ONE-OFF GARMENT PAINTING INNOVATIONS FOR THE GHANAIAN TEXTILE AND GARMENT INDUSTRY

Volume 1, September 2019 **Pages: 217 - 233**

ISSN: 2665-0983 (ONLINE) **DOI: 10.35738/ftr.v1.2019.15**

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ABSTRACT

This study explored the potential of garment painting as a textile decorating method and by extension an additional source of income generation in textile production practice. As a developing country, the capability of generating local products through local means of manufacturing are commended in the Ghanaian society and highly promoted among its diverse communities. Surface designing is an integral part of Ghana's textile and garment industry and has historically incorporated techniques such as stamping, tie and dye, resist dyeing and direct printing. In recent times, however, innovations such as garment painting has emerged to give a new meaning to clothing decoration and has set the trend for local fashion consumption, especially among the youth. As a result, garment painting is rapidly growing as a commercially viable business for the textile and garment industry in the country. This study discusses the innovation of garment painting and highlights its implication on the future of the local textile and garment industry. It has been established from the study that fabric painting is a creative way to transform plain fabric surfaces with unique designs. Additionally, this method of decorating fabrics is unique and a one-stop process that will assist in revolutionalising the local textile industry in the face of stiff global competition from factory-printed fabrics.

Keywords: Surface Designs; Painting; Garment; Fashion

1. INTRODUCTION

The textile industry in Ghana one time was a dominant sector. The industry which used to employ over 25,000 people has seen a decline in production since 2005, leading to massive lay off of workers due to the import of cheap textiles. Currently, the industry is said to employ a little over 2,000 workers as it nears total collapse (Quartey, 2006). The industry which had so much potential was pushed to its knees, as high cost of production and the influx of cheaper and pirated textiles from China left it helpless. Various governments in their effort to revive the industry have intuited numerous measures, but the problems of the textiles industry persist. In the face of these challenges, innovative ways of making textiles must be explored to help the industry come out of its woes. One of the innovative ways is fabric painting.

Textile surface design refers to any process that gives structure, pattern, or colour to fibre, yarn and fabric (Irwin, 2015). These include spinning, felting, papermaking, weaving, knotting, netting, looping, dyeing, painting, stitching, cutting, piecing, printing, quilting and embellishing. Historically, tie-dye, designs were first tied or stitched into the cloth, using cotton or raffia threads. In resist dyeing, dyers drew on the cloth using an impermeable substance, such as wax or paste made from cassava or other tubers. The fabrics were then dipped into solutions typically made from vegetable dyes, which coloured all but the 'resist covered' areas. Indigo plants were used for deep blue dyes, while reddish-brown dyes were extracted from cola nuts, the camwood tree, and the redwood tree. Greens, yellows and blacks were prepared from other sources. Textile printing was done with calabash stamps, tubers, wood stamps and later on mechanically (roller, rotary and block printing).

Accodinging to Littrell (1977) the introduction of Java batik by European traders and war veterans from Indonesia in the second half of the 19th-century revolutionised fabric productions and decorations in Ghana. Small local production started just after the introduction of the Java Batiks, but demand exceeded supply because the traditional production process was slow and laborious. Several European manufacturers, including Vlisco from the Netherlands and later ABC Wax from the United Kingdom, realising the high demand for batiks produce some of the finest brands of local textile prints (Relph & Irwin, 2010). Most Ghanaian designs and motifs used to decorate fabrics have names. Many designs are associated with particular plants, animals, events, or proverbs, and are often used in other crafts, such as house painting, carving and pottery. Other painters incorporate Arabic script, Roman letters and numerals, or line drawings of contemporary objects, such as bicycles and cars on such fabrics are fashioned out into various garments for all occasions.

