

BATIK WITH GUTTA USING RESIST TECHNIQUES

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Abstract: In Indonesia, our ancestors since prehistoric in Banten precisely, has made batik from rice pulp starch as cover the fabric, called simbut. Simbut (Sundanese) means blanket. Before wax was used for batik, our ancestors have known simbut with batik technique since a long time ago. This simbut fabric using the resist technique, for the color barrier is used ketan rice pulp / pulut rice which is melted and mixed with liquid brown sugar. The coloring technique still uses natural dye materials of this type of herbs.

Batik that the author made using gutta as cover on the design with resist technique, using silk fabric. Gutta is used as a color barrier that can prevent the rate of liquid silk paint to the unwanted place in the design/separate colors. Batik with gutta media is just an alternative media in batik to easier in the making, and speed up the production. The process of making batik using gutta is safe for children because the gutta used does not require heating. If an error occurs in applying gutta, it is easy to fix.

Keywords: Batik, Gutta, Resist Technique

PREFACE

The progress of the batik industry requires us to be more creative, batik not only as a sacred product used in traditional ceremonies but has penetrated into a profane direction, especially as a fashion product. Therefore, batik is now not only limited to a fabric made with traditional techniques by using canting and melted wax but has evolved using advance technology.

In Indonesia, our ancestors since prehistoric in Banten precisely, has made batik from rice pulp starch as cover the fabric, which is called Simbut. According to Yudoseputro (2008, p. 216) : "Kain simbut dari Priangan adalah contoh batik asli yang dibuat dari bahan kanji ketan sebagai penutup kain" Simbut (Sundanese) means blanket. Before wax was used for batik, our ancestors have known simbut with batik technique since a long time ago. This simbut fabric using the resist technique, for the color barrier is used ketan rice pulp / pulut rice which is melted and mixed with liquid brown sugar. The coloring technique still uses natural dye materials of this type of herbs. "This method of simbut making ever done by Craft major faculty of art Indonesia Art Institute from Yogyakarta introduce classic batik and open batik training using simbut method" (Video Hidupkan Lagi Metode Batik Simbut yang Aman, 16 Maret 2016).

Batik Innovation

In a research conducted by Novita explain about batik innovation that has triggered consumption of clothes in larger amount both for formal and informal events, (Prasetyo, 2010 in Novita, 2012, page 1), “Innovations in the art of batik making in Yogyakarta, (especially in motifs, colors, and materials) have been triggering a larger amount of consumption of clothes for both formal and informal events”. (Prasetyo, 2010). Furthermore, also presented about the look of batik a new trend unique, interesting and varied: “Along with the development of the art, batik has emerged to become a trend with a new decorative look that is unique, interesting and varied. As such, now batik is highly favored by the people of Indonesia”. (Novita, 2012, hlm. 1). Yasmine F.J dan Zaini Rais, (2013, p. 3) doing research on Exploration of Contemporary Batik Technique with Puff Screen on Fashion Product, with the concept: “The basic concept of making this work is to provide new innovations in the textile world and add value to the development of batik techniques for fashion products”. The design research is done by Yang Li, Chang-Jun Hu, and Xin Yao to produce patterns like Innovative Batik by using Interactive Evolutionary Algorithm (IEA) as follows:

This paper describes an evolutionary art system, which explores the potential ability of evolutionary computation in Batik design. We investigate the use of Interactive Evolutionary Algorithm (IEA) in our system, with the goal of enhancing user’s creativity to generate innovative Batik-like patterns. We focus mainly on two crucial aspects of the system. (Li Y, Hu CJ, dan Yao X, 2009, p. 1035)

Iwan Tirta, a famous designer and Indonesian batik maestro, doing a lot renewal both in terms of materials and batik design. Now, developed batik that apart from altogether elements of grip, such as batik that produced by Iwan Tirta has been intensively introducing batik to the world fashion scene. They have done a lot to promote Indonesian art in the form of batik dresses, as revealed by Moersid in the Scientific Journal WIDYA (2013, p. 127) as follows:

Banyak temuan Iwan Tirta selama hampir empat dekade dari tahun 1970 an hingga awal 2000 an di bidang batik, namun sumbangan terbesarnya adalah mentransformasikan kain batik tradisional yang semula hanya dikenakan sebagai *jarik*, kain panjang tradisional Jawa ukuran tertentu yang dililitkan di tubuh, menjadi busana gaya Barat yang mampu mengikuti selera zaman. Dengan mem ‘*blow out*’ (memperbesar) ragam hias batik dan menyesuaikan posisi pola letak batik dari semula hanya terbatas vertikal pada *jarik* menjadi horizontal sesuai dengan pola busana Barat, maka sekaligus tercipta dimensi baru batik yang dapat direproduksi dalam dimensi dan volume yang tak terbatas jumlahnya.

