

UNIVERSITY OF EDUCATION, WINNEBA
COLLEGE OF TECHNOLOGY EDUCATION, KUMASI

SCREEN-PRINTED ADINKRA SYMBOLIC FABRICS IN THE PRODUCTION OF
FEMALE FASHIONABLE OFFICE SUITS



A Thesis Submitted to the School of Graduate Studies in Partial Fulfilment of the
Requirements for the Award of Degree of Master of Philosophy in Fashion Design and
Textiles in the Department of Fashion Design and Textiles Education, Faculty of
Vocational Education, University of Education, Winneba

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DECLARATIONS

Student's Declaration

I, BAIDEN, SARAH with Registration Number (200029057) declare that this Thesis “Screen–printed adinkra symbolic fabrics in the production of female fashionable office suits” was carried out by me; that it is my original work and that it has not been submitted wholly or in part for the award of a degree in any institution.

Name of Student: BAIDEN, SARAH

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Supervisor's Declaration

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba.

Name: DR. ABOAGYEWAA-NTIRI, JOSEPHINE

Signature:.....

Date:

DEDICATION

This thesis is dedicated to my husband, Dr. Opoku, Moses and daughter, Isabella Akua Boatemaa Opoku.



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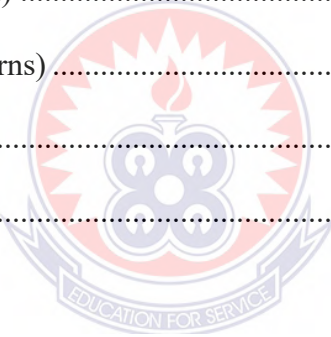


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ABSTRACT

Adinkra symbols are visual symbols among the *Akan* in Ghana. These symbols represent objects that encapsulate evocative messages conveying traditional wisdom, life and beliefs. The *Akan* mainly use the symbols for producing funeral cloths or other fabrics as wrappers for men and women (especially the elderly class). There have not been much creativity and innovation regarding the use of the *adinkra* cloth for female fashionable wears. Black and indigo hues are employed for printing *adinkra* cloth and these hues are associated with mourning among the *Akans*. Thus, using *adinkra* cloth for fashionable wears pose many challenges to fashion designers due to the characteristics of the cloth. This research is anchored on Vygotsky's creativity theory and Baumgarten's aesthetic theory. The study employed mixed methods (qualitative and quantitative) research approach. Purposive sampling technique was used to draw a sample size of three hundred and ninety-one from the estimated population of eighteen thousand. This study seeks to employ selected *adinkra* symbols for the production of fashionable office suits for women. The objectives were to use the *Akan adinkra* symbols to meet the contemporary demands of the fashion industry, apply screen printing technique to produce *adinkra* clothes with synthetic pastes, develop innovative fabrics with *adinkra* symbols that can withstand different tailoring processes and produce fashionable office suits from the redeveloped *adinkra* cloth. The findings revealed that designing *adinkra* to meet different cultures would be the best way to promote the cloth and the symbols. Fashionable office suits made from *adinkra* as redesigned will promote the local textile and fashion industries in Ghana. This study recommends the need to educate and encourage people to patronise the locally- made clothing with indigenous symbols in order to help build and promote the fashion industry.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The *adinkra* symbols are visual and indigenous symbols among the Akans in Ghana. The name *adinkra* mean farewell and represent objects that encapsulate evocative messages conveying traditional wisdom, life and beliefs. The symbols, since their invention have been predominantly used for the production of funeral cloth as wrapper for men and women. The colours used for this particular cloth decoration are mostly black and indigo, which symbolize mourning among the *Akan* people in Ghana (Boakye, 2007).

The *Ashantis* are the custodians of *adinkra* symbols and their cloths' production. Nana Kofi Adinkra, a leader of the *Gyaman* invented the symbols in Ivory Coast (Antobam, 1963). He further argues that the *Ashantis* in a war, defeated the *Gyamans*, captured and killed their king and took captive his artisans into the *Ashanti* kingdom. It is at this period that the *Ashantis* began using the symbols as motifs for textile production.

The symbols are many with diverse meanings and symbolism. The total number of *adinkra* symbols is not yet ascertained since new ones always feature in the traditional textile market. A survey conducted by Adom et al (2016) reveals that the main *adinkra* symbols available for use by the local textile producers are sixty (60) in numbers. The symbols are used for their aphorism and aesthetic reasons. This has made it possible for designers and artists to explore the symbols in different ways.

Obviously, the symbols are not limited to Ghanaian cloth production alone, but the world at large. They are used in fabric production, with the symbols representing historical events, human behaviours, attitudes, animal behaviours, plant life, and objects or shapes. Adom et al (2016), Asmah (2014), Omai (2015) and Adu-Akwaboa (1994) believe that

adinkra symbols are also incorporated as motifs in architectural designs, furniture, book covers, jewelry, plastic products (chairs and bowls) and clothing accessories.

Motifs offer a greater opportunity for the identification of certain textile fabrics, especially those used for clothing. The traditional African textiles that are produced in very stylish and significant colours constitute one of the attractive textiles making wave in most part of the world. African textiles are made with colourful hues and intricate symbols as motifs that convey meaning to the people's culture (Asmah, 2004). This is an indication of the importance of motifs and their symbolism, reflecting their origin or sources as embedded in fabrics or used as embellishments. Hence, the use of traditional motifs being mostly employed in the production of clothing and textiles.

Clothing and textiles are crucial in the life of humanity. Clothing is a major necessity of life. It is, however, placed in line with food, shelter and air as the basic factors that facilitate the survival of humans (Adu-Akwaboa, 1994). Clothing and textiles involved a range of materials used to cover the body. However, this indicates that clothing and textiles have specific function to play in the lives of people. At a point in time, the motifs and styles specify the role of the fabric (clothing), either to be used as customary cloth or for casual dressing. Adom (2012) views clothing and textiles as key identifiers of people's nationality or identity. In this regard, the culture of the people is exhibited through the type of clothing they wear or the textiles they produce for sale. Apart from giving identity to a nation, clothing establishes the values and traditions of an individual. It also advances and enhances the image of a country. Clothing serves an important role in the development and transmission of culture in the world.

Today, clothing and textiles with traditional motif is largely seen as a veritable source of vehicle, influencing the culture of people from different parts of the world. This is because the world is now a global village where travelling to different places is made simple. In the

process of moving from one place to another, people are influenced with numerous cultures, mostly in the field of fashion, clothing and textiles.

In view of this, Opoku et al. (2015) writes that all the nations in the world have unique fashion and clothing, which distinguish one nation from another. Nigerians produce *Akwete* and *adire* fabrics. The Malians produce the *Bogolan* cloth while South Africans are associated with *shew-shew* indigo cloth. Ghana cannot be excluded from the number of countries with peculiar reference to traditional textiles. Ghana is popularly noted for its production of *adinkra* cloth, *fugu* and *kente*. There have been several innovations regarding development of traditional textiles in Ghana for the past decades. Technology has contributed in the sphere of *kente and fugu* weaving as compared to *adinkra* cloth printing (Asmah, 2014).

Clarke (2002) relates that the exclusiveness of Ghanaian textiles in the area of symbolism indicates the nation's culture, values and aspirations. Textile designs that have excelled and cherished by collectors and museums worldwide are those designed with indigenous motifs or symbols. Throughout history, symbols or motifs have been explored to indicate or express ideas, communicate meanings and convey emotions. Symbolism in textiles as explained by Asmah (2004) is the use of unit, motif or design, which portrays the in-depth meaning and understanding more than they really represent.

In the area of cloth manufacture, colour plays a very significant role without which the aesthetic nature of the motifs in the fabric would not be felt. Colour is used in relation to the purpose behind the construction of the cloth. However, if the cloth is meant for funerals that are organized on either Thursdays or Saturdays in Ghana, as in the case of *adinkra*, then it has to be decorated with black, indigo and red respectively. In the Ghanaian context, these colours signify sadness, bereavement and aggressiveness. Besides, if the cloth ought to be

used for thanksgiving service, especially after funerals on Sundays, then, it definitely has to be decorated with black and white hues (Adu-Akwaboa, 1994).

Irrespective of the cultural significance of *adinkra* symbols, they are mostly seen in funeral clothes. The *adinkra* clothes on the other hand, are employed for specific events like durbars, wars, festivals and puberty rites. It is also used to design kings and queen's regalia for spiritual performances. This trend has not changed among the *Ashanti* as far as the *Ashanti* tradition is concerned (Adom et al., 2018).

The application of *adinkra* symbols as motifs on fabrics and colours used can be altered to make the motifs and the cloth more applicable for producing classic and fashionable wears. Fashionable products such as female suits, jackets, vest, party wears, dinner wears, wedding gowns and fashion accessories such as bags, hats, shoes and bangles appear favourable to be produced with fabrics made with *adinkra* symbols through modernized screen-printing technology (Opoku et al., 2019).

The meaning of suit and jacket in most cases tend to contradict each other. Suit in the fashion industry is a set of garments (clothes) produced with the same fabric. This can be a top (jacket) and trousers for men. The women version is also of the same fabric, but the top (jacket) can be worn with skirt or trousers. Jacket on the other hand, is ascribed to the top part of a suit that is worn separately on different trousers or skirt without necessarily having to be designed with the same fabric (Opoku et al., 2019).

1.2 Statement of the Problem

The *Adinkra* symbols are visual and educative symbols among the Akans of Ghana. There have not been much creativity and innovation regarding the use of *adinkra* symbols for fashion and textile wears for decades. These symbols represent objects that encapsulate evocative messages conveying traditional wisdom, life and beliefs. Despite the numerous

significances associated with the symbols, the *Ashantis* of Akan tribe mainly use these symbols for producing funeral cloth that is used as wrapper for men and women (especially the elderly class) (Adu-Akwaboa, 1994). The nature of the wrapper coupled with the drapery characteristics on the human body, does not encourage youth patronage of the cloth. This drapery style of dressing has been maintained among the elderly for centuries. Black and indigo hues are predominantly employed for printing *adinkra* cloth and these hues are associated with mourning in Ghana (Opoku et al., 2019).

Thus, using *adinkra* cloth for fashionable women wears poses many challenges to fashion designers because of the characteristics of the cloth as inherited or influenced by the production method and dye application (Tetteh, 2006). *Adinkra* cloth is not washable because it lacks colourfastness and thus, tends to become hard after printing. This phenomenon does not promote good tailoring processes (Glover, 1971).

The concern to use *adinkra* cloth in the areas of innovative motifs or fabric, dye application and method of production in the quest for developing fashionable wears like suits have been a major worry to some designers. It is against this background that this study intends to use selected *adinkra* symbols for the production of female fashionable office suits.

1.3 Purpose of the Study

This study seeks to employ selected *adinkra* symbols for the production of fashionable suits for women thereby promoting the symbols and developing the fashion industry.

1.4 The Objectives of the Study

The objectives of the study are to:

1. use the *Akan adinkra* symbols to meet the contemporary demands of the fashion industry,

2. apply screen-printing technique to produce *adinkra* patterned clothes,
3. develop innovative cloths with *adinkra* symbols that can withstand different tailoring processes and;
4. produce fashionable office suits from modified *adinkra* patterned cloths.

1.4 Research Questions

1. How would *adinkra* symbols be used to meet the contemporary demands of the fashion industry?
2. How would screen printing technique be applied for producing *adinkra* cloths?
3. What procedure would be adopted to develop innovative cloths with *adinkra* symbols to withstand different tailoring processes?
4. What fashionable office suits can be produced with the *adinkra* modified cloths?

1.5 Significance of the Study

This study is significant because at the level of practice it will project the quality and value of *adinkra* symbols as used in fabrics and suits for better understanding and appreciation. In the same vein, it will enhance or boost the use of *adinkra* symbols as motifs in fabric production.

Again, the study has developed innovative fabrics that can withstand different tailoring processes for textile and fashion practitioners thereby creating additional jobs in clothing industry.

The study will generate foreign exchange since the production of the fashionable suits is expected to meet different cultures and different functions.

At the level of theory, it will encourage other researchers to investigate similar concepts among other indigenous symbols or motifs across the globe.

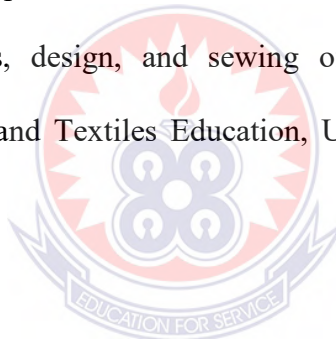
1.6 Limitation of the Study

The administration of research questionnaire was faced with some challenges due to Covid-19 pandemic. Meeting with the respondents appeared very problematic since some of them were not willing to accept the questionnaires. This actually prolonged the duration initially assigned for the data collection and also eliminated the evaluation aspect of the finished products. In effect, the products were not evaluated to ascertain their acceptance of the people.

1.7 Delimitation of the Study

The study will concentrate on the use of selected *adinkra* symbols among the *Asantes* in Ashanti Region, Ghana for the production of female fashionable suits.

The fashion illustrations, design, and sewing of three suits took place in the Department of Fashion Design and Textiles Education, University of Education, Winneba (Kumasi Campus).



1.8 Definition of Terms

Adinkra: they are visual symbols with rich meaning and lessons associated with the Ashanti in Ghana. They are predominantly used for funeral cloth for men and women as a wrapper.

Fashion: is the accepted style of garment or clothing among groups of people within a season.

Jacket: It is the top part of a suit, which is worn with different trousers or skirts.

Motif: it is explained as the main design in a fabric or cloth. It normally goes with textures (background design) in fabric designing.

Pattern: This refers to fashion template used for cutting individual garment components from fabrics. It comes in different sizes and can either be basic or production pattern.

Suit: is a garment produced with one fabric for both the top (jacket) and the trousers. Men and women wear suits. Women suit can be designed with a jacket (top) and a pair of trousers or skirt.

Symbol: Is described as a person, sign, event or an object that has a fixed meaning.

1.9 Organization of the Study

This study will be structured into six chapters. Chapter one, will give background information of the work and sets the topic of the study in context. It presents the purpose and objectives of the study and explains the structure of the thesis. Chapter two is literature review. This chapter captures a review of related literature conducted on screen-printed *adinkra* symbolic fabrics in the production of female fashionable office suits, taking into account its relevance to the research topic in question, whilst pointing out gaps in previous research which this study intends to fill. Chapter three discusses research methodology. It focuses on the methodology to be used to arrive at the conclusions in the last chapter. Explanation and justification for the selection of methods used in analysis will be discussed focusing on their reliability, validity and effectiveness in realising the purpose of the study. Chapter four will be data presentation and discussion. The discussion will highlight the major findings of the research and the inferences made from them in view of findings from related previous studies. Chapter five is the product of fabrics and the office suits. Chapter Six will be on the summary of findings, conclusions and recommendations. This section will itemize the major research findings and indicate how this research work will contribute to knowledge.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter looks into the review of literature related to *adinkra* symbols, production or printing methods, the use of *adinkra* cloth and the production of female fashionable suits. Several issues, presentations by authorities and information from journals, newspapers, books, radio and television broadcast, internet and interviews are discussed. The review of literature in this chapter is categorised under the following sub-headings: Art and culture of the *Asante* people in Ghana, the concept of *adinkra* symbols, photographs of *adinkra* cloth, *adinkra* symbols and their philosophical meanings, *adinkra* cloth printing procedures, the concept of natural and synthetic dyes, evolution of suit production, contemporary textile designing techniques and approaches, theoretical framework and conceptual framework.

Adinkra symbols among the *Akans* people in Ghana have played various and varied roles in the textile and fashion industries for the past decades. Notwithstanding the textile and fashion industries, the symbols are also used for architectural and furniture designs. The symbols are of variegated forms with diverse meaning related to everyday activities of humanity. Considering the fashion industries, the symbols are usually used for the production of funeral clothes. The cloths, in subsequent usage are made into blouses and long skirts for the women and wrappers for men (Opoku et al., 2019).

The colours used for making and decorating the cloths are commonly associated with sorrowful events. Consequently, black, indigo and dark-brown colours feature as basic colour options for the clothes. The dye is locally extracted from the *Badie* tree, which involves very long and tedious production processes (Mato, 1986). The production processes for obtaining the dyes (colours) hardly had undergone transformation despite the current technological advancement in the fashion and textile industry. The symbols have not changed since their

invention. This has rendered the use of the symbols to mostly funeral clothes. However, it is possible to modify the symbols to meet the challenges of both domestic and commercial textile and fashion industries in Ghana.

The current situation of *adinkra* cloth production and other related issues are reviewed based on statements or assertions of some authorities in the fashion and textile industry. Among the authorities are Mato (1986), Adu-Akwaboa (1994), Glover (1971), Asihene, (2005), Amenuke (1991), Adom (2009) and Aboagyewaa-Ntiri (2013). Oral tradition as primary data was also solicited during the researcher's field trips to major towns in the Ashanti Region where *adinkra* cloths are printed.

2.2 Arts and Culture of the Ashanti People

The Arts and Culture of the *Ashanti* people are cited in this literature review because they claim to be the custodians of the *adinkra* symbols in Ghana.

The *Ashanti* are located close to the middle belt of Ghana, with a landmark that is mostly forested. Fianu (2007) notes that the *Ashanti's* territory constitutes nearly 150 miles, away from the coastal areas. They constitute the largest ethnic group amongst the *Akan* people. The *Akan* tribe covers the *Fanti*, *Akuapim*, *Nzema*, *Bono* and *Ahafo*, *Akyem* and the *Asante*, but, the *Ashanti* (*Asante*) are known to be the most powerful in politics, religion, farming, fabric production (weaving), mining, wood and metal carving.

These factors are prime resources from which enough revenue is generated for the country's development. This assertion points that the *Ashanti* have a unique role to play in terms of Ghana's economy. Craft works or artifacts are other relevant factors that make the *Ashanti* stand tall in the creative art industry in Ghana. The *Ashanti* can boast of traditional fabric production due to their expertise in *kente* weaving and *adinkra* cloths printing.

The *Ashanti* focus much on the *kente* fabric than the *adinkra* cloth. The *adinkra* is usually associated with funeral observations and certain sorrowful endeavours. Creating a balance between these two craft works will improve the social-cultural, economic and aesthetic acceptance of *adinkra* clothes in the textile industry. Asihene (2005) believes that projecting *kente* fabric to the international market has been the fact that *kente* was originated from Ghana but not that of the *adinkra* symbols or clothes. Asihene's assertion is arguably not the sole reason why *adinkra* has not received the needed recognition as *kente* fabric. The authenticity of this submission, from the researcher's perspective, can only be attributed to the uses of *adinkra* clothes but not its origin.

In the kingship matters, Adom (2012) writes that the greatest king of the *Ashanti* kingdom (*Asantehene*) is the most respected personality of the land and even held in a similar position as the central government. The *Asantehene* and his sub-chiefs ensure that natural resources and other creative arts such as clothes (*kente*) symbols (*adinkra*) which belong to the *Asante* are protected by laws of the land.

Rusu (2012) commenting on *Ashanti*' craft industry writes that the *Ashanti* are known for their skillful nature in the areas of weaving, dyeing, woodcarving, ceramics, jewelry, pottery and metal works. *Adinkra* symbols are used as motifs for decorating various artifacts produced by the *Asantes*. It is however common, to see *adinkra* symbols on pottery, jewelry, ceramics and metal works for aesthetic and ritual purposes.

Lysianassa (2009) puts forward that the *Ashanti* have a rigorous and religious system involving elaborate ceremonies. Ancestral worship is a core ritual concept among the *Ashanti*; witchcraft, sorcery, belief in spirits and divination, are highly regarded because, the people believe ancestors have greater influence on the physical world. There is the belief that certain gifts for carrying out major accomplishments are bestowed by spirits on the individual.

This phenomenon makes it so imperative for most kings and chiefs to have absolute faith in the maker of the universe (God). They believe however, that the land belongs to the ancestors, and the living has no right to utilise it, without the consent of the spirit world (Fianu, 2007). Fianu further relates that the *Ashanti* have the understanding that the Supreme Being (God) is the giver of life and the spirit after death, returns to the creator. Moreover, they (*Ashanti*) still hold that the human is made up of body, soul and spirit, but upon death, the spirit returns to the creator for judgment.

One common belief among the *Ashanti* is the assumption that one inherits his or her status from the mother, the self-will (ego), from the father and the very well-being (life), from God (Asihene, 2005). Most of these beliefs are mere myths which cannot be authenticated, from the views of the researcher. Major fact of the *Ashanti* is that they do not downplay on the integrity of their chiefs especially the *Asantehene* (king of *Ashanti* kingdom).

Osei (2002) declares that the *Ashanti* kingship style is devised as a pyramid. In Osei's view, a king heads the *Ashanti* confederacy with paramount and smaller chiefs who assist him. These chiefs rule the sub-towns under the confederation and usually report all issues concerning the town folks to the paramount chiefs. The paramount chiefs in subsequent situations report to the king (*Asantehene*) on matters beyond their jurisdictions. In effect, the chiefs are subject to the king.

The *Asantes* are very hospitable and relate well with people. They are hardworking and they do not relent to embark on daily activities such as farming, mining, ceramic and pottery production and more importantly, cloth weaving and dyeing. The *Asantes* are very powerful in wars; and thus, were able to conquer and capture many territories in the olden days (Asihene, 2005).

The *adinkra* symbols were initially not crafted by the *Ashanti* as stated earlier. Through wars, they conquered the *Gyaman* from Ivory Coast and took captive of their ruler

and his artisans. After killing the king, they structured the symbols, brought the king's artisans to *Ashanti* kingdom and took full control and ownership of the symbols (Asihene, 2005).

Osei (2002) reported that, the *Asantes* first settled in some rural towns and remote areas or villages and due to their location, indulged themselves in spiritual activities like sacred shrine worship and sorcery practices. Osei further states that:

The *Asante* have a well-tailored cultural, religious and political structures that distinguished them from other groups within the *Akan* tribe. These characteristics particularly exhibit that the *Asante* are well coordinated and organised. The art industry is highly developed than any other avenues in and around the territory (1999 pp. 6-7).

