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Kanto; An Innovative Approach To Batik Production

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***Abstract:** Man's quest for variations in textile decoration, a branch of the creative arts which embraces any method of applying colour or design to a fabric is still invoked in the field of textiles. In the light of the above, this paper investigates the possibility of achieving accurate print definitions of design outlines in batik making with emphasis on coloured images using the screen printing technique. With this integrated approach, the practice-based research under the qualitative design methodology was employed. The result of the research shows that the Kanto print paste (a term coined out of the lead author's ethnic name), was formulated out of vat dye constituents, mixed with cassava powdered starch, integrated with batik technique, can attain a precise and accurate definite colour outline image when applied onto fabrics using the screen printing technique. The end products interpret the communicative dynamics inherent in screen and traditional batik design prints and showed innovativeness, diversity, contrast, harmony, multiplicity and stability. Once more, the research proved that such innovative batik prints have tremendous significance for contemporary batik design concepts to enhance batik fabrics in the Ghanaian fashion industry. However, further research need to be conducted on the Kanto print paste to prolong its preservation period.*

***Keywords:** batik, Kanto print paste, Binder, Thickener, screen printing technique.*

I. INTRODUCTION

Batik, a method of textile decoration is a creative form of self-expression in fabric design, using techniques such as resist dyeing, mordant printing and painting has initiated and developed from the Far East. Miles (1994) reiterates Herodotus' affirmation of indigo dyed, painted garments in the 5th century BC. The history of Batik and how long this method of decorating cloth has been practiced is difficult to determine with accuracy, nevertheless the royalty and peoples of Solo and Yogyakarta in Indonesia are traditionally thought to have dressed in Batik. A greater level of innovation can be achieved in textile design by integrating the traditional methods of textile production.

Butterworths (1967) explain that the word "batik" describes a sort of resist printing, known and studied as a native craft in Java, South-East India, Europe and parts of Africa. However, it is by its Indonesian name of "Batik" that the process is best known. Most scholars agree that it is in Indonesia that the skill of Batik making reached the highest degree of artistry (Kerlogue, 2004). This art form is widely known and practiced in Ghana and it enjoys an assortment of motifs, names and forms, which distinctly differ in appearance from different regions, areas and communities.

Growth in craftsmanship over the years has borne testimony to mankind's innate craving to design on substrates with the hope of exhibiting creativity, uniqueness and a sense of identity. And this creative art finds its expression in embracing any method of applying colour or pattern to a woven textile. Batik occurs when both sides of a material or certain areas of the fabric are covered with hot liquid wax (resist medium) by means of a block or a batik tube. The resist medium penetrates and seals parts of the cellulosic material to prevent those portions from receiving the dye when the waxed fabric is dipped into a dye tub.

According to Belfer, (1992), selective further waxing and re-dyeing allows a variety of colours of increasing depth to be built up. Furthermore, where complete colour changes are

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needed, the wax is completely removed with boiling water and the fabric washed, dried and re-waxed to cover areas that should be protected from further dyeing. Other integrative techniques adopted in batik making are tie-dyeing, discharge printing, mordant printing and painting.

The main objective in fabric decoration is the production of attractive designs with well-defined margins made by the creative arrangement of motifs and colours and therefore dyes and pigments are used entirely or intermittently to produce the required designs. Traditionally, printing is described as localized dyeing. The dynamism, which works between the dye and the fibre, is the same in dyeing and printing (Miles, 1994). Printing is therefore a form of dyeing in which the colours are applied to specified areas instead of the entire fabric and its resultant artistic effects is much more enhanced in value than the plain dyed fabrics.

Both printing practices belongs to the textile wet processing industry, becoming increasingly popular in Ghanaian traditional textile production and makes the concept of integration a possibility to explore. The concept of integration was introduced to improve upon the existing indistinctness of colour images and to explore their common purpose to translate different colour prints on fabrics using the two varied techniques. This concept of integration was characterized primarily as a process of merging the batik and the screen printing techniques with sufficient interaction to attain a harmonious newly formed entity. Its characteristics, therefore, included processes, combination, interaction, and harmony.