Iwan Tirta’s contribution is to transform traditional batik originally worn only as a *jarik*, traditional *kain panjang* of Java that wrapped around the body, become a Western-style dress who were able to follow the tastes of the times. By enlarging the motif of batik and batik layout patterns adjust the position from the beginning is only limited to vertically on the horizontal into accordance with *jarik* pattern of Western fashion, then at once created a new dimension of batik can be reproduced in dimensions and the volume is infinite in number.

The above shows that exposure to so many efforts are being made to develop batik, both in terms of technique, materials, or other development in the field of fashion. In some countries, batik made by using glue as a replacement for the wax. "Here is a much modified version of Batik using blue gel glue and acrylic paint which gives similar results for much less mess and hassle. This is a fun project for adults and kids alike!" (Michelle, 2015). Other opinion: "Batik is a wax-resist fabric dyeing technique that originated in Indonesia. To make batik-making more child-friendly, wax can be replaced with white glue or blue gel glue to make various exciting batik crafts and projects". (http://www.firstpalette.com/Craft_themes/Colors/gluebatik/gluebatik.html). In Ghana there is a batik t-shirt using wet dyeing technique, described in the research conducted by Asmah Et Al. (2016, p. 1) "This paper investigates the prospect of utilizing appropriate materials, techniques and a coordination of individual creativity to achieve an innovative wet dyeing T-shirt batik print". In Malaysia, batik made using wax materials and also use lacquer/laker as the resist, especially on batik silk screen/filter/batik print. The following explanations such as "bahan lacquer/laker – sejenis campuran bahan tinner dan emulsion yang dimasukkan ke dalam kelongsong stensil untuk melukis corak pada skrin – bertindak sebagai lilin yang menghalang bahan pewarna daripada meresap ke bahagian-bahagian yang telah ditutup dengan lacquer". Translation in the English is "ingredients of lacquer/laker – a kind of mixture ingredients tinner and emulsion which is inserted into the cladding stencils to paint a pattern on the screen – acts as a wax that prevented dye rather than seep into the divisions that have been covered with a lacquer". (Joe A, 2010).

Gutta

Gutta-percha/gutta belongs to the family Sapotaceae. This plant family comprising tens of types, including Palaquium. Palaquium, gutta-percha type commonly known as gutta-percha Isonandra, most sought and used in the production of the gutta-percha. . "Gutta percha adalah cairan getah murni yang dapat mengeras dan berasal dari pohon Sapotaceae yang dapat dipadatkan, terdapat di Semenanjung Malaysia dan pulau-pulau sekitarnya serta pada daerah tropis yang pertama kali dijumpai oleh Isonandra Gutta". (Parulina T, 2004, p. 3). Parulina said that: gutta-percha is is pure liquid sap hardens and can be derived from the tree of the Sapotaceae that can be compacted, found in Peninsular Malaysia and nearby islands as well as in the tropics which was first encountered by Isonandra Gutta. In Indonesia, Gutta plants widespread in mountainous areas on the islands of Sumatra, Bangka, Kalimantan and Riau. Gutta was originally used as the most suitable material for the isolation of undersea cables. Currently the gutta-percha is used in the field of dentistry as a root canal filling materials. "*Gutta percha point* merupakan bahan pengisian saluran akar golongan plastis yang paling banyak digunakan di kedokteran gigi". (Parulina T, 2004, p. 3). In silk painting, gutta is used as media resist, as the pasta to cover design. Gutta was act as a barrier to dye or paint, serves keep color in areas that are restricted to the lines of the design.

Resist Technique

The resist technique is coloring techniques commonly used in silk painting to create boundaries that restrict the flow of colors so as not to extend above the silk fabric. Resist technique described by Stolze F (2009) that “Serti or resist technique is a method used in silk painting to create boundaries which limit the free flow of silk”. This resist technique not only used in silk painting, but used also in traditional batik with the use of wax, Salma stated that the wax layer in the form of lines written on cloth will quickly freeze is exposed to air. The layer of wax is what will interrupt the dyes seep on cloth, as in the following excerpt: “Lapisan lilin berupa garis-garis yang ditorehkan pada kain akan cepat membeku terkena udara. Lapisan lilin inilah yang akan merintangikan bahan pewarna meresap pada kain”. (Salma, 2013, p. 87).

Batik in this paper using a resist technique (cover or fence) which is used as a silk painting techniques. The Serti (closing or fence) technique is the silk painting technique where designs are outlined with gutta or water-based resists, which are applied to white silk that has been pre-washed, dried and stretched (on a stretcher).