Other authors have variant concepts about the *Asante* concerning their origin, status and life aspirations and notable among them are Gotti and Gotti. A brief story gathered by Gotti and Gotti (1960) reveals that the *Ashanti* belong to a group of people who originated from the clan or family of Negroes occupying the African Guinea coast. They live a moderate life and are slightly built, dark in complexion, short in height; if not cross marriages between the people who migrated from the North of Ghana, the *Ashanti* would still be short in height. The *Ashanti* kingdom is composed as a modern political government. The king of *Asante* (*Asantehene*) operates his own definite political military organisation. Notwithstanding, the kingdom has legal system where issues bothering land disputes, marriages, kingship, thefts, and certain social vices contradicting the laws, are settled amicably in various palaces which are equated with formal court system in Ghana.

Pirating *Ashanti's* traditional textiles, crafts, symbols, folklore, sounds and other old reserved system of living without prior permission is highly prohibited (Adu-Akwaboa, 1994). The aforementioned statement regarding patent and copyright of *Ashanti's* traditional

symbols and systems over time have been downplayed due to loose and less supervision of traditional legacies. Moving forward, the elders hardly exhibit interest in protecting the traditions of *Ashanti* land. The above issues have led to adulteration of original traditions in local textile industry. A major factor to these social illegalities, ‘stealing’ and borrowing of *Ashanti* traditional symbols and motifs emanate from the present Chinese textile industry. These industries enrich their home country at the expense of other countries (Gillow & Sentance, 2006).

Considering the family system of the *Ashanti*, Asihene (2005) relates that in the marriage status, children of the couples are of the mother’s family, the reason why in the olden days, fathers were seen as strangers and obliged not to cater for their children. Sometimes, the uncles had to care and educate their nephews with the concept that the man (father) could abandon the matrimonial home at any time but, not the children. From the researcher’s perspective, the matrilineal family system is not anymore entertained in *Ashanti* and most importantly throughout Ghana. Presently, children are trained, especially with much effort from the father; paying of school fees, feeding, clothing and providing shelter.

There are sets of supernatural beliefs and powers in *Ashanti*. The people comprehend that God has endowed plants or trees, animals and mountains with souls. Ancestral and witchcraft worship play a great function in the people’s lives. Attesting to the above fact is the worship of the *Ashanti* golden stool, an indication of ancestral worship. Spiritual worship and practices constitute a larger part of the *Ashanti*’s beliefs (Amenuke, 1991).

Looking at the local textile production in perspective, Nubour (2006) and Adu-Akwaboa (1994) believe that the textile industry started with the production of *kyenkyen* (*Antaiaris Africana*) cloth. The process of manufacture involved beating of the bark with clubs or sticks to loosen the fibres. After beating, it was washed and allowed to dry and thereafter, beaten again to soften before use.

The early production of *Ashanti* textiles has tentatively graduated to several developments with the advent of advanced technology in the textile industry; though the local approach of *kente* weaving and printing of *adinkra* are still practised.

2.3 The Concept of *Adinkra* Symbols

The invention of *adinkra* symbols has series of conflicting tales. Oral tradition reveals that *adinkra* symbols were initially originated from *Gyaman*; an ancient kingdom of present-day Cote D'Ivoire. Asmah (2014) believes that the *Asante* cannot claim a total ownership of the indigenous creation of the *adinkra* symbols.

Whatever the evidence, the accepted truth of history surrounding the creation of the symbols by different schools of thought suggest that, the *Asante* in an attempt to expand their territory close to the northern and western part of Ghana encountered in a fierce war with the *Gyaman* who lived in Cote D'Ivoire (Boakye, 2007). The aftermath of the war was that the *Asante* defeated the *Gyaman* people, took captive of the indigenes and captured their king who was the original inventor of the symbols. The king was finally killed and his artisans brought to the *Ashanti* land precisely Kumasi. The introduction and translation of the symbols to the *Ashanti* kingdom marked the beginning of *adinkra* printing cloth. The captive artisans were made to work with the *Ashanti* artists simultaneously on the symbols and assigned renowned names according to the *Akan* proverbial meanings to them. Bowdich (1966) and Oduol (2012) jointly believe that the motifs were in later periods transformed into stamps and used as printing blocks to stamp fabric or cloth manufactured from cotton.

Some of the symbols stand for sorrowful issues and moments (Mato, 1986). This is due to the defeat and capture of the *Gyaman* king (Nana Kofi Adinkra) which greatly affected the people (*Gyaman*). The eventual death of the king inspired the names of the symbols; *adinkra* meaning farewell. Oral tradition holds that the *Ashanti* king joined the

Gyaman land to the *Akan* territory but prior to the death of Nana Kofi Adinkra, the artists especially those taken as captives were desirous of expressing their sorrow through patterned cloths produced and such tradition has been maintained. What actually spearheaded the conflict between the *Asante* and the *Gyaman* was linked to the duplication of the *Ashanti* Golden Stool by the ruler of *Gyaman*. For the *Asante*, the Golden stool is very sacred, even up to this modern age due to traditional preservation. The strife amongst the *Gyaman* and the *Asante* became a military conflict around the nineteenth century (Kumah, 2009). The original cloths were designed occasionally and exclusively for the royal people, spiritual leaders and were solely meant for relevant events like funerals and ritual ceremonies.

Concurrently, Delaquis (2013) and Boateng (2011) share common views as further evidence concerning the emergence of *adinkra* symbols into the *Ashanti* kingdom. They note that the symbols emerged from cross international relations and trade with the Muslim traders. Trading activities then expanded across the Sahara, to North Africa and beyond. However, most of the symbols bear *Twi (Akan)* names. It is not clear to say that the symbols are from Arab world even if there are forms of similarities of *adinkra* with that of Islamic symbols (Kwami, 1994). A close observation by Rattary (1972) reveals certain measurement of mystical impact on the symbols, but the truth remains unchangeable.

Securing dyes for printing appeared problematic to the *Asantes* because they only copied the symbols without ascertaining what printing pastes or dyes the *Gyaman* used for decorating the clothes. Fortunately, the then *Asantehene* (Nana Osei Bonsu-Panyin) ordered his military men to undo the *Gyaman* king's regalia, critically studied it and finally arrived at a peculiar plant dyes for the printing. The production processes for acquiring these dyes then appeared very tedious (Adom, 2012; Arthur, 2001).

Asmah et al (2016) posit that *Ntonso*, *Bonwire*, *Asonomaso* are the main towns in *Ashanti* region where *adinkra* cloth production is mostly carried out. Additionally, these

towns offer several training to apprentices and students on attachment programmes in local printing and dyeing respectively.

Nubour (2006) assessing the uses of *adinkra* symbols in fabric designing, believes the symbols are used for funeral clothes. He asserts further that the darker shades of *adinkra* clothes are mostly worn during Saturday's funerals. The black and white clothes are usually worn for thanksgiving ceremonies, naming ceremonies and parties. This same type of *adinkra* cloth is worn during the funeral rites of the first child of a couple known as 'sodo' by the Ashanti. Prominent functions (durbars) also experience the parading of *adinkra* clothes. For example, on such occasions, the kings and traditional priests' regalia are inscribed with specific *adinkra* motifs.

Adinkra cloth comes in different patterns of design. Adom et al. (2016) and Asmah et al., (2016) believe there are four main types of *adinkra* cloth. They are *mpakyiwa* (plain background); *nhwimu* (linear marking type); the *kente* strip and the *nwomu* type.

The Mpakyiwa (Plain Background Type)

The method of constructing the cloth entails the spread of the fabric on a padded or cushion table with foam or papers. The *adinkra* stamping block is dipped into printing dye to pick the paste for stamping. After printing, the cloth is removed and set into the sun for drying. This cloth has no background designs thus the name *mpakyiwa* (plain).



Plate 2.1: *Mpakyiwa* cloth
Source: (Owusu-Sampa, 2014)

The *Nhwimu* (Linear Marking Type)

Kuwornu-Adjoattor et al (2016) explain that to produce *nhwimu* prints, one has to spread the fabric on a padded table. A wooden comb with strands of yarns is employed to pick the dye which is registered horizontally and lengthwise in an evenly-spaced arrangement. It is however assumed that the spaces between the lines should be evenly marked.



Plate 2.2: *Nhwimu* cloth
Source: (Owusu-Sampa, 2014)

The *Kente* Strip Version

In this category, the background of the cloth is prepared with calico fabric and strips of *kente* cloth. The strips of *kente* is aligned either vertically or horizontally on the calico fabric. This creates several divisions or spaces. In the subsequent development, the *adinkra* stamps are used to print out the intended motifs leaving the *kente* strips that are sewn in-between the unstamped calico areas.



Plate 2.3: *Adinkra* with *kente* strip
Source: (Adom et al, 2016)

The *Nwomu* (Embroidery Type)

The *nwomu* cloth has similar characteristics as the *kente* strip. The little difference is that embroidery designs are rather inculcated into the *nwomu* instead of applying the *kente* strip. This arrangement allows the producer to stamp the *adinkra* symbols onto areas of calico not occupied by the embroidery designs. Quarcoo (1994) contend that this particular version of the cloth is the current development in the *adinkra* production business. What is more, the cloth is expensive as a result of the technologies involved in its manufacturing.



Plate 2.4: *Adinkra* with embroidery-*nwomu*
Source: (Adom et al, 2016)

A major short fall of the several *adinkra* clothes is that, they are not washable (Glover, 1971). Besides, the dyes and the weight of the cloth do not encourage smooth sewing processes (Aboagyewaa-Ntiri, 2013). Manipulation becomes difficult because the dyes are sticky.

Colour is important in textile designing. When planning to buy clothing articles, colour is given crucial consideration. It is however the first property that attracts people. The most exciting thing about textiles is the attractive colours employed, though the design may also be very interesting (Adu-Akwaboa, 2004). Due to the fascinating nature of colours, some textile items may be discarded, before they wear out because their colours have faded away. Colour in the views of Sackey (2006) is a very significant element in textile design. Poor designs have made good sales due to rich colour schemes used. Conversely, poor colour schemes have sapped beauty in otherwise very interesting designs.

Adinkra cloth is popularly designed with black, red, white, indigo and brown which Adu- Akwaboa (1994) views as indigenous colours.

In the Ghanaian context, red, black, dark brown, vermilion indigo are used for funeral or mourning clothes. A look at contemporary textile and fashion designing, responses to colour are not just biological. Colour association from culture influences people. Asihene (2005) opines that Africans delight in beauty and colour. Colours are cultural symbols vital to people. For Africans and most of people in the world, the beauty of colour cannot lie only in the visual value, but in its significant traditional meanings (Antubam, 1963). Symbolic colours are never absent in any occasion. Additionally, he relates that there are gold and silver ornaments, rich costumes or printed fabrics, ranging from russet-brown and indigo to yellow and the brightest scarlet. These colours change in their meaning as they move from one ethnic group to another. Irrespective of where people come from, there are symbolic ideas about colours, which are often revealed in their cultural or religious rites (Adamtey, 2008). Colour symbolism is one pertinent aspect of textile art.

The Asantes incorporate an active and complex system of symbolic display in their ceremonial rituals. Colour plays a prominent role as a visual representation and symbolic form in creating a subtext for ceremony or ritual occasions. It also establishes identity of people and participants, defining relationships, and by contextualizing the visual content of ceremonial regalia and ritual objects. It enhances royal regalia either as a complimentary embellishment of objects to identify them to the specific occasion or as symbol of rank and status. Colour gives religious ritual a sacred presence, reflecting the temper and ambience for the entire cycle of ceremony. Visually prominent and ritually significant during funeral, colour indicates the complex relationships of extended families during the period of mourning and transition (World Book Encyclopedia, 2004).

Each cluster of colours embodies association that reflects spiritual and cultural values and symbolic references that are shared by the larger population and contextually defined to circumstance and ritual appearance. Clothes with different colours often are the most visible element during ceremonies and their colours reflect the event and define an individual's participation in the ceremony.

Colour has symbolic meaning in Ghanaian culture and each colour conveys peculiar information when worn or displayed at significant places or situations. Black is a symbolic colour for funerals in virtually all ethnic groups in Ghana. It is official mourning colour at funerals especially for a person who died at unripe age (Isiguzo, 2005). Black signifies negative and socially undesirable qualities and things that harm. White is a symbol of purity and joy, usually worn at funerals especially death of old individuals. The difference in colours of clothes at funeral ceremonies convey varying messages albeit they are same situation, but not taken as the same culturally. The death of a young person is always painful, knowing he or she has not accomplished his or her task on earth, to enable smooth passage to the land of the ancestors. The death of the aged is a welcome event that the living makes merry and perform rituals to herald easy passage to the ancestral land. Often when the dead lived a good life and was loved by many, not only did the members wish it an easy passage to the ancestral world, but they also prepare to welcome it into this world again. This informs the African belief on reincarnation. Red is a spiritual colour with a very powerful religious significance. It is the colour of cloth used to adorn the table at the shrine during ritual ceremonies (Isignzo, 2005).

White symbolizes spirit colour while red repels sprits, as on the lips of an *M'pongime* mask from Gabon. Blue is a symbol of peace as used on the Yoruba masks of Gelede society in Nigeria. In Ghana, white is viewed regarding ivory glass, eggshell or white clay. It is used in spiritual purification, healing, sanctification rites and joyful events. In some cases, white

symbolises contact with ancestral spirit, deities and other unknown spiritual entities such as ghost. White is used with black, green or yellow to express notion, spirituality, vitality and balance. It also signifies innocence, purity, joy, victory, virginity, fairness, ghostly, blankness, emptiness, transparency, fortune and harmlessness (Adu-Akwaboa, 1994).

2.4 Photographs of some *Adinkra* Cloths

Adinkra cloth as earlier discussed in the previous section is for funeral wrappers. Funerals organized on either Thursday or Saturday makes use of black, red and blue-black colours. Sunday funerals are accustomed with black and white colours respectively (Opoku et al, 2019)

Below are photographs of *adinkra* cloths:



Plate 2.5: *Adinkrahene* Cloth
Source: (Baiden, 2018)



Plate 2.6: *Gye Nyame and Akofena* cloth
Source: (Baiden, 2019)



Plate 2.7: *Kobene* Cloth
Source: (Baiden, 2019)



Plate 2.8: *Adinkra* Cloth
Source: (Tetteh, 2006)



Plate 2.9: *Adinkra* Men's Cloth
Source: (Tetteh, 2006)

2.5 *Adinkra* Symbols and their Philosophical Meanings

Communication plays a vital role in human lives. In relationship matters, it is observed as an invaluable substance in the *Ashanti* culture and tradition. The *Akan* ethnic group, being the universal umbrella of several clans or factions, has a distinguished characteristic, which is its capability to communicate messages and ideas through symbols (Iddrisu, 2001). The *Ashanti* kingdom, being the principal component and constitutes the majority group of the *Akan* tribe does not underestimate the use of communication through symbols and motifs.

According to Kuwornu - Adjoattor et al (2016):

Adinkra motifs are categorized in two forms. Many people from the Ashanti Empire are apparently conversant with the common symbols. Nevertheless, they find it difficult to explain or interpret the philosophy, history and significant values embedded in the symbols. Because of this, they are not able to apply the symbolic lessons in the motifs (symbols) in their social lives. The other group of the symbols entails the unfamiliar ones. These motifs hardly appear in the daily activities of Ghanaians thereby posing a challenge to their meaning and interpretations (pp. 14-15).

In the *Ashanti* culture, people share ideas through symbols, motifs and signs. The mode at which these symbols are transmitted only understood by people of the same culture or have understudied such different cultures over time (Agyekum, 2006).

In effect, people's languages are mainly systems of symbols and motifs as coined by one of the greatest philosophers- Aristotle; "spoken words are the symbols of mental experience and written words are true replica of the meanings of words, things, actions,

emotions, behaviours and ideas of a people”. Symbols of same culture are typically understood through cultural assimilation, acculturation and migration.




Adinkra symbols have similar connotations and philosophically in line with Aristotle’s assertion discussed earlier. Frimpong et al. (2013), consider the symbols as geometric and pictorial motifs that indicate ideal concepts and values of *Ashanti* people. The symbols offer valuable advice in matters concerning proverbs, folklores and historical events that cut across issues involving people’s daily activities. They are vividly employed in all facets of life.



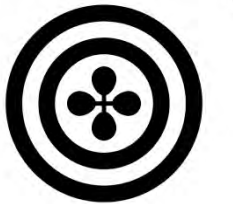
The exact number of *adinkra* symbols is not ascertained. Several authors and researchers present different numbers. Tetteh (2006) and Rattray (1972) record fifty (50) symbols in their separate publications while others suggest nearly hundred symbols.


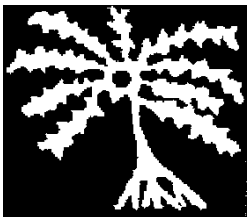

Abissath and Korem (2004), Arthur and Rowe (1998) and Glover (1992) together with the researcher’s field trip to some of the prominent *adinkra* printing towns identified one hundred and twenty (120) symbols used in the traditional printing industry in Ghana.


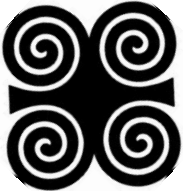

It is worthy to note that the symbols are reviewed on the grounds of two separate studies by Tetteh (2006) and Kuwornu - Adjoattor et al (2016). The major aims of these authors were to compile the exact number of popular *adinkra* symbols. An exploratory method was adopted to organize and interpret the symbols.

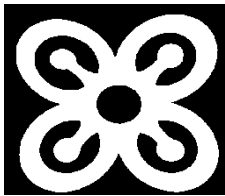
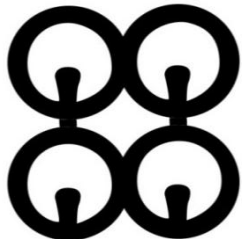
Below is the review of some commonly used *adinkra* symbols alongside with their photographs, symbolism and most importantly their application in a table form.



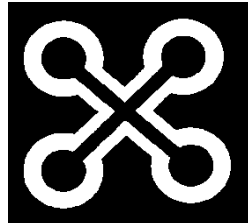
SYMBOLS	NAME OF SYMBOLS	LITERAL MEANINGS	PHILOSOPHICAL SIGNIFICANCE
	<i>Adinkrahene</i>	“The King of Adinkra”	<p>The symbol (<i>adinkrahene</i>) means king of <i>Adinkra</i>. It is seen as the most prominent among all the symbols and as a result constitutes the fundamentals of the <i>adinkra</i> printing symbols and cloth. This particular symbol as opines by Abissah (2004) et al signifies greatness and royalty. It is found on the king’s regalia or cloth to exhibit the power and might of kings in the <i>Ashanti</i> kingdom. <i>Adinkrahene</i> symbol uses to dominate the printed clothes of the kings and royal members from the palaces in the olden days.</p>
	Eban	“Fence”	<p><i>Eban</i> (fence) is a symbol with its meaning as strength and authority. In the political field, it stands for greatness, fort, castle and fence, which signifies home protection, security and safe fortress. This symbol was designed in a protective structure to offer cover and enclosure similar to Ashanti building structure. The symbol has been associated with fence walls in the cities and communities over time.</p>
	<i>Sankofa</i>	“Return and get it”	<p>The symbol appears in two different forms, but the commonly used one represents a bird turning back to fetch or pick something from the back or behind. This symbol is widely employed in <i>adinkra</i> cloth production. Besides, novice and professionals can easily recognize it in the <i>Ashanti</i> kingdom and the world at large. In the literal sense, the symbol depicts a message of ‘return and get it’, ‘learning from history’ or ‘go back and fetch’. The <i>Ashanti</i> embrace this symbol so much for the message it carries to those willing to learn. In the symbolic perspective, it is not a mistake to rectify ever-committed wrongs.</p>



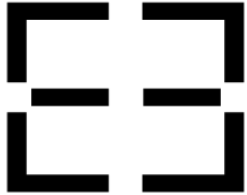
	<p><i>Akofena</i> Symbol</p>	<p>“Ceremonial sword”</p>	<p>The symbol is <i>Akofena</i> in the <i>Akan</i> language, which literally means the royal or ceremonial sword. It signifies great bravery with a philosophical connotation of the great fighter or warrior who always has a ceremonial sword at rest even when he retires from war. Philosophically, the symbol signals to the neighbouring tribes that the <i>Ashanti</i> are very brave and do not accept defeat easily.</p>
	<p><i>Mpatapo</i> Symbol</p>	<p>“Reconciliation knot”</p>	<p><i>Mpatapo</i> is the name in <i>Akan</i> (Twi) language and reconciliation knot in the English version. It symbolizes peacemaking and reconciliation. The reconciliation symbol is mostly employed in areas where there have been disputes and misunderstanding between different parties and such discrepancies need to be resolved amicably. The philosophy connected with the symbol is that, the cost of attaining peace in society is expensive and as a result, individuals are admonished to live and behave well so that there is always sanity in the society.</p>
	<p>Adinkrahene Dua</p>	<p>“King of Adinkra’s tree”</p>	<p><i>Adinkrahene dua</i> resembles <i>Adinkrahene</i> symbol but the little difference is that this has another design fixed inside the original <i>Adinkrahene</i> symbol. The addition of motif at the centre, visibly transforms <i>Adinkrahene dua</i> into a different symbol altogether and presents it in another form. Oral tradition states that this symbol was solely developed as a stamp for the kings and chiefs. The use of the symbol for decoration was highly restricted to kings’ cloths but with no punitive measures for defaulters. It has similar symbolic meaning as the original <i>adinkrahene</i> symbol. Greatness and royalty are the main depiction of the symbol.</p>

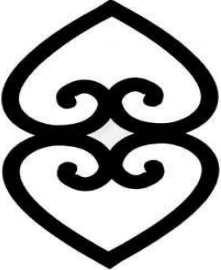
	<p><i>Duafe</i></p>	<p>“Wooden comb”</p>	<p>Wooden comb (<i>Duafe</i>) is among the symbols developed by the Gyaman’s king and his artisans. It is a symbol of behaviour or attitude that shows high moral standard especially among females. Philosophically, it connotes an attractive or useful quality of women and their everlasting love.</p> <p>Gyekye (2002) reviewing this particular symbol says: The wooden comb is designed for the <i>Asante</i> women for plaiting or combing their afro hairs. It is highly regarded as an important tool in female body decoration or adornment. The comb is one of the household items used during puberty rites of the <i>Asante</i> girls. In the course of puberty rites, <i>duafe</i> is offered to the girls by their fiancés together with items such as mirror, perfume, stools, sandals and traditional pomade.</p>
	<p><i>Abe Dua Symbol</i></p>	<p>“Palm tree”</p>	<p>Palm tree is important to the <i>Asante</i>. There is an adage in <i>Ashanti</i> that says “<i>Nnipa nye abe dua na ne ho ahyia ne ho</i>”. This means that humans cannot be likened to the palm tree because they are not self-independent and sufficient. Among all trees, the palm tree is very strong and can withstand all weather conditions. There is a traditional saying that all trees would die except the palm. This shows that the palm tree is a symbol of long life. The philosophical implication of the symbol indicates toughness, richness, self-dependent and strength.</p>
	<p><i>Nkonsonkonson symbol</i></p>	<p>“Chain link”</p>	<p>Adom (2011), in an attempt to explain the symbol, asserts that the <i>Nkonsonkonson</i> symbol represents formidable chains. Frimpong and Amankwah (2013) believe it is a symbol of human relations and unity. In the modern society, what affects one person affects all. Based on this, no one lives in isolation. Interpersonal relationship is key in community development.</p>