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1.1 Fabric Painting

Fabric painting is the art of applying washable acrylic (acrylic fabric paint) or dimensional paint to clothing or accessories(Walter, 2011). Even though painting on clothes is not new, there are new styles and techniques evolving on a regular basis. Creating patterns or designs on clothing is a wonderful way to enhance the outlook of clothing in terms of style. Collier et al. (2001) indicate that the application of a pattern to the fabric by the use of dyes, pigments or other coloured substances might be affected by a variety of hand or machine processes. Freehand painting of designs on fabrics is probably the oldest technique for applying ornament, but hand painting is a time-consuming procedure. Furthermore, it does not always result in a uniform repeat of a motif that is to be repeated more than once. Fabric painting has been in existence since humans began weaving fibres together to form the first fabrics. As the earliest of humans painted their bodies, they began using those same techniques to paint the fabrics that they created. Two basic methods of painting fabrics which were colouring and patterning were used. Application of colour was the process of directly applying an image with colour to the fabric. Patterning was painting (or printing) with resists in patterns and then colouring the image on the fabric.

According to Harper (2009), fabric painting is a technique that began thousands of years ago in Asia and eventually expanded to other parts of Europe and Africa through trade. The technique has a deep history in Asia through Kalamkari, an ancient India art, and also in China and Japan, where other forms of patterning were developed. Explaining further, Harper (2009) continued that after fabric painting had been practised in India for hundreds of years and the fabrics were traded throughout other parts of Asia, Egypt and Greece. By 200 AD, fabric painting expanded to parts of Europe and Africa. China began developing new techniques such as using resists and stencils, and the ideas spread to Japan, where the Japanese painted beautiful intricate patterns on their long and flowing garments. Fabric painting continued to expand into other parts of the world including Peru and parts of South America. The technique is used today in America and all parts of the world. Now recognised on a global scale, fabric painting is used on a daily basis as a hobby and more importantly for business.

Lewis (2011) indicated that different painting effects could be created using various household tools and some different methods. Entirely different effects are produced by varying the amount of paint used, the thickness of the paint and the tool used in applying it on the fabric. A sponge dipped in paint will create a dappled effect, and could be layered in different colours of paint as an all over pattern. Paint brushes of any size from wide decorating brushes to fine artists' brushes can be used. To soften the paint lines and make gentle transitions from one colour to another, those portions of the fabric could be wet to 'water down' the effect of the fabric paint. Using wetter fabric

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and thinner paint will cause a greater bleeding effect on the fabric. To cover a large area, thin down the fabric paint with water and use a spray bottle to spritz the fabric. Masking tape and other resist materials can be used to cover parts of the fabric that do not intend to be painted.

Painted fabrics can be used to make all kinds of functional and decorative items. A plain cushion can be painted, or paint a design on a length of fabric and use it to sew cushion cover. Take plain fabric squares and decorate them with the same pattern in different colour combinations to make coordinated fabrics to use for a quilt. Plain fabric lampshades make a good painting surface and make a good alternative to more expensive lampshades. A white silk scarf can be painted with silk paints to make a one-of-a-kind, wearable item. Plain T-shirts, sweatshirts and canvas tote bags are sold in craft stores for use with fabric paints. Paint specifically designed for use on fabric flows from a narrow-tipped bottle that does writing, edging and detailing easier. The paint has a thick consistency that gives it a three-dimensional effect when dry (Walter, 2011; Kanzinger, 1993). To prevent wet paint from seeping through the front to the back when painting clothing, a sheet of cardboard is inserted inside the garment. This also gives the artist a flat surface on which to work. Straight pins are inserted from front to back on the outside of the project around the edge of the cardboard to keep it in place. Temporary glue (Cola Permanente) could also be spread on the board to also keep the material taut and smooth on the surface drawing.

Paint application in garment or fabric painting comes in different forms and approach. Rubber stamps, sponges cut into shapes or any object with a flat surface can be coated with paint from a brush, then pressed onto the fabric to create a design. Palettes are used to mix fabric paints or as dipping trays for stamps. Buttons, rhinestones and other decorative items with flatbacks can be attached to a fabric paint design by pressing them into a pool of fabric paint that is deep enough to cover their edges. To activate the painted areas, a glitter is sprinkled on the paint while it is still wet and leave to dry. Painting on clothing is a creative way to design one-of-a-kind fashion pieces could be lucrative is the practice to attract more customers. Painting on different fabrics such as apparel or home furnishing fabrics can give a creative look to those fabrics. Garments such as t-shirt, pants, jeans, and jackets and also other products such as bags, pillows, or anything made up of fabrics could be enhanced by adding designs to them. Depending on the skill level, there are various painting styles, brushes, fabrics and paints that work best. Although each garment painting is uniquely customised, collectively it could take a huge market share in textile surface designing in Ghana.

