leaves and stems of the *Wolo* tree; the solution acts as a fixative. Then, using carved bamboo or wooden sticks, symbolic designs are applied in mud that has been collected from riverbanks and allowed to ferment over time. After the mud is applied to the cloth, it is dried in the sun. The process is repeated several times to obtain a rich colour that are deeply imbued in the cloth. When it reaches the desired hue, the cloth is washed with a caustic solution to remove debris and to brighten the background. Today, *mud cloth* comes in background shades of white, yellow, purple, beige, rich brown, and rust (Patrick, 2005).

African Brocade fabric

African Brocade fabric is made from 100 percent cotton. Unique designs are intricately woven into shiny and starchy fabric. This cloth is also called *Basin fabric*. Brocade or Basin fabric is very popular in West Africa (Saho, 2009).

African Tie Dye

African Tie Dye fabric is popular in Africa. A common method of tie dyeing is the formation of patterns of large and small circles in various combinations. This is found particularly among people from Senegal, Ghana, Gambia, and the Yoruba of Nigeria. There are several techniques used for resist-dyeing. For instance, a cloth is tied or stitched tightly so that the tying or stitching prevents the dye from penetrating the fabric, and sometimes starchy substance is applied to the textile. This will resist the dye giving pale areas on a dark background when it is washed at the end of the dyeing process. Another method of tie dyeing consists of folding a strip of cloth into several narrow pleats and binding them together. The folds and the binding resist the dye to produce a cross-hatched effect. A very popular tie-dyeing technique in Nigeria is to paint freehand with starch before dyeing in indigo in order to resist the dye. These are only a few examples of tie-dyeing methods used in Africa today (Polakoff, 2010).

African Embroidery

Textile fabrics with embroidery display beautiful artwork and can be found throughout Africa. Usually, patterns are drawn onto the fabric and then stitched by hand or by machine in a complementary colour of thread. Embroidery with long threads was not unknown and the production of plush – like cloth is best known from central Africa.

Here the embroidery thread is passed vertically through the fabric and brought back again, after having been knotted or not, and the ends are then cut off above the surface of the fabric to yield pile (Vasina, 1984).

2.2 Textile processes and products

2.2.1 Textile processes

Textile processes are the individual procedures, guidelines and techniques which fibres, yarns and fabrics go through to become finished textile end - products for specific purpose. Wikipedia Encyclopedia (2010) describes some fabric manufacturing processes that can be applied in the domestic setting and the industry. These processes include; weaving, knitting, crocheting, lace, and embroidery.

Weaving is a textile production method which involves interlacing a set of longer threads (called the warp) with a set of crossing threads (called the weft). This is done on a frame or machine known as a loom, of which there are a number of types. Some weaving is still done by hand, but the vast majority is mechanised (Adu - Akwaboa, 1994).

Adu - Akwaboa added that *Knitting* and *crocheting* involve interlacing loops of yarn, which are formed either on a knitting needle or on a crochet hook, together in a line. The two processes are different in that knitting has several active loops at one time on the knitting needle waiting to interlock with another loop, while crocheting never has more than one active loop on the needle.

Lace is made by interlocking threads together independently, using a backing and any of the methods described above, to create a fine fabric with open holes in the work. Lace can be made by either hand or machine.

Embroidery is simply a needle work. Working with needle and thread / yarn on fabric or garment aimed at enhancing its appearance (Adu - Akwaboa, 1994).

2.2.2 Textile products

According to Wynne (1997), textile products seen today are as a result of simple and complex industrial processes that can best be understood by the textile industrialist. Some end-products of textiles include fabrics for apparel, curtains, upholstery, bed sheets, knitted Jumpers, shirting, swimmer wear, towels, tights and trousers.

Products made of textiles range from the most common to the most complex of all uses; textiles are used for clothing and containers such as bags and baskets. In the household, they are used in carpeting, upholstered furnishings, window shades, towels, covering for tables, beds, and other flat surfaces. In the workplace, they are used in industrial and scientific processes such as filtering. Other uses of textiles include flags, backpacks, tents, nets, cleaning devices such as handkerchiefs and rags, and transportation devices such as balloons, kites, sails, and parachutes. Fibreglass and industrial geotextiles are other uses of the textile that can be used in strengthening and backing composite materials. Textile products are also used in the hospital, military and defense (Wikipedia Encyclopedia, 2010).

One of the most important and widely used textile products is fabric (for apparel). The word fabric is derived from a Latin term *fabrica*, which means artisan's

workshop or structure. A fabric is defined by Tortora and Merkel (1996) as a flexible sheet material that is assembled of textile fibres and/or yarns that are woven, knitted, braided, netted, felted, plaited, or otherwise bonded together to give the material mechanical strength.

2.2.3 Finishing processes

According to Collier (1974) textile finishing covers an extremely wide range of activities which are performed on textiles before they reach the final consumer. They may be temporary, or permanent, as in the case of a permanently pleated skirt and calendared textile fabrics. However, what can be said is that all finishing processes are designed to increase the attractiveness or serviceability of the end-product. This could involve such techniques as putting a glaze on an upholstery fabric which gives it a more attractive appearance, or the production of easy-care finishes on dress fabrics which improve the performance of dress wear. A further aim of textile may be described as improving customer satisfaction. Textile finishes may be grouped into two; chemical and mechanical / physical finishes.

(a) *Mechanical or physical finishing processes* include stentering, calendaring, the use of additives, beetling, raising, milling, mercerizing, chlorination, softening, embossing and heat setting.

(b) *Permanent and chemical finishes* include crease - resistant finishes, anti-shrink treatments, moth – proofing, flame – proofing (flame retardant finishes), water- proofing, bonding and laminating (Collier, 1974).

After production some textiles are often dyed, thanks to advancement in technology fabrics are available in almost every colour. Coloured designs in textiles can be created by weaving together fibres of different colours, adding coloured stitches to finished fabric (as in embroidery), creating patterns by resist dyeing methods, tying off areas of cloth and dyeing the rest (tie-dyeing), or drawing wax designs on cloth and dyeing in between them (batik), or using various printing processes on finished fabric. Textiles are also bleached; this is to make them pale, white and brighter (Collier, 1974).

Textiles are sometimes finished by chemical processes to change their characteristics. In the 19th century and early 20th century starching was commonly used to make clothing more resistant to stains and wrinkles. Since the 1990s, with advances in technologies such as permanent press process, finishing agents have been used to strengthen fabrics and make them wrinkle free, developing permanent treatments based on metallic nanoparticles for making textiles more resistant to things such as water, stains, wrinkles, and pathogens such as bacteria and fungi (Collier, 1974).

More so today than ever before, textiles receive a range of treatments before they reach the end-user. From formaldehyde finishes (to improve crease-resistance) to biocidal finishes and from flame retardants to dyeing of many types of fabric, the possibilities are almost endless. Embroidery may not be a textile finishing process but can be applied to textile products as a means of decorating and enhancing the beauty of the product permanently (Wikipedia Encyclopedia, 2010).

Colour fastness: This is the ability of the substrate to maintain its colour despite external factors such as perspiration, rubbing or washing. There are two aspects to fastness:

change (alteration in the depth of shade); and *staining* (transfer of colour from the substrate onto another substrate).

2.3 Yarn

Tortora and Merkel (1996) define *yarn* as a continuous strand of textile that may be composed of endless filaments or shorter fibres twisted or otherwise held together. Yarns may be single or ply and form the basic element for *cabled yarn*, *fabric*, *thread*, and *twine*. Yarns can be utilised in many such fabric-making processes as weaving, knitting, crocheting tatting, netting or braiding, depending on the result desired and the character of the yarn. *Filament yarns* are made from silk or manufactured fibres. *Spun yarns* are made from short staple lengths of fibre that occur naturally in cotton, linen, and wool and that can be cut from manufactured fibres or silk.

Textile yarn is an assembly of substantial length and relatively small cross section of fibres and/or filaments with or without twist. *Yarns* are long, fine and flexible, made from staple fibres and/or continuous filaments, held together with or without twist (Wynne, 1997).

Wikipedia Encyclopedia (2010) holds the view that a *yarn* is produced by spinning raw wool fibres, linen, cotton, or other material on a spinning wheel to produce long strands.

2.3.1 Characteristics of yarn

Textile is an essential part of humanity. In every area of human endeavour, there is the use of textile or textile product. From bed covers, dress made in a variety of woven or knitted clothes, household upholstery and domestic products, interior decorations to medicine and defense, are all made from textiles formed and held together by yarns.

According to Wynne (1997) the end-product requirements of many of these textiles are very different, hence different characteristics of yarn is needed for a particular end product. Carpet yarns need to be bulky, resilient and wear resistant; underwear has to be made from soft, absorbent, smooth yarns; and seat belts must be composed of optimum-strength yarns. Care must be taken when designing yarns to ensure that the character and properties of the yarns are correct for the end-product. Often a compromise balance of properties is accepted since optimisation of any one property can usually only be obtained at the expense of another. Strength, elasticity, extension, handle, resistance to abrasion, appearance and aesthetic appeal of the yarn must all be viewed in the light of the end-product requirements.

She further explained that the properties and characteristics of yarns are obtained partly from those of the constituent fibres, and partly from the way that the fibres are arranged, that is the yarn structure. Differences in the structure of some yarns may be subtle, even under a microscope, but they lead to major differences in the end-product performance.

2.3.2 Types of yarn

Yarns may be classified into two; *staple* and *filament* yarns.

(a) Staple fibre yarns: *Spun-staple yarns* consist of staple fibres assembled and bound together by various means (usually twist) to produce the required characteristics such as strength, handle and appearance (Wynne, 1997).

There is a vast range of staple fibre yarns that can be classified in a number of ways: by fibre length (short staple being less than 60 millimetres, long staple greater than 60

millimetres); by yarn construction (single, plied, cabled, multiple, fancy); and by spinning method, which is a much more detailed of classification (Wynne, 1997).

(b) Continuous filament yarns are produced either by combining the required number of filaments together as in the silk throwing process or, more commonly, by producing simultaneously in one spinning operation, as in the case of man-made fibres. The typical filament yarn is, therefore collection of parallel filaments lying close together and virtually straight, running the whole length of the yarn. As the filaments are as long as the yarn itself, there is no need for them to be bound together. Yarns with one filament are referred to as *monofilaments* and those with more than one as *multifilament* (Wynne, 1997).

Coloured yarns: Coloured yarns are yarns which may be from filament or staple fibres. These are yarns that have gone through permanent dyeing and colouring finishes which makes them suitable for special purposes such as sewing, weaving, embroidery, knitting, and crocheting (Collier, 1974).

2.3.3 Uses of yarn

The foundation (the basic structure) for every textile product as explained earlier is the fibre and subsequently yarns. Uses of textile yarns ranges from simple thread to the more complex weave structures. Yarns can be used for knitting, crocheting, weaving, making yarn rope, macramé, friendship bracelets, tying packages, decorating (as in embroidery and appliqué), arts and crafts, tying up veggies / plants, tying up hair, playing with kittens and a host of others. Yarns are packaged and marketed in hanks, cones and cheeses (Wikipedia Encyclopedia, 2010).

2.4 Design

Tortora and Merkel (1996) define *design* as an arrangement of form or colours, or both, to be implemented as ornamentation in or on various textile materials (substrate). Designs or patterns may be woven or knitted onto the decoration; or a blend of colours may brighten to improve the design or pattern. Adu – Akwaboa (2001) on the other hand explain design to be a careful arrangement of accepted elements following certain principles. It is the organisation of both the elements and the application of the principles to put parts into a useful unit.

Design is that area of human experience, skills and knowledge which is conceded with man's ability to mould his environment to suit his material and spiritual need. Design is the planning that lays the basis for making of every object or system. In a broader way it can be used as a noun or a verb. Design as a noun informally refers to the construction of an object or a system, while 'to design' (verb) refers to the making of the plan to a product. Design is essentially a rational, logical, sequential process intended to solve problems or initiate changes in man – made things (Wikipedia Encyclopedia, 2010).

Design is an attentive activity, guided by aims and objectives. It refers to planned and organized actions intended to bring about some predetermined outcome although there may also be accidental results. It clearly reveals that before one produces a design, the item, artifact or product to be executed should be planned. The process begins with the identification and analysis of a problem and process through structured sequence in which information research and idea explored are evaluated until optimum solution to the

problem or need is devised. It is important to design before any work of art is executed because good design is the basis for quality in all the arts (Adu-Akwaboa, 1989).

In order to achieve a better result and product when designing, one must follow certain elements and principles of design; some of these design elements and principles are explained at the next sub-topics.

2.4.1 Elements of design

Adu - Akwaboa (2001) expatiates on the importance of the elements and principles of design in textile designing. Everyone is attracted to a particular textile design (or product) based on the way and manner these elements and principles of design have been well utilised. Definitely, there is something in the design (or product) that might have caused the attention of the observer; line, shape, size, colour, light, emphasis or dominance, rhythm, contrast, texture, dot, motif, balance, layout, harmony etc. These elements and principles when arranged well make every design attractive and appealing to the observer. The following are some elements of design applied in every visual form of design especially in textile design;

Dot and line

A *dot* may also be known as a *point* in some literatures. It is a single mark in space with a precise, but limited, location. Alone, it can present a powerful relation between negative and positive space. A line on the other hand is simply defined as the path traced by a moving point or a continuous succession of dots.

Dots and lines are used in everyday activity. In the language of art, however, a line can have many qualities, depending on how it is drawn. The direction of a line can express

different emotions and feelings. According to Adu – Akwaboa (2001), there are four primary directions of a line; vertical, horizontal, left oblique and right oblique.

A *vertical line* seems to stand stiffly at attention, a *horizontal line* lies down, and a *diagonal line* seems to be falling over. By analogy with a straight line being the shortest distance between two points, a person who follows a straight, clear line in thought or action is believed to have a sense of purpose, “straight” is associated with rightness, honesty, and truth, while “crooked”- whether referring to a line or a person’s character, denotes the opposite (Adams, 1999).

Shape and form

A shape is described as a series of lines (in different directions) joined together to form an enclosed area. A shape is a self contained defined area of geometric or organic form. A positive shape in a painting automatically creates a negative shape. The terms *form* and *shape* are often used synonymously. There are two major types of shape; *natural shapes* (free forming shapes) and *geometric shapes* (Adu – Akwaboa, 2001).

Like lines, shapes can be used to convey ideas and emotions, open shapes create a greater sense of movement than closed shapes. Specific shapes can suggest different ideology in our everyday lives, example square shapes denotes stability, reliability and symmetry.

Texture

According to (Adu – Akwaboa, 2001) texture is the quality conveyed by the surface of an object. Everything we see has texture. This may be an actual surface, or a simulated or represented surface. Textural appearances can be generated using any of the

elements of designs stated above. There are four types of textures; *Actual textures* (tactile, physical, rough); *Simulated textures*; *Abstract textures* (conceptual) and *invented* (organic) *textures*. Physical textures are the real textures of things seen and felt with hand, and feel is just as it appears. It is a true texture both visually and physically. Simulated texture is that surface that looks real but in fact is not, they imitate the original texture to look identical or real. Abstract textures are those that indicate clue of the original texture quality (Adams, 1999).

In every work of art, there are areas that are attractive to every observer; textures also play a major role in the aesthetic nature of the work. With this in mind, textures are always planned with the other elements of design in any given composition (Adu – Akwaboa, 2001).

Size

Size is determined by the spaces between lines that go together to form shapes and these differ in many respects. The size of an object can be determined in relation to another. Sizes are also important in textile design since it shows the concept the designer wants to achieve (Adu – Akwaboa, 2001).

Colour

He further added that colours can be grouped into three basic categories; *Primary colours*, *Secondary colours*, and *Tertiary colours*.

Primary colours are colours on the colour wheel (colour chart) that cannot be produced by mixing any other colours. These colours are red, yellow and blue.

Secondary colours are a combination of two primary colours in their equal proportions; that is, red and yellow produces *orange*, red and blue produces *violet*, and yellow and blue produces *green*.

Tertiary colours are produced when two secondary colours are mixed together in their equal proportion. This in effect is the result of mixing the three primary colours together with one predominating or being in excess, example orange + green gives *Citron*, green + violet gives *Olive*, and Orange + violet gives *Russet* (Adu – Akwaboa, 2001).

2.4.2 Principles of design

The principles of art can be defined as a set of rules or guidelines which enable every textile design to create a well balanced composition in a work of art. They are combined with the elements of design in the production of any textile piece. There are several principles of design that serve as variables, values and attitudes that underline any modern design. These principles include balance, rhythm, emphasis, harmony, variety, proportion, contrast and unity. The designer's purpose drives the decisions made to achieve appropriate scale and good proportion; and the degree of harmony between all the elements is achieved through the balance of unity and variety (Wikipedia Encyclopedia, 2010).

The following are some principles of design applied in every visual form of design especially in textile design;

Balance and Harmony

Wikipedia Encyclopedia (2010) defines balance as the stability achieved through even distribution of weight on each side of the vertical axis. Like nature, balance is

essential. Balance can either be symmetrical (in balance) or asymmetrical (imperfect balance) but still pleasing to the eye. A small area can be made to balance a large area if the small area is of importance to the designer and vice versa. Harmony occurs in the use of colour and other elements of design. A work of art is said to be well balanced, if the elements of design used are in the right proportion.

Layout

This may be described as the tracing paper plan for a textile design. Layout or arrangement of motifs is an important process in textile designing. A layout may be described as the placement of a motif in relation to other motifs in a design, considering the distance, shape and sizes of each motif. The direction of the motifs when arranging them is very important. Motifs can be arranged differently when designing, one; one-way direction with the right side pointing upwards or downwards, two; two-way direction with some of the motifs pointing in opposite directions. There is also a four-way direction, when motifs are pointing to all the cardinal directions in an orderly manner. The last but not the least is a tossed arrangement, i.e. when the motifs are arranged randomly or in a tossed manner (Adu –Akwaboa, 2001).

Emphasis or Dominance

According to Wikipedia Encyclopedia (2010) emphasis is defined as the focal point in every work of art; it is where design principles or meaning are concentrated. Emphasis can be applied to one or more of the elements used to create difference. It creates attention for the observer.

Rhythm

Rhythm or Movement refers to the delusion of activity or speed in a composition or design. It is a way of combining elements to cause the viewers eye to move over the entire artwork in a specific direction. Movements are obtained by the use of wavy lines and / or the way the motifs have been arranged in relation to other elements of art in the design (Wikipedia Encyclopedia, 2010).

Unity

Unity also known as harmony or balance in some literatures is the comprehensiveness of related parts in a work of art. It is an entity that is a coherent body of ideas. Unity occurs whenever all the elements in a design combine to form a consistent whole. This principle acts a lot like the principle of balance. Yet, unity defers from balance in the sense that, all balanced elements form harmony in a design as a whole but is not so with unity (Wikipedia Encyclopedia, 2010).

Variety

Variety is the quality or state of having different forms or types. These types could be in sizes, colours, and types of motif used.

Contrast

This is the opposite of balance. Contrast usually describes characteristics of art elements in opposition; from subtle to extreme or intense. For example, light areas in contrast to dark areas; highly textured areas as opposes to smooth areas; and contrast

between complementary colours. Unless a feeling of chaos and confusion are what one is seeking, it is a good idea for artists to carefully consider where to place areas of maximum contrast in a work of art (Wikipedia Encyclopedia, 2010).

These elements and principles of design play a major role in every textile design especially in the art of embroidery.

2.4.3 Design concepts

A design concept is an idea for a design. For example designing a cloth for a king; it usually begins with a design croquis / sketch, which is a representation of the idea that is not fully finished or implemented the way the final product will be. Croquis and sketches may be described as the layout of design in balance but not in repeat. In every design concept the following are recommended; a rough layout, arrangement of motifs, establishing design size, drawing the motif, refining the layout, identifying technique and colour(s) to use, and transferring the ideas into the final work (Adu - Akwaboa, 2001).

Every artist is supposed to always have an idea (design concept) in mind as the basis for design generation. An *idea* is described as a theme or motif that forms the basis of a piece of work throughout its development. Themes guide artists to generate layout on how to go about the final work and also leads to the creation of motifs. A *motif* in textiles ‘is the main symbol, a single element or design unit which is repeated to form a complete design suitable to be printed on a fabric.’ Motifs are building blocks on which textile design are created (Adu - Akwaboa, 2001).

2.4.4 Communication in design

According to Wikipedia Encyclopedia (2010), communication in design is concerned with how media intermission such as human interaction, textile design, prints design and digital pieces of work communicate with people or observers. The term communication design is often used interchangeably with visual communication. *Visual Design* is the design working in any media or support of visual communication. This is a correct terminology to cover all types of design applied in communication that uses visual channel for transmission of messages.