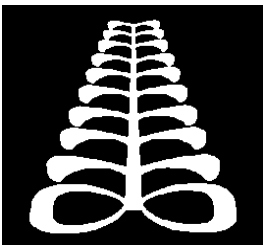

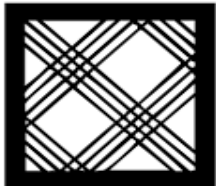

	<p><i>Gyawu Atiko</i></p>	<p>“Gyawu’s occiput”</p>	<p><i>Gyawu atiko</i> symbolizes <i>Gyawu’s</i> occiput. Adom (2016) asserts that <i>Gyawu</i> uses to be one of the sub-chiefs of <i>Bantama</i>- a suburb of Kumasi (the capital city of <i>Ashanti</i> region). Initially, this particular symbol was not part of those developed by the King of Gyaman (Nana Kofi Adinkra) based on speculations and myth surrounding its invention. It is believed that Nana <i>Gyawu</i> in one of the annual festivals among the <i>Ashanti</i> consented to shave his hairs in a style that depicts the motif or symbol in question. The symbol teaches a lesson of confident, consistent and persistent character to encounter life challenges that individual, groups and nations face daily. It is a symbol of leadership, bravery, valour and fearlessness in the <i>Akan</i> traditional setting.</p>
	<p><i>Dwannimen</i></p>	<p>“Ram’s horn”</p>	<p>The Ram’s horn (<i>Dwannimen</i>) is one of the commonly used symbols among the <i>adinkra</i> in the local cloth production of the <i>Ashanti</i>. According to oral tradition, the ram’s horn symbol represents concealment, humility, strength, wisdom and education. The strength of the ram is in the horn. The philosophical message in the behaviour and nature of the ram, indicates that individuals, especially leaders and those occupying high positions can be powerful, strong and influential, but should have some sorts of consideration attached to their operations in the society.</p>
	<p><i>Osrane</i></p>	<p>“Moon”</p>	<p>The moon (<i>osrane</i>) forms part of <i>adinkra</i> symbols with the symbolic interpretation as patience and confidence as expressed by Nkansah-Obrempong (2002). Contemplating on the moon as <i>adinkra</i> symbol, Yankah (1995) relates that the <i>Akan</i> communities in the olden days were dominated and ruled by women because of their attributes. The <i>Ashanti</i> believe that women possess qualities of patience,</p>

			<p>faithfulness and humility as factors that necessitate societal and national governance and development. Currently, in the enstoolment discourse among the <i>Akan</i>, the queen mother plays a key role for the enstoolment and destoolment of kings and chiefs. Philosophical lesson deduced from the symbol indicates the influence of women in the society. Women are hospitable, faithful, generous, charming and most of all national development greatly depends on them.</p>
	<i>Bese Saka</i>	<p>“Bunch of cola nut”</p>	<p><i>Bese saka</i> (bunch of cola nut) belongs to the commonly used <i>adinkra</i> symbols. It dominates in most of the local clothes and sometimes combines with other symbols to give different meaning and interpretation to certain designs.</p> <p>The symbol in its philosophical sense means plenty, power, wealth, authority, oneness or unity. The unity aspect of the symbol lies in the bunch because it divides the pods with each containing several seeds. Anane (2002) shares similar view with Kuwornu et al (2016) on the philosophical lessons the symbol offers.</p>
	<i>Mate Masie</i>	<p>“I have and get it”</p>	<p><i>Mate masie</i>, literally meaning, “I have heard and kept it” is another <i>adinkra</i> symbol that educates the contemporary world about the relevance of secrecy. Oral tradition reveals that it is a symbol of knowledge and deep wisdom. There is an adage in the local proverbial dialect that says ‘<i>Nyansani na otimide asem kora netrim</i>’ (it is only the wise who tends to listen more and keeps or harbours whatever is listened overtime).</p> <p>Nkansah-Obrempong (2002) relates that allowing confidential matters to loosely prevail in the public domain can trigger panic among the community members. Unnecessary gossip and rumour are likely to bring division among people who are closely related.</p>

			People who engage in such acts are immature in the <i>Akan</i> society as it is against the norms of the land.
	<i>Gye Nyame</i>	“Except God”	<p>Many scholars and artisans believe that <i>Gye Nyame</i> symbol (<i>Except God</i>) is the most common symbol among the <i>adinkra</i>. It is one of the symbols that have numerous uses. It has been used in several areas, such as cloth production, furniture making, architecture, tattooing, and interior decoration and has ever featured on some Ghanaian old currencies.</p> <p>The symbolic meaning associated with <i>Gye Name</i> symbol indicates that all authority belongs to the Supreme God.</p>
	<i>Funtumfunafu Denkyem Funafu</i>	“Siamese crocodiles”.	<p><i>Funtumfunafu Denkyem Funafu</i> is as one of the uncommon <i>adinkra</i> symbols. It is complex in nature but contains chains of philosophical lessons mostly in our democratic dispensation. In the literal term, <i>funtumfunafu denkyem funafu</i> from the perspective of Kuwornu - Adjaottor et al (2016), Arthur and Rowe (2001) and Glover (1992) represent “Siamese” twin crocodiles joined together at the belly or stomach.” It is a symbol that demonstrates oneness in democracy irrespective of discrepancies found in the cultural values of people living at a particular place.</p>
	<i>Nyame nnwu na me wu</i>	“God never dies so I shall not die”	<p><i>Nyame nnwu na me wu</i> is the name of the symbol with literal meaning as “God never dies; and so, I shall not die.” The symbol in its symbolic term represents life after death or immortality and constant existence of the Most High God.</p>

	<p><i>Mmra Krado</i></p>	<p>“Padlock of the law”</p>	<p>Kuwornu - Adjaottor et al (2016) agreeing with Owusu - Sampah (2014) offer a literal meaning to the symbol as “padlock of the law” with a symbolic interpretation of laws of nations and societies. However, there are different laws or statutes which govern the activities of individual confined in particular vicinity. It is believed that laws and regulations that may excel in a location may not necessarily perform equally at another place. To buttress this point, there is an adage among the <i>Ashanti</i>, which says “what builds one family on the other hand, may destroy or tear apart another family.” This implies that laws vary as localities vary. The underlining principles is that, no community or nation can excellently perform in the absence of laws and regulations.</p>
	<p><i>Tumi Te Se Kosua</i></p>	<p>“Power is like an egg”</p>	<p>One of the <i>adinkra</i> symbols, which educates and teaches how leaders should handle power, is ‘<i>tumi te se kosua</i>’. This symbol according to Abissath and Korem (2004) describes power as an egg, which significantly needs to be handled with care. It is a symbol that symbolizes delicacy of political power and fragility of democracy. In the <i>Akan</i> (Ashanti) proverbial expression, it is believed that power and authority are fragile like an egg, when handled too tightly, it would break; if held too loosely, it might fall and break (<i>‘tumi te se kosua, wo so muden a, epae; na se woanso mu yie nso a efiri wo nsa bo fem na apae’</i>).</p>
	<p><i>Woforo Dua Paa...</i></p>	<p>“When you climb a good tree”</p>	<p><i>Woforo dua pa a</i> (when you climb a good tree) is characterized among the uncommon <i>adinkra</i> symbols or motifs. It appears unusual irrespective of the message it carries. In the <i>Akan</i> proverbial expression, it is said that ‘he who climbs a good tree is encouraged or supported’ (<i>woforo dua pa a na ye pia wo</i>). It symbolizes togetherness, encouragement and cooperation (Abissath and Korem, 2004).</p>

			<p>It is believed in the <i>Akan</i> traditional setting that one who pursues a good course should be supported and encouraged to continue. There are individuals who always have the growth of the community at heart and consequently, such philanthropic exercises are warmly entertained in as much as the welfare of the people is concerned.</p> <p><i>Woforo dua pa a</i> (when you climb a good tree) is characterized among the uncommon <i>adinkra</i> symbols or motifs. It appears unusual irrespective of the message it carries. In the <i>Akan</i> proverbial expression, it is said that ‘he who climbs a good tree is encouraged or supported’ (<i>woforo dua pa a na ye pia wo</i>). It symbolizes togetherness, encouragement and cooperation (Abissath and Korem, 2004).</p> <p>It is believed in the <i>Akan</i> traditional setting that one who pursues a good course should be supported and encouraged to continue. There are individuals who always have the growth of the community at heart and consequently, such philanthropic exercises are warmly entertained in as much as the welfare of the people is concerned.</p>
	<p><i>Asase Ye Duru</i></p>	<p>“Earth weight”</p>	<p><i>Asase ye duru</i> from the perspective of Tetteh (2006) literally means, “the earth is heavy or has weight”. The earth is always ready to hold anything that falls from the sky without complaining. It is asserted in the <i>Akan</i> traditional setting that when the sky is exhausted of carrying its load, it drops them down to the earth. An interesting aspect about this assertion is that, the sky feels the earth has nothing to worry about but rather satisfied always. Symbolically, <i>asase ye duru</i> stands for divinity, providence, power, wealth and authority (Abissath & Korem, 2004). In the philosophical sense, it is believed all powers come from the earth. This concept admonishes people living on the earth to be vigilant and to live beyond reproach since there are gods watching and recording the acts of the inhabitants on the earth.</p>

	<p><i>Aya</i></p>	<p>“The fern”</p>	<p><i>Aya</i> (the fern) is a particular plant which grows on the palm tree. It derives all its nutrients from the palm tree and because of this, it is able to withstand all weather conditions as the palm tree. It’s symbolic representation involves resourcefulness and endurance. Adom et al (2018) commenting on <i>aya</i> symbol write that it encourages and teaches people and nations to be resourceful and self-reliant. Looking at the symbolic application to contemporary living, Owusu-Ansah (2013) relates that life is dynamic, hard times are inevitable so people should encourage themselves to cope with all situations. Resourcefulness and endurance must be the hallmark of everyone.</p>
	<p><i>Boame na me boa wo</i></p>	<p>“Help me to help you”</p>	<p><i>Boame na me boa wo</i> symbol has similar connotation as the <i>nkonsonkonson</i> symbol. This symbol literally means, “help me to help you” and symbolically represents interdependence and cooperation. It highlights the need to helping one another as a way of attaining development in society (Acquah & Oduru, 2013).</p>
	<p><i>Nkyimu</i></p>	<p>“Crossing”</p>	<p>In the literal sense, <i>nkyimu</i> symbol means crossing. This symbol depicts the arrangements and divisions done onto the plain <i>adinkra</i> cloth prior to stamping. It is a symbol of accuracy, skill and precision.</p>
	<p><i>Nyame Dua</i></p>	<p>“The Tree of God”</p>	<p><i>Nyame dua</i> as the name in <i>Akan</i> language means tree of God or Alter of God. The symbol represents God’s presence and protection. The presence of God is important in every life. Success in life is achieved because of God involvement in human endeavours.</p>


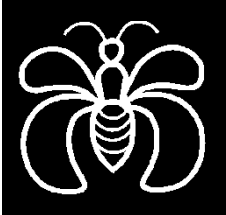

	<i>Nyansapo</i>	“Wisdom knot”	<p><i>Nyansapo</i> is a symbol of wisdom, patience and ingenuity. There is a saying in <i>Akan</i> dialect that “<i>nyansapo ye sane no wo oba nyansafo mu</i>”. This implies that it takes wisdom, patience and knowledge to untie a knot made by a wise or an intelligent person. Wisdom and patience are needed to ascertain development in life.</p>
	<i>Fafanto</i>	“Butterfly”	<p><i>Fafanto</i> literally means butterfly and is a symbol of tenderness and gentleness from the angle of Tetteh (2006).</p>
	<i>Mako</i>	“Pepper”	<p>Mako as an <i>adinkra</i> symbol is a shortened form of the <i>Akan</i> proverb “<i>Mako nyinaa mpatu mmere</i>,” literally “All peppers (presumably on the same branch) do not ripen simultaneously.” This proverb teaches the greater ones to help the less endowed with the implicit understanding that fortunes could reverse so that they would also need someone’s help. As the <i>Akan</i> say, “<i>mmere dane</i>,” literally, “Time changes”. “<i>Mako nyinaa mpatu mmere</i>” could also be an exhortation or encouragement to those behind to strive for advancement and not resign to fate.</p>

Table 2.1: Adinkra Symbols Documented
Source: (Baiden, 2020)

It was gathered at Ntonso (*Adinkra* cloth printing centre) that apparently there are sixty (60) common *adinkra* symbols for cloth production even though, there are hundred and twenty (120) symbols as discussed earlier. There are researchers who believe that the total number of the common symbols is hundred (100). Whatever the truth may be, it is believed that there are different versions of individual symbol. To buttress this, the researcher came across three different variations of *sankofa* symbol during the researcher's field trip to printing centres. In an attempt to ascertain the exact number of the symbols, those that seem to register different versions are still counted as one and that might have necessitated the reduction of the number from hundred to sixty. Irrespective of the total number of the symbols, only the most common ones are selected for this research. The symbols are however chosen on the grounds of their literal meaning, symbolism, proverbial expression, philosophical lesson and finally their application to contemporary living.

Tetteh and Kuwonru et al in their studies could not establish the total number of *adinkra* symbols available to the Ghanaian textile industry, but the review concludes that the number is neither hundred nor sixty. In terms of contributions, these authors have helped in diverse ways by organizing the symbols for discussion.

2.6 *Adinkra* Cloth Printing Procedures

Adinkra cloth production is characterised with tedious processes. A high level of vigilance is needed to achieve precision in registering the symbols on fabrics during printing. Printing of *adinkra* cloth from the perspectives of Asmah et al. (2015), Adom et al. (2016) and Adom (2012) involve the preparation of stamps, production of dyes and the actual printing.

2.6.1 *Adinkra* Stamps Preparation

Adinkra blocks or stamps called *mpakyiwa* in the *Akan* language used for printing *adinkra* cloth are manufactured from pieces of calabash (Adu-Akwaboa, 1994). To buttress

this assertion, Adom et al. (2016), believe that the patterns are constructed from calabash or gourd with the hand. They further explain that the construction of the stamps or blocks is traditionally made by the indigenes of *Ntonso* (suburb of Kumasi).

The people are popularly noted for the printing of *adinkra* cloth. The symbols or motifs are cut on hard surface of the calabash and in the subsequence process, attached to small pieces of bamboo sticks tapered together at one end. The bamboo sticks are designed to serve as handle, held during printing. The diameter of the stamp measures approximately 5 - 8 centimeters. Men mainly make the stamps (symbols) on the calabash. It is believed that the first calabash stamps for *adinkra* cloth production might have been designed by men (Owusu - Sampah, 2014).

The calabash stamps are dipped in hot *adinkra duro* (dye) for about 10 - 15 minutes for preservative reasons. This helps keep the stamps bug-free in-between uses. Prior to the carving of the symbols from the outer surface of the calabash, the inner part of the dried and thick-skinned gourd is subject to smearing of shea butter for one year just to soften it. After this, the outer surface is gradually and gently removed with sharp knife. Awutah (2012) relates that the motifs or symbols are transferred onto the calabash with the help of a pencil. In the course of carving, the negative part is removed with a gouge leaving the positive side for picking the dyes during printing or stamping.

Currently, there are several innovations on the use of calabash stamps. Silk-screen and hand printing blocks have been developed to complement the calabash stamps. Albeit, for uniqueness and original design, one has to embark on the use of calabash stamps (Adom et al. 2016). Calabash apparently exhibits the original printing procedure though the process is tiresome.



Plate 2.10: Calabash for making Blocks or Stamps

Source: (Owusu-Sampa, 2014)



Plate 2.11: Tracing of Symbol

Source: (Owusu-Sampa, 2014)



Plate 2.12: Carving of Stamps

Source: (Owusu-Sampa, 2014)



Plate 2.13:: Preparation of Stamp Handles

Source: (Owusu-Sampa, 2014)



Plate 2.14 Nature of Handle

Source: (Owusu-Sampa, 2014)



Plate 2.15: Handle Preservation

Source: (Owusu-Sampa, 2014)



Plate 2.16: Adinkra Stamps or Blocks

Source: (Owusu-Sampa, 2014)



Plate 2.17: Adinkra Stamps Drying

Source: (Owusu-Sampa, 2014)

2.6.2 Production of Adinkra Dyes and Printing Pastes

The *adinkra* dye is a vegetable dye, which is extracted from the bark of the *Badie* tree (*Bridelia micrantha*) (Adu-Akwaboa, 1994). The plant is widely cultivated in the middle belt of the country precisely forest zone in the Brong and Ahafo Regions in Ghana. As cited in

Adom (2012) by Fianu (2007), the source of *adinkra* dye is from a particular tree bark (*kuntunkuni*) with the botanical name *bobax brevicuspe*. Adom (2012) and Asmah (2004) share similar view regarding the true source of the *adinkra* dye. They believe the dye is obtained by treating the bark of a tree botanically described as *Rhodognaphalon-brevicuspe* (local: *Kuntunkuni*). A review into the preparation of *adinkra* dye indicates there are three different dyes obtained from the plant and these dyes (colours) are used to produce separate clothes. The *kuntunkuni* dye features a russet-brown colour, which is used for mourning the dead. Besides the *kuntunkuni* dye, there are other dyes like the *kobene* (vermilion red) and *Brisi* (indigo or black) which are together used as mourning colours (Adom, 2012).

The production processes of the *adinkra* dye entail the immersing of the bark of the tree in water for about 3 to 5 days just to soften the bark. It is then removed from the water and beaten to make it extremely soft. This is done to facilitate smooth extraction of the dye liquor from the plant during boiling (Asmah, 2015). The initial results of the process exhibit the transformation of the boiling water into dark liquor.

Oral tradition reveals that the dye liquor at this stage is drained and in the subsequent development subject to several boiling. To make the dyes more affinitive for the fabric, bumps of iron fillings are added to the liquor to serve as a mordant (Mato, 1986).

Rattary (1958) in Asmah et al., (2016) analyses the volume of the iron fillings added to the *adinkra* dyes (*duro*) as follows: Carbonaceous matter - 0.18%, silica - 9.90%, Ferric oxide - 87.0% and Maynesinn - Oxide 1.42%.

Technically, *adinkra* dye is insoluble, but has to be treated to make it soluble so as to have direct affinity for fabrics. To effect this change requires enough pouring of water to the bark of the plant in a container. This is normally carried out in a barrel and boils for about ten hours. The dye liquor is allowed to cool which then shows a reddish brown colour.

The liquor formed is drawn and packaged in different dye containers. If the dye is meant for producing *kuntunkuni* cloth, then the fabric is soaked in a container (barrel) containing the dyes for over ten hours. To achieve the right colour of the dyes, Asmah (2004) and Oduro (2013) write that weights are put on the cloth while in the container for proper immersion. The initial colour of the fabric when removed is yellowish-brown but upon exposure to the atmosphere, it registers its actual colour which is black. If darker colour is required, then the process is continued severally.

Plate 2.18 to 2.22 are the photographs of the preparatory processes involved in the *adinkra* printing dyes.



Plate 2.18: *Kuntunkuni* Bark
Source: (Opoku, 2019)



Plate 2.19: Soaking of Bark
Source: (Opoku, 2019)



Plate 2.20: Pounding of Bark
Source: (Opoku, 2019)



Plate 2.21: Sieving of Dye Liquor
Source: (Opoku, 2019)



Plate 2.22: Boiling of Dye
Source: (Opoku, 2019)

2.6.3 The Actual Printing of *Adinkra* Cloth

Adinkra cloth printing has seen some level of improvement over the years regarding manufacturing of stamps or blocks, dye production and the type of fabric used. Asmah et al. (2016), relate that current production of *adinkra* dyes have been adulterated with coal tar just to make the dyes appear glossy. Synthetic pastes are also common in the trade. The traditional stamps have graduated from ordinary calabash to screen printing methods even though dyers or printers still embrace the indigenous techniques.

The fabrics however, are presently designed using embroidery and appliqué design on the background before the main *adinkra* symbols are printed onto them. The authors further write that printing is usually carried out in a rectangular manner whereby the fabric to be printed is divided with three or four tine comb. The comb is used to create segments on the fabric so that the motifs are filled in between the spaces formed by the comb. Asihene (2005) as quoted in Adom (2012) opines that a piece of fabric to be printed has to be laid on a clean ground by using pegs to hold the ends of the fabric. This is done to allow the fabric rest flat on the printing space. In some cases, the fabric is arranged on a floor and boards used to cover it while nailing at the selvages. This method in the views of the researcher is tedious and time consuming. Additionally, there is likelihood for the fabric to be dirty during printing. The printer may also not feel at ease. These issues have influenced some printers resort to the use of screen-printing technologies coupled with the application of synthetic pastes.

Assessing alternative *adinkra* printing techniques, Asmah et al. (2016), write that the present method uses workbenches mounted above the ground to help a person of average height work smoothly while standing instead of kneeling as the indigenous printing procedure demands.

Plate 2.23 exhibits traditional printing method while Plate 2.24 indicates an advanced printing of *adinkra* cloth whereby the use of screens and benches are employed to facilitate smooth printing.



Plate 2.23: Traditional method of printing with blocks
Source: (Owusu-Sampa, 2014)



Plate 2.24: Marking and Printing
Source: (Owusu-Sampa, 2014)



Plate 2.25: Traditional method of printing with screen
Source: (Owusu-Sampa, 2014)

In the traditional printing method, the block is placed in the bowl containing the dyes to collect or pick the dyes for printing. The printing block is carefully shaken off a little if realised it has picked more than necessary dyes. This is done to achieve accurate printing effects and to prevent colour bleeding. The block is offered in a direct manner on the fabric by freehand (Owusu-Sampa, 2014). The arrangement of the motifs on the cloth depends on the plan and layout of the textile designer (Adom, 2012). Repetition of patterns is achieved through tessellated arrangement.

