CHAPTER 10:

SURFACE DESIGN TEXTURE: AN INDISPENSABLE ELEMENT OF DESIGN FOR AFRICAN PRINTED FABRICS

Contributed by
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INTRODUCTION

African wax printed fabrics that comprise of Dutch wax printed fabrics, English wax printed fabrics, Ghana wax prints, Togo prints, Cote d'Ivoire prints, Nigeria prints, imitation fancy wax prints from China and so many others known as *Ankara* are decorated with different bold bright colourful designs accentuated by intricate designs found at the background. These wax prints have been adopted as one of African traditional garbs and sold both in the markets and shops across the whole of Africa. Now and then newer designs keep evolving and many people keep purchasing them because of some properties which they possess.

In a typical Nigerian setting, they are usually used as uniforms for different groups such as women groups, wedding ceremonies, burial ceremonies, birthday celebrations, the naming of a newborn baby ceremony, chieftaincy, coronation and title-taking ceremonies. They could also be employed as everyday wear or office wear. One thing that attracts some people to these printed fabrics is the design. Without the designs on these fabrics, there might not be a story to tell because these designs speak volumes and convey some messages to the onlooker without a written word. Taking a look at these printed wax fabrics, one notices the elements and principles of design being utilized to produce some groundbreaking designs. Apart from these elements and principles

of design, one striking element that gives fascination and prominence to any design is texture. Texture is one of the elements that can be manipulated to make art and design more innovative and interesting and "heighten an emotional impact" on the observers (Preble et al., 2002). Texture is an important element of art and design. It is associated with a sense of feel, which draws all the viewers' physical and mental attention to the artwork. It plays with the eyes and brain evoking thought-provoking views and ideas. The researcher divulges that one of the major characteristics of African wax printed textiles is employing the use of a texture or textures as a design on the background. This study is of the view that the bolder designs are usually the main focus in African wax printed designs but the texture found mostly on the design background is not often recognized because of their intricate nature. The researcher reveals that without the background textures, the whole design layout is scanty and under-designed, thereby lacking solidity and originality. Therefore, this paper is of the view that the functions of textural background designs in African wax-printed fabrics cannot be ignored and have not been given the adequate attention they deserve as those designs are not complete without textures. Thus this paper discusses texture as a vital element employed in the designs of African wax-printed textiles and showcases some of the textures utilized as surface decoration on them. It also experimented with textures in the studio and further suggests that scholars of art and design should always experiment with some textural effects to boost their creative pieces.

African wax-printed textiles

Wax Prints are colourful cotton fabrics produced using a mechanised wax-resist printing technique inspired by the Indonesian hand-crafted batik method. In the late 19th century, the British trader Ebenezer Brown Fleming introduced the prints to West Africa where the consumers embraced the exotic, colourful patterns together with the random imperfections that imbued the

fabric with an attractive, unique signature (Elise 2020). African Wax Print which is famous as Ankara these days is believed that originated in Indonesia as batik. A small amount of hot liquid wax is taken in an etching tool and different designs are made on the cloth. After the evolution of the batik, European countries brought huge changes in the manufacturing process introduced roller-printed fabrics and ended the custom of handmade African Wax prints. It's a pure form of cotton and extremely soft in texture. Because of the high quality of the fabric, African Wax Print is more expensive than other kinds of African prints (Elise 2020).

Wax prints are produced using 100% cotton grey fabric which is scoured, washed, bleached and mercerised to remove impurities and prepare the cloth for wax printing. The design is etched onto two copper rollers which are mounted onto the wax printing machine. The molten wax resin will be picked up in the etched roller and impressed onto both sides of the cloth. The cloth is dyed using Indigo or other coloured dyes. The dye penetrates the cloth in the areas that are not protected by the wax resin. The dyed cloth is then washed to remove most of the wax from the cloth but small random spots of wax remain. As the first colour is applied to the cloth, the random spots of wax will resist the colour and leave small pearls of white when all the wax is washed from the cloth. An optional second colour may be added to the pattern when all the wax has been removed. There are various random wax resist effects that can occur during the wax process according to the nature of the pattern, the dyes and washing processes. Indigo crackle effects occur when the cloth is washed vigorously and the wax resin breaks allowing the indigo dye to penetrate the cloth through the cracks in the wax. There are various random wax resist effects that can occur during the wax process according to the nature of the pattern, the dyes and washing processes.