Communication in design is a mixed discipline between design and information - development which is concerned with how a particular medium such as printed, crafted, electronic media or presentations communicate with people. A communication design approach is not only concerned with developing the message aside from the aesthetics in design, but also with creating new media channels to ensure the message reaches the target audience or observers (Wikipedia Encyclopedia, 2010).

Every design seeks to attract, inspire, create desires and motivate the people to respond to messages the design possesses, with a view to making a favorable impact for humanitarian purposes. The design process should involve strategic thinking, creativity, and problem-solving. This is necessary in every design concept development, so as to send the right message(s) to the observers using motifs in the design. s

2.5 History and development of Embroidery

Embroidery as an art of decorating fabric or other materials by stitching designs using thread or yarn and a needle. Embroidery is not a method of construction of fabric but, rather a method of decorating them. Embroidery is sometimes misinterpreted or misapplied as appliqué (Madhavi, 2010).

John (1967) also defines embroidery as the use of yarns applied with needle in a variety of stitches to form a decorative pattern. Embroidery is a skill that has been practiced for many centuries. The translation of writings from classical Greece includes many references to fine embroidery. The ancient Greeks considered weaving and embroidery to be fitting occupations for goddesses and noble women.

Embroidery can be done either by hand or machine. Sometimes other materials such as metal strips, precious and semi-precious stones, and shiny flecks are used to add to this decorative stitching technique.

Hand embroidery involves stitching embroidery designs by hand onto the fabric using hand needles. This process is time consuming and painstaking, but gives unique and interesting result (Pain, 1990).

The use of embroidery to decorate clothes has been around since man began to wear clothes. A method of decorating and embellishing clothing, embroidered designs came about as a result of hard work and care. Embroidery as an art form has origins that can be traced far back to the Iron Age. The discovery of embroidery began when primitive man discovered that he could use thread to join pieces of fur to make clothes. As a natural progression, it was discovered that the same thread could be used to make decorative

patterns on the clothes. Primitive man also used colourful beads, stones and bones to add to these decorations (Encyclopedia Britannica, 2006).

According to “Embroidery history” (n. d) embroidery is one of the oldest art forms that have been used since prehistoric times to decorate fabrics for ecclesiastical purposes, costume, domestic uses and secular ceremonial articles.

One interesting Greek textile showing evidence of embroidery has been dated at 500BC and provides some of the earliest evidence of the embroidery skills. It is believed that embroidery was practiced long before this date (Wace, 1948).

English historical records available indicates that there was emphasis on ecclesiastical embroidery works in the 10th and 11th centuries, and in the 18th century embroidery for costume and apparel were the most important. Later, ceremonial embroidery came to the forefront and was used by a large number of people. With the introduction of Christianity came the development of crafted embroidery works, history tell of royal gifts given to the monks and priests, were embroidered robes that were to be used for making vestments and church ornaments. King Athelstan gave a large number of articles to the shrine of Saint Cuthbert. These came to be known as the *Durham Embroideries*. These embroidery works were later found in the Cathedral in the 19th century. They consist of a stole and tunic, embroidered in red, blue, green, purple and gold thread on a linen ground lined with silk. The design of the stole has the Holy Lamb with figurers of the Apostles on each side. It was believed to be produced in the 10th Century (Embroidery history, n. d).

Examples of some embroidery works are still surviving till date, samples can be found from Ancient Egypt, China, Greece, Persia, France, India and England. Every country has

its own distinctive style of embroidery, which incorporates the culture and imagery from their history and tradition (Madhavi, 2010).

2.5.1 The Norman Period

Many scenes from history are often found embroidered onto fabrics. One of the most famous decorative textiles ever made was created by embroidery. It is known as the *Bayeux Tapestry* (Tortora, 1987).

The “*tapestry*” (sometimes synonymous to embroidery) is actually a piece of embroidery almost 70 metres - 228ft. long and 50cm -18ins high and half inches deep (Plate 2.1 and 2.2). It consists of eight lengths of linen embroidered with dyed woolen threads and includes 58 scenes of Norman Conquest and has Latin inscriptions. The first ones depict the preparation for the conquest of England by duke William of Normandy, after Harold, his distant cousin, had committed perjury by failing to fulfill his promise not to seek the crown of England after the death of Edward the Confessor. Next, is a description of the work to prepare the invasion fleet and, finally, ‘*the battle of Hastings*’ in 1066 at which Harold was killed and victory was won by the Normans and their Duke. He was crowned King of England on Christmas day that same year (Madhavi, 2010).

It is thought that the embroidery, which is also known as ‘*Queen Matilda’s tapestry*’ or, alternatively, as the ‘*Tale of the Conquest*’, was made at the request of Odo de Conteville, the Duke’s half-brother. It was first displayed on 14th July, 1077 in the nave of Bayeux Cathedral, on the occasion of the consecration service (Jacques, 2002).

In the Napoleonic Wars it was used as a covering for a transport wagon and sent to Paris. Later it was returned to Bayeux and exhibited in the Hotel-de-Ville. In 1913 the

tapestry was moved to the house of the Bishop of Bayeux. Referred to throughout the history of embroidery as *The Bayeux Tapestry* it is actually an embroidered piece rather than a woven tapestry. It is actually made up of several pieces of linen material which may have been worked by different people, as there are joints and breaks in the character of the border. Plates 2.1 and 2.2 show some sections of Bayeux Tapestry (Davidson, 1993).



Plate 2.1: Section of “*The Bayeux Tapestry*”

Source: Hervé champollion 2002 ©

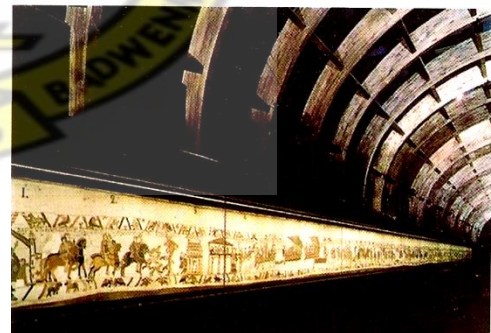


Plate 2.2: Duke William crosses the sea on a large vessel (left) and exhibition room of the Bayeux Tapestry (right)

Source: Hervé champollion 2002 ©

The embroidery is worked in two kinds of wool in 5 shades of blue, 2 of green, buff, red and grey. These colours are used with little regard for the true representation, for example there are blue and red legs on the same horse, or green hair on the Figuring. The stitchery is partly in laid work and partly in outline (stem stitch). The drawing of the Bayeux tapestry scenes are full of life and vigour and the whole presents a fascinating, lively scenes. The work has a narrow 3.5 inch border at the top and bottom, running the whole length, which is filled with all kinds of ornaments: birds, beasts, rural scenes and illustrations of Aesop's Fables. Here and there the border is broken into, by detail of the main scenes. The inscriptions in Latin are finely drawn Roman lettering, obviously the work of an Englishman of learning (Embroidery history, n. d).

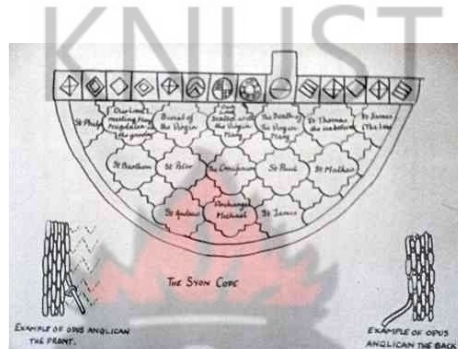
It suffered during the French Revolution and again during the German Occupation but was then placed on show in the deanery before being transferred to the William the Conqueror Centre in 1983 where almost half-a-million visitors file past it in admiration every year (Jacques, 2002).

2.5.2 The Medieval Times

According to Stokstad (1995), this was the great period of English Embroidery and the high standard of work made England famous throughout the world. Most embroidery works were worked on linen, silk or velvet in gold, silver or silver-gilt threads and coloured silks.

Most men and women gained such recognition during this period that they came to be well known in the world. The special method of this period of the history of

embroidery was ‘*Opus Anglicanum*’ derived from a Latin word (is the medieval term used to denote **English embroidery** (Bindman, 1985).



Source: www.needlework-tips-and-techniques.com 2010 ©

2.5.3 The Sixteenth Century Embroidery

According to “Embroidery history” (n. d) this period was also known as the Elizabethan age in embroidery history. It was characterised by travel and adventure that brought new materials and designs into the embroidery industry. The ground was linen, silk or satin and sometimes velvet or leather. The embroidery was done in various coloured wools or silk (often outlined in gold or silver thread) and sometimes entirely in gold or silver. The designs were often some form of scroll work with freely drawn natural forms. The type of embroidery done in this period was divided into two main groups: household articles and costume. The household articles include table covers, pillows, cushions, small panels, and large wall panel’s curtains. Embroidery for costume includes caps, gloves, cloaks, tunics, sleeves, and mittens.

Another form of embroidery gaining popularity in England at this time in embroidery history was ‘*Spanish Blackwork*’. The name was given to any embroidery worked in black thread on white material and it is said to have been introduced into the country during the reign of Henry the eighth by Queen Catherine and her ladies. Gold thread was also used in this type of needlework. However, the technique is of great antiquity, being adopted by the Spaniards from the Moors and Arabs, who in turn borrowed it from the Egyptians and Persians (Embroidery history, n. d).

Other stitches used included chain, buttonhole, braid and coral stitches. The designs of this period favoured floral designs with long waving stems, leaves, flowers and vines worked in minute and delicate stitchery. Throughout embroidery history, many techniques decline in popularity at certain periods and this was the case with *blackwork* during the 17th century, although it is now popular again.

2.5.4 The Seventeenth Century Embroidery

According to 'Embroidery history' (n. d) A technique popular at the time was '*stump work*' which consisted of Figuring and scenes modeled in relief by stuffing with wool or hair so that what should have been characteristic work of the needle became an imitation of sculpture. However, often used in conjunction with this were delightful little trees, birds and animals, some of these are said to have been of symbolic meaning referring to the House of Stuart.

In this period of embroidery history, once again the designs and methods changed. The general scale has increased and large panels and hangings were characteristic of the late 17th century. The ground was generally lined with huge sprays of flowers or many-branched trees rising from mounds of earth among which animals play. The stitchery was usually in wools, using browns, greens, orange and peacock blue which were favourite colours of the time. Sometimes a piece of work was embroidered in tones of one colour. There were sometimes landscapes depicted complete with castles, palaces, fountains, gardens, clouds and radiating suns. Beads, glass, mica, wooden shapes, leather and sequins, along with gold thread, were often used as well as the more usual threads (Embroidery history, n. d).

2.5.5 The Eighteenth Century Embroidery

The general type of work done during the 17th century was still used in the 18th century, but as time went on embroidery became much more naturalistic in character until eventually the imitation was such that the essential qualities of the needlework resembled brush work (Embroidery history, n. d).

The great variety of natural objects, flowers, trees, birds, animals and insects were often worked on the same piece of cloth. The growth of trade with China and the Far East brought an influence in design and birds with wonderful plumage and flowers resembling the *lotus* and *chrysanthemum* were introduced alongside the traditional English forms.

Household items such as hangings and coverlets were embroidered in much the same way as in the previous century of embroidery history, however, there was a change from worsteds to silks and in addition, there was a great interest in embroidery in relation to furniture (Embroidery history, n. d).

2.5.6 Industrial Revolution and Embroidery

The discovery of the shuttle embroidery revolutionised the embroidery industry. In the 1800s, Joshua Heilmann worked on improving the design of a hand embroidery machine. This revolutionised the embroidery industry and began a chain of events leading to the development of sewing machines in the 1860s to the invention of hand powered embroidery looms in the 1870s (Madhavi, 2010).

2.5.7 The Nineteenth Century Embroidery

While embroidery was still largely practiced, this period on the whole was one of revival rather than originality. As an art much of the work deteriorated. This may have been due to the fact of the introduction of machinery and mass reproduction. The field of women's interests became much wider and with increased activities outside the home there was less time for domestic crafts. Costume was much less elaborate and embroidery was usually replaced by machine made braids and motifs. The vogue for the sampler was

very apparent in the first half of the century and there followed a fashion for wool work pictures.

Although samplers of stitches and methods had been made for many years it was in the 18th and 19th century that they became one of the chief occupations of the embroiderer. They often had some pictorial value, of a very formal type, which had in addition in the 19th century, a quotation which might be a motto, words from the Bible or often a rhyme of gloomy sentiment. These samplers were often done in wool cross stitch on canvas and the general design included the name and age of the worker, the date, the alphabet, a quotation, formal motifs and a border (Embroidery history, n. d).

2.5.8 Embroidery Today

Today, machine embroidery has grown by leaps and bounds. Computers have added another twist into this sewing technique making the process easier for mass production of embroidered designs. Nowadays, machines are available in the market which can embroider designs. Specially designed machines can even read a computerised design and stitch it. Example of such machines is the Schiffli Embroidery Machine. However, machines cannot do all the complex stitches of hand embroidery, but computer technology has allowed for easy design changes and stitch variation (Elsasser, 2007).



Plate 2.4: An example of machine embroidered fabric

Source: Mark Heard (<http://www.flickr.com/photo>)

Embroidered clothing is considered to be a symbol of wealth in many communities.

2.6 Embroidery stitches

According to Tortora (1987), there are a wide variety of different types of embroidery and embroidery stitches that have been developed in all parts of the world. Each one originated a style with a distinctive repertory of stitches and decorative motives. In embroidery, a wide variety of stitches are used to outline and fill in the design. The choice of stitches is usually related to the effect the sewer wants to achieve. The yarns used are usually made of fibre. There are Basic and Fancy stitches used in embroidery.

Fancy stitches are decorative embroidery stitches used for special effects, for contrast, and emphasis. The cross stitch is the most basic and simplest stitch in embroidery history.

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Types of embroidery stitches are seen in Figure 2.1

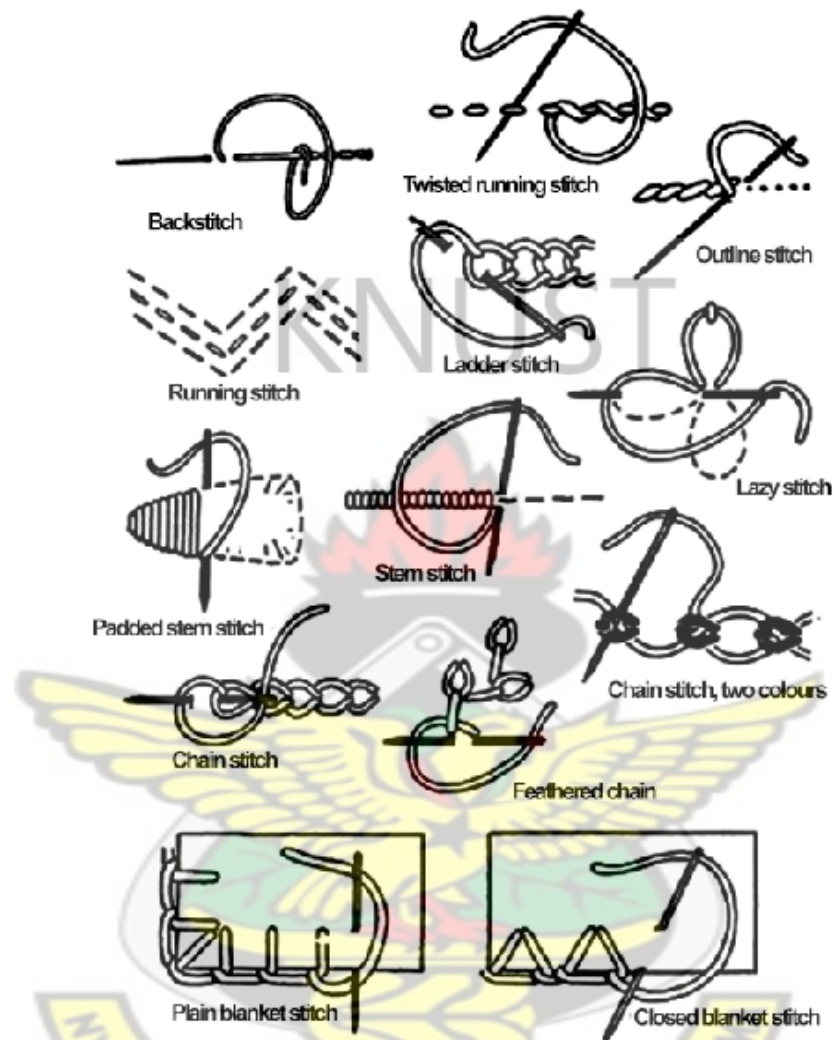


Figure 2.1: Types of fancy embroidery stitches

Source: www.needlework-tips-and-techniques 2010 ©

Some of the common stitches available include; Running stitches, Twisted running stitches, Backstitch, Stem stitch, Padded stem stitch, Chain stitch, Magic or Checkered chain stitch, Lazy daisy, Ladder or Square chain stitch, Outline stitch or Crewel stitch, Blanket stitches, Feather stitches, Cross stitch and French knot.

2.7 Brief history of Asantes and Asante clothing

2.7.1 The origin and history of Asantes

The Asante Nation as it is known is located in the forest belt in the middle of the country Ghana. Historically, the Akans are believed to have come from the ancient Ghana Empire which existed in the North-western part of West Africa before they migrated southwards to their present areas of abode (Alistair, 2009).

Historical records available indicate that there are some clans of Asante Nation who profess to have originated from a hole at Asantemansu near Asumegya. Other clans also believed that their ancestors descended from the skies. The people of Asante form part of an ethnic group called the Akan people. Oral tradition available explains that the Asante Nation is part of Akans and the Akans migrated from Mesopotamia. Another school of thought proved that the Akans either shared the same boundaries with the Israelite and / or of the same stock with the Israelite before migrating to Africa (Osei, 1994).

However, it is believed that the perception of some people claiming to have originated from the skies, holes or other places were coined up stories to cover up the earlier history of the clans. It is believed that when the Asante chiefs united under Nana Osei Tutu, they were forbidden to relate their origin to history since it will bring discord and disagreement between the chiefs. And to help solve this problem they were asked to narrate these stories in answer to any question about their origin (Osei, 1994).

Osei (1994) further explain that the Akans later formed part of the old Ghana Empire. They then moved towards the southern part of the Empire in search of arable land to cultivate food crops. The reasons why they moved southward were:

(a) Inter-Empire wars which created instability at their places of abode. Therefore they moved Southward into the forest belt to avoid constant warfare and get the peace needed for their farming ventures.

(b) The influence of the Islamic religion in Africa. When the Moslem religion started in Arabia and entered North Africa, people were forced to accept the new religion but the Akans worshiped God through their spokesmen to the supreme God. They therefore migrated into the forest belt to have religious freedom.

They first settled in the present day Northern Region at Gonjaland which was a forest zone in the 13th century. After spending some time in Gonjaland they later travelled in the southwards direction in the thick forest along river bodies, mountains and valleys. In order to survive, individual hunters and farmers prepared huts and shelters under trees and caves. Their leaders were mostly hunters and warriors.

Other communities or linguistic groups in Ghana who belong to the Akan ethnic group includes: *Dankyiras, Bonos, Akwamus, Akyems, Kwahus, Sefwis, Wassas, Akwapims, Guans, Fantes, Asantes, Assins and Adanses*. The communities forming the Akan group have one belief and one behavioural pattern. Akans believe in the existence of God the Creator, therefore anybody who does not believe in the existence of God could not be counted as an Akan (Osei, 1994).

According to Osei (1994), the communities again moved towards the south, and Asantes settled at the Adanse area. Asante's historical records do not show the exact date of their settlement in the Adanse area; however it is believed to be in the 14th century. Because they were in transit all their buildings were not permanent they lived on or under trees and caves to protect themselves from bad weather and wild animals.

One identifying factor of the Akans is that, each individual belongs to one of the eight (8) groups (clans) of the Akans. The clans are the following: *Oyoko, Aduana, Biretuo, Asona, Ekuona, Asenie, Asakyiri* and *Agona*. These clans could be found in all the Akan states. It was believed that people belonging to a clan claimed to be the children of one woman or one ancestor; hence they became brothers and sisters. Intermarriages between clans were not accepted, it was a taboo since they are related in blood.

Osei (1994) again points out that, with increase in population, Asantes decided to move from the Adanse area to build new towns for permanent settlement; this was in the 15th century. These major towns were Asumagya, Kokofu, Nsuta, Dwaben, Mampong, Offinso, Bekwai and Kwaman (now known as Kumasi). Other smaller towns include Edwesu, Kaase, Agona, Tafo, Boukrom and Kuntense.