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1.2 Surface Design of Textiles in Ghana

Textile surface designing in Ghana has a complex history and comes in different forms. The notable ones are Adinkra, batik, tie-dye, direct stamping and various kinds of screen printing. Adinkra is a printed fabric, hand-made and was originally worn mainly for funerals, which is a very important ceremony in Ghana (Willoughby, 2005). As mentioned in the introduction, the textile surface design was essentially a manual process in Ghana and is done with calabash stamps, tubers and wood stamps until the introduction of wax prints that were printed mechanically (roller, rotary and block printing). The advent of "mammy cloths" (printed cotton fabrics) in Ghana could be traced from the colonial period in the Gold Coast era. The clothes were first brought by some Ashanti soldiers who were then serving in the Dutch army in some colonies in Indonesia. The soldiers were given to the Dutch commissioner as slaves due to the cordial relationship that existed between the then Asantehene and the Dutch commissioner. As part of their duties, the soldiers were made to fight on behalf of the Dutch in Indonesia. The soldiers being attracted to the aesthetic qualities of the Javanese prints brought samples of the cloths to the Gold Coast after their service. The Gold Coast women were very fascinated by the clothes and expressed special interest in the prints and established trade links between Holland and Gold Coast upon which large quantities were brought to the Gold Coast. The only foreign textiles in the Gold Coast before the Javanese prints were dyed fabrics from Manchester. The Manchester dyed fabrics could not compete with the wax Javanese prints hence lost their popularity. When the British realised this drastic change, they sought diverse ways to improve upon their dyed fabrics, and this led to the production of fancy and imitation wax prints. Unfortunately for them, they did not succeed the competition since the Gold Coast women were able to distinguish between the imitation wax prints by the British from the real wax print from Holland. The term "Dumas" which popularly became known for real wax prints from Holland was coined from the name of a Lebanese merchandiser who first traded in wax print with the Gold Coast women. The British eventually took over the trade through one of her leading firms in Africa known as the United Africa Company (Relph & Irwin, 2010; Nielsen, 1979; Kent, 1971).

The introduction of such prints in Ghana compelled Ghanaian textile designers to seek for ways and means to develop their textiles. From the onset, Ghanaian textile designers were able to make designs, give the prints names and send them to Holland to be printed and brought back for marketing in Ghana. Furthermore, the various manual textiles design processes such as batik, tie-dye, screen printing Adinkra stamping did not stop and continued side-by-side with the mechanically printed textiles till date. Therefore garment painting in this context is another innovation in this constant flux of textile production practice in Ghana.

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1.3 Fashion Trends in Ghana

People in Ghana continue to dress in traditional styles of their ancestors despite the abundance of Western influence. Most of the clothes are hand-dyed, machine-woven or knitted and hand-sewn by professional dressmakers and tailors. There a few handwoven fabrics such as the kente and fugu. As a result, many people wear clothing that is custom-made to suit their unique taste and preference. Ghanaian clothing is usually made of sturdy fabrics that are rich in colour and patterns. Many outfits include expert embroidery and beading as accessories. According to Ross (2010), the style of dress for women in Ghana is fashionable and practical. There are about three types of traditional styles for women: a long dress, skirt and top set and wrap. All pieces are tailored by professional dressmakers and tailors using brightly coloured fabrics often mammy prints. The long dress is usually worn during formal occasions including parties and celebrations. The skirt and top set is a more casual outfit that is worn during the daytime on trips to the market and around the house. There are many variations of the traditional long dress styles that include strapless, halter and short-sleeved. Skirts tend to be fitted tightly about the waist although a more flared shape is also worn. Women often wear headbands made of twisted fabric and accessories which go with outfits with sashes tied around the waist (Hira, nd).