In some cases, the design is prepared to become attractive using horizontal bands of silk threads arranged in a repeat embroidered pattern of red, black, blue and yellow. The cloth after printing is dried, since there is no further treatment and other finishing process given to the cloth (Adom, 2012).

2.7 The Concept of Natural and Synthetic Dyes

Dyes and colours to many people are the prerequisite to purchasing of clothing and other household textiles. From the angle of Adu-Akwaboa (1994), they are the major factors accorded much consideration because of the beauty they render to textiles. Dyes and colours offer distinctive property to clothing. This phenomenon tends to promote the rate at which people use textiles nowadays.

Zollinger (2003) commenting on the sources of dyestuffs used in the textile industry writes that they are obtained from bark or stems, leaves, roots, flowers and berries of dye plants, insects and shellfish. The sources enumerated are natural and as a result provide natural dyes. Colouring substance embedded in these materials is extracted through long processes. Adu-Akwaboa (1994) believes natural dyes do not have affinity themselves for the fabrics they applied on and therefore needed mordant to fix the dyes permanently. Mordant is a chemical substance which has an affinity for both the dye and fibre and serve as a link. Preparation of natural dye bath entails the harvesting and soaking of dyestuffs in water for some days. The dye material is set on fire afterward to simmer between one to three hours in order to extract the dye. The dye liquor is poured into another container with enough water and boiled to achieve the desired dye bath volume. The required mordant is added to the dye solution at this stage (Casselman et al, 1980).

There are notions regarding the invention of man-made dyes. William Henry Perkin is said to have discovered dyes in 1856 through his unsuccessful experiment to produce quinine. The colour or dye which emanated from the activity was mauve (Zollinger, 2003). The

researcher believes that Perkin's discovery was geared towards the development of synthetic dyes since natural dyes had already existed prior to the production of the first man-made dyes. Synthetic and man-made dyes are synonymous. These dyes are made from the residue of petroleum and earth minerals. The high textiles demand gave room to production of synthetic fibres and this also influenced the development of man-made dyes. Dyers prefer the use of synthetic dyes to natural dyes because the later involved tedious and long process of production (Liles, 1990). Adu-Akwaboa (1994) relates that synthetic dyes are classified in accordance with production technique, application method and fibre type. The following are some of the common synthetic dyes used in the textile industry.

Acid Dyes

Acid dyes can be applied on silk, wool, other protein fibres, modified rayon and nylon. Plant or vegetable fibres that are sensitive to weak acid solution are not recommended to be dyed with acid dyes. These dyes require mordant (Glauber's salt) to facilitate level dyeing while sulphuric and acetic acid help the fibre to absorb the dyes (Zollinger, 2003).

Vat Dyes

Vat dyes are usually insoluble in water but addition of reducing agents like sodium hydrosulphite (hydros) they can be reduced to a leuco form which then becomes soluble in dilute alkaline solution. Vat dyes are converted into leuco compound which is soluble in water in the presence of an alkali such as sodium hydroxide. The dyes in this state develop an affinity for the fibre. The process of converting the insoluble vat dyestuff into leuco compound is called 'vatting' thus, the name vat dye. Hofenke (2004) writes that vat dyes require oxidizing agent in the form of hydrogen peroxide, sodium bichromate to fix the dyes to the fibre. In the absence of the chemicals, the dyed fibre or fabric is exposed to the air (30 – 45 minutes) to restore the vat to its original insoluble condition to develop the original

colour of the dyes. Vat dyes are fast to light and washing and excel well when applied on cotton and acetates.

Reactive Dye

Reactive dyes chemically unite with vegetable fibres and therefore become practically impossible to wash them off after dyeing. According to Adu-Akwaboa (1994) the dyes coupled with the fibres by a reaction with the hydroxyl (OH) group of the cellulose molecule make the dyes become an integral part of the cellulose. Reactive dyes therefore have excellent wash fastness and cleaning properties.

Cotton fabric and its blends appear favourable when dyed with reactive dyes. Caustic soda, sodium bicarbonate and sodium carbonate are employed as catalyst for reactive dyes. These dyes are locally fixed to the fabric with the help of steam or air.

Basic Dyes

Basic dyes from the perspective of Cardon (2018) are also classified as cationic dyes.

They are the first synthetic dyes discovered and this followed shortly after the original work of William Henry Perkin (chemist). Even though these dyes are brilliant, they are not fast to light and washing and they have no direct affinity for plant fibres. They are applied on acrylics.

It could be analysed that cotton fibres or fabrics which are commonly dyed in the small-scale textile industry have direct affinity for vat, reactive and sulphur dyes. In some cases, it is the preparatory treatment given to the fabric that will make it absorb dyes. Constant demand for textiles has currently placed much emphasis on the manufacturing and supply of synthetic dyes.

It can be deduce from the above data that dyes have passes through several developments and still researches are on-going in the quest of obtaining more reliable dyes in

the clothing and textile industry. It has also revealed each fibre type has its own dyes that are compatible.

2.8 Evolution of Suits Development

The origin of suit and jacket is specifically not known even though, the development started from the Great Britain. The first designers who introduced this craft of sewing still remain anonymous. It is also uncertain as to where the earlier designers obtained ideas for producing suits. Researches reveal that the first lounge suit became popular in the middle of nineteenth century, which means there had been several developments until this particular era (Cabrera and Antoine, 2015).

Suits have over the years designed for noble individuals (men) especially those from the royal families in the Great Britain. They are clothes or garments that symbolise manhood and entail beauty, dynamism and the qualities that genuinely define the concept of a man (Opoku, 2019). Suits have been in use for many centuries and have experienced different changes regarding style, fabric and functions. Despite all these, the prime meaning and philosophical core of their production remain same (Opoku, et al., 2019).

The Great Britain is the home of tailored suits because finer woolens and worsted fabrics for customised works are made in England till today. British tailored suits have distinctive characteristics which make them fit well than suits from any other country. The padding of the shoulder through to the sleeve head, chest, seams and hem of the suit are the sole influence of accurate and perfect fit (Opoku, et al., 2019).

Italian suits also came into the scene with different style effects but were not the same as the British suits. Neapolitan tailoring (Italy) employs softer fabric than that of the Britain. Padding was not done in most cases throughout the fabric but rather half way the garment. The sleeve head of Italian suit is not raised up as that of the Great Britain. Italians employ the

shirt-sleeve style for fixing their suit sleeve. The shaping of the side seams is also not done close to the body (Opoku, et al., 2019).

Looking at the regional variations of tailored suits, American first tailored works appeared in the 1920s and however became popular in the 1950s with its own features. American suit has the shoulder line extended above the shoulder bone and this does not allow the crown (sleeve head) to lie exactly at the bone and as result, makes the sleeve pull, or fall a little from the shoulder bone. Suits made in America are somehow ‘baggie’ with the shaping not definite as that of the Great Britain (Cabrera and Antoine, 2015).

History of suits and jacket is easily analysed considering its decade developments. Modern suits in the world market emanated from the ideas and inspirations of the early trends. Social, economic and cultural settings and occurrences of past decades are the main contributors that influenced the current trends of suit and jacket manufacture (Cabrera and Antoine, 2015).

Men fashion in the 19th century witnessed a major turning point in respect of style and fabric selection. In the Western world, this was the period of climaxing the Victoria era which gave rise to a new trend for men’s clothing. Cabrera and Antoine (2015) relate that men’s fashion started experiencing different changes that could make men appear good and presentable at all occasions.

The nineteenth century era experienced the transition of Victoria frock suit to sack suit. A common characteristic of this period was the wearing of three-piece suits, which comprised a sack with a matching waistcoat or vest for men. Using contrasting trousers also became fashionable (Cabrera and Antoine, 2015).

Another way of wearing suits then was using same fabric for both jacket and trousers (pants). However, contrasting waistcoat or vest was popularly worn under the suit. Trousers or pants for jackets were made ankle high with turn-ups or cuffs. Introduction of fullness such

as pleats, darts, creases and tucks were very common at the back and front sections of men's trousers and skirts (Cabrera and Antoine, 2015).

Production methods of suits were subject to strict rules and people were punished for breaking specific dress code rules. Social and cultural factors helped eliminate the aforementioned rules during the middle of the century. Cabrera and Antoine further write that the 1910s suit and jacket for men and women appeared similar to the former ones. The only variation was that, during this period, men of the middle and working class added caps to complement their dressing.

The World War I affected fashion trends and as a result, fashion remained static, which effected conservatism and practicality. The aftermath of the war came the use of short jackets (influenced by military uniforms) with either two or three buttons. The early 1920s encouraged the wearing of long tailcoats and pinstriped suits. The choice of fabric colour, tie and shoes were all favoured in the same era. Fashion trend during World War I was characterised as re-appropriation of clothing associated with the war, but ended up differently. Designers of suit later resorted to narrow reverses (lapels) and slim or straight trousers. Single-breasted jackets were worn on double-breasted waistcoat. The use of hats was class-coordinated (Cabrera and Antoine, 2015).

The 1930s suits experienced a slight change of the 1920s as many people wanted to look popular in terms of clothes they wear. Notwithstanding, constructional processes of suits became flexible to satisfy large scale production (Opoku, et al., 2019).

The 1940s and 1960s did not witness any major changes in constructional methods. Suit produced within these periods had inspirations from early developments. Brighter colours were introduced into suit manufacturing, as people needed very stylish clothes for disco in the 1970's and 1980's respectively. Suits in early 2000 appeared in pastel colours,

very short and were associated with vent openings at the back. Buttons were either two or three and could match any trousers (Opoku, et al., 2019).

A critical look at the suits developments reveals that the current suits in the market are inspired by the old trends. Old and modern ideas for suit manufacturing have remained similar just that the 21st century trend encourages brighter colours than before. Closed-fitting styles are also common these days (Cabrera and Antoine, 2015).

Although women's suits may not date back to the 1600s the way men's do, they nevertheless have a colourful, boundary-pushing history. The first notable appearance of a woman making a man's suit her own was in 1870 when actress Sarah Bernhardt began wearing her "boy's clothes" in public. At the time, a woman wearing a man's suit was scandalous, but this controversy did not keep her from further challenging gender roles – she played the lead in Hamlet in 1899 (Fringes, 2008).

By 1910 the suffragette movement was in full swing and with it came women who were bolder and more active. Rallies, marches and civil disobedience required more than just shaking off dated 1800s ideals – they required less restrictive clothing. The predecessor to the modern skirt suit was a sharp counterpoint to the popular "hobble skirt," the mainstream fashion of the time that was so narrow at the ankles the wearer 'hobbled' around (Fringes, 2008).

The Suffragette Suit was a hallmark of progressive woman and inspired icon and fashion Grande dame Coco Chanel. Possibly, the most well-known designer to make women's suits, Chanel gained popularity during the First World War by eschewing corsets for tailoring and is widely credited with making the first truly female suit in the modern sense. Unlike its predecessors, the Chanel suit retained a sense of glamour and femininity (Cabrera and Antoine, 2015).

The female suit and jacket saw a brief lull in popularity after the Second World War as many sought a return to traditional domestic roles after the mass influx of women into the wartime workforce. Christian Dior's "New Look" embraced the 1950s housewife look with nipped waists and full skirts. But by the 1960s the suit was back in full force as an unprecedented 40% of women had joined the workforce. This decade saw many watershed moments in equality with the Equal Pay Act of 1963, the Civil Rights Act of 1964, and a Presidential act banning discrimination based on gender in 1967. The sixties also witnessed Andre Courreges' reintroduction of the suit into elegant day and evening-wear (Cabrera and Antoine, 2015).

By the 1980s the percentage of women in the workforce had grown to over 50%, and the decade became known for the iconic "power suit". With Giorgio Armani championing androgynous shoulder pads and the over-sized jacket silhouette, the stereotypical look for women in business was born (Fringes, 2008).

In 1993 trailblazing Senators Barbara Mikulski and Carol Moseley-Braun led the charge to overturn the ban on women wearing trousers on the Senate floor. It is hard to imagine that as little as 25 years ago a woman could have been expelled from Congress for wearing pants (Cabrera and Antoine, 2015).

Suits dynamics in the contemporary fashion industry work in favour of men than women. This concept was buttressed by a survey conducted by the Ghana Tailors and Dressmakers Association in 2016, which shows that the demand for men's suits is very high compared to women's suits.

Below are some photographs of early suits which serve as source of inspiration for the study.



Plate 2.26: Suits of Early 1900s
Source: <https://www.thequintessentialman.com>



Plate 2.27: Different Styles of Early Suits
Source: <https://www.thequintessentialman.com>



Plate 2.28: Suits in the 1910's
Source: <https://www.thequintessentialman.com>



Plate 2.29: Different Styles of 1910's Suits
Source: <https://www.thequintessentialman.com>



Plate 2.30: Suits of Early 1920s
Source: <https://www.thequintessentialman.com>



Plate 2.31: Suits of Early 1920s
Source: <https://www.thequintessentialman.com>



Plate 2.32: Suits of Early 1930s

Source: <https://www.thequintessentialman.com>



Plate 2.33: Suits of Early 1940s and 50s

Source: <https://www.thequintessentialman.com>



Plate 2.34: Suits in the 1960s

Source: <https://www.thequintessentialman.com>



Plate 2.35: Suits in the 1970s

Source: <https://www.thequintessentialman.com>



Plate 2.36: Suits in the 1980s

Source: <https://www.thequintessentialman.com>



Plate 2.37: Suits in the 1990s

Source: <https://www.thequintessentialman.com>





Plate 2.38: Suits in the 2010-2016

Source: <https://www.thequintessentialman.com>



Plate 2.39: Suits in the 2010-2016

Source: <https://www.thequintessentialman.com>

2.9 Contemporary Textile Design Techniques and Approaches

Textiles as explained by Adu-Akwaboa (1994), Sackey (2006), Cyri - Egware (2012), Wynne (1997) and the concise Oxford Dictionary - tenth Edition as a derivative term which originated from the Latin word '*texere*' which denotes weaving. In furtherance, the term encompasses cloth and all materials that can be formed or have been formed into yarns or fabricated into cloth.

The development of textiles production in prehistory has been the subject of many scholarly studies since the late 20th century. Evidence regarding man existence in the prehistoric era suggests that human beings may have begun wearing textiles (clothing) as far back as 10,000 to 50,000 years ago. Indigenes who occupied the landmark of Western Europe clothed and decorated themselves with basket hats or caps, belt worn at the waist, and a strip of textiles that wrapped around the body right above the breast (Frings, 2008). Sackey (2006) contends that discovery of certain plant (vegetable) fibres such as flax and cotton in a cave in the Republic of Georgia around 34,000 BCE undoubtedly reveals that textiles were greatly explored during the prehistory era. This revelation indicates presumably that textiles over the

years have greatly contributed to man's development. The progressive development of textile production started as leaves coverings, animal skin, and in subsequent generation, in respect with technological advancement migrated into the art of weaving and spinning. Textile production as a scientific and art industry has experienced tremendous transformation depending on man's effort to supply clothes across the globe.

Cyril - Egware (2012) observes that modern technology has influenced the textile production techniques into several dimensions. Presently, different methods of executing textile projects, abound, which involve weaving, embroidery, knitting, crocheting, and felting, bonding, together with surface embellishments such as printing, batik, tie-dye and appliqué. The initial materials employed for textile manufacture emanated from plant and animal sources respectively. Over reliance of traditional materials (natural) and the search for further knowledge have paved way to the inclusion of synthetic materials in the textile industry. Commonly used natural fibres for manufacturing textiles include wool, silk and vegetable that comprise cotton, flax, ramie, sisal, hemp and corn (Fringes, 2008).

Wynne (1997) and Fringes (2006) look at the under listed synthetic fibres as the most important fibres in the textile production industry. These fibres include rayon (viscose), lyocell, acetate, triacetate, are classified as regenerated (cellulosic) fibres. The purely synthetic (non-cellulosic) fibres on the other hand, entail nylon, polyester, acrylic, spandex, polypropylene and others. The fibres are converted into useable textile fabrics (cloth) via fabric decorative techniques. The most widely methods involve printing (screen, block) embroidery, bonding, felting, batik, tie-dye, weaving, crocheting and knitting.

2.9.1 Embroidery as Textile Manufacturing Technique

Embroidery as explained by Adu-Akwaboa (1994) is used to describe fabrics produced with decorative or ornamental stitches with the application of thread or yarns. The

decorated stitches are rather made on already constructed fabrics. It is among the oldest and beautiful arts and recognised as a distinguished art even in the days of prehistoric era. Early Egyptian costumes contained lovely embroidered borders. During the seventeenth and eighteenth centuries, the English and French needlewomen used embroidery to produce stylish and awe-inspiring decorative effects. Embroidery as textile manufacturing techniques is carried out by hand or Schiffi machine which undoubtedly is able to counterfeit different embroidery stitches (Adu-Akwaboa, 2004).

Embroidery terms are many, different countries have different terms for the same stitches, and even in the same country, the term may vary from one place to another. There are countless of embroidery stitches available in the clothing and textile industry. The most common ones include chain stitch, beading, chevron stitch, buttonhole stitch, featherstitch, cross-stitch, satin stitch, French knots, stem stitch, lazy daisy stitch, straight stitch, backstitch and running stitch. Construction of embroidery requires the application of materials and tools like needles, thimbles, scissors, canvas, fabric, frames and loops, threads and yarns. As stated earlier on, embroidery stitches vary and are used to achieve specific designs. A number of stitches has dual purposes like in chain stitches. They are capable of outlining the shapes of designs and at the same time filling up large spaces (Wynne, 1997).

2.9.2 Fabric Printing (Screen)

Printing according to Fringes (1998) is employed to apply design to fabric or cloth. Wynne (1997) on the other spectrum views it as a localised application of dye or pigment in a thickened form to a substrate, to generate a pattern or design. To further substantiate the concept of printing, Adu-Akwaboa (2004) and Kadolph (2008) believe printing is the process of transferring designs from rollers, screens, blocks onto a textile material with printing pastes (dyes). It includes roller printing, screen-printing, block, heat transfer, polychromatic

and electrostatic printing. Currently, the roller and the screen are used to assist the printing process and among them are the differential printing and micro jet injection.

Fringes (2002) notes two basic categories of printing; wet and dry printing. Under wet printing, there is engraved-roller printing and screen-printing where dyestuffs are used in wet form for an optimum colour penetration.

Pigment printing is a wet printing style but then, the pigment is fastened to fabric surface with resin. Other wet prints encourage the application of dyestuffs that have a chemical affinity to the fabric, fibre and do not use resin. A major characteristic of wet printing technology is that, it is very likely to achieve a soft and drapery hand (Fringes, 2006).

Engraved-roller printing as explained by Fringes entails the use of a separate roller engraving for each colour in the pattern. Screen printing method that forms part of the wet printing techniques is a form of stencil printing whereby a synthetic fibre or metal gauze stretched taut over a frame is used. Part of the gauze has the holes blocked off (non-printing area) and the printing paste is force through the open printing areas by a rubber or metal blade, called a squeegee, and on to the fabric beneath (Wynne, 1997).

Rotary screen-printing is a mechanised type of flatbed screen-printing. In this technique, the roller itself is porous in the areas to be printed. Dyes for printing are strongly fed into the roller cylinder and via its porous screen as it rolls over the cloth. This method, to many textile designers is considered easier and quicker as compared to flatbed screen printing and is progressive or continuous, allowing no breaks between screens (Wynne, 1997).

Dry printing involves heat-transfer or paper printing. This is the process whereby the fabric, with the help of heat and pressure, absorbs designs from a specially printing paper. The paper, which may be printed by flexography, gravure, converted rotary screen process or offset, is sandwiched between the fabric and a silicone-robber sheet (Wynne, 1997).

Again, the paper print then vaporizes and is transferred onto the fabric when it is subject to a high temperature for some seconds (Wynne, 1997; Fringes, 2008; Adu-Akwaboa, 1994). Direct printing, discharge and resist printing are all printing styles. In direct print method, all aspect of the design to be printed is 'saved for' which means that colours are not entertained to overlap and as so, each colour has its own specific area on the fabric. Additionally, each colour has a unique area reserved for it on the cloth and the printing exercise will have to ensure that good colours positioned or deposited in the correct saved - for locations. For two different colours to either emerge or touch, Wynne (1997) writes they must do exactly that and not overlap to cause and generate a third colour.

In respect with the discharge and resist printing styles, some portions of the fabric are protected from dye absorption and the areas, not protected, have the tendency of absorbing dye. These approaches are applied in tie-dye and batik production. In tie-dye process, areas of fabric are tied or sewn with thread and dyed with hot or cold dyes. The tied or sewn portions resist dye absorption. Batik production inculcates the application of molten wax to resist dye absorption. The wax at the end is removed which then affect both planned and accidental designs. A crucial observation reveals that different printing styles are possible in contemporary textiles production industry. Textile designers are not restricted to a single printing method. Designers' level of knowledge and experience contribute immensely in achieving better results in the course of manufacturing (Cyril-Egware, 2012).

The data from the various sub-topics outlined helped in diverse ways by revealing both practical and theoretical works carried out by some authors. Some contributions and conclusions from existing works helped in identifying certain gaps and their impact on the study.

2.10 Theoretical Framework

Theory is viewed by Ndiyo (2015), Grant and Sanloo (2014) as a body of connected concepts, definitions, and propositions that show a fixed plan of an issue by specifying relationships among variables with the prime motive of explaining and predicting an outcome of an issue. Ndiyo argues that theory further offers greater evidence pertaining to the result of a proposed phenomenon. The propositions here highlight the fact that no one researcher has invented or propounded something that has no root from already documented foundations or theories.

In effect, theories are conclusions formulated by renowned authorities in either academic or non-academic endeavours. Obviously, the theoretical framework is among the very pertinent features of the research process. Osanloo (2014) writes that theoretical framework runs through the entire research process starting from topic selection, objectives, development, research questions, literature review, design procedure and method of data analysis.