The Akan states practiced matrilineal form of inheritance. In such states, the children of the male members of the clan are not counted among the members of the clan. Their leaders later became their chiefs and since they moved in clans, the towns they founded were clan towns. The clan members of the founder of a town became the royals of the town. These were usually the children of the female members of the clan. Two people always rule each town. You always have a male and a female ruler. The male is

the chief and the female is the Queen mother. When a chief dies, it is his brother or the sister's son who succeeds him. His son cannot succeed him because the son is not counted among the members of the clan (Osei, 1994).

Osei (1994), further explain that the first organised state of the Akans, which developed to become a kingdom was the Adanse state. This state was later defeated by the Denkyira state, which is also an Akan state. The Denkyira kingdom ruled the other Akan states with iron hands therefore some of the Akan states serving Denkyira decided to unite and overthrow the Denkyira kingdom. The individual Akan states therefore united for the purpose of war to overthrow the Denkyira state.

Findings from Alisteir (2009) reveal that Asantes later lived in the forest around Asumegya and around Lake Bosomtwe. It was from this area that they migrated to various parts of the forest and founded various towns and states. At first the states were not united but each state was on its own. The idea of forming one united Asante's state started during the reign of Nana Obiri Yeboa. The idea did not gain roots when the states were defeated by Dormaa state which was also on Akan state. Nana Obiri Yeboa lost his life in the war. The successor of Nana Obiri Yeboa was Nana Osei Tutu. He united the states and with the help of Okomfo Anokye who was a chief of Agona state and also a spiritual leader, prepared the united Asante states, psychologically, physically, and spiritually for war.

Okomfo Anokye, the chief traditional priest commanded a Golden stool to descend from the skies on one Festive Friday, "Fofie" when all the chiefs had gathered, and rested on the laps of Nana Osei Tutu, making him the unquestionable king of the

united Asante states. The Golden stool became the soul of the new Nation and each Chief swore an oath not to raise arms against the Golden stool. They swore to protect the Golden stool with their blood. The states which gathered to swear included Mampong, Asumegya, Kokofu, Kumase, Dwaben, Bekwai, Offinso, Nsuta, Kontanase, Edweso and Agona. After the unity celebrations, the chiefs met, and waged war against the Dormaa state to avenge their defeat at the hand of the Dormaa state. They drove the Dormaa people from their former place of settlement to their present abode in Brong Ahafo Region. After the Dormaa war Asantes prepared feverishly for the Denkyira war which was termed as war of liberation. One important lesson was the spirit of sacrifice exhibited by some of the Chiefs (Osei, 1994).

When Okomfo Anokye stated that before victory could be won, some Chiefs had to offer themselves as sacrifice for ritual purposes; Chiefs like Tweneboa Kodua of Kumawu, Asenso Kofo of Adwumakasekese and Dikopim of Edweso readily gave themselves up in order that future generation might be free. Okomfo Anokye further prophesied that the Chief who would be the war leader would not live beyond seven days after the war. Nana Boahen Anantuo the Chief of Mampong offered himself to lead the war in order that king Osei Tutu will live to rule the Asante Nation. The war of liberation ended with victory for the Asante Nation. After that, Nana Osei Tutu I and his spiritual adviser devoted most of their time in making of laws and laying the administrative structures of the new nation. Later on Nana Osei Tutu built Kumase as the capital of the Asante Kingdom. This administrative capital later became Kumasi (Osei, 1994).

2.7.2 Styles and techniques of cloth production among Asantes

According to Kent (1971), there are several methods of decorating woven cloth other than dyeing and painting found among Asantes. These decorative processes includes, stamping, painting of patterns on cloth, appliqué, and embroidery.

Weaving

Weaving is the most common form of cloth production among Asantes. It is the interlacing of two sets of yarns; the warp and the weft. The warp runs in the lengthwise direction in the fabric and the weft runs at the opposite direction after weaving. Asantes are mostly known for their prestigious cloth known as the Kente. It is a colourful woven fabric worn by both male and females to show their wealth, royalty, beauty and position in the society. Bonwire, Adawomase, Ejisu, Asokwa, Ntonsu and Asafo are some notable areas associated with Kente production in the Ashanti Region (Kent, 1971).

Dyeing

According to Kent (1971) a dye is prepared from the root of a plant known as '*kuntukuni*'. The root is usually collected from the forest, dried for several days and boiled. The water is then separated from the bark after boiling for about 10 to 15 hours. It is then allowed to cool. The fabric is dipped in the solution and dried under the sun. This process is repeated until the true shade of black is achieved. These dyed fabrics were later stamped with designs to produce the Adinkra cloth known as *kuntukuni*.

Painting

Traditional woven cloths were also painted with traditional colours prepared from roots, leaves, seeds, flowers, and bark of plants, insects, clay and other natural sources (Kent, 1971).

Appliqué

John (1967) defines appliqué as the cutting of small pieces of cloth or other materials that are then attached to the surface of a larger textile. Appliqué is simply a decorative design made of one material sewn over another. Traditional symbols were cut out from leather, skin and other unconventional materials and sewn onto woven cloths with needle using the hand. Fabrics produced with this method were originally designed for traditional priest, warriors, and spiritualists.

Stamping

According to Kent (1971) Asante's traditional art of stamping designs on cloth was not learned until the early 19th century. Stamping designs on cloth started in the early 1900 with the prior aim of designing for paramount chiefs, sub-chiefs and some prominent people in the society. Designs were stamped onto woven cloth with a dye prepared from the bark of a plant known as '*badie*'. The dye is prepared by boiling the bark for about 7 to 10 hours. The bark is then separated from the water. The thickened residue paste is obtained and this is used for the stamping. These traditional stamped cloths were known as Adinkra cloth. Cut – out design from calabash, gourd and wooden surfaces were used for the stamping.

Embroidery

Indigenous hand embroidery known as ‘Nwomu’ was developed along side the Adinkra cloth in the 17th century with the prior aim of decorating and enhancing the beauty of the Adinkra cloth. The colours and designs used were symbolic and possess certain cultural values and significance (Kent, 1971).

Printing

Kent (1971) further explains that printing is a new technique introduced recently to register Adinkra stamp designs on woven fabrics. Designs are prepared from screen, and similar traditional and foreign dyes are used.

2.8 History and production of Adinkra cloths among Asantes

Sarpong (1974) emphasised that one of the most common forms of media of expressing Ghanaian symbolic art is the cloth. There are two ceremonial cloths among the Akans; these are Kente and Adinkra cloths. The Kente is used on joyful occasions, whereas the Adinkra cloth is worn when people are sorrowful or mourning.

Adinkra cloth is a hand printed fabric. The origin of the cloth is traced to the Asante people of Ghana. Initially the cloths were made for royalty to be worn at religious ceremonies as well as funerals of chiefs and other prominent people in the society. Adinkra cloth is decorated with traditional symbols that convey the thoughts and feelings of the person wearing it. The fabric of Adinkra cloth is divided into squares by lines

drawn using a bark dye and then stamped with gourds that have been carved with designs (Michelle, 2007).

Adinkra symbols were first used as decorative elements in one of the most highly valued, hand-embroidered cloths of West Africa. The origin of the fabric is traced to the Asante people of Ghana and the Gyaman of Cote'd'Ivoire (Ivory Coast). However, the production and use of Adinkra cloth has come to be more associated with the Asantes than any other ethnic group. Around 19th century, the Asantes developed their unique art of printing Adinkra cloth, thus, by stamping special designs onto the fabric. Traditionally, the cloth was used exclusively by royalty and spiritual leaders for very important sacred ceremonies and rituals (The history of Adinkra and Adinkra symbols, n. d).

Werness (2008) opines that the cloth takes its name from a royal prisoner of war, king Adinkra who is said to have worn a cloth stamped with designs symbolising his sorrow at his lost of freedom and over the deaths of his soldiers. Historical evidence shows that Adinkra designs were used among Asantes before king Adinkra's defeat in 1818, but the oral tradition linking it with victory enhances the cloth's value. It was originally made by men.

The cloth formerly functioned primarily as funeral cloth but it is now in general use. The term *nkra* means "message" and the individual symbols from a system convey meaning that often relates to the soul and to proverbs, both of which provided spiritual insight of supernatural origin. Some of the designs may have been introduced through the North Africa trade route. The designs have names, such as the pattern of three concentric circles called *Adinkrahene* "king of Adinkra" (appendix 5). This design is considered the

most important of all, is associated with the prisoner-king and indicates authority, grandeur, firmness, magnitude and prudence. Early Adinkra cloths were red, russet or black and the dyes were applied with calabash or gourd stamps. Those dark hues of mourning are now supplemented with many others including green, blue, purple and yellow. Adinkra is now used as fine dress on Sundays and festival occasions (History of Adinkra and symbols, 2008).

Other historical records available indicate that 'Adinkra', is the name of a famous King of Gyaman (now the Ivory Coast) who angered the *Asantehene* (the King of Asante), Nana Bonsu - Panyin, by trying to copy the Golden Stool of Asantes. Adinkra was defeated and slain in a war. It has been suggested that the art of Adinkra came from Gyaman. Adinkra literally means "saying good-bye or farewell," in the language of the Akan, hence the use of the special cloth on funeral occasions, to say good-bye to the departed soul. The cloth is first embroidered before stamping or printing the designs (History of Adinkra and symbols, 2008).

The printing process entails stamping one symbol at a time onto large sheets of cotton cloth. *Adinkra aduru* (Adinkra dye) the stuff used in the stamping process is prepared by boiling the bark of *Badie* plant together with iron slag. The designs are cut-out pieces of calabash with wood attached for handling, are dipped into the *Adinkra aduru* which serve as the printing paste, and then stamped onto the cloth (Plate 2.5).



Plate 2.5: An Adinkra cloth designer at work at Ntonso

Source: historyofAdinkra.com®

Originally the Adinkra cloth was printed on the ground (Plate 2.5), however today raised platforms with sack coverings act as the printing table. Adinkra cloth are of four categories that are produce locally: 1. *Kobene*, 2. *Kuntukuni*, 3. *Birisi*, and 4. *Nwomu* or *Adinkra Fufuo*. There are also background colours as Red, black, brown and white which are not dyed locally (traditionally) but made from the factory. The Adinkra cloths are preserved by dry cleaning (Amoako – Attah, 2001).



Plate 2.6: A stamped kuntukuni cloth



Plate 2.7: Adinkra cloth with embroidery

Source: Carol Ventura (<http://iweb.tntech.edu/cventura/Adinkra>) – 2010 ©

According to Amoako – Attah, (2001) the Adinkra symbols (motifs) stamped on the cloth have names and meanings derived either from proverb, a historical event, human attitude, animal behaviour, plant life, forms and shapes of inanimate and man-made objects.

In recent times, Adinkra cloths are used for a wide range of social activities. In addition to its sacred usage, it is also used to make clothing for such special occasions as festivals, churchgoing, weddings, naming ceremonies and initiation rites (History of Adinkra and symbols, 2008).



Plate 2.8: A display of Adinkra cloths

Source: Carol Ventura (<http://iweb.tntech.edu/cventura/Adinkra>) – 2010 ©

Today, designers use Adinkra symbols in creating a wide range of products including clothing accessories. Modern designers use Adinkra symbols on wide range of products including the seals of academic and political institutions, on billboards, interior decoration, packages, book covers, earrings, necklace, headbands, chair and a host of others (History of Adinkra and symbols, 2008).

2.9 Traditional hand embroidery among Asantes

The history of traditional hand embroidery among Asantes started alongside the production of Adinkra cloth. Yarns were traditionally spun from cotton fibres and these were used for the embroidery. These yarns were dyed locally with traditional dyes prepared from natural sources. Colours used include red, yellow, blue, indigo, green, black, brown and a host of others. Originally embroidery was done to join woven Kente strips together. Embroidery is done on the fabric before stamping or printing.

Amoako-Attah (2007) agrees that with Adinkra printing, embroidery is first done with thread and needle after which the stamping is done with the Adinkra dye.

2.10 Symbolism and value of traditional colours and symbols used in designing Adinkra cloths

Adinkra symbols have been in use for over hundreds years and constitute an ancient African writing system of verbal and visual imagery. There are over two hundred Adinkra symbols available. The symbols are figurative and stylized geometric images that embody poetic messages. Some of the symbols express the legendary history of the Akan people, and others are cultural metaphors and aphorisms about philosophy, myths, legends, beliefs, aesthetics, ethics, human relations, religious concepts, and social values. They are full of meanings and profound truths. These symbols contain a lot of moral lessons and virtues of life. When used for other special occasions, the symbols convey messages such as hope, peace, bravery, faith, and love (Adinkra cloth Symbol, n. d).

All people, irrespective of where they maybe evolve peculiar symbolic ideas about colour, which are often revealed in their traditional practices of everyday life and in casual religious rites.

According to Hagan (2010) Akans ritual occasions use three main colours; these colours are *Fufuo* (white), *Tuntum* (black or dark), and *Kobene*, *Kokoo*, or *Memene* (red). Except in a few cases involving the use of green (*bun*), all colours used in ritual ceremonies appear to fall under these three broad terms; so that the terms *Fufuo*, *Tuntum*, *Kobene* (and their cognate terms) tend to apprehend wider ranges or spectra of colour than would normally fall under them in a naturalistic classification of colours.

White, yellow, milk and any shade off-white are *Fufuo*; red, purple, pink, orange, and violet are *Kobene*; black, blue, indigo, and the darker shades of brown are *Tuntum*. One immediate implication of this is that the colour terms *Fufuo*, *Kobene* and *Tuntum* cannot be interpreted as "white" "red" and "black" respectively. Symbolically, *Fufuo*, *Kobene*, and *Tuntum* have certain broad connotations, but the most significant meaning which attaches to each one of these colours can only be discovered in the context of the specific rituals. There are wide differences in the manner in which colour is used. Colours differentiate the categories of individuals involved in ritual ceremonies and make it possible for every individual to be identified easily in any gathering (Hagan, 2010).

Hagan (2010) explains some meanings associated with *Fufuo*, *Tuntum*, *Kobene* among Akans;

Fufuo (white) is the ritually auspicious colour and it has immediate association with victory and spiritual purity. It is associated with the sacred, and it is considered the

colour of gods and kings; the symbol of the purity and sacredness of their persons and estate. Fufuo also expresses joy and hope and wellbeing. When used in combination with black, green or yellow expresses notion, spirituality, vitality and balance. It also signifies innocence, purity, joy, victory, virginity, fairness, blankness, emptiness, transparency, fortune, and innocent.

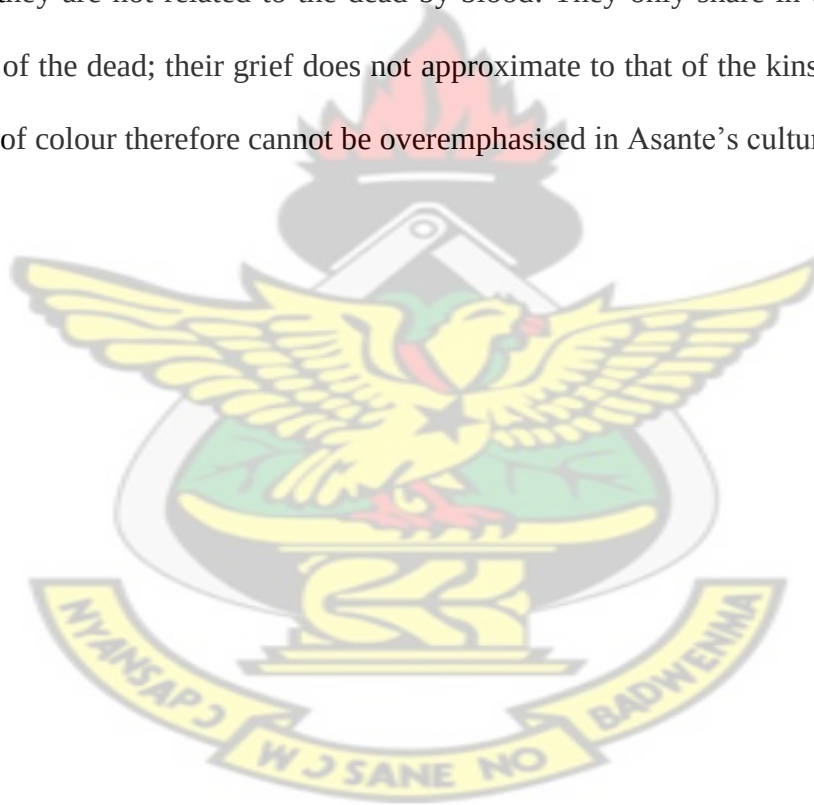
Tuntum A (black) stand for darkness and loss and for death, but it does not necessarily connote defilement or profanation. The Stool of kings or elders who die in battle or of old age while in office is consecrated and held sacred memory; it is painted or decorated black. All objects which are dedicated to the spirits of the dead are purposely treated to appear 'black', objects of war, except gold and silver, are also blackened. But in spite of its association with spirituality and age, *Tuntum* is never used for the celebration of victory; it usually expresses sorrow and it is associated with ill-luck.

Kobene (Red), Akans generally point to blood (*mogya*) as the paradigm of this colour. Blood stands for life and vitality. Red is therefore used as a symbol of heightened spiritual mood, sacrifice, passion, danger, anger, enraged struggle, bluntness, and optimism (Hagan, 2010).

The striking thing about an Asante's funeral is the clear colour distinctions in the clothing of mourners. In any Akan funeral the dominant colour is red and black and sometimes with a combination of brown. Mourning bands (*abotiri*) are fastened round the head, into which red peppers are sometimes placed; the russet-brown mourning cloths are put on; these are sometimes marked with Adinkra stamped designs. The mourners who are not blood relations (and these would include non-matrilineal relations, and personal

friends) put on black or brown. This means that black and red refer to opposite categories and relationships (Antubam, 1963).

The use of colour in denoting specific classes and the role of individuals in funerary ceremonies among the Akans employs distinct levels and categories. Distinction is made between those who belong to the family of the dead and those who are outside it, red for the former and black for the latter. Those who put on red and smear themselves with red ochre, indicate they are the blood relatives of the deceased. Others put on black because they are not related to the dead by blood. They only share in the sorrow of the kinsmen of the dead; their grief does not approximate to that of the kinsmen of the dead. The role of colour therefore cannot be overemphasised in Asante's cultural traditions



CHAPTER THREE

METHODOLOGY

3.0 Introduction

Methodology refers to the principles and procedures of inquiry that helps a researcher to collect and analyse data in a particular discipline. This chapter consists of the methodology used, and this involves the libraries visited, research design, descriptive and experimental research methods under the qualitative research approach, the population for the study, sampling method used, data collecting instruments, and primary and secondary sources of data collection.

3.1 Research design

In a research study, the researcher must conceptualise the research problem and put it into a (structural) perspective that will guide him in the data collection and analysis. According to Opoku (2005), such plan and structure of research is usually known as *research design*. The research design is of extreme importance as improper design could lead to misleading results. Clough and Nutbrown (2002) explain why a researcher should use a particular methodology since it provides the reason for using a particular recipe (research method). This can be summarized as;

“any serious research must have a carefully – thought – out design before data are collected otherwise precious time and effort can be wasted” (Opoku, 2005).

The purpose of this research is to identify, discuss and explore techniques in indigenous hand embroidery among the people of Asante.

According to Frankel and Wallen (1996), qualitative research is the appropriate research method for this particular research. They explain further as a process of obtaining a holistic picture of what goes on in a particular situation or setting. In view of this, the research is based on qualitative research approach and it employs experimental and descriptive methods of research for its execution and analysis of the results.

3.2 Library research

In order to review literature and other information relevant to this research, the researcher visited some institutions and departmental libraries in Kumasi and Accra. These libraries includes; the Kwame Nkrumah University of Science and Technology (KNUST) library, College of Art library, Art Education library, Ashanti library, the British Council library (Kumasi), the Balme library and the Institute of African Studies library (University of Ghana, Lagon).

Secondary data were collected, interpreted and analysed for the research. The data were collected from published books, encyclopedias, dictionaries, and articles on the World Wide Web. These were used in the literature review chapter, methodology as well as the description and evaluation of the final designs.