Most often men wear tunics, short or long-sleeved, with loose drawstring pants. In northern Ghana, men wear striped smocks that are hand-woven with symbolic designs, and sometimes in various strips of colours. Men, often, dress in more Western styles of clothing such as jeans and t-shirts. However, people in business tend to wear suits to work, even though formal occasions often call for a tuxedo. Ghanaian males embrace Western fashion more so than the females. A mix of Western and Ghanaian fashions is also seen among the men as they are seen pairing jeans with the traditional smock and tunic (Ross, 2010). Ordinarily, fabrics are designed, that is, dyed or printed before they are cut to make garments in most instances in Ghana. Painting on the garment is giving a new meaning to surface designs in Ghana. It is taking over from various surface designs such as printing, embroidery, appliqué and lace. The versatile nature of fabric painting is making its adoption and utilisation very sporadic. From instant thumbnail designs to well layout designs, one can get a very nice and instant design on his or her dress. Fabric painters in Ghana have increased significantly over the last five years. Although there is no empirical evidence as to their real numbers, their activities and products are easily available and popular amongst the youth. Most textile exhibition organised in recent times has seen different designs and innovations in garment painting. This study explores the potential of garment painting as a textile decorating method and by extension an additional source of income generation in textile production practice.

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2. MATERIALS AND METHODS

The tools and materials used in garment painting are brushes, pencils, plywood (normally A3 size but sizes vary depending on the surface area), roller, palette, and permanent cola glue, acrylic fabric paint, and a cast brass piece.

- Palette knife: This is used to pick paint from the container onto the palette and in some cases to mix paint.
- Palette: The surface for mixing paint before application.
- Cola permanent glue: Water soluble glue made from acrylic resin for fixing and stretching fabrics.
- Soft pencils (3B pencils): For sketching or drawing and in some cases etch paint from the surface of the garment.
- ¼" Plywood: Used as a support in the stretching and fixing of the garment.
- Dimensional-relief paint: A water-resistant paint with an applicator tip used in creating intricate, border and outline designs.
- Fabric paint: A non-toxic washing resistant paint used as a medium for direct painting on dry cotton or non-synthetic fabrics. It contains acrylic resin, emulsion, water, and pigment.
- Acripuff-heat Puff fabric paint: This is heat expansion paint with an applicator tip for intricate and 3-dimensional designs.
- Silkscreen: Used as a medium for painting directly on cotton and thin fabrics.
- Brushes (sable brushes): For applying paint.
- Rage: For cleaning excess paint from the brush after washing when painting
- Pressing Iron/Hand drier: For the expanding acripuff paint

2.1 Preliminary Sketches

To enhance the flow of lines, strokes and the reduction of stains, there is a need for brainstorming on the subject matter or theme. Therefore preliminary sketches and series of thumbnails sketches are done at this stage.



Figure 1



Figure 2



Figure 3

Figure 1, 2 & 3: Examples Preliminary Sketches

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2.2 Transferring the Designs onto Garments

The garment is supported and stretched to provide a smooth surface for colour application. It is ensured that a ¼" Plywood is cut into the size 20 x 35 inches (The dimensions of the plywood could be varied depending on the size or shape of the garment). With a palette or thin roller layers of cola permanent glue are applied bit by bit till the entire surface of the plywood is coated with the cola as shown in figure 4.



Figure 4: Application of Cola permanent glue

At room temperature, the cola permanent adhesive is allowed to dry for 15 minutes and as a result, the glue becomes sticky and ready when feeling with the fingers on the plywood as shown in figure 4.

2.3 Painting on a Shirt

To make a painting on a cotton garment (as shown in figure 5) with a dominant segment of the whole garment irrespective of the position, one must consider the colour of the garment. Hence a colour scheme that either contrasts or harmonises with the garment gives suitable results.



Figure 5: Cotton Shirt

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Based on the dimension, directions, and subject from the preliminary sketches, the area of the shirt to receive the paint is fixed onto the board (1/4'' plywood) which in this case is the front left as shown in figure 6.