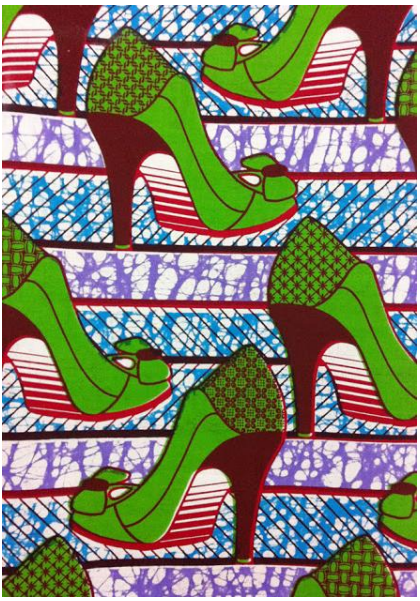


Plate 1: African wax-print named shoe, showcasing marble effect as texture. Source: C-Duru (2023)

Plate 2: African wax-print showcasing small bubbles effect named Michelle Obama's bag. Source: Chudi-Duru (2023)

The marble effect occurs when the pattern allows larger bubbles of wax resin to remain on the wax and resist parts of the first colour application.

Plate 3: African wax print showcasing small pearls effect. Source: Chudi-Duru (2023)

Small **bubbles** or **pearls** of white usually occur when the pattern is more detailed, and small spots of wax remain on the cloth following the initial washing process. The random wax resist textural effects are what makes wax prints unique. The impression that the introduction of Dutch wax prints into the West African market took place from nowhere is not quite true because in West Africa, there had always been a vibrant textile market since fabrics have been significant in African social life, for a very long time. Early in the 16th century, the English, Dutch and French were selling batiks and other types of textiles manufactured in Asia, such as the guinea cloth and cotton produced by the Indian to West African markets. As a result of this, consumers were already acquainted with internationally produced fabrics. Once the Dutch batik-inspired wax prints were introduced in West African markets, it gave rise to the height of foreign-manufactured fabrics in the 19th

century. However, Eccentric Yoruba (2011), concludes by mentioning that no matter how Dutch wax prints found themselves in West Africa, it can be concluded that they were initially meant for the Indonesian market but found a more eager market in the Gold Coast (Ghana) where they became symbols of high-quality fashion. From the Gold Coast, these fabrics proliferated to other West and Central African markets including Nigeria. Doku (2014) also supported the view and said that the unique fashion home of sub-Saharan Africa began in Ghana.

Doku (2014) further narrated that, West Africans accepted these Dutch wax prints in the 19th century, using and integrating them as part of their culture and self-expression. The English produced and sold wax-printed textiles, but the Dutch brands were much more accepted because most of the West African countries were under English and French colonial rule; their preference was for the Dutch brands to date.He further mentioned that up until the 1960s, most wax prints sold in West Africa were produced in Europe using motifs designed precisely for African markets and later after most West African countries gained their independence things were transformed.

Asho (2013), is of the same view as Doku (2014), and mentions that although the fabrics were manufactured outside Africa, as African countries gained independence in the 50s and 60's they built indigenous textile mills and started creating designs that represented traditional cultural motifs, patterns and colours of various ethnic groups in Africa. Currently, Ghana is home to several fine and high-quality wax print manufacturers including Woodin, a subsidiary of Holland's Vlisco and ATL which is a subsidiary of Manchester-based ABC Textiles. Doku (2014) further mentioned that, in the early year 2000, Ghana's fashion industry began to take shape. The large-scale production of African prints and the marketing of new products through fashion shows contributed to the increased sophistication of the industry and public awareness. Eccentric Yoruba (2011) noticed that, although

these textiles are now manufactured in Africa, the companies that manufacture them are largely not owned by Africans. Yet West Africa became the exclusive market for Dutch prints which have dominated the West African market since the end of the 19th century. Today, wax prints carrying European brand names are the most expensive in the West African fabric market.

Also, Felsenthal (2012), reported that, in Indonesia, the inhabitants have used the technique of wax-resist dying to produce batik fabrics for a long time. These elaborately patterned handmade textiles have some similarities to the prints that have been displayed on the fashion runways. They are made of bold, repeated and intricate motifs set against the backgrounds of varying hues. She further narrated her view on how the prints originated in West Africa. There was a conscription by the Dutch in the mid-19th century, which enlisted a lot of West African men both slaves and soldiers to augment their army in Indonesia. These men took a liking to the local handicrafts on reaching there and came back with batik in their home countries, from then a taste emerged in West Africa for these batik textiles. Similarly Eccentric Yoruba (2011), supported this view by accepting the theorised role played by West African contracted soldiers for the Dutch in Indonesia, also known as the Black Dutchmen by bringing the wax prints to West Africa. They served between 1810 and 1862 and had taken Indonesian batik with them on their return to their homes as gifts for their families. Thereafter, local interest in the fabrics grew, and the Dutch wax prints were the closest imitation available.