3.3 Qualitative research

The term *qualitative research* as discussed by Leedy and Ormrod (2005) includes several approaches that are to some extents different from each other. However, all qualitative approaches have two things in common; they focus on phenomenon that occur in natural setting and also involve studying phenomenon in their complex forms. Researchers who use qualitative approach rarely try to simplify what they observe in a

research setting. Instead, they recognised that the issue they are studying has many dimensions and they solve the issue in its complexity. Qualitative research is progressive in nature where qualitative data, such as interviews, observation, and literary works (data) are used to understand and clarify complex phenomena. The researcher must be well trained in observation techniques, interview strategies, and whatever other data collecting methods are likely necessary to answer the research problem (Madsen, 1992).

Frankel and Wallen (1996), on the other hand, define *qualitative research* as studies that investigate the quality of relationships, activities, situations, or materials. Bogdan and Biklen (1992) outline and explain that in every qualitative research the following are some major characteristics;

First, the natural setting is the direct source of data, and the researcher is the key instrument. Secondly, qualitative data are collected in the form of words or pictures rather than numbers. The third characteristic is that qualitative researchers are concerned with process as well as product. Researchers tend to analyse their data inductively, being the fourth characteristic, and finally how people make sense of their lives is a major concern to the qualitative researcher.

Based on the above characteristics and parameters it was realized that one must understand the people of Asante, the way they live, the origin and usage of the hand embroidery technique and other important factors that promote the art. The researcher used the qualitative research approach for this study in order to ascertain the relationship between the people and the art since this has become the major source of livelihood for some indigenes. The study is based on qualitative research and employed experimental and descriptive research methods.

3.3.1 Experimental research method

Experimental research involves manipulating conditions and studying effects. There are three basic characteristics of all experimental research, and these are control, manipulation and observation which in long round, will serve as the basis for testing any assumptions made before the research. This kind of research is best used in pure scientific research and this is because it finds its greatest utility in the laboratory, where variables could be controlled. Experimental research is effectively applied within the non laboratory settings as well (Frankel & Wallen, 1996).

Experimental research in this regard does not refer to the scientific or laboratory work but studies involve in the cause and effect applied in the arts. Since the researcher actually established different treatments and their effects, results of this type of research are likely to lead to the most clear-cut interpretations which can be understood by all.

In this research, efforts were made to maintain control over all factors and variables that may affect the result(s) during the execution of the samples and the final designs. The study is based on experimental study that manipulates and explores different kinds of variables in the form of materials, tools and techniques to produce an Adinkra cloth that is unique and exceptional. In doing this, an attempt was made to determine or predict what may occur. This method was used to evaluate the appropriateness and suitability of the materials, tools, equipment as well as techniques used in the execution of the designs.

3.3.2 Descriptive research method

The aim of descriptive research is to provide an accurate description of something that is going on in a research setting. It is used extensively when the purpose of the

research is to describe, explain, observe and test assumptions. Descriptive research can also be used to a lesser extent to make predictions and discoveries. Under most circumstances this requires researchers to have a good grasp of research methods including knowledge of data analysis. Description is the foundation upon which qualitative research is built (Wolcott, 1990).

In the experimentation and execution of the designs, descriptive research method was used to give an in-depth description of the processes involved, fabrics used, needles used, the techniques used, the yarns that were employed as well as the execution of the samples and the final cloth. Descriptive research was used in order to make replication of the process possible.

3.3.3 Population for the study

The term '*population*' as used in research, refers to all the members of a particular group. It is the group of interest to the researcher, the group to whom the researcher would like to generalise the results of the study. A '*target population*' is the actual population to whom the researcher would like to generalise; the '*accessible population*' is the population to whom the researcher is entitled to generalise (Frankel & Wallen, 1996).

Producers, sellers and users of Adinkra cloth in Ashanti Region are the *target population* whilst the *accessible population* comprises selected producers, sellers and users of Adinkra cloth among Asantes in the Kwabre East District and the Kumasi Metropolis.

3.3.4 Sampling and sample size used

Frankel and Wallen (1996) define *Sample* as a group in a research study on which information is obtained. *Sampling* is subsequently the process of identifying this group and finding information from individual group members. In observing the characteristics of a sample, certain deductions about the characteristics of the population can be drawn.

Opoku (2005) concludes that the sampling technique employed in any research is also of equal importance as improper sampling could lead to difficulties in the analyses of data and wrong inferences could be drawn. Proper sampling method eventually leads to a good research.

On occurrence, based on *previous knowledge* of a population and the specific purpose of the research, researchers use personal judgment to select a sample; this sample to the researcher possesses the necessary information about the population. Thus, *Purposive Sampling* method was employed to select the appropriate human resource from the main population for the study, since the researcher can obtain the necessary information needed for the research.

This method of data collection was appropriate because there was a predefined group or specific groups in mind. The right individuals whom the researcher considers to have the facts and other resources useful to the research being conducted were contacted and this served as the *samples size*. With this in view, 125 individuals were identified but only 35 were interviewed. This included some organisational heads located within the scope of the study.

3.4 Data collecting instruments

According to Leedy and Ormrod (2005) in qualitative studies there is the need to acquire data from all sources and this can be done by much reliance on observations and interviews. In view of this, the researcher decided to employ both interview and observation as data collecting instruments to collect data from primary sources for the research.

3.4.1 Interview

Interview as defined by Frankel and Wallen (1996) is the careful asking of relevant question(s) pertaining to a particular problem. They further explained that it is an important way for a researcher to check the accuracy of (to verify or refute) the impressions he or she has gained through observation. One of the main purposes of interviewing is to find out what is in people's mind, what they think and how they feel about something.

The researcher used the *Informal interview* to conduct the research. The *Informal Interview* tends to resemble casual conversations. They do not involve any specific type or sequence of questions or any particular form of questioning. The primary intends is to find out what people think and how the views of one individual compare with those of another (Frankel & Wallen, 1996).

As part of the sampling process, 125 individuals were identified but only 35 were interviewed with the help of an interview guide (appendix 1 - 3). Interview questions were asked both in Twi and English so as to enable the interviewees fathom questions asked by the researcher. These interviews were conducted with a purpose in mind, thus to help ascertain the level of awareness as well as their in-depth knowledge and technical

knowhow on indigenous hand embroidery in Ashanti Region. These individuals are fully involved in the production and usage of Nwomu and the Adinkra cloth in Kwabre East District and Kumasi Metropolis. Areas visited included Wonoo, Bonwire, Adawomase, Ntonsu and Aboasu in the Kwabre East District. Other areas included the Centre for National Culture, Bantama, Manhyia, Asafo, and Asukwa in the Kumasi Metropolis.

3.4.2 Interviews conducted

The table below indicates the categories of respondents who were interviewed as part of the primary data collection process;

Table 3.1: Interview respondents

Respondents	Num.	Percentage %
Sectional heads – Centre for National Culture, Kumasi.	3	8.57
Organizational Heads – Adinkra cloth producers Association, Ntonsu and Asokwa.	2	5.71
Supervisors - C.N.C, Asokwa, Ntonsu, Bantama, Adanwomase.	5	14.29
Producers and manufacturers of Adinkra / Nwomu cloth , in Kwabre East District and Kumasi Metropolis.	5	14.29
Sellers of Adinkra / Nwomu cloth , Kumasi Metropolis.	10	28.57
Users of Adinkra / Nwomu cloth , Kumasi Metropolis.	10	28.57
Total	35	100

As part of the research, purposive sampling was used to collect primary data necessary for the study. As explained earlier, individuals deemed fit to provide the needed primary data necessary for the study were interviewed. This sampling method was used because the researcher had a prior knowledge of whom and where to get his information.

Table 3.1 indicates respondents who were interviewed for primary data collection. Firstly, three (3) sectional heads from the Centre for National Culture in Kumasi were interviewed representing 8.57% of interviewees. Secondly, two (2) departmental / organisational heads were interviewed from Ntonso and Wonoo which represents 5.71%. Five (5) supervisors, each from the Centre for National Culture, Asokwa, Ntonso, Aboasu and Adanwomase respectively were interviewed representing 14.29% of respondents. Fourthly, five (5) producers / manufacturers of Adinkra cloth, in the Kwabre East District and Kumasi Metropolis were interviewed also representing 14.29% of respondents. Ten (10) sellers of Adinkra / 'Nwomu' cloths representing 28.57% of interview respondents in the Kwabre East District and Kumasi Metropolis were interviewed. Finally, ten (10) users of Adinkra / 'Nwomu' cloth in the Kwabre East District and Kumasi Metropolis were interviewed which also represents 28.57% of the total respondents.

In all, thirty five (35) people were interviewed. These interviews were conducted in a total period of fourteen months. The researcher spent between 30 minutes to 2 hours with each interviewee, the duration of time was intermittent and was also dependent on the feed back received by the researcher during the interview. Data collected during the interviews were analysed and discussed in the results and main findings.

3.4.3 Observation

According to Leedy and Ormrod (2005), observation in qualitative research is intentionally unstructured and free - flowing; the researcher shifts focus from one thing to another as new and potentially significant activity and object presents itself. They further explain that the primary advantage of conducting observations is flexibility. The researcher can take advantage of unforeseen data sources as they appear.

For the purpose of this project, the researcher took the role of participant – as – observer since he fully participated in the experimentation and execution of all the designs outlined in this research. When a researcher chooses the role of participant as an observer role, he participates fully in the activities in the group being studied, but also makes it clear to the group that he is doing research (Leedy & Ormrod, 2005).

Participant observations were carried out in selected areas in Kwabre East District and Kumasi Metropolis that were involved in the production / manufacture of Adinkra cloths and the indigenous hand embroidery. Observations were carried out in indigenous hand embroidery communities such as Wonoo, Bonwire, Adawomase, Ntonsu and Aboasu in the Kwabre East District, and Bantama, Manhyia, Asafo, and Asukwa in the Kumasi Metropolis. Individuals as well as groups working on Adinkra cloths were observed.

The main aim of the observation was to find out the following;

1. The type of fabric used.
2. The type of yarn and coloured yarns used (including yarn colour arrangements).
3. The stitching style or technique employed.
4. Tools and other materials used.

5. The name and meanings of designs used.
6. The type of finishing process applied and.
7. Marketing of the cloth.

3.5 Primary and secondary sources of data

Primary sources of data collection are the closest to the truth than secondary sources of data collection. It is often the most valid, the most illuminating and the most reliable source of knowing the truth. Secondary data on the other hand may or may not be exactly the truth in its totality but is also reliable to some degree (Frankel & Wallen, 1996).

For the purpose of this research, interviews were conducted with people who are practically involved in “*Nwomu*” / Adinkra cloth production. These individuals were observed and interviewed while they were working with and / or using the Adinkra cloth. Information from these individuals served as the source of primary data where as the secondary sources of data was information accessed in books and other literature from the libraries and the World Wide Web – (internet).

CHAPTER FOUR

TOOLS, MATERIALS AND GENERATION OF DESIGNS

4.0 Introduction

The role tools and materials play in every art work cannot be overemphasized. Nwomu is an indigenous textile art among Asantes and some tools and materials are used in production. This chapter therefore outlines and explains the role of the tools and materials used as well as identify some samples developed as a result of experimenting with some existing stitching techniques (designs) used in Adinkra cloths. The second part of this chapter consists of the description of the design processes involved in the production of the samples and the final cloth. The researcher employed both the principles and elements of design in creating the new Nwomu designs.

4.1 Tools and Materials

The following are some of the tools and materials that were used for the project;

1. Coloured yarns
2. Set of hand needles
3. Rag / napkin
4. Skein winder
5. Tensioning poles
6. Trimming knife
7. Pressing iron
8. Pair of scissors
9. Measuring tape
10. Tensioning cords (“*etiri*”)
11. Fabric
12. Interfacing (stiff material)

Coloured yarns

The yarns used were packaged in both hanks and cones. Assorted yarns were used in the execution of the project. Some of the coloured yarns used include golden – yellow, blue, violet, green, white, black, cream, turquoise blue, and red. The yarns were three and four plied.

Set of hand needles

These are sharp pointed implement (usually steel) used in sewing and making embroidery stitches. This is the main tool used since the work is simply needle work. Even though other needle sizes were used, the main needle size used was hand needle size 3 ½.

Rag / napkin

In order to achieve a clean and neat work during and after stitching, a clean cotton napkin was used.

Skein winder

This equipment was used to convert the yarns from cones into hanks. This process is essential since improper winding will cause the yarns to entangle.

Tensioning poles

These are two temporal wooden poles that were used to secure the tensioning cord which holds the cloth. These poles must be strong enough to maintain the tension in the cloth while working. The poles were further strengthened with a long rectangular cross bar fixed beneath the poles (Figure 4.1).

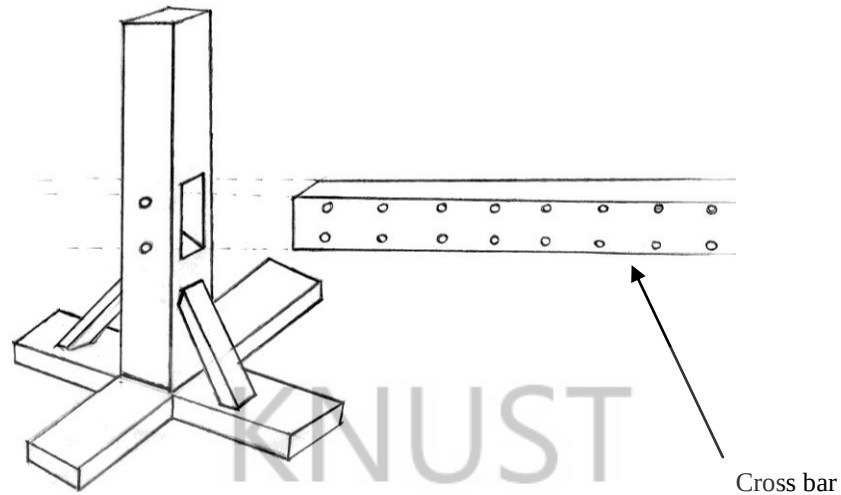


Figure 4.1: Tensioning pole and cross bar

Trimming knife

This is a sharp metal blade covered with a plastic handle. This tool was used to trim off unwanted yarns after knotting and during stitching.

Pressing iron

A pressing iron is an appliance consisting of a flat metal base that is heated and used to smooth the cloth. This equipment was used to remove unnecessary folds in the fabrics and to create permanent folds during the marking and stitching of the designs. It was also used to smooth the sample and the final cloth for presentation.

Pair of scissors

This is a hand-held tool having two crossed pivoting blades used for cutting paper and fabric. This is the second major tool used apart from the hand needles. A pair of scissors was used to cut the fabrics, interfacing, yarns and paper designs during experimentation.

Measuring tape

This is a measuring instrument consisting of a narrow strip of rubber marked in inches and centimetres and used for measuring dimensions. A measuring tape was used to measure the fabric, the size of the motifs and to check the repeat of every design.

Tensioning cords (“*etiri*”)

In order to maintain the tension in the cloth during stitching, “*etiri*” was used. “*Etiri*” literary means ‘*the head*’ in Twi; this is a piece of fabric folded into two and sewn at the edges in a triangular form. This triangular cloth is strengthened by inserting a bamboo stick within the cloth and with a ply yarn the bamboo stick is secured in the widthwise direction (Figure 4.19). The cloth to be embroidered is secured with a long strong fabric or cord inserted through the unstitched part of the triangular cloth otherwise refers to as the “*etiri*”. The cords are then tied to two permanent or temporal poles / pillars at the extreme ends of the fabric.



An “*etiri*” stitched to a fabric

Stitching line

Plate 4.1: Tensioning cord (“*etiri*”)

Fabric

As explained in the literature review, a fabric is an artifact made by weaving, felting, bonding, knitting or crocheting natural or synthetic fibers. The main fabric types used are plain woven Kente (cotton), lace and drill fabric (red, white and black drill).



Plate 4.2: Set of plain woven Kente strips (*ahwepan*)

Interfacing (Backing cloth / Stiff material)

Interfacings are usually used in dressmaking for backing certain portions of a fabric to create permanent folds and/or make it dimensionally stable. Because of its rigidity and stiffness, it is generally referred to as ‘stiff’. It is usually produced from synthetic fibres. One distinguishing feature of the ‘stiff’ material is that one side of the material is glossy. With the application of heat, the glossy part of the material can adhere to any fabric; this could be achieved by the use of a pressing iron on the reverse side. In this project the interfacing was used to strengthen fabrics that were too flexible to withstand the stitching activity.

4.2 Description of Existing Nwomu Designs

Existing Nwomu designs are generally grouped into two major categories; *Kukruboɔ* and *Kawo*.

4.2.1 Kukruboɔ

Kukruboɔ is a coined out name of a dung beetle known in Twi as '*akukrubine*'. According to Asante's tradition the name '*akukrubine*' is not a pleasant word to pronounce in public hence, the name ***Kukruboɔ*** was preferred instead. *Kukruboɔ* designs used in Nwomu cloths were generated from the Nature and strength of a Dung Beetle. *Kukruboɔ* designs are the most known and common Nwomu stitching techniques and these are characterised by regular vertical cross stitching with variations in yarn colour length and arrangements. Almost all Nwomu cloths produced today are designed using the *Kukruboɔ* technique. The most common *Kukruboɔ* designs known today are;

1. *Sikafutro*
2. *Asanteman*
3. *Kramo nnmaa* or Hausa *ntwrɔye*
4. *Aburo ne nkateɛ*
5. *Tuntum ne fufuo*

1. Sikafutro - Gold Dust

Sikafutro designs are the most common Nwomu designs used among the Asantes. *Sikafutro* means Gold dust; the design represents the rich wealth and mineral possession of the Asantes. The significance of this design is reflected on the wearer, thus showing his affluence in the society. The dominance of the golden - yellow colour in the design resulted in the name *Sikafutro*. Colours used in *Sikafutro* design is arranged in the following order of repeat; → **yellow / red / yellow / blue / yellow / green = 3x + yellow (of about 3ins wide).**

This colour arrangement is repeated three times (3x) before ending with yellow which is about 3 inches wide. This is then repeated across the width of the fabric. *Sikafutro* can be used during durbar of chiefs as well as occasions such as *akwasidae* festivals, to depict one's royalty and wealth. An example of *Sikafutro* design is shown below;



Plate 4.3: *Sikafutro* – gold dust

2. Asanteman – Asante Kingdom

‘Asanteman’ is an indigenous Nwomu design originally designed for the Asantehene and his sub-chiefs for durbars and other festive occasions. It portrays the dignity and values of the Asantes.



Plate 4.4: Asanteman – Asante Kingdom

Today, anybody can use it if only he / she can afford it. The design has three colours → **yellow (or gold), black and green**. These colours are *Asanteman* colours, i.e. the principal colours of the Asante Kingdom.

According to Mr. Asante (personal communication, 30/10/09) the origin of these colours goes with a story that, once there was a rich blackman who went to the forest to hunt. Upon making several attempts, he did not get any animal to hunt. He then decided to rest on a ‘stone’ situated beneath a tree in the forest. He sat on this stone and started wondering how to get something home; little did he know that he was sitting on a pure gold in the forest which could fetch him millions of cedis. When he came to himself he recounted how fortunate he has been to be sitting on gold in the forest. This story resulted in the adage ‘*the rich blackman sitting on gold in the forest*’. The black colour denotes the Asante people, it also signifies the hope of the ‘Blackman’; the yellow (gold) denotes minerals in the earth as well as the wealth of the Asante Kingdom; and the green

denotes the thick rich forest in the Ashanti region. Other variations of *Asanteman* design can be seen at appendix 4.

3. **Kramo nwoma or Hausa ntwɔɔye** - (Arabic script or Hausa writing)



Plate 4.5: Hausa ntwɔɔye - Arabic script

Hausa “ntwɔɔye” as it is popularly called is a design generated from the way Muslims write Arabic, thus from right to left instead of the normal writing from left to right. If one does not know how Arabic scripts are read especially the Koran it will be difficult reading from right to left, since the conventional method of reading a script is from left to right. The writings become meaningless to anyone who does not know how Arabic scripts are read. This *Nwomu* technique follows the same principle. When a cloth is designed with Hausa “ntwɔɔye” technique it would be difficult to determine the beginning and the end of a repeat in the design unless the observer is guided by a professional. The repeat of the design is as follows;

→ **Yellow / red** / repeated **six or eight times**, followed by **yellow / blue** repeated **six or eight times**, then **yellow / green** also repeated **six or eight times**.

This design repeat is then repeated across the entire width of the cloth to form the design called **Hausa “ntwrɔyɛ”**. When designed in a cloth, it can be used during thanksgiving services, funerals, and other festive occasions.