Restricting the colour to the design area, required a printing paste with a natural thickening agent which is available and easily accessible to traditional batik and tie-dye printers. Important materials commonly used as binders for traditional textiles are starch, natural gums, acacia derived from cereals, stems or roots such as corn, wheat, tapioca and cassava. The choice of cassava starch as the thickener for the Kanto print paste is as a result of the following characteristics when used in textile printing. They're high molecular weight compounds gives a better viscous paste in water below 90^0C since hot starch pastes continue to lose viscosity if maintained near boiling temperatures (Lund and Lorenz, 1984). They impart adhesiveness and softness to the printing paste so it can be applied to a fabric surface without spreading. They are capable of maintaining the design outlines even under excessive pressure. They hold or adhere the dye particles in the desired place on the fabric until the transfer of the dye into the fabric and its fixation are complete. Its viscosity is sufficiently high to prevent rapid diffusion of the colour through the fabric, in order to avoid poor print definition outlines. It has a stable paste viscosity, which allows an even and measured flow through the screen. The viscosity stability is not only durable in terms of the time during which the fabric is being printed, but even through the dyeing process, (Pfaff, 2008). The resultant cohesiveness ensures that the strength and the free flowing quality of the paste remains intact after its preparation and its execution (Radley, 1976).

Generally speaking, all cellulose fabrics including the regenerated fabric, viscose can be dyed with direct, vat and reactive dyes (Storey, 1985). This implies that the choice of fabric depends on the type of dye and the procedure used to create the resist onto the fabric. This also implies that any framework that can absorb dyes should be capable to retain the resist after dyeing. Materials that give satisfactory results in the above techniques are mercerized cotton, viscose rayon, and hussy fabric, linen and corduroy. In this paper, mercerized cotton fabric was used as this has high affinity for dye.

Batik has become a popular designed fabric produced all over the regions of Ghana. This has been incorporated into our cultural history, especially in its aesthetics, uncomplicatedness and its custom designed-effectiveness of its products for domestic use. The introduction of this craft has encouraged local men and women with a special blaze in cloth design to express their creativity in batik production activities as a means of providing livelihood for economic sustenance.

Taking cognizance of Kadolph's (2007) assertion that screen printing is by far the most used technology today, the dynamics of batik cloth production techniques in Ghana, has acquired a new dimension with the integration of synthetic print paste via the screen. Such products have gained acceptability as a traditional procedure among local batik producers irrespective of the scarcity and high cost of the foreign components in its production in the local market. Consequently, the need for its substitute became very obvious and gave rise to this innovation by formulating a local print paste capable of achieving the same results if not better. The concept is to introduce variety and improved unusual type of batik which adds value and excitement to dress making and contemporary fashion in Ghana.

So far, the medium of resist used in batik production in Ghana and else way is the cooked starch as Braide and Adetoro, (2013) recounts: as it is the technique employed by Nigeria dyers in the process of *Adire*. The method of execution is either by free-hand painting of the cooked cassava starch, *Lafun*, in the fabric or by stenciling the starch on the material. The stencils are made with corrugated zinc or a perforated tin sheet which allows the starch print on the fabric. Kadolph's (2007) suggest the use of screen print method in Nigeria to produce the *Adire* using cooked starch paste with the aid of a squeegee to force the paste out of the screen onto the fabric. Picton and Mack (1989) also affirm the use of cooked cassava starch mixed with a small amount of copper sulphate to produce the *Adire Eleko* resist dyed fabric using the same procedure mentioned above.

II. MATERIALS AND METHODS

The study mainly employed the practice base research that depended on studio activities. The following materials were used: 100 % mercerized cotton, vat dye, powdered cassava starch, tracing paper, distilled water for recipe preparation, mild detergent, heat source (coal pots), metal bucket, aluminium/stainless pots, plastic palette bowls, cups and spoons, big plastic bowls as dye-baths, rubber gloves, thumb-tacks, small plastic palette bowls for measuring dyes, P.V.A (Carpenters glue), Potassium dichromate, wax, sodium hydrosulfite (Na_2S2O_4), sodium hydroxide (NaOH)), aprons and wooden ladle. Tools and equipment employed in the project included, a pair of scissors, staple machine and pins, Cutting tool, Coating trough, squeegee, pens and pencils,

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mesh, cello-tape, a ruler, tjanting, masking tape, working table, pressing iron, working shed, camera, computer, water reservoir for washing and Wooden frames.