Figure 6: Spreading fabric on the plywood and ensuring utmost smoothness

The fabric is spread over the plywood to ensure that wrinkles that will distract the continuous flow of pencil, as well as brush marks, are eliminated. The wrinkled areas that will still exist are gently lifted, stretched and spread as in figure 6.

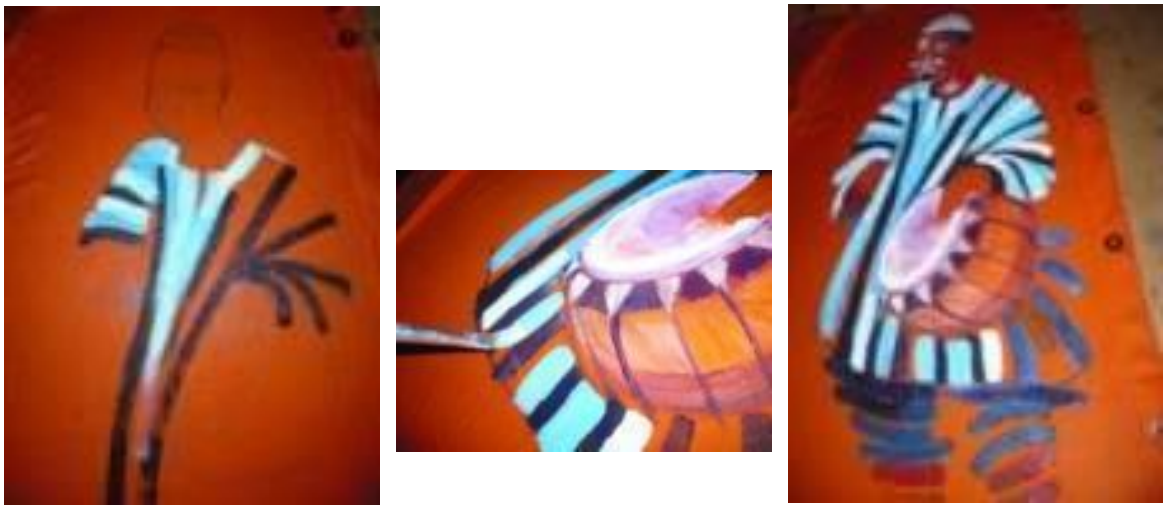


Figure 7: Drawing design with a soft pencil

The design is then transferred onto the garment with a very soft pencil (6B or 4B). See figure 7. The palette knife is then used to pick the various essential colours onto the palette in a circular manner from a light colour to darker colour. Painting on garments involves the use of the direct method of painting and unlike a canvas, does not

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entertain too many over brushing. It is essential to begin the painting by applying the colours from the darkest to the lightest as shown in the pictures in figure 8 (a-c).



(a) (b) (c)

Figure 8: Stages of painting

Paint is applied gently with few calculated strokes and simplified tones which can be achieved as mentioned earlier through uniform sketching before painting. To reduce or avoid the challenge of having stains and polluted scheme, the paint is mixed on the palette before applying it on the garment. The colours are carefully mixed and applied with very few and calculated strokes as possible until the desired or perceived idea is achieved. After painting, the fabric is allowed to dry at room temperature. With the aid of dimensional relief paint's applicator tip, the tip is gently squeezed and moved the tip as one draws to create symbols to complement or balance the painting. See figure 9.



Figure 9: Spirals from dimensional relief paint's applicator tip

Five minutes after using the dimensional relief paint, the garment (shirt) is gently removed from the surface by pulling it off and pulling the plywood from the garment (shirt) as shown in figure 10. It is then allowed dried.



Figure 10: Removing the garment

2.4 Painting Cotton T-shirt

The surface of the support (plywood for stretching the garment) is coated with permanent cola glue as was done in the first instance. For best results, the T' shirt is pre-washed to remove foreign substances such as grease or stains, should there be any. The T' shirt is dried and ironed to straighten and made strong. The plywood with the cola permanent glue coating is put inside the shirt with the side to be painted. The area to be painted is stretched through mopping of wrinkles and draperies with the hand. The process is repeated by mopping from the length to the breath, till the shirt is amply stretched to allow for painting without obstruction as shown in figure 11. Since the t-shirt is relatively heavier, it is significant to ensure that the intersection of the yarns are visible if possible to aid the acrylic resin emulsion in the paint to adhere very well.