During that time, Felsenthal (2012) reported that Europeans were trying to work out how to manufacture their versions of batik, to flood the market in Indonesia with cheaper, machine-made versions of the clothes because the handmade versions were hard to produce and costly, a Belgian printer came up with a method for applying resin to both sides of a cotton cloth at the end of the 19th century, and the machine-made wax-print fabric was produced.

She further reported that a problem was faced by them, in that the machine-made version of these clothes was not as perfect as the original ones. They had some crackling effects which did not appeal to Indonesian batik conformists. In order not to incur a loss and also find a new market for those imperfect textiles, the Dutch turned to West Africa. As the case was, they appreciated the imperfections and saw them as possessing unique qualities in that, no two bolts of cloth were identical. They have a liking for fabrics that are not the same, meaning that a particular design will not be common. The West Afican keenness for these imperfect was so pronounced that Dutch wax manufacturers still produce those imperfections in the printing process today, long after they have resolved the technical fault.

Felsenthal (2012) found out that as Europeans began to sell this cloth, in West Africa to the majority which is women, both rich and poor, who saw its useage as being prestigious; their tastes changed the manner in which those designs were produced as new patterns were designed to reflect significant events and local proverbs. The crackle textural effect is a result of the wax applied on the fabric and this adds to the surface decoration and also as an attraction to the buyer.

Design

A design is a plan or specification for the construction of an object or system or for the implementation of an activity or process or the result of that plan or specification in the form of a prototype, product, or process. The design usually has to satisfy certain goals and constraints; may take into account aesthetic, functional, economic, or socio-political considerations; and is expected to interact with a certain environment (Cambridge Dictionary of American English). Design is an art form, a method of human expression that follows a system of highly developed procedures in order to imbue objects, performances, and experiences with significance. Typical examples of designs include textile designs,

ceramics designs, communication designs architectural and engineering drawings, circuit diagrams, sewing patterns and less tangible artefacts such as business process models.

Elements of design

Design elements are the basic units of any visual design which form its structure and convey visual messages. The elements of design are line, shape, form, space, texture, tone (or value) and colour. The elements are the materials from which all designs are built. The elements of art (or design) refer to colour, form, line, shape, space, texture and value. These are the basic building blocks of art and design (e.g., paintings, drawings, sculptures, textile design and visual communication). The elements are the tools or raw materials, much like paints are the basics to a painter. Design elements have an impact on how a piece of work is perceived, executed, and used—and are present in design regardless of skill, taste, or style. The element of design which this study is predicated on is texture.

Texture

It is one of the seven formal artistic elements, along with line, colour, shape, form, value and space. It can affect mood, evoke psychological associations, bring attention to a medium, or divert our focus toward materials used in a work. Used adeptly, texture can even challenge our perception of what is real. Texture techniques give more depth to an artwork making it look more natural. The more detail an artist puts into the texture of the work, the better the illusion of reality. Therefore, artists employ this method to give their artwork a realistic look, creating a particular atmosphere in the painting (Ayers 2018). He further notes that in the visual arts, texture is the perceived surface quality of a work of art. It is an element of two-dimensional and three-dimensional

designs and is distinguished by its perceived visual and physical properties. The use of texture, along with other elements of design, can convey a variety of messages and emotions. Because garments have combined design elements of texture, colour, and line, each must be selected with one's figure and how they affect each of the other elements. The effects of texture in fashion influence how colours appear and how design lines function.

Texture describes the body and surface of the fabric. Textures may be rough or smooth, coarse or fine, crisp or clingy, soft or stiff, thin or bulky, opaque or sheer, shiny or dull, heavy or light, or any combination of these characteristics. Because textures have many characteristics, they can enhance or detract from a garment's design. They also affect the illusions of the size and shape of the figure. Here are some general guidelines for selecting appropriate textures for garments in fashion design according to Lujan (ND):

- Soft or clingy textures reveal the figure and emphasize figure irregularities.
- Stiff or crisp textures stand away from the body and hide figure irregularities. Very stiff fabrics appear to add weight and dwarf small figures. Moderately stiff fabrics are good on most figures.
- Bulky textures seem to add volume to the figure. Small figures are overpowered by these textures, but they are good for tall, slender figures. They can be used to balance an irregular figure. Example: Bulky sweater for a figure with a small bust and full hips.
- Dull finishes absorb light and generally make the figure look smaller. They are suitable for all figures.