A. PRELIMINARY PREPARATIONS FOR PRINTING

Due to the chemical content within the home-made Kanto paste, initial experiments were conducted on the photographic screen developed to ascertain its effectiveness of accommodating the Kanto print dye paste during the printing process. This was extremely important as noticed, that the chemicals corroded the photographic film on the screen. To avert this initial hitch, the next screen developed was reinforced with lacquer on the inner part of the screen. This proved highly successful upon printing. To commence with the project, colour separation of the design to be printed were made and the two screens produced for the two separate colours of reddish brown and green.

In this regard, two printing procedures consisting of the Kanto prints (Experiment I) and traditional batik prints (Experiment II) were employed on two separate fabrics to achieve an accurate coloured print image of definite outlines in batik making.

B. MATERIALS

The two sets of 3 meters mercerized white cotton fabrics for both the traditional batik print and the Kanto screened print were used as the substrate for dyeing and printing. (However, it must be noted that waxed dyed fabric can be used as the based fabric instead of a plain white fabric for the Kanto production; examples are shown in Fig. 9 and 10). The geometrical properties of the white cotton fabrics are given in Table 1.

Fabric	**Ends/cm**	**Picks/cm**	**GM. /m2**	**Warp Count (Ne)**	**Weft Count (Ne)**
100% Mercerized cotton	36	34	142	40	40

Table 1: Geometric parameters of 100% mercerized cotton fabric

C. DYES AND CHEMICALS

The following chemicals and dyes were used to formulate the home-made Kanto print paste for printing on a 3 meter cotton fabric for the first experiment. The details of the dyes and the chemicals used are given in Table 2.

Dye and Chemicals	**Quantity**	**Functions**
Reddish brown vat dye	42 grams	Dyeing
Green vat dye	42 grams	Dyeing
Sodium hydrosulfide	84 grams	Reducing agents
Sodium hydroxide	84 grams	Reducing agents
Powdered Cassava starch	28 grams	Thickener
Cold water (30°C)	237 ml	Solvent for mixing
Sodium Chloride	84 grams	Exhaustion Agent

Table 2: Functions, quantities and dyes and chemicals used for the Home-made Kanto print paste

D. PRODUCTION PROCEDURE FOR THE HOME-MADE KANTO PRINT PASTE

The 84 grams of sodium hydroxide were measured into a plastic palette bowl, mixed with a little amount of cold water enough to dissolve, stirred and set aside. 42 grams of the chosen powder dye were mixed with a little amount of warm water enough to dissolve in a separate palette bowl, stirred to mix and set aside. 84 grams of sodium hydrosulphite were also mixed in a different plastic palette bowl with a little amount of hot water enough to dissolve and stirred to mix. The hydroxide solution was first poured into the bowl containing the dissolved dye, and the sodium hydrosulphite solution added to the two mixtures; and stirred to mix thoroughly. Lastly the powdered starch was added gradually to the mixture with the finger and stirred as the particles drops into the mixture to form the desired paste consistency. All the preparations and well homogenized printing pastes were applied to the fabrics within 30 minutes of preparation using a flat lacquered silk screen as seen in fig. 1 to fig. 3.

Figure 1: Preparing the “Kanto” print

Figure 2: Pouring the print paste unto the screen for printing

Figure 3: Completing the printing process

Figure 4: Completed print is then waxed by sprinkling before the final dyeing

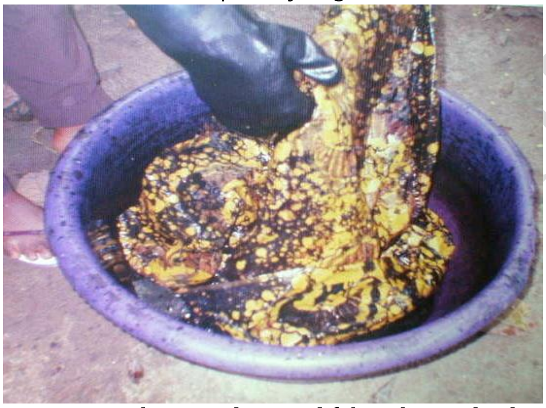

Figure 5: The waxed printed fabric being dyed

Figure 6: After oxidation the fabric is De-waxed by immersing it in hot water and rinsed