4. **Aburo ne nkateɛ** (maize and groundnut)



Plate 4.6: *Aburo ne nkateɛ- Maize and Groundnut*

“*Aburo ne nkateɛ*” design is characterized by the following colour formation;

→ **yellow / black / yellow / red / yellow / blue / yellow / green**, the black is sometimes omitted depending on the designer. This form one repeat of the design and the repeat are then stitched across the width of the cloth. In a simple term, to form one repeat of the design, red is used after every black yarn before blue and green yarns. In this design, yellow is the separator, yellow is used after any other colour. The term *Aburo ne nkateɛ* (maize and groundnut) is a figurative term used to represent a mixture of something especially when one cannot clearly define the constituent in the mixture. In this design one may think the colours are randomly placed but on the contrary they are well planned. This is another unique design which demonstrates the interposition of Asante’s traditional colours i.e. **yellow, black, red, blue and green**. Because of the versatility of this design it can be used at every occasion.

5. Tuntum ne Fufuo (Black and White)

It is simply called “*Tuntum ne Fufuo*” or ‘black and white’. This is because of the interplay of the black and white yarns. The design is one of the most popular Nwomu designs used in Adinkra cloth production.



Plate 4.7: “*Tuntum ne Fufuo*” - Black and White

When used as a design in a cloth, the cloth could be used for funerals, thanksgiving ceremonies as well as naming ceremonies. Black and White designs can also be rendered in other colour ways such as ‘blue and white’, ‘red and white’, ‘green and white’, ‘red and yellow’, ‘red and black’ and a host of others. These designs may be used alongside the black and white design or separately on joyous occasions depending on the colours in the design. Some of these variations can be seen at appendix 4.

There are countless number of variations of these *Kukruboo* designs, for instance an Nwomu designer may extend the width of a particular yarn colour within the stitching line, this is then interchanged with other colours in smaller widths. This may be repeated across the entire width of the cloth.

A survey on Nwomu designs indicates that individual designers within the Kumasi Metropolis and Kwabre East district have developed their own colour arrangements out of the existing designs and subsequently name their cloths to identify

them. Other names coined out of the existing designs includes *Osikani* (A rich man) coined from *Sikafutro* (gold dust), *Otumfoɔ* (A powerful personality or someone in authority) coined from Asanteman and *Sikafutro*, *Owuo ye ya* (death is painful) coined from both *Sikafutro* and *Tuntum ne fufuo* (black and white), and a host of others.



Plate 4.8: Kukruboɔ design in red, maroon and black

This design is usually worn during funeral occasions because of the dominant red colour.

4.2.2 Kawo (legs of millipedes and centipedes)

The *Kawo* on the other hand is characterized by vertical cross stitching technique with extended irregular or serrated edges. These alternating irregular edges symbolize the legs of a centipede or millipede hence the name *Kawo*. In an interview with Agya Yaw, an Nwomu designer at Ntonsu, (personal communication, 24/03/10) he explained that it was believed that an Adinkra designer carefully studied a group of centipedes matching towards a source. He was amazed with the calculated movement of their centipedes and these inspired him to render this unique movement of the centipedes' legs as a technique for Nwomu design. All *Kukruboɔ* designs can also be rendered with the *Kawo* technique. *Kawo* is the most difficult stitching technique apart from the *Kukruboɔ* and it was originally used as a special design for memorable occasions such as victory after war.

Plate 4.9 is an example of the *Kawo* technique. Plates 5.18 and 5.19 also give a clearer view of this technique.



Plate 4.9: “Kawo” – Centipedes

4.2.3 *Ntatamu*

Ntatamu is a modern way of incorporating the unique Nwomu technique in the form of woven Kente strip into a cloth. With this technique, hand needles are not used; rather the fabric is divided into sections and the *ntatamu* design fixed between these sections. When viewed at a distance, one cannot tell whether it is the original Nwomu design or a Kente cloth. The following are some reasons why the *ntatamu* is used;

1. The nature of some types of fabric designed with plastic or metal ornaments makes it difficult to pierce with a needle.
2. The open work in lace fabrics also account for the use of the *ntatamu*. Some open work designs in lace fabrics are too wide that it makes it difficult to pierce a needle through.

3. Less time is used in production
4. The use of *ntatamu* reduces the stress and energy needed for the original Nwomu design and
5. It is inexpensive

Mr. Solomon Atta – Tumfour (personal communication, 12/05/10) the head of traditional weaving section (CNC) explained that even though this technique is a departure from the original Nwomu technique, its current dominance in the textile market has made it a competitive product of the original Nwomu cloth. An example of this technique is shown at Plate 4.14;



Plate 4.10: *Ntatamu* strips fixed in a lace fabric

4.3 The significance of colour in Nwomu designs

In an interview with Mr. Solomon Atta – Tumfour (personal communication, 12/05/10), the head of traditional weaving section (CNC) he explained that originally traditional spun yarns were used for Nwomu designs. These yarns were spun from cotton and dyed with natural dyeing materials. Some sources of these natural dyes include red clay, termites and insects, leaves, roots, bark of trees, seeds, fruits and soot. The fastness properties of some of these colours were good but they were difficult to reproduce in large quantities. Even though some of these colours were not as bright as colours seen today their symbolical significance cannot be over emphasized.

Every art work produced by an Asante has philosophical significance which is best known to the designer. Every colour used in Nwomu design is symbolical and with the knowledge of these symbolical meanings, the colours are arranged accordingly to form a design. He further explained that there is countless number of coloured yarns used today in the production of the Nwomu cloth. Some have significant meaning where as others are for aesthetic purposes. Red, yellow, golden-yellow, blue, green, lemon – green, black, white, violet, sea – blue, pink, mauve, and maroon are some coloured yarns used today.

4.4 Design concepts developed for the project

Nwomu designs are carefully planned interplay of coloured yarns which have significant value to both the designer and the end-user. Based on the elements and the general principles of design discussed in the second chapter, the researcher developed some concepts for experimentation. The ideas were based on the previous knowledge of the techniques and uses of Nwomu designs in and around the Kumasi Metropolis.

The designs were based on geometric shapes, alphabets, semi- abstract designs as well as figurative images including symbols and animals. These designs were generated to explore and introduce new stitching techniques for Nwomu designs. The motifs used for the samples and the final cloth were first drawn in pencil before editing with a computer. The processes and techniques involved in Nwomu cloth production were followed. In order to achieve better results some of these processes or procedures were modified in addition to new materials and tools.

The following designs concepts were developed for the samples and the final cloth;

4.4.1 Designs (sketches) for the samples



Figure 4.2: Sketch one



Figure 4.3: Sketch two



Figure 4.4: Sketch three



Figure 4.5: Sketch four



Figure 4.6: Sketch five



Figure 4.7: Sketch six



Figure 4.8: Sketch seven



Figure 4.9: Sketch eight



Figure 4.10: Sketch nine



Figure 4.11: Sketch ten



Figure 4.12: Sketch eleven



Figure 4.13: Sketch twelve



Figure 4.14: Sketch thirteen

4.4.2 Design for the Final cloth

Preliminary sketches for the final design are shown below;



Figure 4.15: Final cloth design, sketch one



Figure 4.16: Final cloth design, sketch two

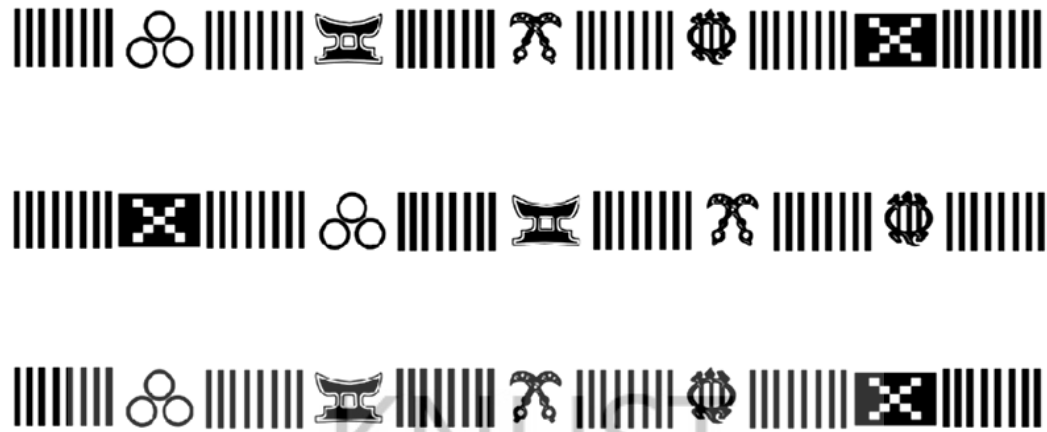


Figure 4.17: Final cloth design, sketch three

4.4.3 Applying colour to the final sketches

The following sketches show the yarn colour arrangements and the design repeats;



Plate 4.11: Final design one –

Stair case (geometric shape and Kukrubo)



Plate 4.12: Final design two -

Combination of Kente designs and geometric shapes



Plate 4.13: Final design three –

Combination of Kente design and some Adinkra symbols

4.5 Processes involved in Nwomu cloth design

The following are the stages the researcher followed in producing the samples and the final cloth;

Step One: Designing

The first stage is the planning of what one wants to stitch onto the fabric. This idea development and layout plan could be done in pencil or with the computer. For the purpose of this project, all concepts were first developed on paper, then to the computer before transferring it to the fabric. Concepts were developed from existing Adinkra symbols, geometric shapes, Kente designs as well as totemic symbols.

Step Two: Preparing the yarns

(a) Converting yarns on cones into hanks

Yarns originally used for Nwomu were prepared from cotton fibres using the traditional spinning method. Today, variety of yarns produced from natural and man-made fibres can be found in the market; cotton, rayon, silk, and polyester yarns are available for use. These yarns are packaged in hank and cone form. For the purpose of this project, yarns in the form of hanks are preferred.



Plate 4.14: Yarns in hanks

If the yarns are in cones, they are first wound onto the warper's mill and then converted into hanks. The hank is cut open at a section and a different coloured yarn is used to tie the ends separately about 8 – 10cm away from the edge. The purpose of this is to avoid entanglement of the yarns. This can be seen at Plate 4.15;



Plate 4.15: a hank tied at a section with a blue coloured yarn

(b) Knotting the yarns

The next process is knotting the ends of the yarns. Knotting involves plying about three to four individual yarns and tying them together making sure that the knot is created at the extreme end of the yarn. This is to avoid wastage. This is a time consuming process and care should be taken not to increase the plied yarns to five or six since this will create irregularities during stitching unless one wants to achieve such effect. Figure 4.18 shows a schematic illustration of the knotting process;

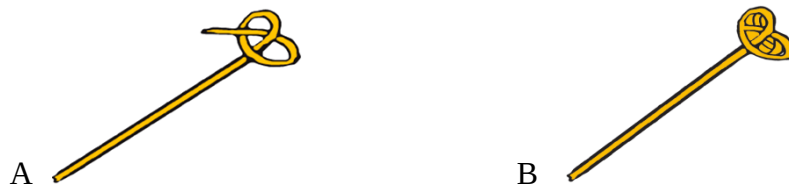


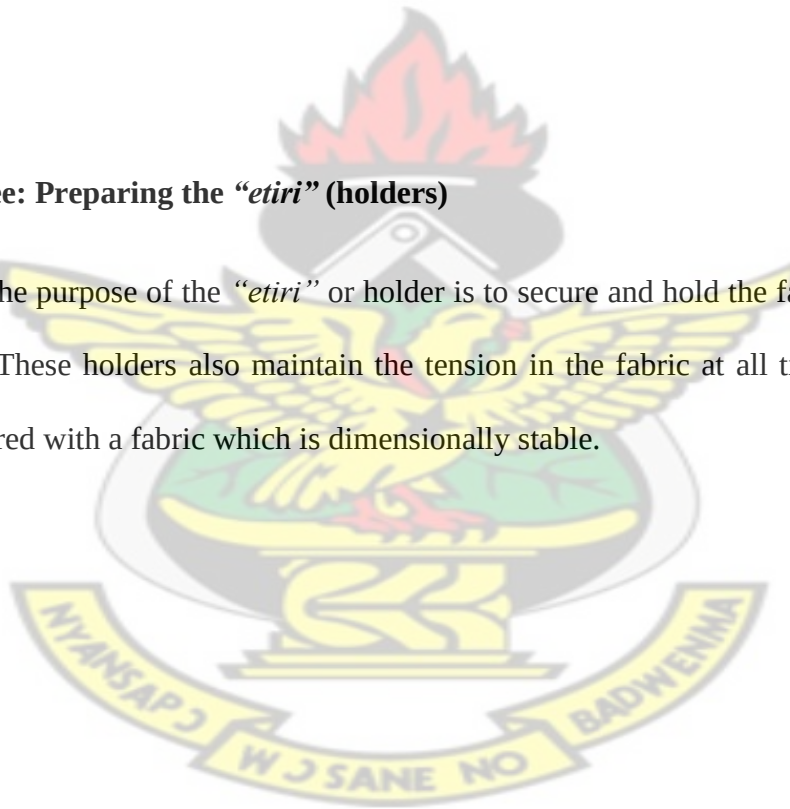
Fig 4.18: Schematic illustration of how the ends of the yarns are knotted



Plate 4.16: Knotted yarns

Step Three: Preparing the “*etiri*” (holders)

The purpose of the “*etiri*” or holder is to secure and hold the fabric firmly when stitching. These holders also maintain the tension in the fabric at all times. The “*etiri*” was prepared with a fabric which is dimensionally stable.



The processes involved in preparing the “*etiri*” are shown below;

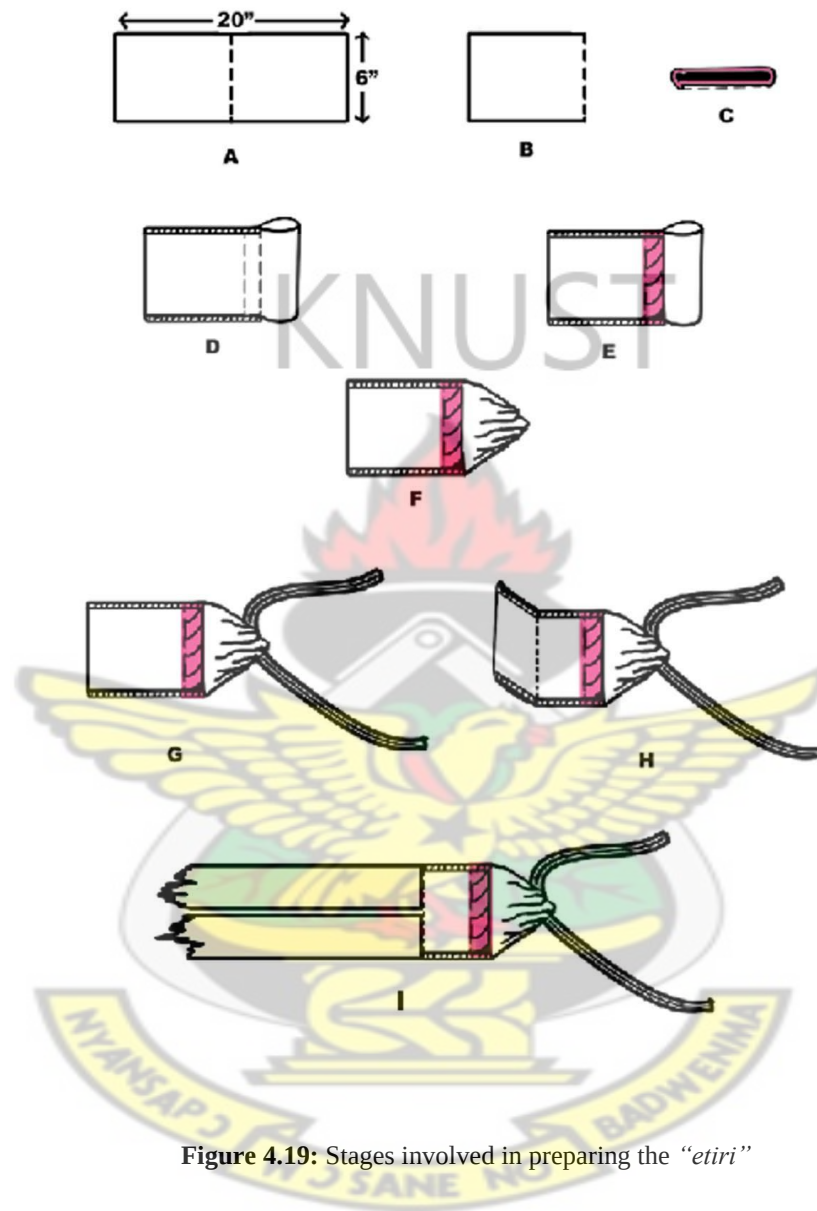


Figure 4.19: Stages involved in preparing the “*etiri*”

A = a plain Kente cloth measuring 51cm by 15.5cm

B = the piece of fabric is folded into two equal halves

C = a flat bamboo stick measuring 15.5cm by 2.5cm is prepared

D = the edges of the folded fabric are then secured with ply yarns. The stitchery is about 8cm to 4cm wide.

E = the stick is inserted between the folds closer to the unstitched area (the position of the bamboo stick is marked in red)

F = the unstitched end of the fabric is gathered together

G = a cord is inserted through the gathered ends, this cord is secured on a pole when tensioning the fabric

H = shows the part of the “*etiri*” which will be fixed to the strips

I = shows the “*etiri*” fixed to the fabric to be embroidered

Step Four: Cutting and folding the edges of the fabric

The following are the steps involved in cutting and folding a cloth for stitching;

- For a man’s cloth, 12 yards (11metres) of fabric is used.
- The cloth is first divided into six sections of about 45.5cm wide and 360cm long. However, 45.5cm by 274cm is used for women’s cloth.
- Kente strips were used for the final cloth; these strips were first marked and stitched together about 5cm to 6.5cm away from the edge, Plate 4.17 and 4.18;



Plate 4.17 and 4.18: Indicates the position where the two strips are stitched together

- d. The edges are then folded separately about 3.5cm inward. To achieve a better result during stitching, an interfacing was used. This is an innovation introduced by the researcher in order to strengthen the strips and make it dimensionally stable. This was achieved with the help of a pressing iron.



Plate 4.19 and Plate 4.20: Capture how the edges of the strips are folded inward

- e. The two joined ends of the strips are also folded inward. This is where the strips would be aligned with the “*etiri*” as indicated at Plate 4.22;



Plate 4.21: After folding - in

Step Five: Fixing the “*etiri*” (the “head” or holders)

This process involves the attachment of the “*etiri*” to the ends of the strips. This is done by aligning the right sides of the strips and the holders together. A five or six

plied yarn is used. Both ends of the folded strips are secured and stitched to the “*etiri*” using the stem stitching technique.



Plate 4.22: Aligning the “*etiri*” to the edge of the Kente strip



Plate 4.23: Stitching the “*etiri*” to the folded strips

Step three (I) and Plate 4.1 shows how the “*etiri*” is fixed to the fabric

The strips are now ready for tensioning and actual embroidery.

Step Six: Tensioning and securing folds

With this embroidery technique, the fabric to be embroidered must be well tensioned so as to provide enough dimensional stability in the fabric. After fixing the strips to the “*etiri*”, it is then tied to the tensioning poles. These tensioning poles are made from wood and it measures about 120cm high.



Plate 4.24: Tying the “*etiri*” to the tensioning pole



Plate 4.25: A tensioned fabric ready to be stitched

The next step is preparing the strip for stitching; this is done by first securing the folds with needles and then tracing the images / shapes on the strip if necessary. Several needles were used to secure the folds together; this provided enough stability at the “stitching line”.