- Shiny fabrics make the figure appear larger and reveal figure irregularities. Shiny fabrics are best for average to slim figures that have regular proportions.
- Coarse or rough fabrics are good choices for average to slim figures. They add volume to large figures and overpower small figures.
- Smooth (not shiny) fabrics hide figure irregularities and are attractive on most figure types.

Texture is becoming more important than ever in textile design. From intricate embroidery and 3D applique to woven patterns, textured fabrics can add depth and dimension to any garment. This trend is particularly popular in the home decor and upholstery industry, with textured fabrics adding a touch of luxury to any space.

Cloth Texture: Different Styles and Types

Although there are different types and styles of fabric textures produced and used in the world, they can be categorized into 3 main sections: Natural texture, Supplementary texture and treated texture. Original/ natural texture is the result of the structural process during the manufacturing time. Natural textures are produced with the interaction of different yarns. It's the raw and the first texture that comes out of the weaving/knitting process. The difference in natural textures is produced by what type of textile fibre is used for the process, the weight of the yarn, stitch size, and many other factors. However, most of the difference is resolved in the fibre section. The textile fibre chat and major types of fibres are discussed in the section below.

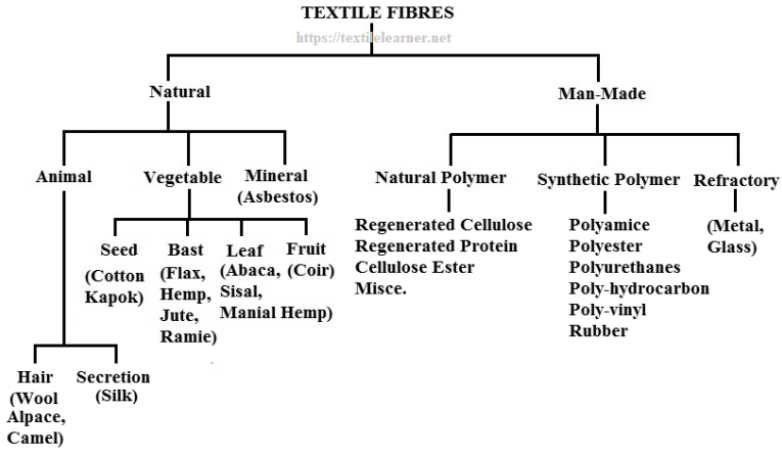


Figure 1: Classification of textile fibres based on sources. Source: textilelearner.net

Vegetable sources:

Major fibres from vegetable sources are discussed below:

- **Cotton:** Cotton is the most widely used natural fibre and consists of pure cellulose. It is produced in China, Brazil, India, Pakistan, USA and Uzbekistan.
- **Flax:** Flax is a lignocellulosic bast fibre, mostly present in European Union. This fibre is mostly used to make linen.
- **Hemp:** Hemp is also a lignocellulosic bast fibre with a low quantity of lignin. The world's leading producer of hemp fibre is China.
- **Jute:** Jute is the strongest vegetable fibre from India and Bangladesh. It is also a lignocellulosic fiber.
- **Ramie:** Ramie is also a lignocellulosic bast fiber mostly available in China and Brazil. It is also known as China grass, with a silky lustre and better elasticity.
- **Sisal:** Sisal is a hard and coarser leaf fibre, mostly available in Brazil, Tanzania and Kenya.

- **Abaca:** Abaca is a leaf fibre, also known as Manila hemp, extracted from the leaf sheath around the trunk of Musa textiles (plantain and banana). The world's major fibre producer is the Philippines. Lignin content in fibre is about 15%.
- **Coir:** Coir is a hard, short and coarse fibre extracted from the shells of coconut. It is mostly present in India, Sri Lanka, the Philippines, Vietnam, Indonesia and Brazil. This fiber contains the highest amount of lignin making it stronger but less flexible.