Once the gutta or water-based resist has dried, it acts as a barrier for the dye or paint; keeping the color within the outlined areas of the design and allowing you to achieve sharply defined borders. After the dye or paint has been properly set, the clear gutta or resist is removed and a defining line the color of the original fabric remains. Colored guttas and resists are also available that are meant to remain in the fabric. ([http:// www. dharmatrading.com/ techniques/silkpaint/silk-painting-techniques.html](http://www.dharmatrading.com/techniques/silkpaint/silk-painting-techniques.html))

Batik that the Authors create using batik gutta as a cover on the design with the technique of resist, using silk cloth. Gutta acts as a color barrier can prevent the rate of liquid silk paint to place unwanted in design/separate colors. Without this barrier, dyes or paint will flow into the place or design. The color used is the color of the reactive substances, this method requires special dyes in dyeing, called reactive dyeing. The current reactive dyeing is one of the most important techniques used for staining of fiber cellulose. Such as stated by Rashid Et Al. (2012) in Gürses A, Açıkyıldız M, Güneş K, Gürses, M.S. (2016, p. 58): “Nowadays, reactive dyeing especially is one of the most important techniques used for the coloration of cellulosic fibers. The reactive dyes cover a wide range of dyes having varying shades, fastness, and costs as well as high brilliancy, easy applicability and reproducibility”.

The Steps Making Batik Using Gutta

Step 1: Preparing Silk Fabrics

Wash the silk by hand and use detergent then rinse. Then soak in soda ash water for 24 hours. After 24 hours, lift and dry. Silk fabrics are ready for use after being first ironed in a suit for silk.

Step 2: Make *The Design*

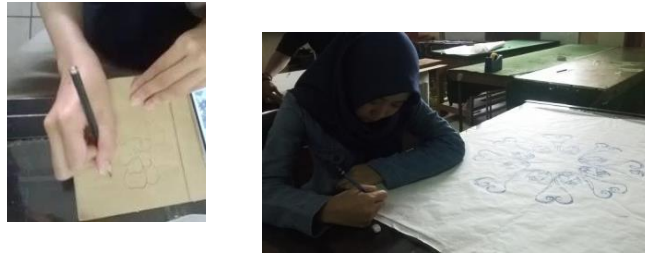


Image 1. Creating Motif Design. (Source: Private Collection)

Sketch the design on a piece of paper, first with a pencil then thicken it with a black marker, this will be a design pattern (image a). Then make a design with a 1: 1 ratio on the bread paper (image b).

Step 3: Preparing The Frame



Image 2. Preparing The Frame. (Source: Private Collection)

Wooden frame used to spread the cloth to be draw. Frames can be made of wood or other materials, can even use unused photo frames. The wood should be soft enough to allow the pin to be easily plugged into the wood. The frame to be used should be coated with duct tape or wood paint so that the color does not stick to the wood. This will result in paint translucent /sticking to the wood and difficult to clean, so it will contaminate the fabric that will be unfurled.

Step 4: Spreading The Silk



Image 3. a.Spreading the Silk; b. Attaching Silk Fabrics with Pins on the Frame.

(Source: Private Collection)

Stretch and stretch silk over the wooden frame, so stretched firmly, reinforced with some kind of special pin for fabric.

Step 5: *Tracing The Design*



Image 4. Move the Picture Pattern onto the Silk. (Source: Private Collection)

Designs that have been made on bread paper must be moved by redrawing by reference or copying the image. Put the silk over the design pattern, by using a pencil move the design onto the silk by tracing the design line traces.

Step 6: *Applying Gutta*



Image 5. The Gutta Process. (Source: Private Collection)

Hold the applicator bottle containing the gutta vertically with the tip touching the fabric, drag the lines gently and slowly when drawing the lines on the patterns that are already available. Make sure that each shape is completely sealed with no gaps to prevent the color from seeping. Make sure the back of the fabric has been closed by resist. If not, it is necessary to apply a resist on the back. Let it dry.

Step 7: Coloring



Image 7. Coloring Process. (Source: Private Collection)

Before applying color to the silk, first mix the color as needed. If you want a light color, add mineral water. Use a soft brush to sweep of the dye into the center area surrounded of the gutta. Do not make brush strokes, but dye slowly and firmly toward the line, the color will flow by itself.



Image 8. Color Tests Process on Silk Fabrics. (Source: Private Collection)

After the dye is processed, it should be tried first on the same type of fabric, whether the color is in accordance with the color that desired.



Image 9. Silk Coloring Process. (Source: Private Collection)

Step 8: Steaming



Image 10. Steaming Clothes That Have Been Colored. (Source: Private Collection)

If you have finished applying the dye onto silk or silk scarf, it is necessary to process the dye because the dye is not yet permanent until the dye is processed and finally can be washed and the color does not fade. How to process dyes depends on the chemical dyes used. Before purchasing the dye should read the instructions thoroughly to determine whether the required procedures are in accordance with the work to be made. For this work, reactive dyes are used which require steaming process, Steaming will produce more brilliant color and fastness.

Result of Batik with Guta



a



b



c

Image 11. Batik Gutta by: a. Asmi Retna; b. Sutarno; c. Arie Fujiana. (Source: Private Collection)

CONCLUSION

Batik with gutta media is just an alternative in the Batik material for ease processing and speed up production. The process of making batik by using media gutta safe (especially for children) because cover material wax replacement (gutta) used does not require heating up. If an error occurs in the wearing of gutta, easy to fix. The time it takes relatively short when compared to the traditional process of making batik using a wax.

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