Figure 7: Effect after completion

Figure 8: Robed in Kanto print

Figure 9: Sample of Fabric waxed and dyed before printing

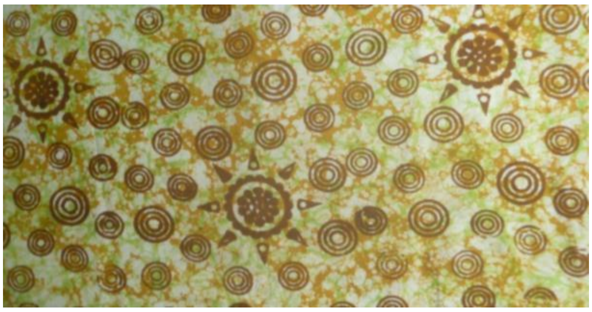

Figure 10: Sample of Fabric waxed and dyed before printing

With the two colour design prints, the whole printing process using different screens with its matching dye colours (reddish brown and green) were used before the fabric was finally removed from the printing table for drying. Intensity of colour and dye penetration into the fabric depends on the number of times the squeegee is drawn across the screen and the pressure exerted on the squeegee. Dyeing actually takes place on the fabric as the squeegee presses the Kanto dye paste through the screen onto the fabric. For effective work, firm contact between the squeegee, the fabric being printed and the screen printing table is needed.

The screens were checked periodically for breakage or leakage and the outer and inner surface of the screens cleaned regularly with a soft, slightly damp rag to speed up drying. This helped prevent blockage of the screen and also avoid staining the fabric being printed. The screens were allowed to dry well before being used again to avoid the edges of the wet masking paper tape on the wet screens to stain the printed fabric. As mentioned earlier, the fabric is not removed from the printing table immediately after one colour print, but is left on the table until all colours have been printed (Fig. 3). The screen is washed immediately after use and dried in a cool, dry place away from the direct sunlight. The fabric was allowed to dry completely, before the commencement of the waxing process. To combine the above process with the batik technique, both sides of the printed fabric were sprinkled with wax and a lighter shade of golden yellow dye applied to the fabric by immersion (Fig. 4 and 5).

E. DYEING

To exhaust the dye bath of its dye, 84 grams of common salt were dissolved in warm water and poured into the dye bath after 20 minutes of dyeing by removing the dyeing fabric first from the mixture, stirred before immersing the dyeing fabric back into the dye bath. Exhaust dyeing was carried out at liquor ratio of 1:25. Dyeing of fabric was carried out at 60^{o}C for 60 minutes as prescribed by the manufacturer. The dyed material was subjected to an oxidation treatment by exposing it to atmospheric oxygen normally called “air oxidation” or “airing” for 15minutes. After oxidation, excess deposits of dye and chemicals in the dyed fabric was rinsed in clean running tap water, de-waxed in hot water, and then rinsed with clean tap water (Fig. 6).

F. FIXATION

Fixation was achieved by the ‘soaping’ process. The material then was treated in hot soap solution or a mild detergent solution for 10 minutes. After the soaping treatment the dyed material was rinsed again thoroughly and finally dried in a cool airy place. Ironing was done while the fabric was leather dry with a pressing iron at a temperature of 120^0 -140^{0}C for 5 minutes.

The process conditions for dyeing, oxidation and ironing are given in Table 3.

Parameter	Value
Exhaust dyeing liquor ratio	1.25
Dyeing temperature	60^{0}C
Time of dyeing	60 min.
Oxidation period	15 min.
Fixation time	10 min.
Ironing Temperature	120^0 -140^{0}C

Table 3

EXPERIMENT II

A. DYES AND CHEMICALS

The following chemicals and dyes were used to prepare three sets of vat dye recipes at different stages of the production process for the dyeing of 3 meters of mercerized cotton fabric. For the three colour batik fabric experiment, waxing and dyeing was done three times. With the exception of the yellow vat dye recipe; ratio of 7 grams of dye -28 grams of Na_2S2O_4 -28 grams of NaOH. Blue and violet dye ratios used what has been registered in Table 4. The details of the dyes and the chemicals used are given in Table 4.