Animal sources:

Major fibres from animal sources are discussed below:

- **Alpaca:** Alpaca is a hair fibre-like wool that comes from the Lama Pocos. This fibre comes in approximately 22 natural colours, produced mostly in Peru, North America, Australia and New Zealand. It is stronger than wool fibre.
- **Angora:** Angora is a rabbit fibre, very soft, fine and silky. 90% of the fibre is produced in China. Angora fabric is very suitable for thermal clothing.
- **Camel hair:** Camel hair is available from the two-humped Bactrian camel mostly present with nomadic households in Mongolia and Inner Mongolia, China. It is the softest and most premium hair fibre.
- **Cashmere fibre:** Cashmere fibre is available with Kashmir goats, in China, Australia, India, Pakistan, New Zealand, Turkey and the USA. It is a luxurious and expensive fibre.
- **Mohair** fibre**:** Mohair fibre is produced from Angora goat, available in South Africa. It is a smooth and lustrous fibre.
- **Silk:** Silk is a natural filament fibre, with high lustre, mostly produced in China, Brazil, India, Thailand and Vietnam.

- **Wool:** Wool is the most important protein fibre. It is the first domesticated fibre, mostly produced in Australia, New Zealand, China, Iran, Argentina and the UK.

Ground and petrochemical sources:

In addition to the collection of the fibres from the sources above the ground, there are fibres from below the ground like metals. Since World War II, there has been a thrust to produce synthetic materials, mostly derived from petrochemicals. The manufactured fibre is termed as 'synthetic fibres' as the raw materials were available by synthesis followed by polymerization and fibre formation. Synthetic fibres became the consequence of spectacular growth in petrochemicals development and utilization. The growth in the development of synthetic fibres and the synthetic fibre industry along with the polymer industry became phenomenal with the growth of the petrochemical industry.

Classification of Textile fibres based on Polymer:

Polymer is a material constructed of smaller molecules of the same substance that form larger molecules. Polymers are any of numerous natural and synthetic compounds of usually high molecular weight and consisting of up to millions of repeated linked units, each a relatively light and simple molecule. The term is derived from the Greek words: 'polumeres', where polus means many, and meros meaning parts. A key feature that distinguishes polymers from other molecules is the repetition of many identical, similar or complementary molecular subunits in these chains.

Polymers, macromolecules, high polymers and giant molecules are the same and consist of high-molecular-weight materials composed of these repeating subunits. These materials may be organic, inorganic or organometallic, and synthetic or natural in origin. Polymers are essential materials for almost every industry such as adhesives, building materials, paper, cloths, fibres,

coatings, plastics, ceramics, concretes, liquid crystals, photo resists and coatings.

These polymers can be natural or synthetic and organic or inorganic. Organic polymers are distinguished from inorganic polymers because of the presence of carbon atoms in the main chain. The Presence of total carbon atoms is termed carbon chain polymers. If the main chain consists of other atoms with carbon, then it is termed a heterochain polymer. Natural inorganic polymers include sand, asbestos, agates, feldspars, mica, quartz and talc.

Natural organic polymers include polysaccharides or poly-carbohydrates such as starch and cellulose, nucleic acids, lignin, rubber and proteins. Synthetic inorganic polymers include boron nitride, concrete, many high-temperature superconductors and several glasses. Synthetic organic polymers include fibres, plastics and coatings, such as polyethyene, polypropylene, polyamides, polyesters, vinyl polymers, polyurethanes and synthetic rubbers.

Fibres are polymeric materials that are strong in one direction, and they are much longer (>100 times) than their width. This is termed as the l/d ratio. Elastomers or rubbers are polymeric materials that can be distorted through the application of force, and when the force is removed, the material returns to its original shape. Plastics are materials that have properties between fibres and elastomers—they are hard and flexible.

Supplementary Texture

As the name suggests, it is the texture of when external materials are attached to the finished fabric texture. These textures are purely additional and up to individual interests. They don't belong to the "mandatory texturing" segment where the steps are to be followed to get a final product. There are countless methods for attaching different materials to different fabrics. The methods and materials for supplementary texture: Embroidery, Patchwork, Beading, e, Monogramming, printing, Felting, Fabric flowers, Insertion,

Ruffles, Using roulette loops, Dyeing, Stamping, Mirror work, Scallops, Shrinking fabric, Sequins work, Decorative edge finishes and others.