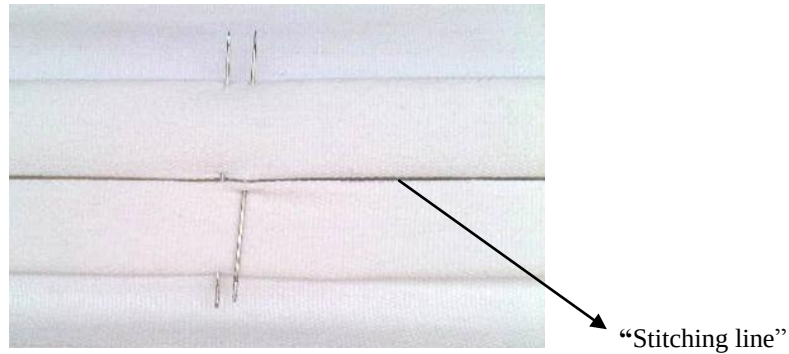


Plate 4.26: Position of the needles used to secure the folds

Step Seven: Threading the needle

When using ply yarns, it is difficult to pass the end of the yarns through the eye of the needle without fraying. Because the yarns are plied in fours and fives, it is difficult to thread it through the eye of a needle since the eye of the needle is too small. In order to achieve a successful threading process the following steps were followed;

- 1) The yarn was wrapped around the needle,

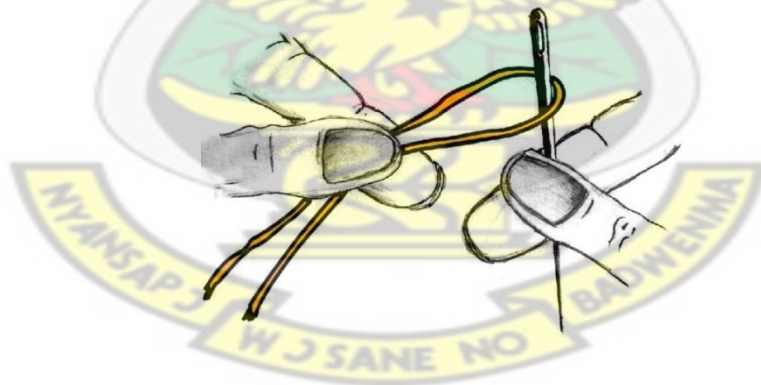


Figure 4.20: Wrapping the thread around the needle

- 2) The yarn is pressed around the needle closer to the fingers and then holding it tight between the thumb and the forefinger (Figure 4.21). This is known as flatterring.

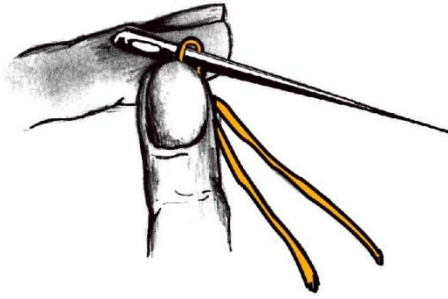


Figure 4.21: Pressing the yarn around the needle

- 3) The needle is removed and the yarn is further flattened between the thumb and the forefinger.
- 4) The yarn is held tight and the needle eye placed on top of the yarn,

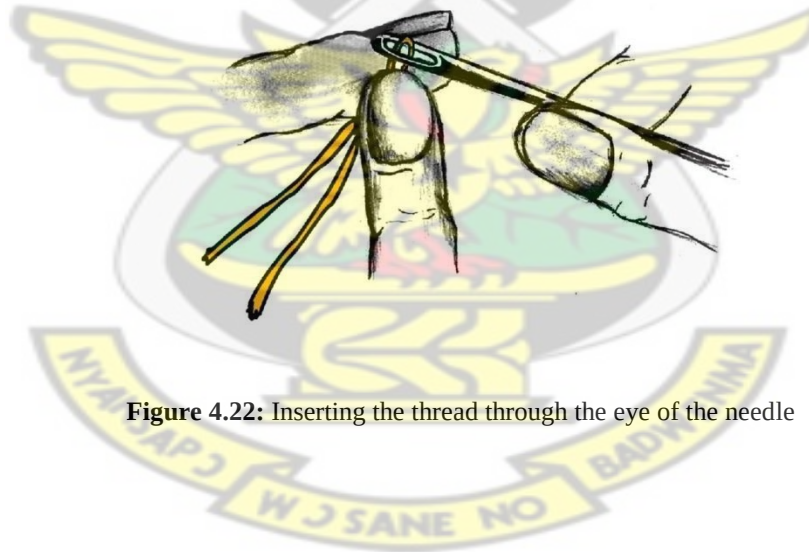


Figure 4.22: Inserting the thread through the eye of the needle

- 5) The yarn is then pulled out through the eye of the needle. The threaded needle is now ready for use (Figure 4.23).

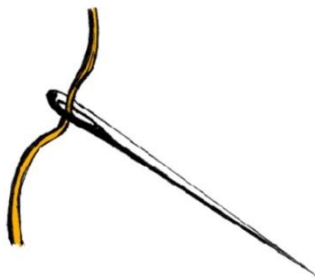


Figure 4.23: A threaded needle ready for use

Step Eight: Actual Embroidery (the stitching process)

To get started, a number of needles are threaded and pierce into the “*etiri*” for easy access. The length of the fabric is measured to ascertain the number of design repeats that will fit into the length of the strip. If there are images or shapes in the design, it is first drawn (or traced) onto the fabric before stitching. There are many stitching styles that can be used in embroidery today but with this indigenous hand embroidery, long cross stitches and / or running stitches were used.

The embroidery is done by piercing the threaded needle through the fabric exactly at the edge of the folds, i.e. where the folded end comes into contact with the surface of the strip beneath the folds. The needle is then pulled out through the opening where the other ends of the folded edges meet (this can be seen as an imaginary line between the folded ends, Plate 4.26). The threaded needle is finally pierced through the opposite side where the folding of the other strip ends, and then reversed to its original stitching end. This process is continued in similar fashion until the thread on the needle is exhausted. This technique is repeated until the entire length of the strip is completed. A schematic drawing of the stitching process (i.e. the use of vertical cross stitch) is shown at Figure 4.24.

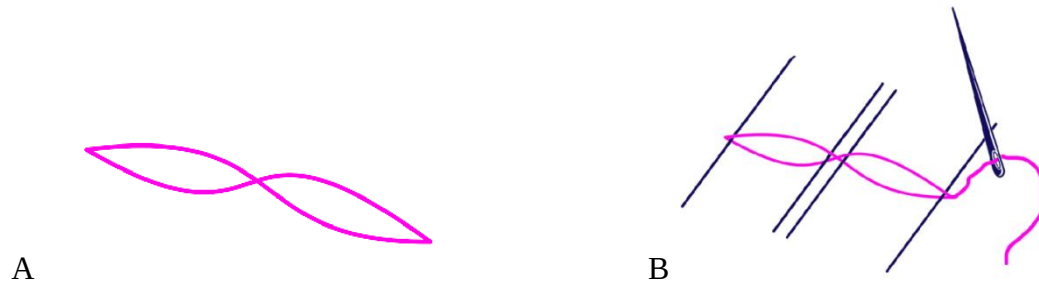


Figure 4.24: Cross section of the stitching process

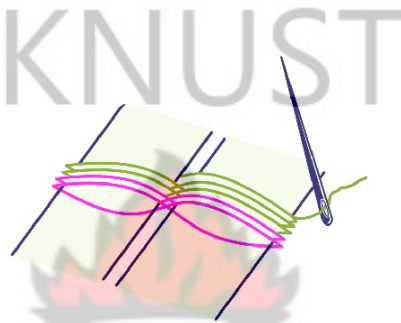


Figure 4.25: Schematic arrangement of the yarns when stitching

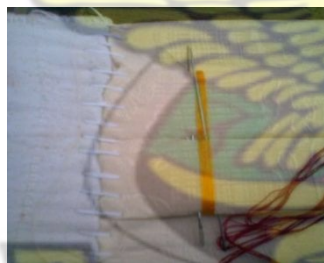


Plate 4.27 and 4.28: Initial stages of the stitching process



Plate 4.29: Position of the needle during stitching

Plate 4.30: A border design for Sample sixteen

As explained earlier, the purpose of this project is to introduce images and symbols into the existing Nwomu designs. In order to stitch the image successfully, it is first drawn unto the strip with a pencil, Plate 4.31;



Plate 4.31: Image drawn onto the fabric

The positive areas of the design are then stitched with a different coloured yarn before the ground or negative areas stitched around it. In order to do this, filling, satin or running stitches may be used, Plate 4.32;



Plate 4.32: Stitching the design



Plate 4.33: Stitched design of 'Gyawu atikor' (appendix 5)

After stitching, the embroidered strip is then separated from the holders with the help of the trimming knife. This process was applied to all the strips produced for both the samples and the final cloth.

Step Nine: Sewing the strips together

Since Kente strips were used for the final cloth, the individual strips were joined together after stitching. In all, Twenty two (22) Kente strips were produced each measuring 13.5cm wide and 360cm long; five pairs (from 10 strips) of these were used for the embroidery. The remaining twelve plain Kente strips were also joined separately in pairs before adding the embroidered strips (Plate 4.35 – Plate 4.37). This was done by the use of a sewing machine.



Plate 4.34: An embroidered strip under tension



Plate 4.35: Joining two plain Kente strips together



Plate 4.36: Sewing the Nwomu strips to the remaining plain Kente strips



Plate 4.37: Joined strips

Step Ten: Printing

Originally, Adinkra printing was done by hand stamping. Adinkra symbols were used for the design for printing; these designs were carved from gourd and calabash. In addition to this, traditional dyes prepared from the bark of the *badee* plant were also used. According to Mr. Asante, an Adinkra printer at Ntonsu (personal communication 16/09/10) the use of these traditional processes were time consuming and tedious thus

making it necessary to introduce hand screen printing in Adinkra cloths. Today hand screen printing has been introduced in the production of Adinkra cloths.

Two sets of designs were developed for this project; each containing four different Adinkra and Kente symbols. Details of these designs have been captured in chapter five.

Plate 4.38 – Plate 4.42 show the printing processes;

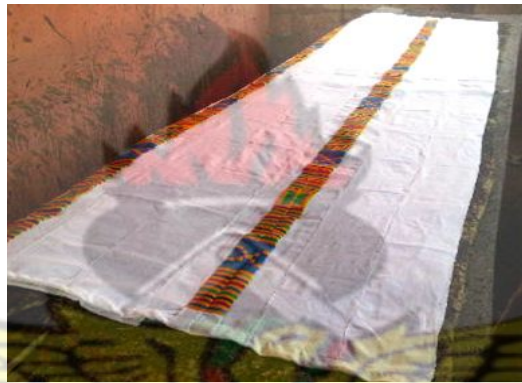


Plate 4.38: Cloth lay on a printing table



Plate 4.39: Printing the first set of design

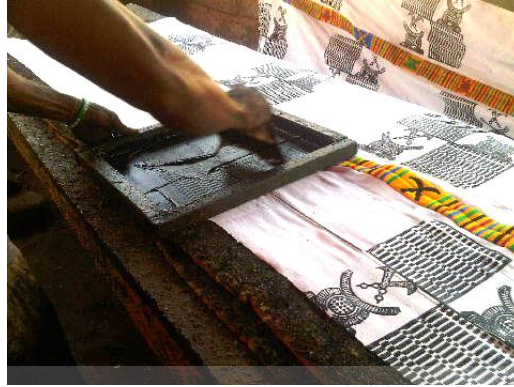


Plate 4.40: Position of the screen on the fabric when printing



Plate 4.41: Printing the second set of designs

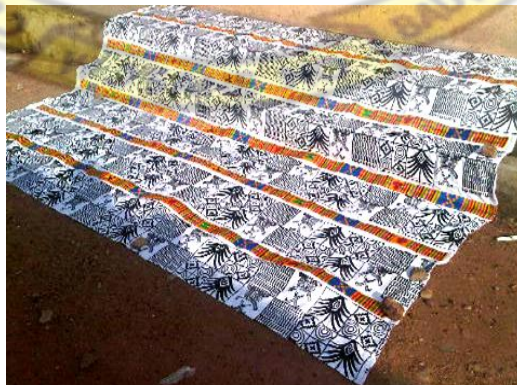


Plate 4.42: Drying the cloth after printing

4.6 Rules and guidelines

The following are some rules and guidelines that were followed during the production of the samples and the final cloth;

- 1) The patterns and coloured yarns to be used were planned before the start of every work. This was done by sketching and editing the concepts first in pencil and then scanned unto a computer for the final editing.
- 2) The preliminary designs were simple and less colourful; this gave room for the addition of details and other colours when necessary.
- 3) Place of work and hands were kept clean before the start of work
- 4) The cloth was then measured, cut and folded correctly before stitching. This was done to both the samples and the final cloth. This helped to achieve accurate repeat size and to avoid wastage.
- 5) It was also ensured that there is enough tension in the cloth at all times.
- 6) Average and shorter lengths of yarns were used since long yarns may entangle.
- 7) Left over yarns was kept properly for reuse.
- 8) Even though “Nwomu” is characterised by a number of bright colours, between two and four different coloured yarn may be used.
- 9) Unwanted yarns and stitches were removed to avoid excessive floats and entanglement.
- 10) The cloth was then folded and kept clean after the days work.
- 11) Registration marks of the design to be printed were done in pencil. These pencil marks were erased after printing.
- 12) Finally the cloth was carefully dried to prevent staining or smearing.

CHAPTER FIVE

DISCUSSION OF THE RESULTS

5.0 Introduction

This chapter exhibits and discusses the results of samples produced as well as appreciation of the final cloth. The study exploited some design concepts relating to Asante socio-cultural and philosophical values. These new designs reflect the original Nwomu design concepts and its significance to Asantes. As part of the study, the researcher has also outlined and discussed some findings that were obtained during the study.

5.1 Results and discussion of samples produced

5.1.1 Sample One

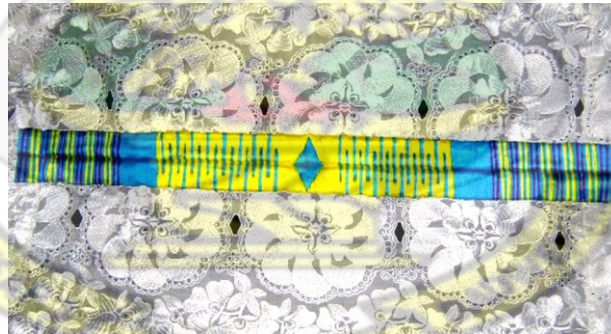


Plate 5.1: Sample one – ‘*denkyembo*’

The ‘*denkyembo*’ design captured in Plate 5.1 is the first sample produced by the researcher. The main symbol used in this design is the shape of a diamond located at the centre of the design. Diamonds are precious minerals which signify royalty, wealth, and affluence but difficult to find and own. The value and significance of diamonds can

be likened to the love that one has for a lover. This reason therefore urged the researcher to name the design as *ɔɔ denkyemboɔ* which means ‘diamond of love’. The design was rendered on a white lace fabric with yellow, violet and turquoise blue rayon yarns. The lace is designed for ladies and women who would like to show their endless love for their spouses. The design is dominated by yellow and turquoise blue colour; these colours signify wealth and love. This lace fabric can be used during wedding ceremonies, thanks giving services and the likes.

5.1.2 Sample Two

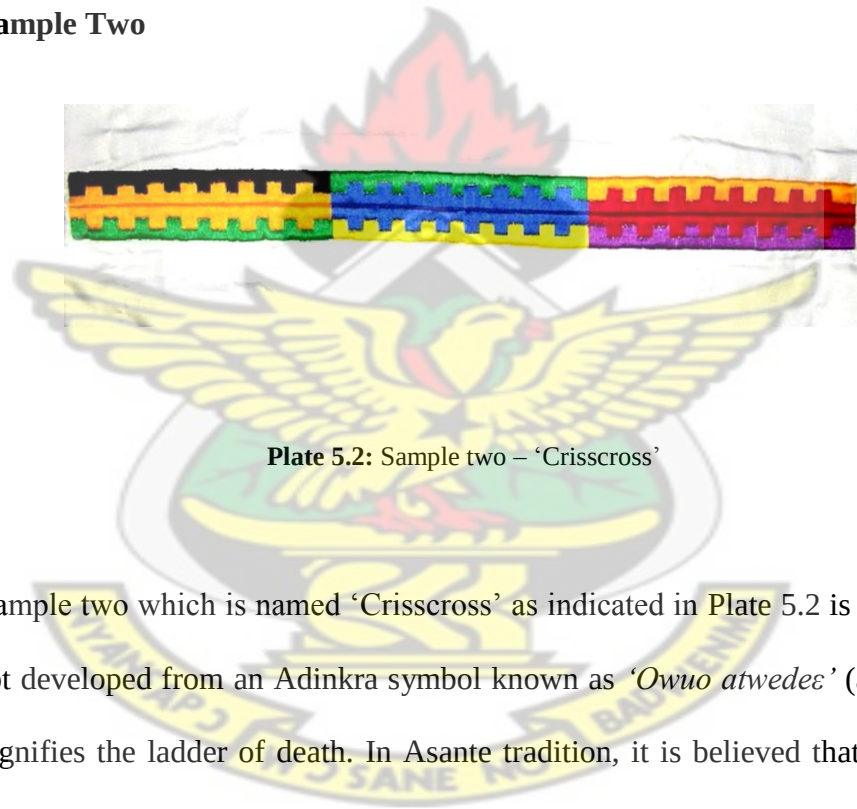


Plate 5.2: Sample two – ‘Crisscross’

Sample two which is named ‘Crisscross’ as indicated in Plate 5.2 is designed with a concept developed from an Adinkra symbol known as ‘*Owuo atwedee*’ (appendix 5 10) which signifies the ladder of death. In Asante tradition, it is believed that everybody is destined to climb the ladder of death. This symbol is used in connection with death or as a caution to people of questionable character. The design is separated into three parts; the first concept developed with the colours of *Asanteman* (Plate 4.4), the second in connection with love and the third from Sikafutro. The colour and type of fabric used for this sample is white drill fabric. Colours of yarns used for the first segment are golden -

yellow, black and green. The second segment consists of blue, green and yellow yarns and the third segment of the design consist of golden – yellow, violet and red. The yarns are cotton and rayon. This design can be combined with other basic Nwomu design like *Kukrubuɔ* or *Kawo*. Depending on the colours used, the cloth can be used on almost all occasions.

5.1.3 Sample Three



Plate 5.3: Sample three – ‘*Kɔtɔkɔ*’ (Porcupine)

The porcupine or ‘*Kɔtɔkɔ*’ is a large rodent with sharp erectile bristles mingled with its fur. The porcupine uses these sharp bristles as self defense against its preys. The porcupine, among Asantes is believed to be a symbol of strength, warrior and self defense creature. The symbolism of this animal to Asantes resulted in an Akan adage ‘*Wo kum apim a apim beba*’ which means ‘if you kill a thousand, thousands will reappear’. The design starts with a *kukrubuɔ* design as a border followed by eleven squares in ascending and descending order. The image of the porcupine is located in the middle of the design. Yarn colours used are black, red, and maroon. The sample was produced purposely for funeral occasions and other related activities. This is because of the dominance of red and black colours in the design. The cloth can be used by both sexes (male or female). Cotton

and rayon are the yarn types used in stitching. The fabric is a drill fabric with a red background colour.

5.1.4 Sample Four



Plate 5.4: Sample four – ‘apremo’

This design is called ‘*apremo*’. Apremo is the name given to the *edwene* (i.e. the zigzag designs) used in Kente cloths. This design may also be called ‘*dame dame*’ or draft; this is because of the alternating blue and white colours which are likened to the squares on a draft board. This sample combines both geometric shapes and Kente designs in one Nwomu design. The design is made up of two colours i.e. blue and white rayon yarns. The significance of these designs makes it adaptable for all sexes, but most importantly women may prefer it for wedding ceremonies, naming ceremonies and the likes. The arrangements of the design are as follows; → *nwotua / eta / nwotua / apremo / nwotua / eta / nwotua / apremo* and *nwotua*. The interfacing (backing cloth) was not inserted in this sample; this made the stitching process difficult due to the flexible nature of the fabric. The design was produced on a white drill fabric.

5.1.5 Sample Five and Six



Plate 5.5: Sample five – ‘K N U S T’ I



Plate 5.6: Sample six - ‘K N U S T’ II

Plate 5.5 and 5.6 are named ‘K N U S T’. Plate 5.6 is a variation of sample five. As part of the objectives for the study, the researcher incorporated alphabets as a technique in the Nwomu design. By this technique, a designer may write any name or words of his choice in the form of Nwomu design. The arrangement of the colours used in this design was developed from *Asanteman* design, but with an introduction of red which adds up to the traditional colours of KNUST. The fabric is plain white Kente. Colours of yarn used were arranged in the following sequence; → red / yellow / black and green, using rayon, cotton, and polyester yarns. This sample is design for the KNUST community, especially for lecturers and senior staff members. It may be used during anniversary celebrations or special congregations.

5.1.6 Sample Seven

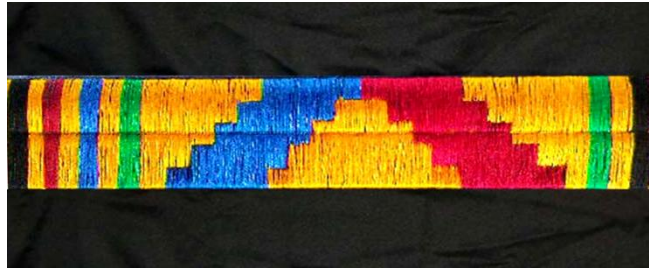


Plate 5.7: Sample seven – ‘*atwedeε*’

‘*Atwedeε*’ or staircase is the name given to sample seven (Plate 5.7). The concept of this design was developed from an Akan adage ‘*owuo atwedeε baako enfro*’ which means that it is mandatory for every person to climb the ladder of death. The design was rendered on a black drill fabric with black, golden – yellow, red, blue and green rayon yarns. The design is associated with the death, hence the name ‘*owuo atwedeε*’. When designed in a cloth it may be used for funerals and its related activities.