Dye and Chemicals	Quantity	Functions
Blue vat dye	28 grams	Dyeing
Yellow vat dye	7 grams	Dyeing
Violet vat dye	42 grams	Dyeing
Sodium hydrosulfide	42 grams	Reducing agents
Sodium hydroxide	28 grams	Reducing agents
Cold water (30°C)	237 ml	Solvent for mixing
Sodium Chloride	84 grams	Exhaustion Agent

Table 4: Functions, quantities of dyes and chemicals used for the three sets of dye recipes

B. PREPARATION OF THE THREE RECIPES

The general trend for each of the three dye recipes followed the same appropriate parameters described in Table 4 for Experiment II. For the blue vat dye recipe as an example 28 grams of sodium hydroxide were measured into a plastic palette bowl, mixed with cold water and stirred to dissolve and set aside. 28 grams of the blue powder dye were mixed with warm water in a separate palette bowl, stirred to mix and set aside. 28 grams of sodium hydrosulfite were also mixed in a different plastic palette bowl with hot water and stirred to mix. The hydroxide solution was first poured into the bowl containing the dissolved dye, and the sodium hydrosulfite solution added to the two mixtures; and stirred to mix thoroughly. Lastly, all the three sets of recipe preparations were applied to the fabric using dyeing by immersion.

Before dyeing, sketched pencil designs were made on the fabric and stretched onto a leather padded work table. Employing the tjanting and stamping techniques the melted wax was transferred onto the fabric (Fig 11 and 12).

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C. DYEING

All the three sets of dyeing, starting from blue, then yellow and lastly violet preceded with waxing or re-waxing certain portions before dyeing (Fig. 12, 13 and 14). To allow easy penetration of dye and even dyeing, the waxed fabric first went through a wet-out process and then frequently turned intermittently within the dye bath after every 20 minutes of the dyeing process. The form of dyeing was by immersion using the procedure recommended by the dye manufacturer. To exhaust the dye bath of its dye, 84 grams of common salt were dissolved at each set of dyeing with warm water and poured into the dye bath after 20 minutes of dyeing by removing the dyeing fabric first from the mixture, stirred before immersing the dyeing fabric back into the dye bath. In each case, exhaust dyeing was carried out at liquor ratio of 1:25. Dyeing of fabric was carried out at 60^{o}C for 60 minutes. The dyed material was subjected to an oxidation treatment after every stage of the three dyeing processes by exposing it to atmospheric oxygen normally called “air oxidation” for 15minutes. It was only at the last stage of the dyeing process that excess deposits of dye and chemicals in the violet dyed fabric was rinsed in clean cold water after oxidation and dried in a cool airy place. The dyed fabric was then de-waxed in hot water and rinsed with clean tap water.

D. FIXATION

Fixation procedures and parameters used for the batik fabric was the same as that of the Kanto printed fabric stated above (Table 3).