From the perspective of the researcher, theoretical framework supports the concept of research topic, the problem statement, the aims, the importance and the research questions. The theoretical framework also serves as an anchor for the literature review and the methods of analysis. Aesthetic theory and Creativity theory constitute the theoretical framework of this study.

2.10.1 Aesthetic Theory

Aesthetic theory as propounded by Alexander Gottfried Baumgarten (1714-1762) and expounded by scholars such as Immanuel Kant (18th century), Gustav Theodor Fechner (19th century) and Adorno (1990) is adopted into female fashionable suits in *adinkra* symbolic fabric. From the angle of the authorities, Aesthetic theory lays emphasis on beauty as the

basic requirement by which inventions and innovations are appreciated within a particular social context. It further sees beauty and functionality of inventions or innovations as the key factors responsible for acceptance.

Adorno writes that art and design products should not necessarily be beautiful, but there must be purposes attached to them. The societies where art works are created have to enjoy the benefits of the works. Cyril-Egware (2012) looks at aesthetic as a theory concerned with beauty and the acceptance or appreciation of beauty.

The researcher adopted aesthetic theory with the aim to ascertain and ensure that much beauty is infused into the proposed designs. To make this phenomenon a reality, extra effort needs to run through all the stages to the finished products.

2.10.2 Creativity Theory

Creativity theory by Vygotsky (1968) is also another theory adopted and built into this study. This theory says that creativity arises from any human activity that produces something new. It however underscores the ability to improve on established ideas into new ones and to integrate new borrowed ideas into previously organised systems or situations. It again explains ways in which new and existing ideas can be fused into different forms to meet contemporary trend. The creative process is understood as a collective one that combines and extends on preexisting discoveries.

Amenuke (1991) and Adu-Akwaboa (1994) share similar views on creativity. These authors asserted that themselves with creativity as those human activities around the nature or environment that challenge the true origin, genuine and imaginative use of skills. Adu-Akwaboa (1994) further writes that creativity is the effort to manufacture original works and concepts. Creativity commences from a creative individual using a creative process to produce creative products. From the researcher's perspective, creativity entails making

something new. It involves inventing or modifying concepts, improving upon existing ideas and rearranging old things or ideas in new form.

This theory is employed and applied in the research to ensure that *adinkra* symbols and cloth are given a modern look and acceptance.

2.11 Conceptual Framework

The conceptual framework intends to integrate various aspects of inquiry such as problem definition, purpose, review of literature, methodology, collection of data and analysis (Ndiyo, 2015). It presents a systematic structure of interrelated ideas or concept which offers a true picture or clear display of how concepts in a given field of study relate within the theoretical framework (Krathwohl, 2009). In a more concise manner, the conceptual framework defines the road map to any research work.

The conceptual framework used for this study apparently illustrates the works of researchers such as Adom (2012), Omai (2015) and Asmah, Okpattah and Koomson (2016). Adom investigates the replacement of *adinkra Badie* dye with synthetic printing pastes. The study only underscores the characteristics of the traditional dye as a vehicle for the promotion of the *adinkra* cloth without altering the symbols and the functions of the cloths. Conversely, Omai argued in favour of developing motifs for the Ghanaian textile industry by combining *adinkra* and other African symbols while Asmah, Okpattah and Koomson considered the technological approach in the *adinkra* cloth production. The study further envisages the synergy of incorporating *kente* stripe in *adinkra* cloth for enhancement.

The lot of information from earlier studies indicates that *adinkra* cloth requires much recognition and transformation in the Ghanaian fashion industry and this is what the study seeks to address by using some of the symbols as motifs on fabrics for the production female suits.

From the conceptual framework, it can be deduced that the Ghanaian fashion industry needs to develop through the use of traditional symbols. In an attempt to build the relationship between the independent, independent and the intervening variables, the study intends to employ the original *adinkra* symbols in a selective manner for the production. To achieve this development, the use of modernised screen-printing and the application of synthetic dyes are seen as catalyst for the production of innovative fabrics and suits. The inculcation of creativity and aesthetic theories cannot be underestimated since the acceptance new product largely depends on the ability outsells the existing product.

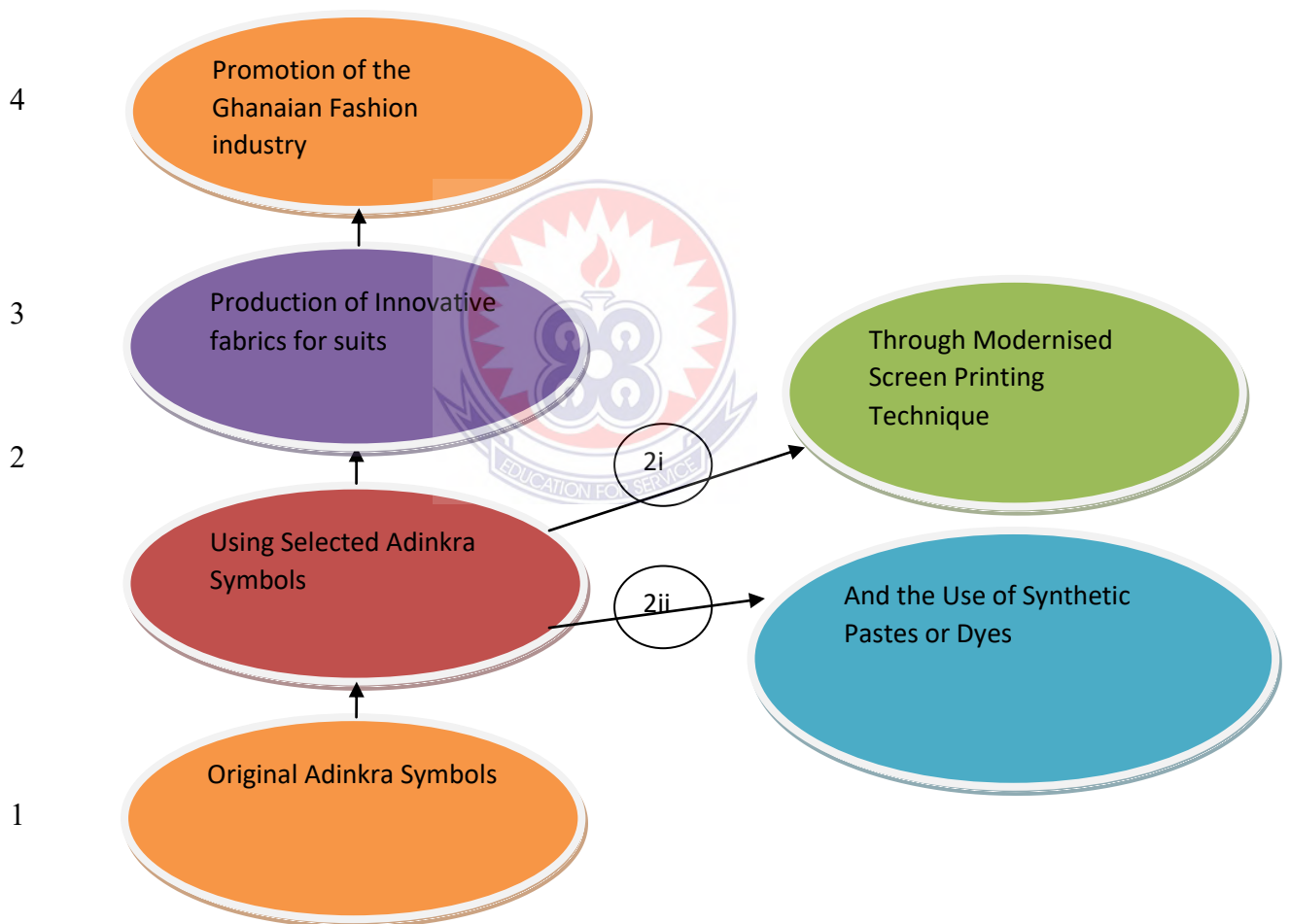


Figure 2. 1 The Conceptual Framework for the Study
 Source: Field Survey, (Baiden, 2019)

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The chapter specifically looks into research design, employment of research method, and population for the study, by which the needed data were sourced and the procedures adopted for ascertaining, assembling and managing the data. It precisely underscores the following components: Research design, location of the study, population of the study, sampling and sample size, data collecting instrument, validation of data collecting instruments, data collecting procedure and data analysis plan.

3.2 Research Design

The researcher employed mixed methods for the study. They are basically quantitative and qualitative research methods. Qualitative design is appropriate in small-scale research when the researcher focuses on the concept of developing specific knowledge through data collecting instrument. The instrument may include participant observation, interview and documentary analysis. However, qualitative method is not entirely devoid of numerical measurement but in this study, it helped in the discussion of data obtained from the interviews. Either depending on the expected data, numerical measurement can be included or exempted (Creswell, 2013). Adopting qualitative design requires optimum experience owing to its investigative nature for producing valid information. Quantitative research design embraces numerical data that can be subjected to statistical analysis. A major tool for this method is questionnaire. Again, it aided in the analysis of the data accrued from the questionnaire. Qualitative and quantitative research designs were used as they allowed the researcher to explore and experiment *adinkra* symbols for designing fabrics for the production of fashionable office suits for women. In view of this, data obtained were

descriptively analysed. The aforementioned reasons influenced the selection and adoption of the research methods.

3.3 Location of the Study

The study was conducted in the *Adinkra* printing centres in Ashanti Region; precisely, Kumasi and its environs. Many traditional art and design industries are confined in these areas.

Additionally, the area is the centre for many formal and informal businesses and at the same time, linking different cities in Ghana. The custodians of *adinkra* symbols also live in and around Kumasi. The researcher considered the location expedient in the verge of attaining the relevant data for the study.

3.4 Population for the Study

Approximately, eighteen thousand (18,000) people are estimated to be living in the *adinkra* printing areas notably Ntonso and Aboaso respectively as revealed by the Statistical Department of Ghana during the 2010 census. The demography of the area proportionally constitutes forty percent (40%) representing small-scale clothing manufacturers. Twenty-five percent (25%) is believed to be involved in white colour jobs while the remaining thirty-five percent (35%) being other professions.

Population is the overall possible group of subjects upon which any given research study is based (Ndiyo, 2015). For the purpose of achieving the objectives of the study, Kings, chiefs and queens were selected because they are the custodians of *adinkra* symbols and as such abreast with current changes of the designs. This category of people became the targeted population. However, the acceptance of new development of the symbols in the area of cloth production is very crucial on the part of opinion leaders. The inclusion of traditional cloth

manufacturing artisans was to ascertain the feasibility of adapting the existing symbols with synthetic pastes and screen- printing method. Consumers were also considered very relevant as the patronage of the study results (products) would depend on them. Their acceptance of the products would beyond doubt determine the success of the project in the society.

3.5 Sampling Technique

The researcher used non-random sampling method in the study. Under the non-random sampling method, deliberate sampling was chosen. In this method, purposive sampling was specifically selected for the study. Peculiar elements and characteristics of the population were deliberately selected on the discretion of the researcher, without compromise. This technique was intentionally adopted for its benefits. Purposive sampling helped the researcher select a sample that has keen interest, and is conversant with the subject matter. The traditional elders, artisans, fashion designers and consumers were all selected via the use of purposive sampling technique. This contributed in realizing the objectives of the study. The reasons enumerated, prompted the choice of sampling technique.

3.6 Sample Size

Out of the estimated eighteen thousand (18,000) population of the study area, a sample size of three hundred and ninety-one (391) respondents were selected based on Slovin's (1960) formula; $n = \frac{N}{1 + N(e)^2}$. The respondents include chiefs, queens, *adinkra* artisans and consumers who were selected through purposive sampling technique. Ten (10) respondents represent traditional elders and another twenty (20) respondents represent *adinkra* cloth artisans and fashion designers. Much emphasis was given to traditional cloth consumers. For this reason, three hundred and sixty-one (361) respondents were selected to represent this group making total sample size to three hundred and ninety-one (391). In

effect, thirty (30) respondents were interviewed whilst three hundred and sixty-one (361) respondents received the questionnaire.

3.7 Data Collecting Instruments

Interview, observation and questionnaire were used as the primary instruments for data collection.

3.7.1 Interview

As a research instrument, interview is a face-to-face conversation or meeting involving an interviewer and interviewee (questioner and respondent). The purpose of interview is to obtain valid and reliable data via responses or feedback from the interviewee pertaining to a question from the interviewer. The interview questions can be structured or unstructured regarding the extent at which the content and procedures involved are prescribed and standardized in advance. A rapport is established once it is conducted in a cooperative atmosphere (Ndiyo, 2015).

In view of this, a structured interview technique was adopted to achieve truthful data from traditional elders and *adinkra* cloth artisans. These groups of people were interviewed separately on schedule bases whereby the artisans were grouped differently from the traditional elders and the interview questions were posed to them while recording the responses at the same time.

3.7.2 Observation

Observation plays a vital role in research endeavour. It is a systematic approach of gathering information in which all the senses come to play in a given social setting. Data from observation is obtained directly rather than through the reports of others. Observation

technique is appropriate in studying small groups and communities. It is devoid of memory errors of respondent, prestige effects and exaggeration (Ndiyo, 2015). The researcher employed participant observation for collecting peculiar data in the course of the study. The researcher used an observational checklist or guide to systematically conduct and record necessary information for the study. In view of this, the researcher arranged trips to visit selected *adinkra* printing towns in the *Ashanti* region in Ghana. The objective was to collect relevant data concerning *adinkra* cloth production processes.

3.7.3 Questionnaire

Questionnaire is a set of questions prepared by the researcher to solicit information from respondents. Administration of questionnaire looks appropriate in areas where the researcher is after statistical data. In most cases, questionnaires are planned in accordance with the research questions enumerated by the researcher. They are administered to target respondents after preparation (Creswell, 2013). The nature of questionnaire can be either close-ended or open-ended. The respondents have freedom to write their own responses in respect with open-ended questions. For proper control and monitoring of responses, close-ended (dichotomous responses) type was adopted for the study. Respondents made choices by circling specific alternatives provided by the researcher. The content of the questionnaire was administered to consumers of local and traditional clothes. In order to avert lackadaisical attitudes of some respondents towards questionnaire administration and missing of question papers, the researcher carried out the questionnaire exercise. This aided rectification of common errors associated with questionnaire and clarification of certain technical terms of which respondents found difficult to understand. The questionnaire were collected from the respondents on the same day of administration but due to the number of the respondents, the researcher used one week in carrying out this exercise.

3.7.4 Validation and Reliability of Instruments

The research questions formulated in chapter one constituted the basis for guidance. It was through these questions that the questionnaire, interview and observational checklist were anchored. The preparation of the interview questions, questionnaire and observational guide were done with the assistance of the supervisor. Adequate scrutiny and corrections were carried out to facilitate authentic and reliable administration of the instruments. The items in the questionnaire and interview after preparation were given to the supervisor for thorough vetting. However, necessary remedies were effected based on the measures put forward by the supervisor. In order to ensure validity and reliability of the instruments, the questions were initially administered to M.Phil. first year students in the department. The results that emerged proved valid and hence, the main administration.

Questionnaire appeared reliable and valid as it helped in collecting information from the literate with little effort. As mentioned earlier, close-ended type of questionnaire was employed and as a result, less stress during administration was encountered. Data from questionnaire were easily reported with frequency counts and percentages. Illiteracy level of some interviewees countered for the choice of interview. Information obtained from interviewees was in the form of verbal data. The verbal information gave the true concept of the people without alteration. In order to create room for respondents to express themselves well, an open-ended question was itemised and presented. The structured type of interview helped the researcher in realising the objectives of the study.

3.8 Data Collecting Procedure

The researcher obtained major part of the data from questionnaire, interview conducted and observation carried out in some *adinkra* production communities within the *Ashanti* region. Specific towns such as *Ntonso*, *Asonomaso*, *Atonsu* and Kumasi Cultural

Centre were the places visited by the researcher. Information gathered at these centres constituted the primary source of data. The researcher took a number of photographs of *adinkra* symbols, dyes, printing styles and clothes from the production sites.

On the other hand, information from existing related literature from newspapers, television broadcast, seminars, textbooks, journals, bulletins, reports, master and doctoral theses, magazines and workshop papers formed part of the secondary sources of data.

Besides sourcing materials online, the following libraries served as good sources of data collection: Kwame Nkrumah University of Science and Technology Library and University of Education, Winneba Library, other equally important libraries such *Ashanti* Library and Kumasi Technical University also helped in several ways as most of the old *adinkra* symbols and clothes were discovered.

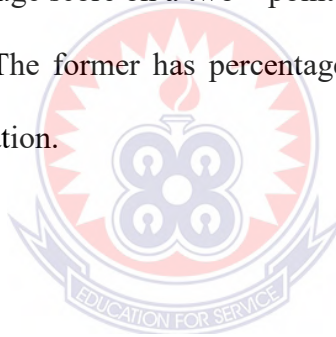
3.9 Ethical Considerations

In research, it is required that the study respondents are protected so that they do not fall prey to the investigation being undertaken (Creswell, 2013). Accordingly, it required of the investigator to inform participants about the purpose of the investigation so that respondents become aware of the purpose and intention of the study. Additionally, ethically, researchers are required not to disclose participants' information to third parties or expose respondent's identity in their study analysis. Hence, it is required that information such as respondents name, personal contacts, etc. is not taken when carrying out research. Accordingly, for the study to ensure that all these ethical dimensions will be addressed, first, possible forms of traces that could make respondents fall victims as a result of the information provided will be eliminated. For instance, respondents will not be asked to provide information about their names and contact details in this study. Again, in order to ensure that the respondents were aware of what this study seeks to achieve, the respondents will be thoroughly briefed and

equally allowed to rescue themselves anytime they feel uncomfortable to continue answering their questionnaire items.

3.10 Data Analysis Plan

Information gathered was presented and analysed by descriptive and analytical approach. The scoring of the instrument was done by grouping the responses and findings thereby converting them into percentage scores. Information from visual observation were grouped, presented and systematically analysed. Inferences were drawn from matters as they unfolded or emerged from visual data. Specific headings were deduced from the study objectives for the analysis. Data accrued from questionnaire were analysed in statistical (descriptive) tables using percentage score on a two – point Likert scale and they were treated differently from the interview. The former has percentage scores representing the opinion pool of the respondents or population.



CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Overview

This part of the study vividly presents the data collected through observation, interviews and questionnaires. Thus, tables and figures were employed for better analysis and understanding of the data.

The study was influenced by the conventional use of *adinkra* symbols for funerals and other sad events, or activities. It is uncommon to see *adinkra* symbols being used on fabrics for the production of female fashionable suits as office wears. However, the objectives of the study were to use the Akan *adinkra* symbols to meet the contemporary demands of the fashion industry, apply screen printing technique to produce *adinkra* clothes with synthetic pastes and develop innovative fabrics with symbols that can withstand different tailoring processes of *adinkra* redeveloped cloths.

The sample size of the study was three hundred and ninety-one (391) and out of this number, thirty (30) were interviewed and three hundred and sixty-one (361) received the questionnaire. Unfortunately, twenty-one (21) respondents could not submit the questionnaire so three hundred and forty (340) was used for the discussions.

4.2. Results and Discussion of Research Questionnaire

4.2.1 Respondents' profile

Table 4.1: Social – Demographic Profile of Respondents

Characteristics	Frequency	Percentage (%)
Gender		
Male	158	43.6%
Female	182	50.2%
Total	340	93.8
Age Range (years)		
20 – 25	19	5.2%
26 – 30	67	18.5
31 – 35	53	14.6
36 – 40	76	21
41 – 45	60	16.6
46 – 50	28	7.7
51 and above	37	10.2
Total	340	93.8
Marital Status		
Married	124	34.3
Single	168	46.3
Divorced	48	13.2
Total	340	93.8
Educational Background		
JSS / JHS / Middle School	60	16.6%
SSS / SHS	110	30.3%
Diploma	129	35.6%
Graduate	41	11.3%
Total	340	93.8
Occupation		
Employed	227	63.8%
Unemployed	113	30%
Total	340	93.8
Working Experience		
1 – 5 years	64	18%
6 – 10 years	74	21%
11 – 15 years	90	26%
16 – 20 years	60	17%
21 and above	40	11.8%
Total	340	93.8

Respondents sampled for the research questionnaire were three hundred and forty (340) and out of this number, 158 (43.6%) were males while majority of 182 (50.2%) were females. In respect of age, 19 respondents representing 5.2% were found to be in the age group of 20 to 25 while 67 (18.5%) were within the age range of 26 to 30 years respectively. About 53 respondents constituting 14.6% were aged between 31 to 35 years. Meanwhile, majority of the respondents (76.21%) were found within the domain of 36 to 40 years. It could be seen from Table 4.1 that 60 respondents amounting to 16.6% were categorized among the age range of 40 to 45 years while 28 (7.7%) respondents were between the ages of 46 to 50 years. On the age range of 51 years and above, 37 respondents constituting 10.2% were also identified. It could be deduced from the discussions that majority of the respondents were between 36 to 40 years of age. This implies that the data obtained for the discussions mostly came from respondents within this age range.

Table 4.1 indicates that a large number of respondents (168; 46.3%) were not married but 124 respondents were found to be in the married group. It could be observed, however, that some of the respondents sampled were previously married but have been divorced by the time of this study was conducted. This category consisted of 48 respondents, thereby representing 13.2%. Considering the respondents' educational background, 60 respondents (16.6%) had only completed Junior High School or Middle School. About 30.3% (110) respondents had either completed Senior Secondary School or Senior High School respectively.

A large number of respondents (129; 35.6%) were Diploma holders while only 41 respondents were believed to have completed university education and as a result, holding degree. In the area of occupational status, more than half of the respondents were employed by the period the study was conducted and were actively working. This group consisted 227 respondents representing 63.8%. About 30% respondents had no job and a result considered

unemployed. For respondents' working experience, it was recorded that 64 respondents (18%) had attained working experience between 1 to 5 years while 74 (21%) respondents fell within the range of 6 to 10 years. Ninety (90) respondents constituting 26% had working experience ranging from 11 to 15 years; and this group was considered the majority. On the other hand, 60 (17%) respondents had working experience of 16 to 20 years while only 40 (11.8%) were between the range of 21 years and above.

From the perspective of the entire respondents' profile, it could be analyzed that females' involvement in the study took dominance of their males' counterpart. Middle – age respondents were also more than any age group. In the same vein, majority of the respondents were not married while Diploma certificate holders outnumbered the overall respondents in term of educational qualification. Looking at the respondents' educational level, it could be analysed that literacy level was high and this is an implication of generating valid and reliable data.