Figure 11: Stretched T' Shirt

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The design is sketched unto the T' shirt with a soft pencil as shown in figure 12 below.



Figure 12: Pencil sketch

Since the colour of the garment is white, it is advisable to apply paint from the lightest to the darkest. In modelling the sketch with the paint, it must be mixed before applying it on the garment as indicated in figure 13 to avoid stains. Use few strokes and simplified tones in the form of strokes in modelling the forms until the perceived idea is achieved.



Figure 13: Painting from light to dark tone

With the aid of dimensional relief paint's applicator tip, the tip is gently squeezed and moved as one draws to create the strings or threads as shown in figure 14.



Figure 14: Detailing with dimensional relief paint's applicator tip

With the paint still wet, the areas without dimensional relief paint as shown in figure 15 are enhanced by etching or scratching the painting off with the aid of a pencil to complete the piece.



Figure 15: Etching and scratching wet paint



Figure 16: Removing plywood backing from t-shirt

The piece is dried for some minutes after using the dimensional relief paint, the garment (T-shirt) is gently removed from the surface (1/4''plywood) by pulling it off and pulling the plywood from the garment (t-shirt). It is placed in a dry area for 72 hours to cure finally. See figure 14 above.

Other ways of enhancing garments are the use of Acripuff-heat Puff fabric paint. To paint with heat puff fabric paint:

- The fabric to be painted is coated with a thin layer of acrylic fabric paint.
- After 2 minutes of drying, the applicator tip of the heat puff fabric paint issued to make the desired design.
- It is dried for 24 hours

- After 24 hours it is, ironed at the back side of the design with heat of about 45C degrees.
- Complete the process; the garment is lifted gently and allowed to cool.

Figures 15-17 below show some examples of Acripuff paintings and figure 18 and 19 are samples of painted garment.



Figure: 17



Figure: 18



Figure: 19

Figures: 17 -19 Samples of Acripuff painted garments



Figure: 18



Figure: 19

Figures: 18 -19. Samples of painted garments

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3. CONCLUSION

The garment painting process encompasses creating patterns and permanent textures on Shirts, T' shirts, Jumpers and other garments. Various pigments are used to create quick, inexpensive and fun effective garments; every design is unique since all of them are hand painted with thickened dye. It has been established from the study that fabric painting is a creative way to transform plain fabric surfaces with unique designs. Even if one's drawing skills are minimal, there are a wide variety of stamps, stencils and other tools that could be used. Natural fabrics hold fabric paints better than synthetics, but one must make sure that the fabric paint is designed for the appropriate type of fabric. There are several methods of holding the fabrics firmly to enable effective painting. Embroidery hoop or attaching the fabric to a wooden frame and another suitable backing could be used for a stabilised base. Painting on clothing with suitable paints creates permanent wearable art; a good paint will not crack or fade when even machine washed and so painted garment may be used for many years. There are many manufacturers of a wide range of soft and dimensionally stable paints that may be considered.

The future of garment painting in Ghana is brighter if it can be integrated into women clothing and fashion to a greater extent. This is because over the years women have exhibited a preference to dressing in the more traditional styles of dress, whereas men usually wear khaki slacks, jeans and suits that is more akin to Western fashion in Europe and the Americas. However, pride in traditional Ghanaian dressing strongly prevails among most citizens, young and old. Even tourists are expected to embrace Ghanaian fashion when they visit the country. Garment painting, therefore, positions itself as a unique and one-stop decorating process that will assist in revolutionalising the local textile industry in the face of stiff global competition from factory printed fabrics. By extension, garment painting has further evolved the static way of exhibiting art (in an enclosed space) into a more mobile and outdoor way of exhibiting creative works.

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June 2019 - Fashion And Textiles Review, ISSN: 2665-0983