Treated Texture

Whereas natural textures are the raw materials, treated textures are the refinement of these raw materials through extensive processing. It's the different finishing touches applied to the natural textures that treated texture refers to. It doesn't only diminish the rawness of the texture but adds and increases its functionality. Different types of finishes are applied to fabric textures, such as Acid wash Air jet spinning, Anti-static finish, Brushed finish, Beetling, Bleaching, Colorfastness, Combing, Deodorize, De-lustering, Enzyme wash, Hydrophilic finish, Mercerization, Moiré, Parchmentizing, Pigment finish Resin, Sandblasting, Schreiner finish and others. Some supplementary textures on African wax-printed fabrics are showcased below:

Plate 4: African wax- print with thin lines as textures. Source: Chika Chudi-Duru (2023)

Plate 5: African wax- print named ABC with curved lines as textures. Source: Chika Chudi-duru (2023)

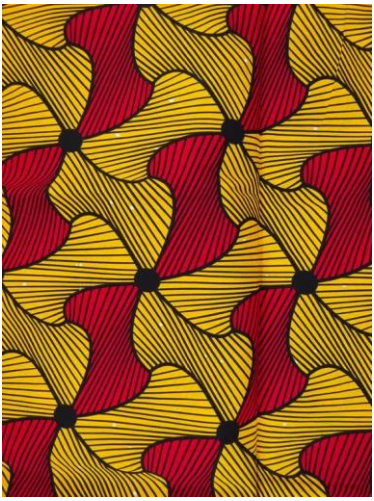


Plate 6: African wax- print named SANTANA with thin lines as textures. Source: Chika Chudi-Duru (2023)

Plate 7: African wax- print named BIG FISH with thin curved lines as textures. Source: www.google.com

Plate 8: African wax- print with lines as textures. Source: Chika Chudi-duru (2023)

Plate 8: African wax- printed fabric named STAR with connected lines as textures. Source: Chika Chudi-Duru (2023).

Theoretical framework

The theory adopted for this study is formalist theory of significant form. In Britain this theory was developed by the Bloomsbury painter and critic Roger Fry (1866-1934) and the Bloomsbury writer Clive Bell (1881-1964). In his 1914 book Art, Bell formulated the notion of significant form – that form itself can convey feeling. Fry is of the view that a work of art is, first and foremost, a collection of lines, shapes and colors, and it is therefore on the formal elements of the work (and not on the content that the work represents) that the scholar should base his judgment. He asserted that purely formal qualities for instance the relationships and combinations of lines and colours—are the most important elements in works of art. Formalism describes the critical position that the most important aspect of a work of art is its form – the way it is made and its purely visual aspects – rather than its narrative content or its relationship to the visible world. In a work of art which African printed wax fabrics are part of, a formalist critic would focus exclusively on the qualities of colour, form, line, composition and other elements and principles of art including textures. These are what makes these printed fabrics what they are. In art, form can refer to the overall form taken by the work, its physical nature; or within a work of art it can also refer to the element of shape among the various elements that make up a work. The Formalism definition is exemplified by the minimalistic geometric paintings of Piet Mondrian. The shapes depicted within his paintings lack any meaning, yet the geometric form of their lines and color form a visual aesthetic never before seen in art. In African wax printed fabrics, the geometric lines, colour, batik effects utilised to achieve textural effects form visual aesthetics and also a unique given identity.

Studio exploration of texture on cotton fabric

During the studio exploration, African indigenous motifs and some abstract motifs were utilized to produce some African printed

fabric designs as computer aided designs in the studio and some textural effects were added to showcase the usefulness of texture on a printed fabric.

Studio exploration 1

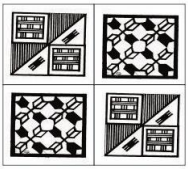
	
Abstract motif sketch.	Popo, mboisi and kpakpando motif sketch

Figure 2: African indigenous motifs utilized in the studio. Source: Chika Chudi-Duru (2017)

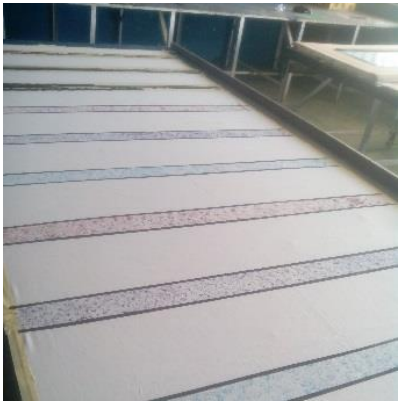


Plate 9: stage 1 of printing in the studio. Source: Chika Chudi-Duru (2017)