Using Akan *Adinkra* Symbols to Suit the Contemporary Demands of the Fashion Industry

Table 4.2: The Demand and Increase of *Adinkra* Fabric

Characteristics	Agree Frequency	Percentage (%)	Disagree Frequency	Percentage (%)
The demand and increase of <i>adinkra</i> fabrics.	187	51.6%	153	42.2%
Limitations of <i>adinkra</i> symbols	233	64.3%	107	29.5%
<i>Adinkra</i> suits meeting different cultures.	192	53%	142	40.8%
Admiration of <i>adinkra</i> symbols	179	49.4%	161	44.4%
Promotion of the local fashion industry.	181	49.9%	159	43.9%
People's understanding of <i>adinkra</i> symbols.	175	48.3%	165	45.5%

Analysis of the results from Table 4.2 revealed that little above half of the respondents (187; 51.6%) believed the demand for fabrics with *adinkra* symbols has increased for the past decade while 153 (42.2%) respondents were of the view that the

demand for fabrics with *adinkra* symbols have not gone up over the past decades. The assertion of the majority on this issue fall in line with the stances of Abissth and Korem (2004), Arthur (2008) Amici (2003) and Asmah (2014) on the grounds that, the role and uses of *adinkra* symbols over the years have become versatile in many areas of human endeavours thereby increasing their usage.

Looking at the uses of *adinkra* symbols for funeral purposes and their limitations in terms of contemporary demands, 233 respondents constituting 64.3% asserted that, the major use of *adinkra* symbols is funeral purposes and this has negatively affected the contemporary demands of the symbols, but 107 (29.5%) respondents believed that the use of *adinkra* symbols for funeral activities has not limited the contemporary demands of the symbols.

From Table 4.2, it could be observed that majority of the respondents (192; 53%) agreed that, using *adinkra* symbols for the production of female fashionable suits has the tendency to make the products (suits) meet different culture around the globe. On the contrary, 148 respondents representing 40.8% believed employing *adinkra* symbols in female fashionable suits would not promote the suits; thereby reaching other cultures. The assertion of the latter group is in consonance with Nubour's (2006) assessment of the local and international uses of *adinkra* symbols. Nubour concluded the study by saying that, *adinkra* symbols appear to be cherished more locally than on the international market. But this, proposition according to the researcher has over the years changed due to the present innovations given to the symbols and their cloth production.

Looking at the production of female suits with *adinkra* symbols and their acceptance or admiration, more than half of the respondents (179; 49.4%) were of the view that production of suits with *adinkra* symbols would make people admire or accept the symbols whilst 161 (44.4%) respondents share a contrary view. The latter posited that using *adinkra*

symbols for the production of female suits has little or no bearing with the acceptance of the symbols by the people.

The textile and the fashion industry from the perspectives of Adu-Akwaboa (1994) and Opoku (2019) started as craft industry in Ghana, but there have been series of developments due to technology and the use of other innovative machinery. There is always the need to promote the indigenous clothing industry with innovations in order to reach the status it deserves. In the sphere of promoting the local fashion industry with the designing of female fashionable suits with *adinkra* symbols, 181 (49.9%) respondents as against 159 (43.9%) respondents believed designing female fashionable suits with *adinkra* symbols will promote the local fashion industry.

Analysis of the understanding of the meaning of *adinkra* symbols when used for suits, revealed that, 175 respondents amounting to 48.3% asserted that using *adinkra* symbols as motifs for suits production will help many people understand the meaning of the symbols. On the other hand, 165 respondents representing 45.5% disagreed with the fact that the use of *adinkra* symbols as motifs for suits production will help many people comprehend the meaning of the various symbols.

However, it can be deduced from the discussion that, it is possible to use Akan *adinkra* symbols for the production of female fashionable suits to meet the demands of the fashion industry since the people's interest and acceptance of the symbols is expected to be increased when applied on fabrics for making suits for females.

Application of screen-printing technique and synthetic pastes for the production of fabrics with *Adinkra* Symbols

Table 4.3: Application of Screen-Printing and Synthetic Pastes

Characteristics	Agree Frequency	Percentage (%)	Disagree Frequency	Percentage (%)
Vegetable dyes for <i>adinkra</i> cloth.	162	44.7%	170	49.1
Vegetable dyes or pastes are not fast.	206	56.8%	134	37%
The use of synthetic dye or pastes for <i>adinkra</i> cloth.	188	51.9%	152	41.9%
Screen-printing and synthetic dyes will make <i>adinkra</i> cloth attractive.	174	48%	166	45.8%
Synthetic pastes or dyes will improve <i>adinkra</i> cloth.	196	54.1%	144	39.7%
Synthetic dyes will reduce the long processes of vegetable dyes preparation.	179	49.4%	161	44.4%
The use of synthetic dyes will make <i>adinkra</i> cloth cheaper.	172	47.5%	168	46.3%

Adinkra fabrics (clothes) as observed by Adu-Akwaboa (1994) have been dyed or printed with vegetable dyes. In order to ascertain whether this methodology of printing still exist, one hundred and sixty-two (162) respondents sampled believed that *adinkra* cloth is mainly printed or dyed with vegetable dyes while almost half of the respondents (178; 49.1%) clearly indicated that *adinkra* cloth is not mainly printed or dyed with vegetable dyes. This assertion is in consonance with the proposition made by Adom et al. (2018). These authors concluded that there is a particular synthetic dye from petroleum which has similar characteristics like the *kuntunkuni* dye (mainly black) which is used in some local printing centres.

Comparing whether *adinkra* vegetable dyes are fast to ultra – violet rays (sunlight) and washing, majority of the respondents (206; 56.8%) admitted that vegetable dyes or pastes for printing *adinkra* cloth are not fast to ultra-violet rays and washing. In the same view, 134 respondents making up 37% reiterated that vegetable dyes or pastes for printing *adinkra* cloth are fast to sunlight and washing. Results from Table 5.3 shows that 188 (51.9%) respondents

agreed synthetic vat dyes or pastes can be used to print *adinkra* cloth for better effect, but on the contrary, 152 (41.9%) observed that synthetic vat dyes or pastes cannot be used to print *adinkra* cloth.

Considering the application of screen-printing technique for printing *adinkra* cloth, 174 respondents constituting 48% undoubtedly admitted that the use of screen-printing method and synthetic dyes for colouring *adinkra* cloth will make the cloth appear attractive. On the other hand, about 166 respondents representing 45.8% shared different opinions concerning the above mentioned assertion. This category of respondents submitted that, employing screen-printing and synthetic dye for colouring or decorating *adinkra* has no tendency for making the cloth attractive.

As indicated early on, the original *adinkra* cloth is not washable because of the nature of dyes used for printing. However, this makes wearing the cloth uncomfortable to some regular consumers. Hotenke (2004) believes the use of synthetic dyes or pastes has advantage over vegetable dyes by adding value to the comfort of the cloth. On this note, more than half of the respondents (196; 54.1%) sampled strongly admitted that colouring *adinkra* cloth with synthetic dyes or pastes would improve the comfort of the fabric. Meanwhile, 144 (39.7%) respondents believed that employing synthetic dyes or pastes for colouring or decorating *adinkra* cloth would not improve the comfort of the cloth. Apparently, the latter submission by the respondents tends to refute the proposition made by Hofenke (2014) and Zollinger (2003) on the efficacy of synthetic dyes such as vat and reactive as outlined in the literature. Hunger (2003) writes that making of vegetable dyes entails very long processes as compared to synthetic dyes. Regarding this assumption, majority of the respondents (179; 49.4%) supported the concept that replacing vegetables dyes with synthetic dyes will abate the long processes embedded in the preparation of vegetable dyes while 161 respondents amounting to 44% believed it is rather the synthetic dyes that have long chain production processes.

Irrespective of vegetable dyes not being fast, coupled with tedious production, they are also not cheap in the market. Analysis of the results on the price of synthetic dyes revealed that, they are moderately cheaper. Table 4.3 shows that 172 respondents representing 47.5% asserted that synthetic dyes are cheaper than vegetable dyes. Notwithstanding the proposition elaborated earlier, 168 respondents constituting 46.3% are of the view that using synthetic dyes for *adinkra* cloth will not be cheaper than vegetable dyes.

Furthermore, the results indicated that synthetic dyes like vat and reactive are fast when applied on cotton fabrics. These dyes can present the fabrics in a more attractive manner thereby improving their comfort. Also, it has been also established by the results that synthetic dyes are cheaper than vegetable dyes.

Producing innovative fabrics with *adinkra* symbols that can withstand different tailoring processes.

Table 4.4: Adinkra and Different Tailoring Processes

Characteristics	Agree Frequency	Percentage (%)	Disagree Frequency	Percentage (%)
Existing <i>adinkra</i> cloth not used for fashionable wears.	212	58.5%	128	35.3%
<i>Adinkra</i> innovative fabric for suits	194	53.5%	146	40.3%
Tailoring techniques for innovative <i>adinkra</i> cloth	186	51.3%	154	42.5%
<i>Adinkra</i> female suits will bring foreign exchange	208	57.4%	132	36.4%
Promotion of <i>adinkra</i> at different functions	190	52.4%	150	41.4%
Innovative <i>adinkra</i> cloth will make sewing easier.	175	48.3%	165	45.5%
Adopting screen printing will boost <i>adinkra</i> cloth production	189	52.1%	151	41.7%

The submissions made by Asamoah (1999), Opoku (2019) and Adom et al. (2018) concerning the use of *adinkra* cloth as enshrined in the literature were found to be true as

compared to the results in Table 4.4. From the results, more than half of the respondents (212; 58.5%) believed the original *adinkra* cloth cannot be used to produce fashionable wears while 128 (35.3%) respondents were not in support of the assertion that the existing or original *adinkra* cloth cannot be used to produce fashionable wears.

Separate studies carried out by Kuwornu – Adjaottor (2015), Owusu – Sampa (2014) and Opoku (2019), however, suggest that, the *adinkra* cloths as produced in the traditional textile centres in Ghana have series of undesirable characteristics which hinder their (clothes) contemporary use, unless redesigned to innovative fabrics. The assumptions made by these authors revealed to be reliable in connection with the results obtained. Collectively, 194 (53.5%) respondents as against 146 (40.3%) strongly admitted that *adinkra* cloth if redesigned via screen printing technique for innovative fabrics can be used to produce female fashionable suits.

Pressing, fusing and moulding constitute some major tailoring techniques. Generally, not all fabric can withstand such treatments unless specifically designed. The survey conducted showed that little above half of the respondents (186; 51.3%) reiterated that pressing, fusing and molding as tailoring techniques will be made easier with *adinkra* cloth if redesigned. About 154 respondents representing 42.5% conversely believed that none of the tailoring techniques can be applied on *adinkra* cloth whether redesigned or not. The fabrics were able to undergo tailoring processes because after printing, they were subjected to strong heat to permanently fix the dyes. Again, a medium weight fabric (substrate) with little elastane finish which is good for tailored garments was used for the printing.

Considering creating innovative fabrics with *adinkra* symbols for suits, and the yielded returns expected; 208 (57.4%) respondents admitted that creating innovative fabrics with *adinkra* symbols as motifs for suits will bring foreign exchange. On the other hand, 132

(36.4%) respondents share contrary views on the benefits involved in *adinkra* cloth when employed in female suits production.

Adinkra cloth for the past decade has been customised to producing funeral cloth. In view of this, hues related to sad moments and events are used for decorating the cloth. It can be analysed from Table 4.4 that 190 (52.4%) respondents asserted that manipulating *adinkra* symbols for making official suits for females will promote the uses of the symbols and the cloth at different functions. But 150 (41.4%) respondents disagreed on the notion of using *adinkra* at different occasion or functions, irrespective of the various treatments given to either the symbols or the cloth.

The original *adinkra* cloth possesses several challenges pertaining to assembling or sewing into fashionable suits because of the characteristics of the cloth. In line with this phenomenon 175 (48.3%) respondents comparatively opined that assembling of *adinkra* cloth as redesigned into innovative fabric will be easier and faster. Notwithstanding this assumption, 165 (45.5%) respondents were not in support of the fact that sewing of *adinkra* cloth will be easier and faster when made into innovative fabrics.

According to Adom (2012) the traditional method of printing or dyeing *adinkra* cloth with blocks has not changed over the years. This conventional procedure has however limited the production of *adinkra* cloth. From Table 4.4, 189 (52.1%) respondents as against 151 (41.7%) respondents categorically stated that adopting screen printing technique for making *adinkra* cloth will boost its production.

Looking at the discussion, it could be deduced that employing screen printing technique for producing *adinkra* cloth has the tendency to alter the characteristics of the original cloth; thereby making it possible to withstand different tailoring processes.

4.3 Interview Responses

The researcher decided to interview thirty people of which ten (10) were community elders around the *adinkra* printing centres and twenty (20) representing *adinkra* cloth artisans and fashion designers. The information was saturated after interviewed twenty-five (25) interviewees. In view of this, seven (7) elders and eighteen (18) *adinkra* artisans and fashion designers summing up to twenty-five (25) interviewees were used. Due to the number of the interviewees, focus group interview method was employed.

Table 4.5: Interview schedule

Area of Study (Interview)	Interview Date
Ntonso Art Village	5 th February, 2021
Kumasi Cultural Centre	12 th February, 2021
Adanwomase	19 th February, 2021

The following are the responses obtained from the interview based on the questions that were posed to the interviewees. The responses have been categorised into two sections depending on the group of people interviewed.

4.3.1 Responses from Adinkra Cloth Artisans, Fashion Designers and Traditional Elders

Question One: Have *adinkra* symbols been used in the production of suits?

Inferring from the question whether *adinkra* symbols have ever been used for the production of fashionable suits, interviewees constituting the majority said that, they have never come across suits that have been fully designed with *adinkra* symbols as the main motifs in the fabric. In the same vein, interviewees reiterated that they have witnessed some suits made of *adinkra* symbols but the motifs were not solely *adinkra* symbols. This latter group of interviewees further indicated that it is nowadays common to use modified version of *adinkra* symbols for fashionable wears but as to whether these wears are able to undergo

tailoring processes, they could not tell. On the other, interviewees who were found to be fashion designers asserted, it is very difficult to use *adinkra* symbols and as a results, the cloth for suits production.

Looking at the concerns of the majority of the interviewees, it can be analysed from the discussion that it is not common to see female fashionable suits made from *adinkra* symbols on the market either locally or foreign.

Question Two: Why have *adinkra* symbols not been used for suits since their creation?

Considering why *adinkra* symbols have not been used for suits since their creation, fashion designers believed it has not occurred to them about the possibility of employing the symbols in their production. Responses from some of the fashion designers concerning the question are that:

we do not see any reason to use adinkra symbols since the symbols are associated mostly with funerals. Using these symbols for my suits production will affect my sales because majority of Ghanaians understand the symbols to be related to sad moments.

On the other hand, interviewees who were mostly *adinkra* artisans revealed that the symbols are someone's creation or invention and for that matter there is no need to be used in suits that are characterised as a global product; responsible for meeting different cultures. In furtherance to their submission, they said it is always good to maintaining the status quo when it comes to traditional symbols.

Notwithstanding the earlier propositions, interviewees noted to be fashion designers said it would be difficult to handle fabrics made with *adinkra* symbols. This group of people could not draw a distinction between the uses of the symbols and *adinkra* cloth.

However, it can be deduced from the data that many people still hold on to the tradition associated with *adinkra* symbols irrespective of the numerous uses and how far these symbols can go when used for fashionable wears.

Question Three: What technique will be used to develop innovative fabrics with *adinkra* symbols for the production of suits?

The original *adinkra* cloth is printed with blocks carved from calabash. Subsequent development gave room to localised screen-printing technique (Adu-Akwaboa, 1994). In connection with relevant technique to develop innovative fabrics with *adinkra* symbols, majority of interviewees strongly proposed screen -printing technique as a method to create fabrics for female fashionable suits. This fabric production technique would be employed for the suits production. However, interviewees believed batik method will be appropriate for making attractive and beautiful fabrics for suits while others indicated block printing with calabash (carved with *adinkra*) as medium for producing fabrics for female suits.

Looking at the responses, it is obvious that some *adinkra* artisans and fashion designers still believe in the obsolete method of printing *adinkra* cloth with calabash blocks. It is true the tradition attached to the old style of *adinkra* production should be maintained, but it has been tested and proven that the original *adinkra* cloth cannot be made into fashionable wears. Screen-printing method appears to be favourable for making innovative fabrics for suits since most of the responses focused on this printing technique.

Question Four: Why have black, brown and red colours been used for printing *adinkra* cloth for the past decades?

Inferring from the information gathered by the researcher on the issue of why black, brown and red colours have been used for printing *adinkra* cloth for the past decades,

interviewees indicated that most of the symbols have names related to sad moments and events. In furtherance of their assertion, they mentioned symbols like *owuo atwede* (ladder of death) and *mmra krado* to buttress their position. Notwithstanding, interviewees argued that, black, brown, indigo and red were the only common hues in the past and that necessitated their adoption in *adinkra* cloth production. Minority of the interviewees attributed the reason for the use of these colours to the methods or techniques employed for printing the cloth. They continued to say that the artisans needed thick pastes (colours) which the blocks (stamps) they used for printing could easily pick without soiling the cloth. The search for thick pastes led to vegetable dyes and these dyes could only supply dark shades. Interviewees who were cloth artisans reiterated that the symbols were purposely created for funeral ceremony, thus; the use of sad related colours.

In respect of the assumption made so far, it can be deduced that dark colours were the only available colours at the beginning of *adinkra* cloth production. It has also been established that the application of sad related colours such as black, indigo and brown were used in conformity with the tradition behind the creation of the symbols.

Question Five: Which colours (dyes or pastes) can be used to replace *adinkra* vegetable dyes while producing aesthetically pleasing effect?

Regarding dyes or pastes for replacing *adinkra* dyes while producing aesthetically pleasing effects, nearly all the interviewees categorically stated vat and reactive dyes as the best options for innovative fabrics. Some of the interviewee responded by saying:

we think when looking for dyes to replace the traditional adinkra vegetable dye, the dye used for making batik and tie-dye will be the best choice. This dye can last longer and has no problem with washing.

Inferring from this submission, it is undeniable fact that the respondent was referring to either vat or reactive dye replacement. However, the rest of the interviewees clearly could not state their stance on whether vat or reactive dyes could replace *adinkra* vegetable dyes.

It can be deduced that, *adinkra* cloth is predominantly produced with vegetable dyes but the introduction of synthetic dyes (vat or reactive) will help improve the beauty and other characteristics of the fabric (cloth).

Question Six: What strategies can be adopted to promote adinkra symbols as used on fabrics for suits?

Different countries have diverse strategies for marketing and prompting their local textiles and garments. Considering the strategies for promoting *adinkra* symbols as used on fabrics for suits, some fashion designers interviewed believed fashion shows, fashion week, exhibition and trade fairs are the major means of promoting *adinkra* suits.

Countries like Italy, France, England, South Africa, Kenya and Senegal as stated by Opoku (2019) have specific weeks in the year whereby people from all lifestyles visit these countries just to witness their yearly fashion week programme. Huge sums of revenues are generated through these shows for development. During such occasion, traditional textiles and garments are exhibited to showcase the creativity of individual designers. Conversely, other interviewees said *adinkra* symbols as used in female fashionable suits should be worn as official apparel by women. Another group of interviewees believed using the suits as Friday wear by women in the working class will be the best way to promote the suits.

It can be deduce that the symbols after being used for female fashionable suits should not be limited to Ghanaian usage alone, rather be exported to other countries and by doing so, the symbols as appear in suits will be accepted globally.

Question Seven: What are some of the benefits that will be derived from using *adinkra* symbols as motifs for producing suits?

The data gathered regarding the benefits of using *adinkra* symbols as motifs for suits showed that, interviewees believed this development in the local fashion industry will bring foreign exchange to the nation. However, some interviewees indicated that using *adinkra* symbols for trendy or fashionable suits will create employment for individuals who want to venture into textiles and fashion business. To buttress their point, they continued to say that since there is likelihood for some people to show interest in the new line of fashion (*adinkra* suits), the demand will go high; thereby creating additional jobs for those already in the business and new entrants. Minority of the interviewees admitted that using *adinkra* for fashionable suits will help appreciate traditional symbols both in the fashion and textile industries respectively.

It is worthy to note that most of the female suits on the African market are imported. Sometimes the fabrics, colours and motifs embedded in these exotic suits have nothing to do with the African climatic conditions, values, and traditions but people are compelled to assimilate them because there are no other options.

From the above discussion, it is certain that using *adinkra* symbols for female fashionable suits will have many advantages to the textile or fashion designers and the general public.

Question Eight: Why have the use of *adinkra* fabric been associated with the elderly?

In respect of *adinkra* cloth as being associated with the elderly in the Ghanaian society, more than half of the elders interviewed admitted strongly that, *adinkra* cloth since their in session, have been predominantly used by the elderly class in the society. Below is a submission made by some of the elders interviewed.

we have used adinkra cloth since I became a chief. It is a requirement to have the original cloth or a different cloth decorated with adinkra symbols at some of our traditional meetings.

In the same vein, some interviewees believed the symbolism associated with the symbols is best understood and applied by mature people. They further reiterated that when a younger person puts on *adinkra* cloth, that individual indirectly appears to be a mature person. This is why the younger race has little or no interest in wearing the cloth.

From the data, it can be deduced that if *adinkra* symbols and the cloth are not made into fashionable wears such as suit, its usage will still be remained with the elderly and extinct in the future.

4.4 Observation Results

The researcher undertook some trips to few *adinkra* printing centres to ascertain whether *adinkra* cloth artisans still employ vegetable dyes and the printing techniques they presently use. On the other hand, there was also the need to find out how frequently people wear garments especially suits made of *adinkra* symbols.

***Adinkra* Production**

The Use of Vegetable Dye (Badie)

The researcher visited two neighbouring towns (Ntonso and Asonomaso) which are noted for *adinkra* cloth printing business. However, it was discovered at these centres that the artisans have not stopped using the traditional ‘*Badie*’ dye for producing *adinkra* cloth. The old method of extracting the dyes from the ‘*Badie*’ plant is still practiced these days, even though, there have been several technology advancements in the printing industry. It was observed that the long processes involved in getting the dyes for the cloth sometimes, delay printing and delivery schedules of finish products. It was noted at one of the printing centres

that, there has been somewhat alternative synthetic dye that resembles the *kuntunkuni* dye of which some artisans prefer nowadays. A major setback of this synthetic dye made from petroleum is that, it easily becomes scarce on the market.