5.1.7 Sample Eight



Plate 5.8: Sample eight – ‘*denkyembuɔ*’

Sample eight is a further development of sample one (ɔɔ *denkyembuɔ*). This design is a series of diamond shape connected to each other. The diamonds were stitched

with a wine rayon yarn using a yellow rayon yarn as the background. The design was rendered on a cream coloured fabric. The use of diamonds in this design signifies royalty, affluence and wealth. When a cloth is produced with this design it can be worn during wedding or engagement ceremonies as well as thanksgiving services to show appreciation. The design is recommended to ladies who are fashion conscious and want to demonstrate their love.

KNUST

5.1.8 Sample Nine



Plate 5.9: Sample nine – ‘Untitled’

Sample nine was designed with geometric shapes which were used in other samples developed during the experiment. The geometric shapes used in this design are known in Kente weaving as *Apremo* and *nwotua*. All these symbols may not be used in one Nwomu design. It could be combined with other basic designs to form a unit repeat. These shapes are difficult to render in cloth with hand needles especially when using the Nwomu technique. Sample nine demonstrates the ability of the researcher to incorporate

these geometric shapes in an Nwomu design. For the purpose of this research the geometric shapes were combined in one unit repeat. Sample nine was developed on a white drill fabric using the following set of colour arrangements; → green / black / maroon / golden – yellow / and blue rayon yarns.

5.1.9 Sample Ten



Plate 5.10: Sample ten – ‘nwotoa’

Sample ten is a modification of sample four. The design is named ‘nwotoa’ because of the alternating red and golden - yellow squares located at both ends of the design. Nwotoa is a border design used in designing Kente cloths and it represents the shell of a snail. It is used as a border design in this sample because it demonstrates the strength of the snail shell as a protection for the snail. In this case the main design which consists of geometric shapes (*apremo*) and *kukrubu* designs located in the central part is being guarded by the border design, .i.e. *nwotoa*. This sample is also produced with the following set of colours; maroon / golden – yellow / green / and blue rayon yarns. As explained earlier, these individual shapes can be combined with the basic Nwomu design to form a unit repeat.

5.1.10 Sample Eleven



Plate 5.11: Sample eleven– ‘C N C ‘

Golden – yellow, black and green are the yarn colour arrangements used as a border design for sample eleven (Plate 5.11). This is then followed by ‘gye nyame’ symbol. This symbol is repeated at the other end of the design before the border design. The colours used were arranged in the order of *Asanteman* design. This is because the Centre for National Culture uses colours similar to that of the Asante Kingdom. The fabric used is plain white Kente. This sample was designed for C N C, Kumasi.

5.1.11 Sample Twelve



Plate 5.12: Sample twelve – ‘totemic symbols’

The Kukrubuɔ design in Plate 5.12 is a variation of ‘*tuntum ne fufuo*’ design. This sample is rendered in two colours; violet and cream on a white drill fabric. Totemic animals such as the porcupine, tortoise and dog were added as part of the design. These totemic symbols could be rendered with other geometric shapes on Kente strips when

designing a full cloth. For the purpose of this research the symbols were combined together. This sample was developed for people who want to see their totemic symbols in their Nwomu cloth.

5.1.12 Sample Thirteen



Plate 5.13: Sample thirteen – ‘*Owuo atwedee 2*’

This sample is a funeral cloth design developed as a modification of sample seven (Plate 5.7). The design is made up of staircase designs (*atwedee*) interconnected to each other. The sample is dominated by red, maroon and black colours on a white Kente background. With the increase in the use of funereal cloths in the Kumasi Metropolis, the design was developed to exhibit the significance of symbols and designs used during funerals and their related activities. The design could also be rendered on a black or red Kente background.

5.1.13 Sample Fourteen



Plate 5.14: Sample fourteen – ‘*Edwene asa*’

Sample fourteen is designed with two *edwene* designs used in Kente cloth production; *afuakwa* and *mpuakron* (nine squares). This is a colourful sample with five different colours harmonizing with the Kente symbols used. The design in the sample begins with a *kukrkubu* design in the following colour formation; → golden-yellow / red / yellow and green. This is then followed by *afuakwa*, designed in black and golden – yellow with a green background. There is another *kukrkubu* design before the *mpuakron* and this ends the unit repeat. The *mpuakron* design is made up of nine squares forming an x symbol rendered in a golden - yellow colour on a blue background. Rayon yarns were used.

The name ‘*Edwene asa*’ is being suggested because of the number of Kente designs used. ‘*Edwene asa*’ simply mean all designs have been exhausted. This is a replication of the Kente cloth called ‘*Edwene asa*’ rendered with the Nwomu technique. The design was produced on a black drill fabric. The cloth can be worn on all occasions because of the colours used and the adaptation of the Kente design.

5.1.14 Sample Fifteen and Sixteen



Plate 5.15: Sample fifteen – ‘Adinkra symbols’



Plate 5.16: Sample sixteen – ‘Adinkra symbols 2’

Samples fifteen and sixteen (i.e. Plate 5.15 and Plate 5.16) were developed with Adinkra symbols. Adinkra symbols are very significance in the culture of Asantes. The ideology, socio - cultural significance and the philosophy behind these symbols make their usage very common in the textile market. *Epa* and *fihankra* (appendix 5) were used in sample fifteen. These symbols were alternated with *kukrubuɔ* designs to form a unit repeat placed between the symbols. The *kukrubuɔ* designs are arrange in similar manner as *aburo ne nkateɛ* (Plate 4.6) design. The yarn colours used in sample fifteen are golden – yellow, green, blue, red and black. *Mmusuyideɛ*, *gye Nyame* and *Gyawu atikɔ* (appendix 5 10) on the other hand were used in designing sample sixteen. These symbols are guarded with a border design named ‘rainbow’. This border is named rainbow because of the variety of colours arranged in a very fashionable manner at the edge of the design. There is also a small *kukrubuɔ* design in a triangular form placed between the borders and the Adinkra symbols.

5.1.15 Sample Seventeen



Plate 5.17: Sample seventeen – ‘nton’

Sample seventeen is called ‘nton’ which means clan. As part of the study, the researcher experimented with the totemic symbols of some Akan clans and incorporated these symbols in a fabric with the Nwomu technique. Using the needle to render these totemic symbols in embroidery was a great challenge to the researcher.

The leopard

The leopard (*etwie* or *ɔsibɔ*) represents the Twidan or Bretuo Family. It is a symbol of bravery and skill. A lion may also be used to represent the bravery and skillfulness of an individual or group of people.

The parrot

The parrot is the totem for the *Agona* family. It is a symbol of eloquence and frankness.

The crow or raven

The white crested raven or crow (*akonkran*) is the symbol of the *Asona* family (i.e. the family of Asona). It is a symbol of purity of heart and eloquence

5.2 *Kawo* (legs of millipedes and centipedes)

The researcher also developed different colour ways of the “*Kawo*” technique. This design is unique in the sense that the edges are not aligned as seen with *Kukrubuɔ* design in other samples. With the “*Kawo*” the edges are serrated and this is likened to the legs of a centipede. An insert in Plate 5.18 shows a clearer view of the formation of the yarns at the edges of the design. Plate 5.19 also shows a combination of *Kawo* and *Kukrubuɔ* designs;



Plate 5.18: A developed colour arrangement of the *Kawo* technique



Plate 5.19: Combination of *Kukrubuɔ* and *Kawo* technique

5.2 The Final cloth



Plate 5.20: Final cloth – '*Sikafutro Kwasiada Adinkra*'

Fabric size: 95” x 132”

Nwomu cloths are very significant in the promotion of Ashanti cultural values and this final cloth is not an exception, because of the colours and symbols used in designing the cloth. The symbols and images used in this final cloth connote beliefs and cultural principles associated with the Asantes. Some of these symbols were originally used in designing Kente cloths. As part of the study, these symbols were introduced in the cloth in order to portray the significance of Asante cultural values. Plate 5.20 shows a display of the final cloth (*Sikafutro Kwasiada Adinkra*). The cloth was produced with twenty two (22) plain white Kente strips called *ntomaban* / *ahwepan*, (Plate 4.2). In all, ten strips were used for the actual Nwomu designs. During the stitching process these strips were joined together to produce five embroidered strips. A pair of these Nwomu

strips can be seen at Plate 4.34. The remaining twelve (12) strips were distributed and joined evenly to the five (5) Nwomu strips and this can also be seen at Plate 4.37

Each Nwomu strip is made up of five Adinkra symbols and a Kukrubuɔ design known as *Aburo ne nkateɛ* (Plate 4.6). The arrangements of the designs are as follows;

→ *Aburo ne nkateɛ / mpuakron / Aburo ne nkateɛ / mpua nsa / Aburo ne nkateɛ / akonwa / Aburo ne nkateɛ / denkyem / Aburo ne nkateɛ / akofena / and Aburo ne nkateɛ*. However, to make the entire design harmonious the *mpuakron* which has a blue background was alternated with the other symbols. The colours of rayon yarns used are golden – yellow, wine, blue, green, and black. The Nwomu design is dominated by a golden – yellow colour, and as explained earlier when a cloth is dominated by a particular colour i.e. yellow or golden - yellow it is named ‘**Sikafutro**’ which signifies gold dust.

Also, in the production of Adinkra cloths when two or more different sets of designs are used in printing an Nwomu cloth it is named ‘**Kwasiada Adinkra**’. The suggested name for this final cloth therefore is ‘*Sikafutro Kwasiada Adinkra*’ or ‘*Kwasiada Adinkra Sikafutro*’. Other names may be given in addition to these names but this is decided by the designer or the end user. The final cloth is 237.5cm x 330cm (95” x 132”) in size and this is for man’s cloth.

The design concepts developed were based on existing Nwomu designs as well as Adinkra symbols which promote Asante cultural values.

The individual Nwomu designs used in the final cloth are outlined and explained below;

1. A Kukrubuo design



Plate 5.21: *Aburo ne nkateε*

This is the main kukrubuo design used in the final cloth. The name of this design is *Aburo ne nkateε* (maize and groundnut). The design is so named because of the distribution of colours used. Five colours were used i.e. golden - yellow, black, red, blue and green, the black is sometimes omitted in the design. These colours were used in the final cloth because it signifies Asantes' cultural traditions and philosophy.

2. Mpuakron



Plate 5.22: *mpuakron*

The first motif or pattern used in the final cloth is *mpuakron*. As explained earlier *mpuakron* means nine squares, these squares are in a form of the symbol x rendered in a golden - yellow colour on a blue background. This design is commonly used in a popular Kente fabric called '*Fatia fata Nkrumah*'. The researcher experimented with this Kente pattern by incorporating it into Nwomu designs.

3. Mpua nsa



Plate 5.23: *mpua nsa or tikro nkɔ gyina*

The symbol in Plate 5.23 was derived from a popular Akan saying ‘*tikro nkɔ agyina*’ i.e. one head does not go into council. There is always the need for one to solicit the views of others in making a decision. Others also explain the meaning of this symbols in an Akan adage as ‘*abua bi beka wo na ofiri wo ntuma mu*’ - meaning a closer friend could be your worst enemy or your problems could be caused by someone closer to you. The circles in the design are connected together and this suggests how a friend can be that close but may have bad intentions.

4. Denkyem



Plate 5.24: *denkyem*

Denkyem or crocodile is noted for its ability to stay both on land and in water. The symbol advices and encourages people to adapt to changing circumstances in life especially those which seem difficult and beyond their control.

5. Akonwa



Plate 5.25: *akonwa*

The stool or *akonwa* is a symbol of power and authority. When used in a design it signifies the overall sovereignty one has over his subordinates.

6. Akofena



Plate 5.26: *akofena*

This is a symbol of two war swords crossed at an angle; this symbol signifies the power and authority vested in a particular chieftaincy or state. It symbolises the gallantry and loyalty of warriors who protect a particular chieftaincy. It is also a very important tool used in swearing the oath of allegiance. When used together with the traditional stool it symbolises total power and authority.

Individual designs developed for printing are shown below;

7. *Nwɔtua*

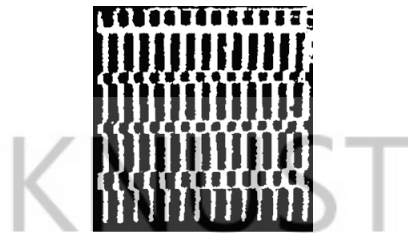


Figure 5.1: *nwɔtua*

This pattern was adapted from a Kente border design called *nwɔtua* (the shell of a snail). This design symbolises strength, protection and security.

8. *Aya and Epa*



Figure 5.2: *Aya and Epa*

Figure 5.2 is a modification of an Adinkra symbol called *aya*. *Aya* (Fern) is a hardy plant, which has the ability to withstand all weather conditions and soil types. The symbol signifies endurance in all aspect of human endeavours. At the base of this design is the *epa* symbol (appendix 5)

9. Aban



Figure 5.3: *Aban* or *Otumfoɔ*

This design is popularly used as a pattern in Kente cloths. It is a serrated diamond shape with a cross sign located in the middle. The design is commonly known as *aban* or *otumfoɔ*. This symbol also symbolizes power, authority and superiority.

10. Adinkrahene



Figure 5.4: *Adinkrahene*

This is the chief of all the Adinkra symbols, hence the name ‘*Adinkra-hene*’ (king).

It is believed that this symbol have played an inspiring role in the designing of other symbols. The above reasons makes the symbol the greater among all the Adinkra symbols ever discovered. The symbol signifies the need to play inspiring and leadership roles.

10. Final set of design

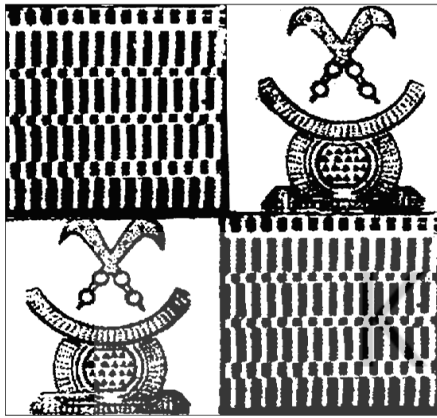


Figure 5.5: *Tumi*

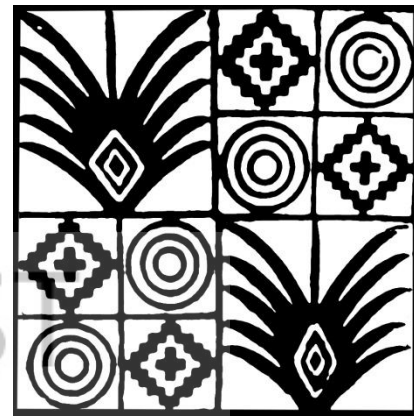


Figure 5.6: *Otomfo*

Each set of design is made up of three to four individual designs. Hand silk screens were prepared with these designs for the final printing. These designs were arranged alternatively on the fabric during printing (Plate 4.38 – Plate 4.42). The first set called *Tumi* consists of *akofena*, *akonwa* and *nwotua* (Figure 5.4) and the second set called *Otomfo* also consists of *aya*, *epa*, *Adinkrahene* and *aban* (Figure 5.5). Each set is divided into four segments and each segment is 13.8cm x 15cm.

5.4 Naming the designs

According to the word web dictionary (2009) a name is a language unit by which a person or thing is known. Kyerematen (1965) also explained that names are very symbolic and significant in every Ghanaian community. Easy identification and description can be made of a person or product when there is a specific name given to him or it. The philosophy behind most cloth names used among Asantes can best be understood if one considers and comprehends the culture of the people.

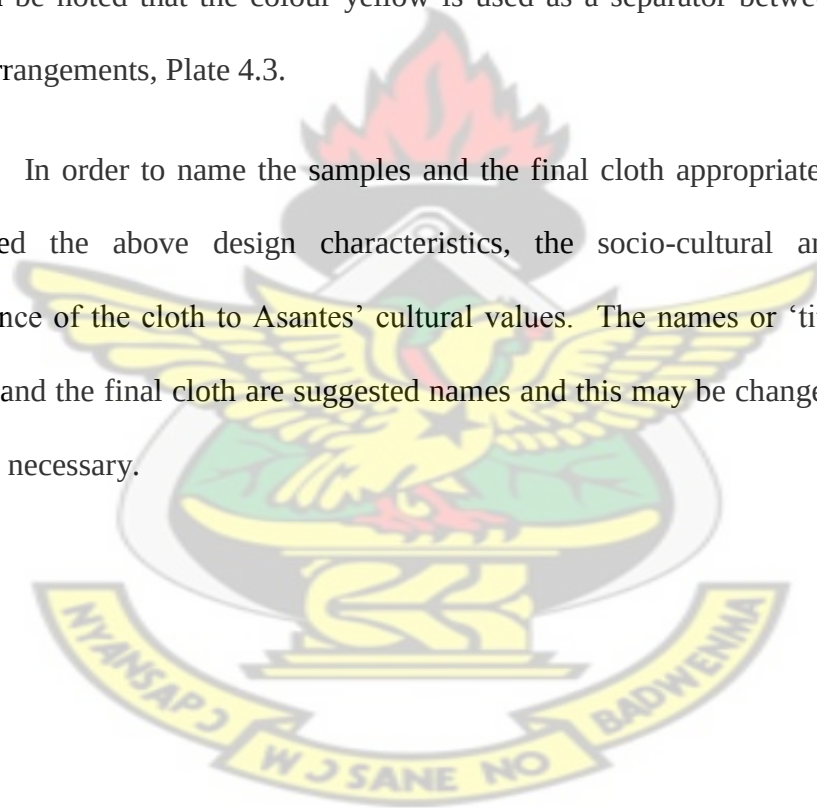
The names given to all the designs produced as part of the study are in Twi since this is the common language of the indigenes in and around the Kumasi Metropolis. Most of these names are symbolic to the people of Asante. With respect to Asante culture, names are given for specific reasons; for instance, names like Kwame, Kwasi, and Yaw are given to a male child born on Saturday, Sunday and Thursday respectively. Whereas names such as Agyeman, Opoku, Yeboah and the likes are family names. In Akan tradition however, names such as Aduana, Oyoko, Agona, Asakyiri, Asene, Asona, Agona and Bretuo are names given to a person or group of people who are believed to be descendant(s) of one ancestor. These are names of the eight clans found among the Akans.

In Asante textile tradition, names are given to Kente and Adinkra cloths based on the following; the type of *edwene* (design) used in the fabric, the name of the weaver, the perception of the designer at the time of weaving, the season, from proverbs, individual achievements, the personality or position of the one the cloth is being designed for, the colours used in the design, the arrangements of the motifs and symbols in the design and for ideological or philosophical reasons.

Cloths such as “Adinkra”- (means farewell), “Nwomu” (means pierce through), “Kobene” (red), “Birisi” (brown) and “Kuntukuni” (black) all together are called “Akunin Ntoma”- i.e. cloths for the valiant or brave heart. These names were originally given to these cloths because of thier usage and characteristics. According to Kyerematen, (1965) names given to fabrics are symbolic and some names are coined out of its usage and physical properties, example ‘Hyewo a enhye’ literally means burn it will not burn or fire proof.

In naming cloths produced with the Nwomu technique, one considers the following characteristics of the design; the colour(s) of the yarns used, arrangements of the yarns, the dominant colour in a repeat of the design as well as the Adinkra symbol(s) or designs used for the stamping or printing. The Adinkra symbols and their socio - cultural significance has been outlined in appendix 5. For example, in a *Sikafutro* (gold dust) cloth design, the dominant yarn colour is yellow or gold and the colour arrangements could vary depending on the designer. However, in designing such a cloth it should be noted that the colour yellow is used as a separator between colours in the colour arrangements, Plate 4.3.

In order to name the samples and the final cloth appropriately the researcher considered the above design characteristics, the socio-cultural and philosophical significance of the cloth to Asantes' cultural values. The names or 'titles' given to the samples and the final cloth are suggested names and this may be changed as and when it becomes necessary.