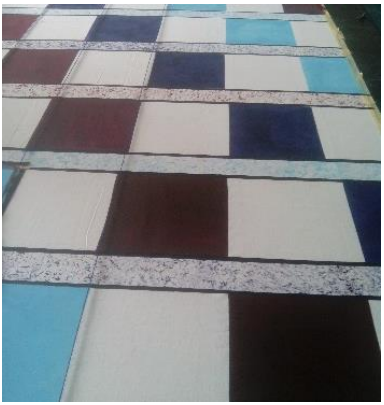


Plate 10 : stage 2 of printing in the studio. Source: Chika Chudi-Duru (2017)

Plate 11: stage 3 of adding texture to the fabric in the studio. Source: Chika Chudi-Duru (2017)

Plate 12: last stage of printing in the studio using *Akwete* woven design motifs. Source: Chika Chudi-Duru (2017). The printing techniques that were utilised in this study are the photographic transfer and the stencilling. This is a four coloured printed fabric.

The sketching of the design was done on a sketch pad during the preliminary studies. After which the motifs sketched were scanned into the computer. They were worked on by shaping and arranging them appropriately, using the Corel draw application. This resulted in a pattern of design. After this, the design was printed out on a paper and transferred to the screen using the photographic transfer. The part of the designs that required stencils were printed out on film papers and cut. A total number of two stencils were cut before embarking on the printing process in the studio while the rest of the designs were achieved through screen printing. The stencils were separated into different parts according to the colours and designs. The studio exploration processes are described below.

1. The cotton fabric was desized to make it more absorbent to printing inks.The fabric was ironed after pretreatment and drying.It was laid and held tightly on the printing table with masking tape, to avoid shifting and lifting while printing.The portions on which the designs were printed, were demarcated with a tiny sewing thread. This was done according to the measurement of the unit of design printed in stage one.

2. A texture was created by making use of two-ply yarns which were squeezed to form a rough ball. These squeezed yarns were dipped in the inks and applied lightly on the surface of the fabric to create a texture before printing in stage two.

3. The printing was carried out starting with the screen printing, after which the cut stencils were utilised starting from the light colours and ending with the dark ones. The paints that were used to achieve this studio practical are the textile inks and acrylic paints. Below in this figure is the computer-aided design format.

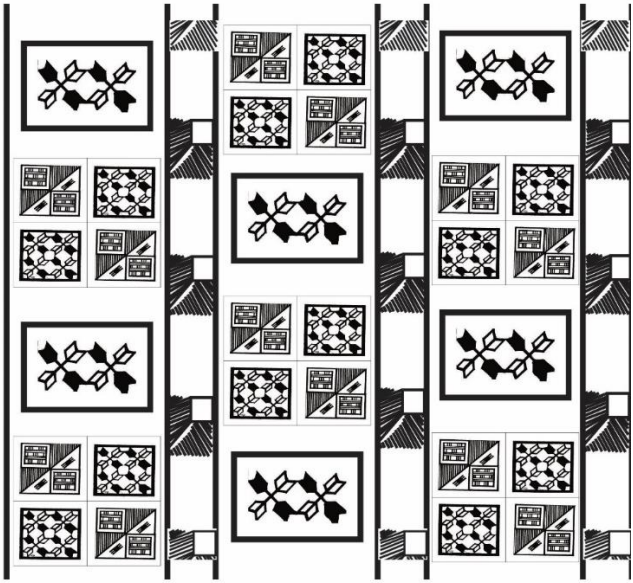


Figure 3: *Kpakpando, mboisi* and *popo* motifs computer aided designs**. Source:**Chudi-Duru (2017)

Studio exploration 2

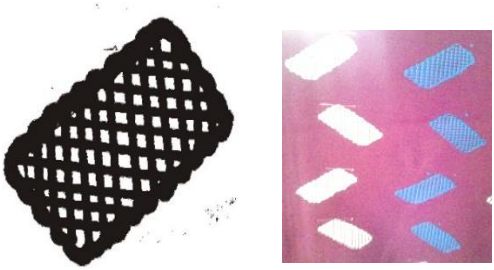
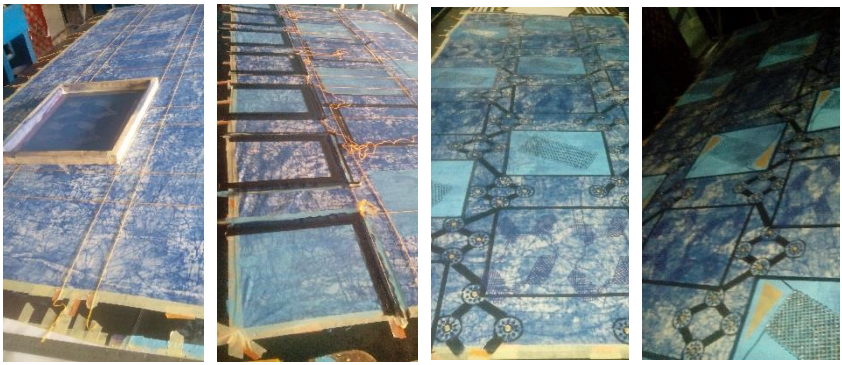