Figure 11: Waxing fabric with a wooden designed block

Figure 12: A waxed cotton fabric ready to be dyed

Figure 13: Re-waxing of the dyed blue fabric

Figure 14: Waxed printed fabric ready to be dyed yellow

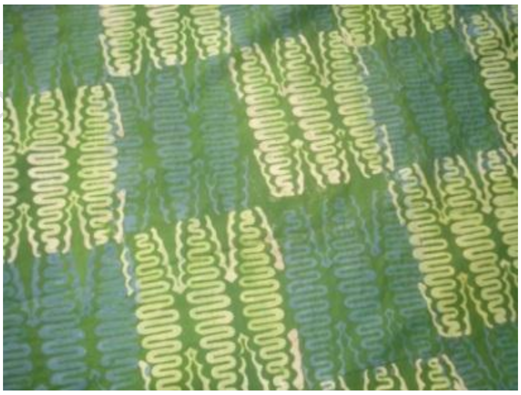

Figure 15: Waxed fabric dyed yellow ready for the last colour

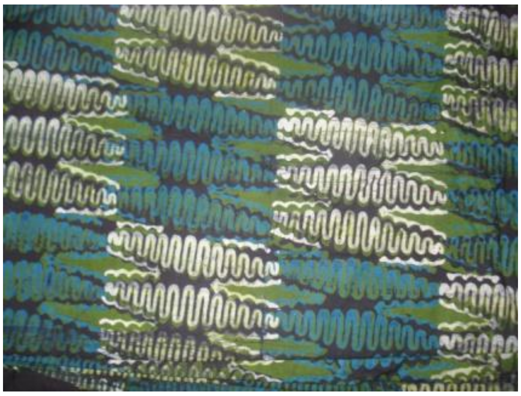

Figure 16: Final fabric dyed violet

Figure 17: Close shot of the batik print

Figure 18: Close shot of the Kanto print

III. RESULTS AND DISCUSSION

To effectually integrate traditional batik printing technique with the hand silk screen printing technique using a Kanto print paste, a locally prepared mixture of vat dye recipe and powdered cassava starch, (as a thickener and a binder) was used to produce a Kanto print batik (Fig: 7 and 8). The result was compared with the traditional batik print (Fig: 16) prepared under similar conditions. Whereas the introduction of colours by one is tub dyeing after waxing, the other is by screen printing and tub dyeing. Most often than not, waxed areas get cracked in the course of tub dyeing registering hazy and undefined or undesired outline images (Fig: 17). With the printed paste, more colour images are restricted to defined areas with sharp outlines that gives definite images (Fig: 18).
To avoid the chemical constituents of the paste from corroding the screen materials used for the various processes, wood was used instead in the construction of the screen frame and the screen coated with lacquer to strengthen the photosensitive film of the developed screen (Fig: 2). The composition of the Kanto print paste is technically determined not only by the dye recipe used, but by the printing technique, the substrate, the application and the fixation methods applied.

The hydrated cellulosic fabric having increased in hygroscopicity due to its mercerization adds strength and improves the dye affinity. From the chemical point of view, such reaction led to the formation of alkali cellulose, which intensified swelling of the fibres and structural reactions for maximum water absorption to compensate for its low diffusion rate. The changes in the physical properties made it more permeable providing easy and free access for the vat dyes and chemical solutions to diffuse into the fabric. Additionally, one important realization for this successful dyeing with vat dyes is its control of how and when the pigmentary colours were converted into water soluble colouring chemicals, prepared under conditions which diffused uniformly into the fibres of the fabric applied (Aspland, 1991).

Exhaustion in the dyeing process, was accelerated by dyeing the last colour on the printed fabric in a warm dye-bath by immersion as the heat introduced in the course of dyeing generated enough energy to transfer the dye molecules from the solution to the fibre as well as in swelling the fibre to render it more receptive. The raising of the temperature within the dye bath during dyeing accelerated the processes of diffusion also, especially into the fibre.

The high quality fine woven mesh used to support the Kanto printing technique reflected on the ease of paste transfer via a squeegee to give a sharp edged images on the fabric. The screen printing technique adopted proved to be a good option for the multi coloured prints as it unveils the quality of the process in addition to its compatibility that allowed the major components within the Kanto print paste, including clarity of colour dyes, chemicals and thickener to physically bind and chemically diffuse into the fabric. Thus the dye recipe applied to the fabric became chemically and physically incorporated into individual fibres. The cassava starch added to each print paste controlled viscosity, fluidity and influenced print quality (Fig: 18). Comparatively, the Kanto paste gave a better higher colour shade result than the traditional batik print produced under the same conditions (Fig. 17 and 18).

The characteristics of the resultant formulation had the following, essential parameters that perfectly agree with any standardized print paste. The flow properties were consistent, stable viscosity for a duration of 30-45minutes at room temperature, high adhesiveness, drying rate of 10-30 minutes at 60^0C, better press performance during the print stages and stability on ageing within 30-45 minutes duration was observed.

There was a noticeable sheen improvement in the results of both the Kanto print and that of the traditional batik print as both fabrics engaged in the same fixation treatment. The visual colour images of the Kanto printed fabric relatively were better between the two techniques (Fig: 17 and 18). However, instead of colouring the whole fabric as in traditional batik dyeing, the Kanto print paste was applied only to define areas to obtain the desired pattern. With respect to dyeing technology, the actual dyeing process of the Kanto print imparted within the fibres of the fabric took place on the printing table and not exactly in the dye bath.