Attribute 2: Printing Techniques used by the Artisans

Considering the types of printing techniques, the artisans use, it was discovered at the centres visited by the researcher that the *adinkra* cloth artisans still apply the block printing and screen-printing styles for making the cloth. Observing some of the printing techniques for some time, revealed that the block printing method looks more tedious and time consuming as compared to the screen-printing method. The artisans sometimes use embroidery as embellishing technique for making the cloth beautiful. This appears attractive but it comes with a cost and this cost analysis factor eventually affects the price of the finished product.

Promotion of Suits made with *Adinkra* Symbols

Attribute 1: How often do people wear suits made with *adinkra* symbols?

The researcher intentionally visited some major banks and offices in the Kumasi metropolis with the concept of finding how often people especially women wear suits made with or embellished with *adinkra* symbols. What was observed in these places was that, none of the workers wore suits made with *adinkra* symbols. It was also discovered that people like using *adinkra* symbols for interior decoration in offices more than they do in garments. Another phenomenon observed was the use of *adinkra* symbols as subordinate motifs in some banks Friday wears.

From the data, it could be deduced from the entire data that the use of *adinkra* symbols in official garments is uncommon on the market and thus, affected the promotion and acceptance of the symbols in terms of formal usage.

CHAPTER FIVE

DESIGN AND PRODUCTION OF NEW ADINKRA FABRICS AND SUITS

5.1 Introduction

This section of the study vividly presents the processes involved in the designing of the fabrics and the production of the fashionable suits. Again, it documents the production processes concerning the application of materials and techniques in a systematic manner of execution. Detailed discussion and analysis of the finished products (suits) are also included in the chapter.

5.2 Production Techniques

The production of the office suits was carried out in three major stages.

The first stage involved the collection of some *adinkra* symbols for the fabric production while the second and the third stages had to do with the pattern making and the sewing of the suits respectively. The symbols were chosen based on their meaning and association in respect of female characteristics and aspirations in life. However, the symbols were used as motifs to make several compositions on paper. The compositions on the paper led to the production of the fabrics (screen printing technique). Tools, equipment and materials used included: cutting shears, curves, tape measure, sewing machine, worked tables, electric iron, screens, pastes, cotton fabric and sewing threads.

Stage 1: Fabric Production (Sketches and Compositions of the Symbols)


In all, a total number of six symbols were employed as motifs for making the fabrics through screen printing technique. In view of this, six different fabrics were made but three of them were chosen in consultation with the artisans, Chiefs, queen mothers, fashion designers,

consumers and supervisor for the suits. The sketches and compositions were made in line with the creativity and aesthetic theories. These theories really influenced the beauty and acceptance level of the fabrics.

The symbols were basically selected because of their association with females' attitudes and behaviours. For instance, *dwanninmen* (ram' horn) symbolises humility and strength, which is directly related to female natural character and behaviour. *Mako* (pepper) symbol forms part of the few selected symbols. It stands for inequality and uneven development. For most women, irrespective of the treatments they go through in life, they continue to strive for equal opportunities and developments in the society. Women are noted for their ability to learn from past experiences. It takes time for a woman to forget and abandon something important and this particular attribute associated with women influenced the choice of *sankofa* (Return and get it) symbol.

The symbols used as motifs for the fabrics compositions have been arranged in a table form. However, the fabrics in plate 5.3, 5.8 and 5.17 were selected for the suits production. It is important to understand that suit production does well with medium or heavy weight fabrics. In this case, a medium-weight cotton fabric was used as substrate for the production due to the good characteristics of cotton; being able to undergo fusing, pressing and more importantly pressing.

Below are the compositions derived from the symbols, the medium used and the names assigned to individual design for the purpose of the study.

SYMBOLS	NAME OF SYMBOLS	LITERAL MEANINGS
	<i>Dwanninmen</i>	“Ram’s horn”






	<p><i>Fafanto</i></p>	<p>“Butterfly”</p>
	<p><i>Mako</i></p>	<p>“Pepper”</p>
	<p><i>Duafe</i></p>	<p>“Wooden comb”</p>
	<p><i>Adinkrahene</i></p>	<p>“Chief of Adinkra Symbols”</p>
	<p><i>Sankofa</i></p>	<p>“Return and get it”</p>

Table 5.1: Selected Symbols in Table Form
Source: Studio work (Baiden, 2020)

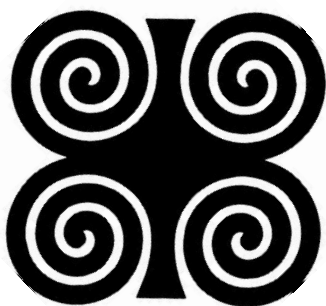


Figure 5.2: *Dwaninmen* Symbol
(Strength)
Source: (Tetteh 2006)

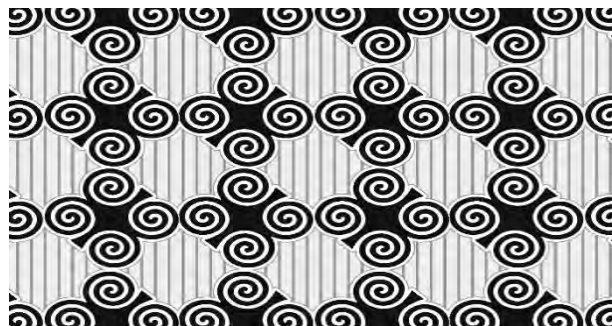


Plate 5.1: The Strength cloth composition
Medium: Black & White Computer Design on Paper
Size: 14" x 16"
Source: Studio work (Baiden, 2020)



Plate 5.2: The Strength design
Medium: Computer Colour Work on Paper
Size: 14" x 16"
Source: **Studio work** (Baiden, 2020)



Plate 5.3: The Strength design
Medium: Screen- Printed Fabric
Size: 14" x 16"
Source: Studio work (Baiden, 2020)



Figure 5.3: *Fafanto* Symbol
Source: (Tetteh, 2006)

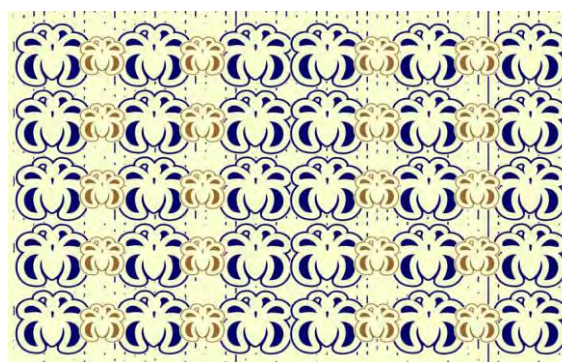


Plate 5.4: Beauty design
Medium: Computer Design on Paper
Size: 14" x 16"
Source: Studio work (Baiden, 2020)

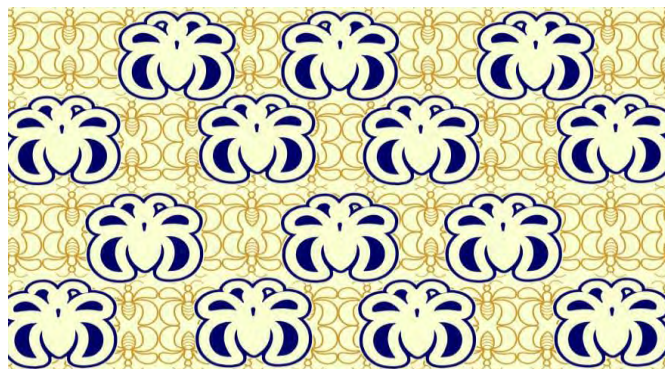


Plate 5.5: Beauty design
Medium: Screen Printed Fabric
Size: 14" x 16"
Source: Studio work (Baiden, 2020)



Figure 5.4: *Mako* Symbol
Source: (Tetteh, 2006)

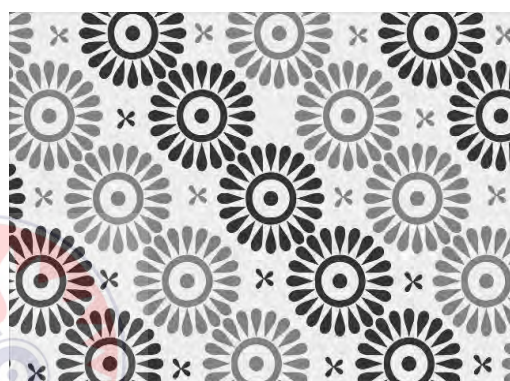


Plate 5.6: Equality design
Medium: Black & White Computer Design on Paper
Size: 14" x 16"
Source: Studio work (Baiden, 2020)



Plate 5.7: Equality design
Medium: Computer Colour Work on Paper
Size: 14" x 16"
Source: Studio work (Baiden, 2020)



Plate 5.8: Equality design
Medium: Screen Printed Fabric
Size: 14" x 16"
Source: Studio work (Baiden, 2020)

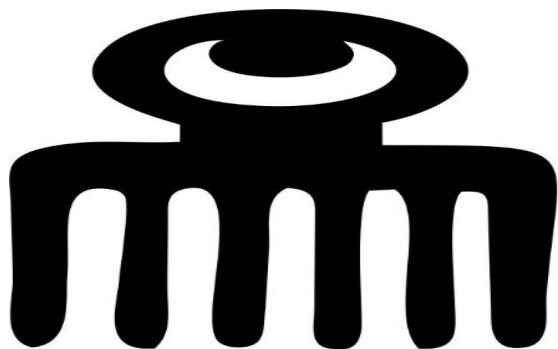


Figure 5.5: *Duafe* Symbol (Afro Queen)
Source: (Tetteh, 2006)

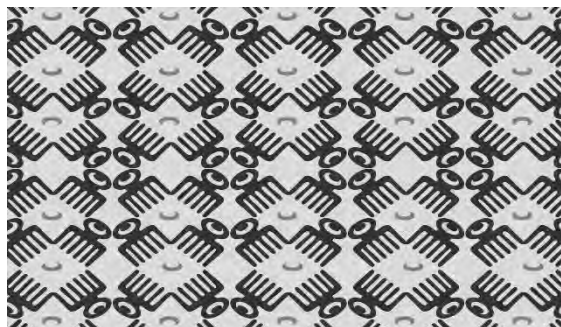


Plate 5.9: Afro Queen design
Medium: Black & White Computer Design on Paper
Size: 14" x 16"
Source: Studio work (Baiden, 2020)



Plate 5.10: Afro Queen design
Medium: Computer Colour Work on Paper
Size: 14" x 16"
Source: Studio work (Baiden, 2020)



Plate 5.11: Afro Queen
Medium: Screen Printed Fabric
Size: 14" x 16"
Source: Studio work (Baiden, 2020)

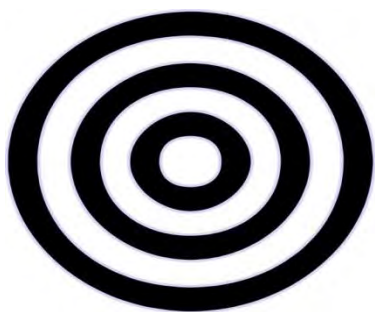


Figure 5.6: *Adinkrahene* Symbol
Source: (Tetteh, 2006)



Plate 5.12: Perfection design
Medium: Black & White Computer Design on Paper
Size: 14" x 16"
Source: Studio work (Baiden, 2020)

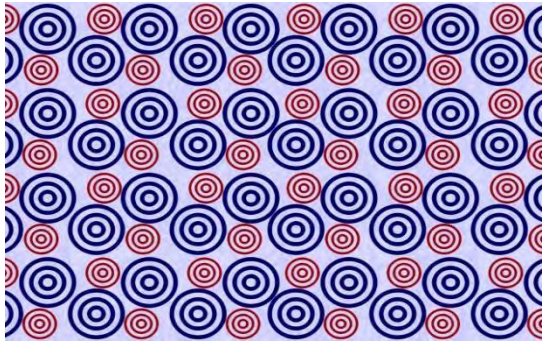


Plate 5.13: Perfection design
Medium: Computer Colour Work on Paper
Size: 14" x 16"
Source: Studio work (Baiden, 2020)

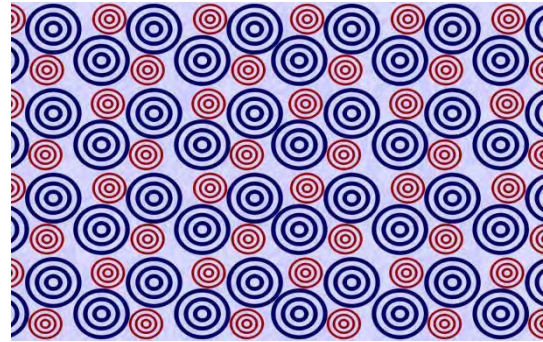


Plate 5.14: Perfection design
Medium: Screen Printed Fabric
Size: 14" x 16"
Source: Studio work (Baiden, 2020)



Figure 5.7: *Sankofa* Symbol (Knowledge)
Source: (Tetteh, 2006)

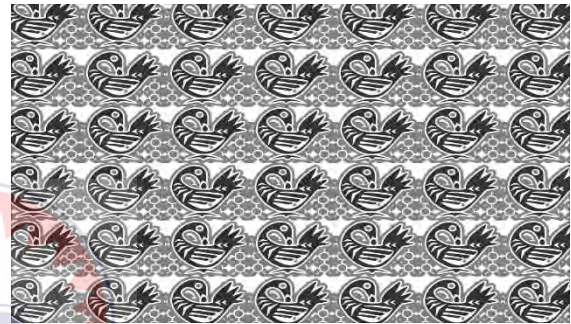


Plate 5.15: Knowledge design
Medium: Black & White Computer Design on Paper
Size: 14" x 16"
Source: Studio work (Baiden, 2020)

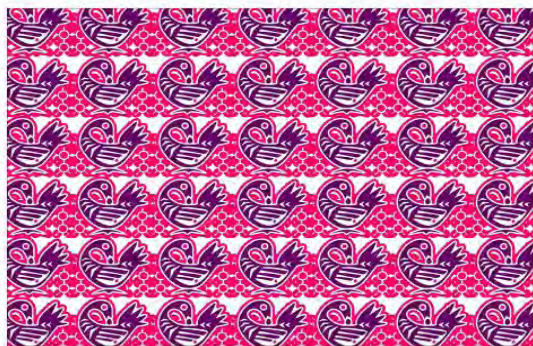


Plate 5.16: Knowledge design
Medium: Computer Colour Work on Paper
Size: 14" x 16"
Source: Studio work (Baiden, 2020)

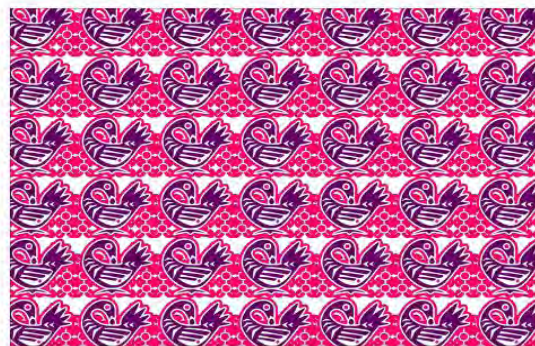


Plate 5.17: Knowledge design
Medium: Screen Printed Fabric
Size: 14" x 16"
Source: Studio work (Baiden, 2020)

Stage 2: Presentation of the Suit Styles, Pattern Production and Finished Work

This section of the production processes presents the various suit styles together with patterns and the finished works in a systematic manner. For easy identification of the styles, different names were assigned to them. The names include African Queen, Perfect woman, Smart look suits respectively. The source of inspiration for the African queen suit emanated from current trend of suits worn by young ladies in the banking sector. On the other hand, the Perfect woman suit was inspired by female legal workers especially lawyers. The smart look suits idea and inspiration also came from the way female secretaries in the public and private firms wear their suits these days. The nature of their suits makes them appear smart and attractive.

A. African Queen Suits

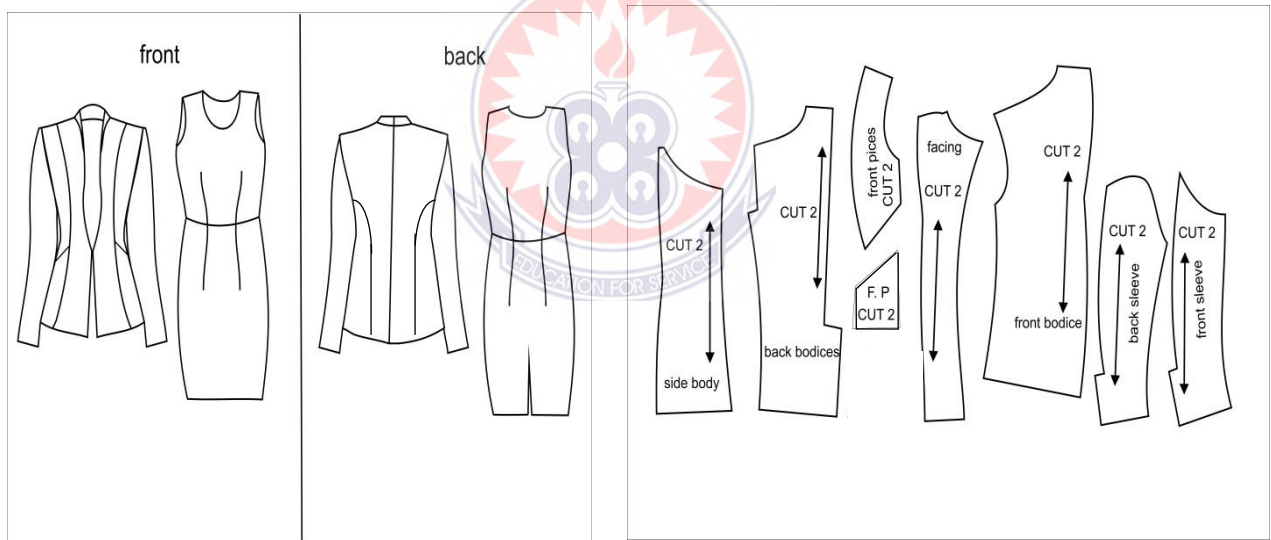


Figure 5.8: African Queen Suit
Source Studio work (Baiden, 2020)

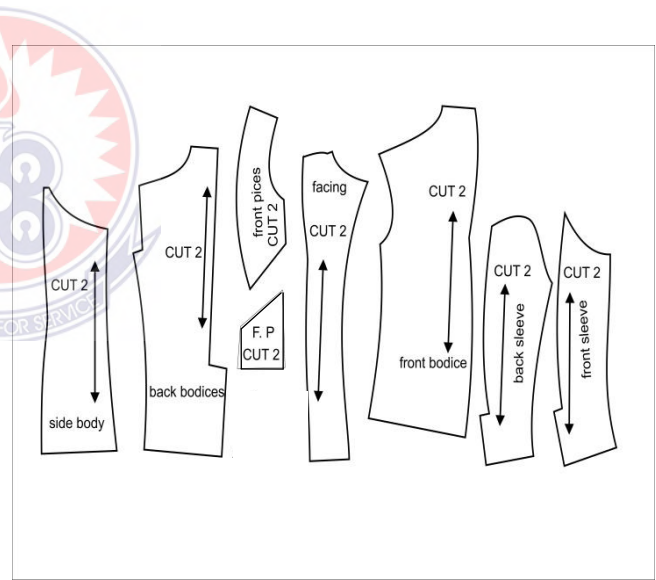


Figure 5.9: African Queen Suit Patterns
Source: Studio work (Baiden, 2020)

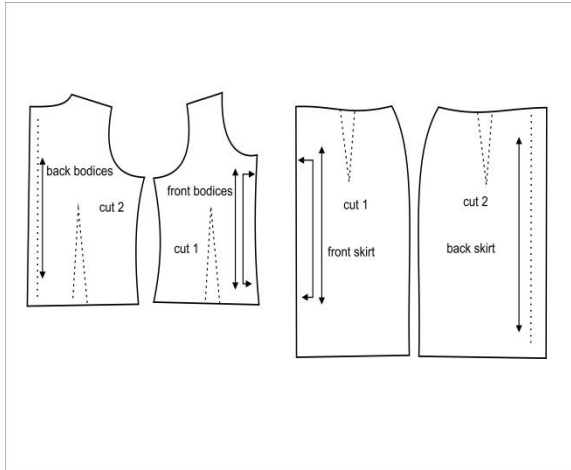


Figure 5.10: African Queen Inner Dress Patterns

Source: Studio work (Baiden, 2020)



Plate 5.18: African Queen Suit (Front)
Source: Studio work (Baiden, 2020)



Plate 5.19: African Queen Suit (Back)
Source: Studio work (Baiden, 2020)

B. Perfect Woman Suit

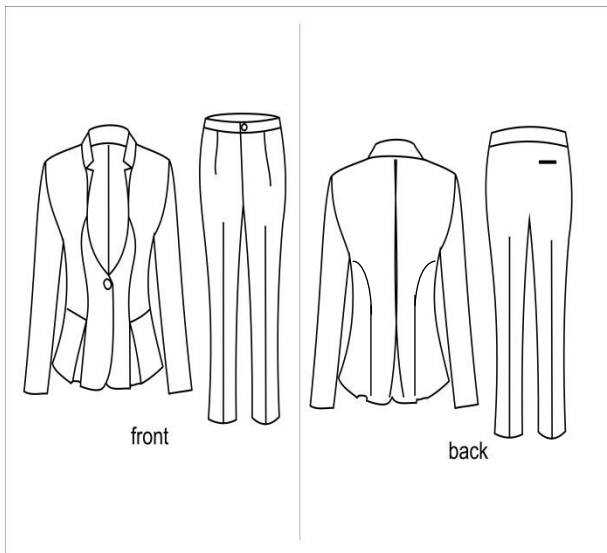


Figure 5.11: Perfect Woman Suit
Source: Studio work (Baiden, 2020)