Plate 13: Achicha motif. Source: Chika Chudi-duru (2017)



First stage **Second stage** **Third stage** **Final stage**

Plate 14: *Achicha* (biscuit) design motif (printing stages).
Source: Chudi-Duru (2017)

The techniques that were utilised in this studio practical were the photographic transfer, batik dyeing and stencilling techniques. It is a five-coloured printed fabric. These processes below were strictly followed during the studio practical.

The white fabric was de-sized to have more affinity for dyes and printing ink. After the pre-treatment, it was dried and covered all over with wax. It was squeezed for the fabric to have some crackles and form some designs which could serve as texture. After the dyeing process, the fabric was washed and ironed as it has been shown on the first stage plate above. During the printing, the fabric was held taut on the printing table with the aid of a masking tape. This is shown in the second stage. The portions on which the designs will be printed were demarcated with a tiny sewing thread. This was done according to the measurement of the unit of design to be printed to aid proper registration. This is shown in the first stage A total number of three stencils were cut before embarking on the printing process in the studio while the main motif was transferred to the screen.

After the preliminary study on the design was conducted, the result was scanned into the computer and arranged appropriately. Corel draw application was employed while designing. The design that is for stencilling was printed out on film papers and the stencils were cut while the other design was printed on a plain white sheet of paper in black and white and transferred to the screen using the photographic transfer technique. The stencils were separated into their different parts according to their colours.

The printing started with the screen printing method and finished up with the stencilling method. The paints used to carry out this studio practical are sticker inks and acrylic. This is seen in the third and fourth stage. Below in this figure is the computer-aided design format.

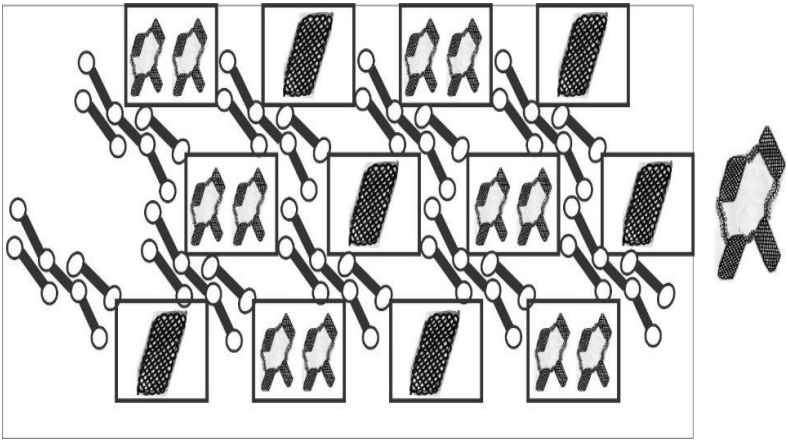


Figure 4: *Achicha* (biscuit) design motif (computer aided design lay-out).
Source: Chudi-Duru (2017)

Results and discussions from the studio exploration

Plate15 : *Akwete* woven fabric (*Kpakpando*, *mboisi* and *popo* design motif printed fabric). **Source:** Chudi-Duru (2017)

Plate 16 : *Akwete* woven fabric with textured background. *Biscuit (achicha)* design motif printed fabric). **Source:** Chudi-Duru (2017)

Summary

In this chapter**,** texture as one element of design that plays a key role during the process of textile designing is extensively discussed. The different types of textures used by textile artists, categorized into three main sections as natural texture, supplementary texture and treated texture were also given much attention. The chapter revealed the usefulness of texture as a surface decoration and also examined some African wax-printed fabrics to find out the key roles played by the application of some textural effects and why they are always used to make some design statements on those African prints. It summarily concludes that texture is one of the element of art and design that is inevitable in design practice.

Questions

1. What is texture in art and design?
2. What are the different types of textures in textile design?
3. What are African wax-printed fabrics?
4. Mention the different types of finishes applied to fabric textures.

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