Every motif or shape had a clear and definite edges. The compactness and definite outline of the design was built on the basis of mathematics and chemistry; a practicing of science that combines theory, skill with technology (Fig: 18). An example is the control of the dye print paste and the well-controlled printing speed that cumulated to the quality of print. The similarities of this resist process seems to be in the reverse in that the blocked areas of the screen just like wax as a medium of resist, prevents the dye or paste from penetrating unwanted areas of the fabric, leaving "blanked" areas in its path as the process is repeated over and over again. In the same vain, the batik process employed repeated waxing and tub dyeing to achieve the final result. Such process requires mastery firstly of colour mixing and application of technique.

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In view of this, it became apparent that in applying wax, the need to regulate the temperature of the melted wax in order for it to penetrate the fabric no matter what method of waxing is adopted is paramount if a better image print is to be achieved. The realization was that areas where thin layers of hot wax were used often allowed the dye to seep through the waxed area, creating undesired results, whereas a thicker buildup wax keeps the dye off. The introduction of Kanto print in batik making not only speed up the process, but also helps to establish a definite print images in its production, an indication of the deficiency in batik prints. This also imply that the procedures and characteristics of batik when combined with Kanto prints proofs to be a fascinating relationship and a feasible possibility. The two techniques adopted best showed a distinct harmony between the batik coloured areas and that of the definite lines created by the screen print to give a subtle, detailed filling of multiplicity of colours in the background of the Kanto print.

Kanto print technique engages darker colours first before a lighter colour. In screen printing, the general rule is that the lightest or brightest colours are printed first on the fabric before the darker colours because of the blends of successive colour built-up in over dyeing. In Kanto prints also, each colour used is distinct at the background and retains most of its true colour due to the sprinkling of wax over the entire fabric after printing to help maintain most of the original colours printed. Tub dyeing with a lighter colour at the end of the process reinforces the two techniques and virtually retains the tone of each colour introduced. To get the wax and any excess dye out of the fabric, de-waxing was done by submerging the whole fabric in a boiling water after rinsing the dyed fabric with water void of any liquid detergent. This was done to avoid the excess dye from discolouring the de-waxed areas in the course of the de-waxing process. Eventually the designed fabric visually revealed a taste of rhythm and complexity in design void of irregularities in colour qualities.

This batik concept branded as Kanto print creates a new artistic appeal that opens up numerous ingenuity and artistic possibilities. The blend of colours and shape of motifs used accolade and distinguish clearly the characteristics of a batik fabric. Though the two techniques adopted utilizes individual design elements related to each technique, the composition as a whole showed marked unity and coherence revealed by the relationship between the open spaces and the motifs used. These combined characteristics accentuate the screen printing appeal on batik fabric that co-exist between screen print technique and the complexity of traditional batik artistry. An important property of the piece is its durability. It is strong, fast to washing and light just as the traditional batik. Again, this marketable textile print can challenge batik practitioners to new innovations that offers customers option to choose from.

Complimenting on the print paste and the dyeing processes, the end product accentuate aesthetic dynamism, characterized with asymmetrical forms, elegant figurative and geometrical elements. The entire design product conveys the energy and thrill of activities evident in the subtle rhythmic movement peculiar to African textile designs (Asmah, 2013).

IV. CONCLUSIONS

The screen printing technique and the batik technique employed in this production, affirms the fact that Kanto fabrics can effectively achieve high marketable quality products. Combining these two techniques into one fabric print presents an effective platform for creativity in the batik industry. It also suggest that such incorporation could be an avenue for additional possibilities to enhance traditional batik products.

Categorically, batik techniques integrated with other techniques could be an effective means to provide alternate and unlimited opportunities for artists to explore its maximum economic benefits. The outcome of this study provides hope for our traditional batik products and the work of contemporary artists in exploring various textile thickeners/binders and techniques to finish their products. The results are that, such integrative interventions added to the existing traditional batik technique can increase the options available to both producers and consumers.

This unfolding new hybridized tradition transpired suggest a new territory for Kanto prints in Ghana and bring out a new artistic and entrepreneurial opportunity for the country. In this regard, introducing Kanto prints to the world, indirectly will attract foreign investment inflows that will eventually lead to the development of Ghana.

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