5.5 Field Research Findings

The study exploited the various techniques of using Nwomu to design an Adinkra cloth among the Asante people of Ghana. In addition to the results discussed in this chapter, the researcher also made other findings during the sampling as well as the experimentation processes. These findings are discussed under the following sub headings;

5.5.1 Field Findings made on Adinkra cloths and the existing Nwomu techniques

According to Mr. Tei Maitey (personal communication, 25/05/10) the Adinkra cloth serves as a representation of the history, culture, norms and values of the Asante people and this together with the Kente cloth are the two most prestigious cloths in the Asante Kingdom. The two cloths carry the beliefs, aspiration and image of the Asante people where ever they may be found. The Adinkra cloth also serves as an educative material in its totality.

He added that the Adinkra cloth teaches a whole lot of cultural values necessary for the development of ones intellect. The Adinkra cloth also serves as a means of communication to the outside world especially to tourists who want to know more about the Asante culture. The cloth may also be used for other purposes such as wall hangings, decorating the dead and as souvenir for tourists and visitors.

It was observed that the Nwomu technique is different from Adinkra design even though the two can be combined to produce an Adinkra cloth. Again, it was realized that

wearing the Adinkra cloth determines the kind of ceremony which one is attending and one's status in society. It was also observed that there are more Nwomu designs (i.e. different colour arrangements and motifs) in the market today that are being developed from time to time, yet there is monotony in the design concepts.

5.5.2 Field Findings made on tools and material used

According to Mr. Mensa (personal communication, 30/09/10) the fabrics used in the production of Nwomu designs may be locally produced fabrics or any of those manufactured in the industry. Nwomu can be done on any type of fabric that can be sewn with hand needles, i.e. any type of fabric may be used except fabrics which have too many open work or too hard to pierce through. It was observed that even with such fabrics, *ntatamu* (Plate 4.10) technique may be employed. An interfacing (backing cloth or 'stiff') may be inserted in fabrics that are too light and flexible; this is to provide enough dimensional stability while stitching. Again, it was realized that yarn types produced from cotton, polyester, and rayon can also be used in Nwomu designs.

Needles used in places where indigenous embroiders work are shared by all. There is the tendency that this could lead to the transfer of HIV / AIDS and other infections (Mr. Atta Tumfour, personal communication, 12/07/10).

5.5.3 Field Findings made on motifs and symbols used

As part of the research, interviews conducted confirmed that some indigenes have little or no idea on the history, and development of their traditional clothing, as well as the names of the designs, colours and symbols used in Kente, Adinkra and / or Nwomu cloths.

During the experimentation process it was observed that motifs in the form of symbols, geometric shapes as well as images can also be embroidered with the Nwomu technique in the Adinkra cloth.

It was also realized that Adinkra symbols are representation of Asantes' cultural values and not fully abstracted objects. Even though some of these designs are conceptual, they represent the thoughts and values of the Asantes. It was observed that the Nwomu designs tend to highlight and project the printed Adinkra designs in the cloth.

5.5.4 Field Findings made on marketing the Adinkra / Nwomu cloth

There are Nwomu designs printed from the factory available in the market today. These designs are imitations of the traditional Nwomu cloths. This is believed to have caused the decline of the patronage of the original Nwomu cloths.

The prices of the Adinkra cloths also differ depending on the type of buyer. This means that affluent people in the society pay more for the same cloth than the ordinary person. It was again observed that designs and colours used in the cloth also play a major role in determining the prices of the cloth. Finally, the study revealed that during funerals and other festive occasions, the market for Adinkra cloths increases and thus boosts economic activities in the Kumasi Metropolis.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter discusses comprehensively the summary of the study, and some conclusions. It also outlines some recommendations, list of references and appendices used as part of the study.

6.1 Summary

The use of symbolical cloths such as Kente and Adinkra cloths among Asantes is very significant since this reflects the traditions and cultural heritage of the Asante people. But this aspect of our culture has not been given enough recognition in the field of academia.

The aim of the study is to identify, describe and discuss some existing indigenous stitching techniques used in Adinkra cloth production and to develop new design concepts incorporating inscriptions, images, and geometric shapes. Comprehensive studies were made on the history and origin of hand embroidery and Adinkra cloth among the Asante people. Design concepts were developed from existing Nwomu techniques, Kente designs as well as Adinkra symbols. These designs were carefully selected and exploited to suit the purpose of the study.

The instruments used in the study include interview and observation. In all, thirty five (35) individuals were interviewed in Kwabre East District and Kumasi Metropolis using the informal interviewing structure. The researcher used participant – as – observer principle to acquire in-depth knowledge on the history, technique, tools and materials

used in indigenous hand embroidery and Adinkra cloth production. KNUST library, Ashanti library, and the Balm library are some of the libraries consulted during the literature review and the sampling processes. The *target population* is producers, sellers and users of Adinkra cloth in Ashanti Region whilst the *accessible population* was selected producers, sellers and users of Adinkra cloth among Asantes in the Kwabre East District and Kumasi Metropolis. Areas covered are Wonoo, Bonwire, Adawomase, Ntonsu and Aboasu in the Kwabre East District. Other areas include the Centre for National Culture, Bantama, Manhyia, Asafo, and Asukwa in the Kumasi Metropolis. Primary data was sourced from these areas as part of the data collection process.

The research was based on qualitative research approach with emphasis on descriptive and experimental methods of research. Purposive sampling method was used during the primary data sampling processes. The study involves series of experiments and observations on the Nwomu technique; in view of this, a number of samples were developed which aimed at exploiting the possibilities in indigenous hand embroidery. A detailed systematic procedure in the design concepts as well as the production of the samples and the final cloth has been outlined. The study also provides comprehensive discussions on the findings observed during the experimentation and the data collection processes.

6.2 Conclusion

Historical accounts available revealed that the art of Nwomu among Asantes was practiced by the indigenes long before the emergence of the Adinkra cloth. But it became prominent with the introduction of the Adinkra cloth in the 17th century. The two most prestigious cloths found among Asantes are Kente and Adinkra cloths. These cloths play myriad of roles in promoting Asante's cultural values. It is no doubt that foreigners travel far and near in order to purchase pieces of this unique work of art which is sometimes called '*the mobile gallery*'. The study into this aspect of Asante traditional fabrics was triggered by the need for us to acknowledge and revere our cultural values and hold it in high esteem so as to be abreast with the dynamics of one's own culture. As outlined in the findings, the results of this research would go a long way to help create awareness of the significance of traditional textiles such as Nwomu and Adinkra cloths and to develop the interest of the youth to learn more of their culture.

6.3 Recommendations

The importance and benefits of Nwomu and the Adinkra cloth to Asantes and Ghanaians cannot be overemphasized. The researcher therefore recommends the following for consideration:

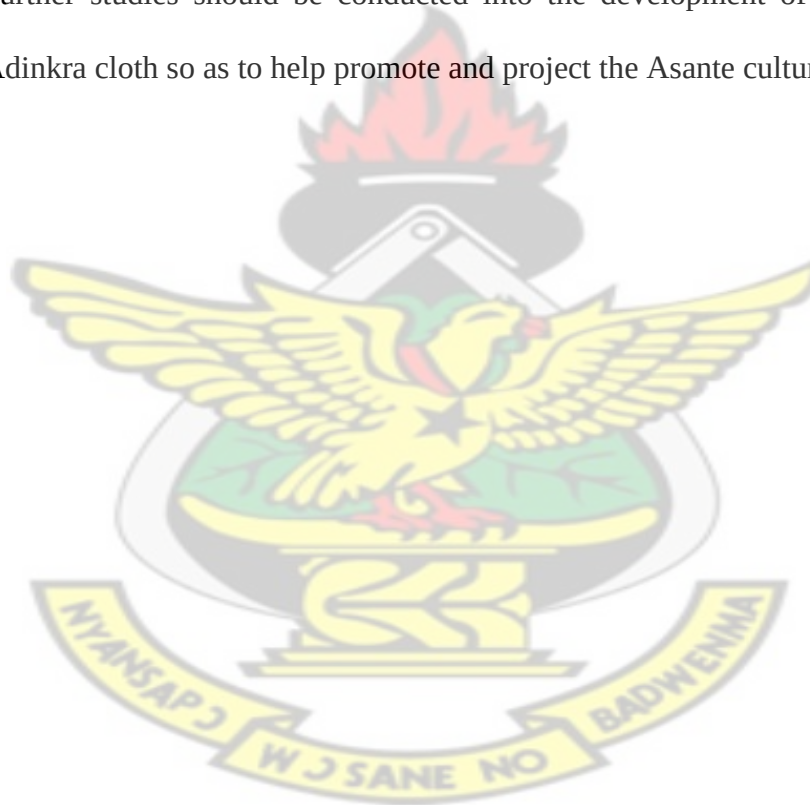
1. The Adinkra cloth is well cherished by Asantes and non-Asantes in and around the Kumasi Metropolis and this has raised the value of the cloth to a higher level. In view of this, workshops should be organised by chiefs, Adinkra cloth producers and the Ghana Tourist Board in conjunction with the Centre for National Culture

to educate the youth and the public on the significance of the conservation of ones cultural values through visual representation. It is their culture and it is their duty to preserve it.

2. The Ministry of Tourism and the Kumasi Metropolitan Assembly (KMA) should build a Regional Museum purposely for traditional clothing or expand the existing museum in the Region to preserve original Adinkra cloths (i.e. Birisi, Kobene, Kuntukuni and Nwomu cloths) for future references.
3. As stated in the findings, areas where Nwomu designers share needles, the researcher recommends that each individual should have his own set of needles to avoid the transfer of HIV / AIDS and other infections. In addition, thimbles could be used on the fingers to avoid infections.
4. Studies into indigenous fabrics such as the Adinkra cloths, Birisi, Kobene, Kuntukuni, Nwomu and Kente and the traditional dyeing processes should be encouraged in vocational schools, colleges and tertiary institutions to broaden student knowledge in traditional arts and culture.
5. The researcher intends to hold regular exhibitions and workshops to encourage Adinkra producers on design concepts and the use of colour. This will also help the youth to be involved in traditional art and culture.
6. The prices of yarn should be subsidised by the government since this indirectly increases the price of indigenous cloths produced.
7. Imitation of Nwomu designs by the textile factories should be discouraged since it reduces the market for the original Nwomu cloth. The printed fabrics tend to be cheaper and lower in quality and cannot be compared to the original Nwomu

cloth. People prefer the printed Nwomu fabrics to the traditional ones because of its price. This initiative can be carried out by policy makers, producers and users of Adinkra cloths and other stake holders in the Ministry of Trade and Industry.

8. It is also being recommended that this thesis and other related outcomes should be compiled into a user - friendly - manual which would guide and promote teaching and learning and also help students and lay persons develop their individual creativity in the production of Nwomu and Adinkra cloths.
9. Further studies should be conducted into the development of Nwomu and the Adinkra cloth so as to help promote and project the Asante cultural identity.



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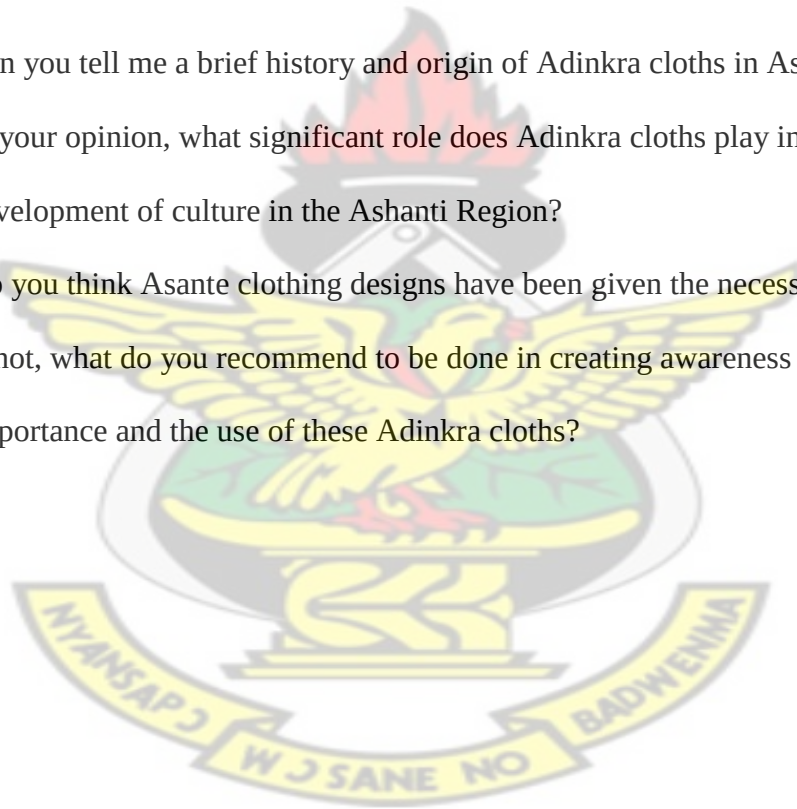
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APPENDICES

Appendix 1: Interview guide for Sectional / Organizational heads and Supervisors

- 1) What is your name?
- 2) Where do you come from?
- 3) Please can you tell me your position and the role you play in this organisation/
section?
- 4) Which group of people do you supervise?
- 5) Can you tell me a brief history and origin of Adinkra cloths in Ashanti Region?
- 6) In your opinion, what significant role does Adinkra cloths play in the
development of culture in the Ashanti Region?
- 7) Do you think Asante clothing designs have been given the necessary attention?
- 8) If not, what do you recommend to be done in creating awareness of the
importance and the use of these Adinkra cloths?

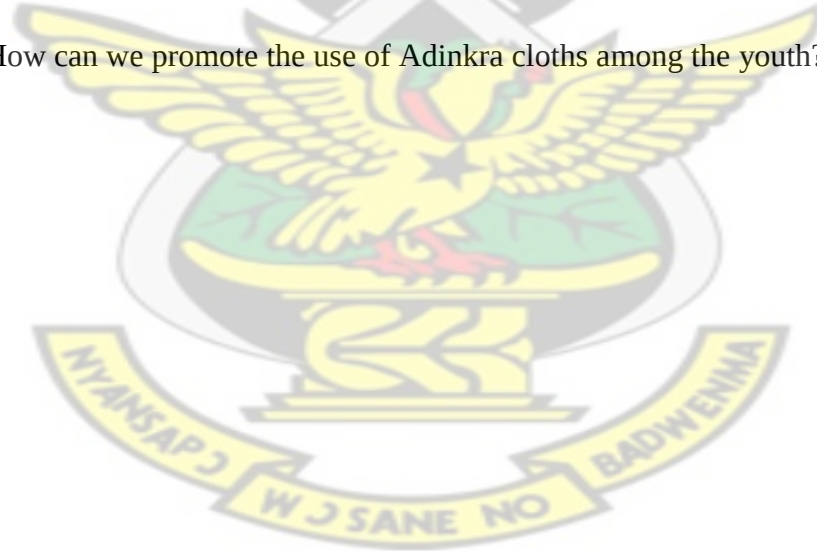


Appendix 2: Interview guide for producers and manufactures of Adinkra cloths

- 1) What is your name?
- 2) Where do you come from?
- 3) What types of Adinkra cloth do you normally produce?
- 4) When did you start producing these Adinkra cloths?
- 5) Did you inherit the art from someone or you were taught in a school? Who?
- 6) Can you tell me a brief history and origin of Adinkra cloths in Ashanti Region?
- 7) In your opinion, do you think there are other aspect of the Nwomu technique that needs to be exploited? If yes, how?
- 8) How do you name your designs?
- 9) Do you know the names and meanings of the designs you used in the cloths?
- 10) What type of fabrics and yarns do you use for your design?
- 11) In your opinion, how can we promote the use of Adinkra cloths among the youth?
- 12) How do you market your products?

Appendix 3: Interview guide for sellers and users of Adinkra cloths

- 1) What is your name?
- 2) Where do you come from?
- 3) For how long have you been selling / buying Adinkra cloths?
- 4) What attract the buyers to buy a particular cloth? Is it the designs, the colours used or the name of the cloth? Any other reason(s)?
- 5) Why do you prefer Adinkra cloths?
- 6) Can you tell me the names and meaning of Nwomu designs you know?
- 7) What group of people do you sell your products to?
- 8) How do you market your products?
- 9) How can we promote the use of Adinkra cloths among the youth?



Appendix 4: Variations of Nwomu yarn colour arrangements



1. Black & White



2. Blue & White



3. Yellow & Green



4. Brown & Black



5. Red & Yellow



6. Aburo ne nkatee Red



7. Aburo ne nkatee violet



8. Variations of Aburo ne nkatee



9. Variations of Hausa ntwreye



10. Hausa ntwreye Pink



11. Nsia nsia (Six Six)



12. Sea Blue



13 Asanteman



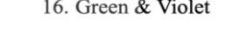
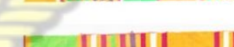
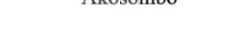
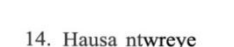
14. Hausa ntwreye
'Akosombo'



15. Variations of Sikafutro design



16. Green & Violet



Appendix 5: Name, meaning and socio – cultural significance of Adinkra symbols used in the project.

1. Name of symbol: Gye Nyame



English translation: Except God or I am not afraid of any body except the Almighty God

Socio – cultural significance: God is regarded as the creator of the world and humanity and therefore must be reverence and worshipped. The symbol reflects the supremacy, power, and dominion of God over all situations and creations. He is therefore regarded as the omnipotent, omniscience and omnipresent. **This is a symbol of the supremacy of God**

Socio – cultural significance: this symbol was a hair style shaved on the back of the Bantama

chief's head. The symbol signifies valour. **This is a symbol of valour.**

4. Name of symbol: Adinkrahene



English translation: Chief of all the Adinkra symbols

Socio – cultural significance: This symbol is noted to have played an inspiring role in the designing of other symbols. The above reasons makes the symbol the greater among all the Adinkra symbols ever discovered. The symbol signifies the need to play inspiring and leadership roles. **This is a symbol of greatness, charisma and leadership.**

2. Name of symbol: Fihankra



English translation: Compound house

Socio – cultural significance: Typical Akan building architecture normally has only one main entrance, which also serves as an exist. This symbol reflects security, safety, solidarity, and communality enjoyed in the company of family members who live in a compound house. The symbol stresses the need for people to live together and serves as each others keeper. It also foster cordial relationship. **This is a symbol of security and safety.**

5. Name of symbol: Epa



English translation: Handcuffs

Socio – cultural significance: Handcuffs were introduced as a result of the slave trade. It later became popular among the chiefs in cuffing offenders of the law. Anyone who is handcuffed becomes a slave and captive of the captor. The symbol reminds offenders of the uncompromising nature of the law. It however discourages all forms of slavery. **This is a symbol of captivity and slavery.**

3. Name of symbol: Gyawu atik5



English translation: The back side of Gyawu's head

6. Name of symbol: Mmusuyidee



English translation: The agent, which removes ill luck or curses

Socio – cultural significance: Various items are used as sacrifices and offering to God for him to ward off evil powers and thoughts and also bring about good omen, uprightness, and sanctity of man. This symbol encourages regular request for good omen from God. It also stresses the need for confession and repentance of one's sins. **This is a symbol of good fortune and sanctity.**

chieftaincy. It also symbolises the gallantry and loyalty of warriors who protected a particular chieftaincy. It is also very important for swearing the oath of allegiance. The symbol advises people to honour and show loyalty to their elders. It also encourages statesmanship and gallantry. **This is a symbol of authority and gallantry.**

9. Name of symbol: Aya



English translation: Fern

Socio – cultural significance: This is a hardy plant, which has the ability to withstand all weather conditions and soil types. The symbol signifies endurance of difficulties in all aspects of human endeavours. The symbol teaches that life is full of uncertainties; therefore the survival of mankind requires strong-will to face all challenges. It also encourages individuals and nations to be self-reliant and resourceful. **This is a symbol of defiance and endurance.**

7. Name of symbol: denkyem



English translation: crocodile

Socio – cultural significance: the crocodile lives in water but it does not breathe water, it breathes air. The crocodile is noted for its ability to stay both on land and in water. The symbol signifies the tendency to adjust oneself to all forms and situations in life. The symbol advises and encourages peoples to adapt themselves to changing circumstances especially those which seem difficult and beyond their control. **This is a symbol of adaptability.**

10. Name of symbol: Owuo atwedee



English translation: Death ladder

Socio – cultural significance: Literally meaning everybody shall climb the ladder of death. This symbol reflects the uncompromising nature of death. It is a necessity and an ultimate end of mankind on earth. The symbol reminds people to be modest and live lives worthy of emulation, because death is no respecter of persons. It also fulfils the promise of life after death and for that matter ancestor worship. **This is a symbol of morality.**

8. Name of symbol: akofena



English translation: war sword

Socio – cultural significance: this symbol signifies the power and authority vested in

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