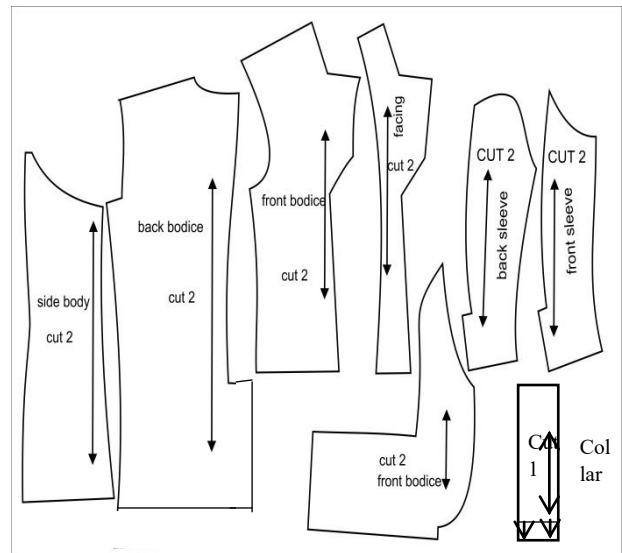


Figure 5.12: Perfect Woman Suit Patterns
Source: Studio work (Baiden, 2020)

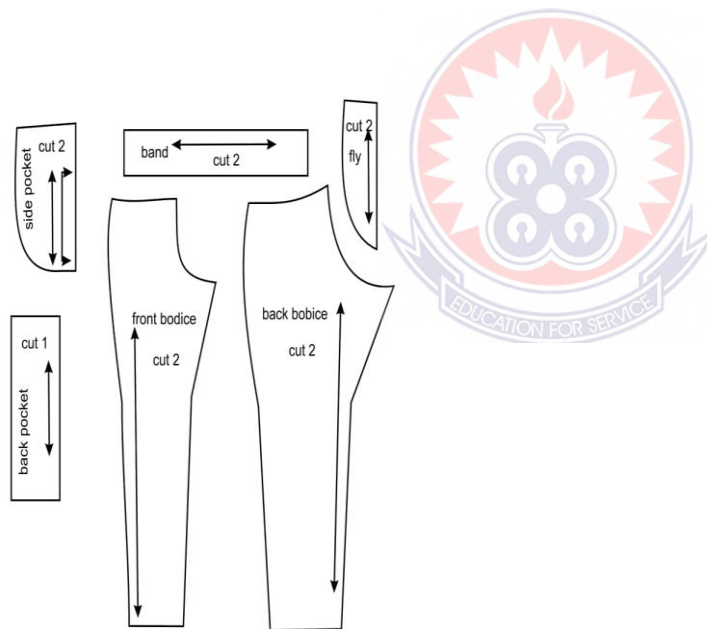


Figure 5.13: Perfect Woman Trousers Patterns
Source: Studio work (Baiden, 2020)



Plate 5.20: Perfect Woman Suit (Front)
Source: Studio work (Baiden, 2020)



Plate 5.21: Perfect Woman Suit (Back)
Source: Studio work (Baiden, 2020)



C. Smart Look Suit

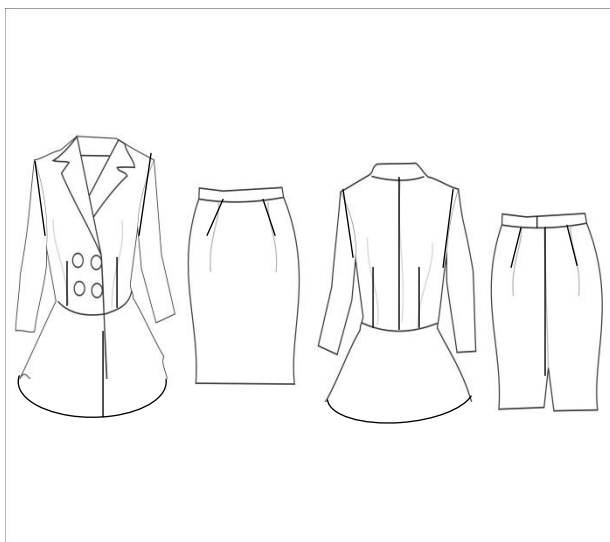


Figure 5.14: Smart Look Suit
Source: Studio work (Baiden, 2020)

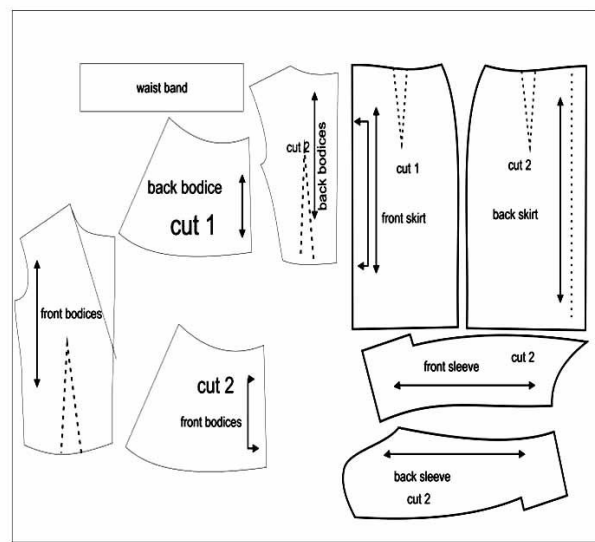


Figure 5.15: Smart Look Suit Patterns
Source: Studio work (Baiden, 2020)



Plate 5.22: Smart Look Suit (Front)
Source: Studio work (Baiden, 2020)



Plate 5.23: Smart Look Suit (Back)
Source: Studio work (Baiden, 2020)



Stage 3: The Sewing Processes

This section looks into the main joining of the various garment components to form a complete whole. In the making of garment especially at the joining stage, there are two major technologies concerning sewing of the pieces or replicas. The joining can either be carried out in a round or flat method style. The only difference between these two methods is that, in the flat sewing technique, the seam of the sleeve and that of the main bodice are sewn together with a single stitching line. These stitches start from the hem of the sleeve passing through the under arm until reaching the hem of the bodice. Looking at the round method, both the sleeves and the bodice are separately prepared before they are joined together. Round method does well in tailored garment such as suits since each part of the garment has

to be fully and accurately prepared before attaching it to where it belongs. This study used the round method procedure for assembling the garment components together. Open seam was used throughout the construction.

After fusing the garment components with woven interfacing, all the darts and style lines were stitched and pressed neatly with steam iron.

The front section facings were prepared and joined to the front lining before they were attached to the fashion fabric. For perfect hang, the lining was tacked firmly to the fashion fabric. This facilitated smooth lying of the garment under construction. The next process after working on the front part of the garment was to prepare the back bodice.

In suit development, more attention is given to the front section than the back. That is the reason why the entire section of the front is fused but only some designated portions of the back received fusing. The back vents were prepared while attaching the back lining to the fashion fabric. The front and back sections were joined together at this stage by starting from the side seams before shoulder lines or seams.

The hem of the jacket was sewn after working on the side and shoulder seams. The hem was first tacked and pulled through one of the armholes before stitching. The collar and sleeves were separately prepared and fixed to the neckline and armholes respectively.

Tacking is important in jacket or suit production especially when fixing sleeves and attaching collars. It is imperative to note that a good tailored jacket is judged based on how the sleeves hang, collar drapes, and the nature of the pockets and reverse. Looking at the suits, pair of trousers, dress and skirt are also designed to complement the outfit.

5.3 Presentation and Analysis of the Finished Products (Suits)

The analysis of the suit is specifically based on the individual style or design specifications. Notwithstanding, the parameters used to analyse the garments (suits) include

the nature of the revere (lapel), collar, number of buttons, position and type of vent, construction or style lines and the fabric used. Some recommendations have also been outlined to ensure proper care and maintenance of the suits.

The African Queen Suit (Plate 5.18)

The African Queen suit is produced with the 'strength' fabric as exhibited in plate 4.3. The fabric is designed with *dwanninmen* symbol (lamb's horn) which symbolizes strength. The main colours are dark red and blue-black printed on pink background. The red colour represents aggressiveness and enthusiasm which portray the character of women in their quest to attain recognition in the society. Even in their fight to acquire high positions and equal opportunities, women are also cool in terms of attitude and this attribute is in consonance with the meaning of the blue-black colour.

Considering the features of the style, it comes with a built-up neckline, princess line (from the shoulder to the jacket hem), long sleeve with vents and back centre line incorporated into a vent opening. The style can be used for parties, church service, office wear and other official functions as indicated by the respondents.

The jacket together with the inner dress should be treated with care. Constant washing and ironing are not advisable since that can destroy the colourfastness of the fabric.

The Perfect Woman Suit (Plate 5.20)

The Perfect Woman suit is designed in a close fitting style. The fashion fabric for the construction is solely an *adinkra* cloth as redeveloped through screen-printing technique. The style comes without a revere (lapel) and has one button closure around the waist. On the other hand, it has a princess line incorporated into a dart, and this dart however runs from centre

front of the jacket to the hem line. The princess line, while ending at the hem of the jacket is designed to create inverted pleat just for functional and decorative purposes of the style. All the features mentioned are attributed to the front section of the jacket. The back view comes with vent opening at the centre back. Again, the style has a mandarin collar which is somewhat high in order to keep the wearer warm. The jacket has long sleeve with vent opening at the hem.

The fabric used for the perfect woman suit is the fabric titled “Equality” in plate 5.8. This fabric is designed with *mako* symbol (pepper) representing inequality and uneven development in the society. The symbol was chosen in connection with women’s aspirations and the fight for equality among people in the society. The colours used are red and blue which represent aggressive and peace. Looking at the style, it falls in line with current trend of female suits on the market.

The suit apart from its official uses can be worn at other special occasion such as parties, wedding, and church services. This is the comments from respondents who assessed the finished garment. The uses of the suit as mentioned appear more contemporary as compared to the ordinary uses of *adinkra* cloth as featured in plates 2.61 and 2.62.

Maintaining the perfect woman suit requires proper handling and care. This suit does not require frequent washing and ironing. Dry cleaning and ironing from the inside is highly recommended.

The Smart Look Suit (Plate 5.22)

The smart look suit is designed with the fabric titled “knowledge”. *Sankofa* symbol constitutes the motif in the fabric. The name of the fabric and the meaning associated with the symbol has something in common. The fabric is printed with red and violet colours. Violet

colour suggests imagination and spirituality while red in this domain represents energy and strength. Undoubtedly, all these attributes conform to female characters and aspirations.

The jacket front has reverse (lapel) which extends to the natural waist and this effect calls for one button closure. Again, the style has long sleeve and bespoke collar. The back section has no vent opening but a style line at the centre back. The jacket is complement with a skirt which can be taken to parties, churches and other equally important functions. Proper care is required to maintain the suit for longer period. It can be washed and iron but should be done diligently and not on frequent bases.



CHAPTER SIX

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary of Findings of the Study

The main findings of the study have been structured and presented in accordance with the study objectives. Below is the presentation of the key findings of the study.

6.1.1 Using Akan *Adinkra* Symbols to Meet the Contemporary Demands of the Fashion Industry

Looking at this objective, it was revealed that 51.6% of the respondents forming the majority believed the demand for fabrics made with *adinkra* symbols has gone up for the past decades. This means that 42.2% of respondents have not seen any increase in the demand of *adinkra* fabrics (cloth).

Again, on the uses of *adinkra* symbols for funeral purposes and their limitations in terms of contemporary demand, it was observed that more than half of the respondents (64.3%) as against 29.5% expressed that the major use of *adinkra* symbols is funeral purposes and this has negatively affected the contemporary demands of the symbols.

The results further suggest that using *adinkra* symbols for the production of female fashionable suits is likely to make the suits meet different groups of people with varying culture. On the other hand, the results revealed that more than half of the respondents (54.4%) believed many people would admire and accept *adinkra* symbols when used in the production of suits. Specifically, it was observed from the results that using *adinkra* symbols for female suits will promote the local textile and fashion industry.

6.1.2 Application of Screen-Printing Technique and Synthetic Pastes for the Production of Fabrics with *Adinkra* Symbols

On this objective, it was observed that more than half of the respondents (58.1%) clearly indicated that *adinkra* cloth is not mainly printed or dyed with vegetable dyes. The results also established that *adinkra* vegetable dyes are not fast to sunlight and washing as compared to synthetic vat dyes or pastes. Again, the results suggest that synthetic vat dyes or pastes can be used to print *adinkra* cloth for better effect.

On the issue of applying screen printing technique for making *adinkra* cloth, majority of the respondents (174; 51.7%) believed the use of screen-printing method and synthetic dyes will make the cloth appear more attractive than the original cloth.

However, this indicates that the comfort of the cloth will be improved when screen-printing and synthetic dyes are employed for producing the cloth. It was observed from the results that preparation of *adinkra* vegetable dyes involved very long processes as compared to synthetic dyes. This means that it takes longer period to make vegetable dyes. The results further revealed that synthetic dyes are cheap on the market. This indicates that vegetable dyes are not cheap and easy to be found on the market.

6.1.3 Producing Innovative Fabrics with *Adinkra* Symbols that can withstand Tailoring processes

Under this objective, results from the study showed that majority of the respondents (58.5%) believed that the original *adinkra* cloth cannot be used to produce fashionable wears like female suits. In the same vein, 194 respondents as against 146 respondents admitted that *adinkra* cloth if printed through screen-printing technique can be used for making female fashionable suits. Again, the results revealed that *adinkra* cloth if redesigned into innovative fabrics can withstand major tailoring processes such as pressing, fusing and moulding. What

this means is that, the original *adinkra* cloth is not capable of undergoing much of the tailoring processes due to the characteristics of the cloth.

Looking at the results, it was established that employing screen printing technique for producing *adinkra* cloth has the tendency to improve the characteristics of the original cloth; thereby making it possible to withstand different tailoring processes. The fabrics were able to undergo tailoring processes because after printing, they were subjected to strong heat to permanently fix the dyes. Again, a medium weight fabric (substrate) with little elastane finish which is good for tailored garments was used for the printing.

6.2 Conclusions

The study focuses on the use of *adinkra* symbols as motifs for innovative fabric production and construction of female fashionable suits. This phenomenon was influenced by the conventional use of *adinkra* symbols for funeral cloth among Ghanaians, precisely the *Akan*. In spite of the rich meaning the symbols convey, they are however limited to funeral cloth among the elderly people. It had never been possible to use the original *adinkra* cloth for fashionable wears due to the characteristics of the cloth. Several tailoring processes appear difficult, as the cloth cannot withstand pressing, moulding and fusing, which are key factors in tailoring.

After identifying these challenges, screen printing technique was devised to create innovative fabrics with some *adinkra* symbols. Synthetic dyes or pastes were employed for printing the fabrics. Interestingly, the fabrics emerged better with desirable features than the original *adinkra* cloth. The sampled fabrics produced proved beyond reasonable doubt that washing, sunlight and more importantly, pressing, fusing and moulding have no negative effects on the fabrics. Different suit styles were selected and patterns made for them before cutting and assembling.

The results from the study revealed that it is possible to use *adinkra* symbols as motifs, screen printing technique and the application of synthetic pastes for producing innovative fabrics for the construction of female fashionable suits.

6.3 Recommendations

The study put forward the following recommendations:

1. There should be collaboration between *adinkra* artisans and fashion designers. This will help the two parties address their concerns pertaining to their activities and by so doing receive the needed attention.
2. Fashion designers are encouraged to embrace the use of indigenous symbols and cloth for the production of contemporary wears.
3. The association of *adinkra* artisans should involve themselves in organizing workshops and seminars to improve the skills of their members in the areas of modern printing methodologies, materials and dye application for better practices.
4. There is the need to educate and encourage people to patronize locally made clothing with indigenous symbols.
5. It is recommended that the government should support traditional textile manufacturers to acquire advanced tools and equipment to improve on their activities. Sometimes, it is because these designers lack modern facilities that is the reason they are not able to compete favourably with the global market.
6. The study suggests further research on the use of *adinkra* symbols for the production of children wears.

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APPENDIX

APPENDIX 'A'

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF FASHION DESIGN AND TEXTILES

This questionnaire is being administered by a graduate of Fashion Design and Textiles with the aim of obtaining the views about the possibility of designing fabrics with *adinkra* symbols as motifs for the production of female fashionable suits. It is expected that the responses will be truthful and sincere to facilitate the objectives of the exercise. Please be assured that all information and responses given will be strictly treated confidential.

Thank you.

Section A

SOCIO – DEMOGRAPHIC VARIABLES

Please tick (✓) the appropriated boxes

1. Gender

Male Female

2. Age range in years

20 – 25

26 – 30

31 – 35

36 – 40

41 – 45

46 – 50

51 and above

3. Marital status

Married

Single []

Divorced []

4. Educational background

JSS/JHS/Middle school []

SSS/SHS []

Diploma []

Graduate []

5. Occupation

Employed []

Unemployed []

6. Working Experience

1 – 5 years []

6– 10 years []

11 – 15years []

16 – 20 years []

21 and above []



Section B

**THE USE OF *AKAN ADINKRA* SYMBOLS TO SUIT THE CONTEMPORARY
DEMANDS OF THE FASHION INDUSTRY**

Please tick (✓) the response that best reflects the content to which you agree or disagree with each of the following statements.

Statement	Agree	Disagree
1. The demand for fabrics with <i>adinkra</i> symbols has increased for the past decade.		
2. The use of <i>adinkra</i> symbols for funeral purposes has limited its contemporary demands.		
3. Female fashionable suits with <i>adinkra</i> symbols can meet different cultures.		
4. Production of suits with <i>adinkra</i> symbols will make people admire the symbols.		
5. Designing female fashionable suits with <i>adinkra</i> symbols will promote the local fashion industry.		
6. Using <i>adinkra</i> symbols as motifs for suits production will help many people understand the meaning of the symbols.		

Section C

APPLICATION OF SCREEN-PRINTING TECHNIQUE AND SYNTHETIC PASTES FOR THE PRODUCTION OF FABRICS WITH *ADINKRA* SYMBOLS

Please tick (✓) the response that best reflects the extent to which you agree or disagree with each of the following statements.

Statement	Agree	Disagree
1. <i>Adinkra</i> cloth is mainly printed with vegetable dyes.		
2. Vegetable dyes/pastes for printing <i>adinkra</i> cloth are not fast to ultra-violet rays (sunlight) and washing.		
3. Synthetic vat dyes/pastes can be used to print <i>adinkra</i> cloth.		
4. The use of screen printing and synthetic dyes for colouring <i>adinkra</i> will make the cloth appear attractive.		
5. Colouring <i>adinkra</i> cloth with synthetic dyes/pastes will improve the comfort of the fabric.		
6. Replacing vegetable dyes to synthetic dyes will reduce the long processes involved in the preparation of vegetable dyes.		
7. The use of synthetic dyes for <i>adinkra</i> cloth will be cheaper than vegetable dyes.		

Section D**PRODUCING INNOVATIVE FABRICS WITH *ADINKRA* SYMBOLS THAT CAN WITHSTAND DIFFERENT TAILORING PROCESSES**

Please tick (✓) the response that best reflects the extent to which you agree or disagree with each of the following statement.

Statement	Agree	Disagree
1. The existing <i>adinkra</i> cloth cannot be used to produce fashionable wears.		
2. <i>Adinkra</i> cloth if redesigned via screen printing technique for innovative fabrics can be used to produce suits.		
3. Pressing, fusing and molding as tailoring techniques will be made easier with <i>adinkra</i> cloth if redesigned.		
4. Creating innovative fabrics with <i>adinkra</i> symbols for suits will bring foreign exchange to Ghana.		
5. <i>Adinkra</i> symbols as used for suits will promote the symbols at different functions.		
6. Assembling (sewing) of <i>adinkra</i> cloth as redesigned into innovative fabric will be easier and faster.		
7. Adopting screen printing technique for making <i>adinkra</i> cloth will boost <i>adinkra</i> production among art practitioners.		

APPENDIX ‘B’

INTERVIEW GUIDE FOR ADINKRA CLOTH ARTISANS AND FASHION DESIGNERS

These set of questions served as a guide to the researcher as an in-depth interview with traditional elders, *adinkra* cloth artisans fashion designers. Follow – up questions that have not been explicitly stated below were asked to seek clarification where necessary.

Adinkra Symbols as motif for Fashionable Suits

1. Have *adinkra* symbols been used in the production of suits? Yes [] or No []
2. Why have *adinkra* symbols not been used for suits since their creation?

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3. What techniques will be used to develop innovative fabrics with *adinkra* symbols for the production of suits?

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4. Why have black, brown and red colours been used for printing *adinkra* cloth for the past decades?

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5. Which colours of dyes/pastes can be used to replace *adinkra* vegetable dyes while producing aesthetically pleasing effects?

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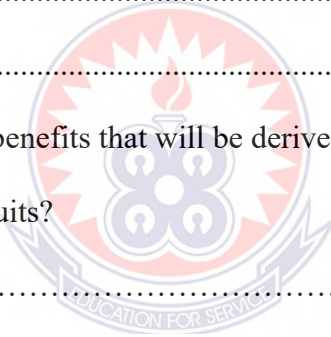
Uses and Promotion of *Adinkra* Symbols as Employed in Female Fashionable Suits

6. What strategies can be adopted to promote *adinkra* symbols as used on fabrics for suits?

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7. What are some of the benefits that will be derived from using *adinkra* symbols as motifs for producing suits?

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APPENDIX ‘C’

INTERVIEW GUIDE FOR TRADITIONAL ELDERS

These set of questions served as a guide to the researcher as an in-depth interview with traditional elders, *adinkra* cloth artisans fashion designers. Follow – up questions that have not been explicitly stated below were asked to seek clarification where necessary.

Techniques and Application of Colours for *Adinkra* Cloth

1. Why have black, brown and red colours been used for printing *adinkra* cloth for the past decades?

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2. What are some of the benefits that will be derived from using *adinkra* symbols as motifs for producing suits?

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3. Why have the use of *adinkra* fabrics been associated with the elderly?

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OBSERVATION CHECKLIST

Observation checklist/schedule for the modern printing techniques and the use of *adinkra* symbols cloth at different functions.

Angle of Observation	Attributes	Remarks Yes / No Explain
<i>Adinkra</i> printing techniques	<ol style="list-style-type: none"> 1. Do <i>adinkra</i> artisans still employ vegetable dyes for printing? 2. What printing techniques do the artisans use for their cloth? 	
Promotion of suits made with <i>adinkra</i> symbols	<ol style="list-style-type: none"> 1. How often do people wear suits made with <i>adinkra</i> symbols? 	

