Designing Batik Motif with Digital Pattern Method
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Abstract
Batik fabric is a traditional cultural form from Indonesia, developed initially solely for use of the King and his followers. In modern society, batik has spread more widely into everyday wear for Indonesian people. Batik motifs are made following the market needs and must constantly be updated to cater to changing fashions. Therefore, the author provides training to the younger generation in the digital construction of new batik patterns. The methods used in this training are presentation, tutorials, practicums and discussions.

Keywords: Batik Motif, Digital, Pattern

1. Introduction
Batik is a distinctive Indonesian culture that has worldwide, this is evidenced by the recognition by UNESCO of Indonesian batik as a non-material culture native to Indonesia. Since the recognition of the UNESCO, the Indonesian people increasingly love batik.[1] This love is proven by the suggestion from the government to wear batik as a school uniform, Indonesian people began to use batik clothing in daily activities both formal and informal. In addition, batik artisans are also competing to develop motif designs, coloring and manufacturing batik-based clothing products.

The batik-producing regions in Indonesia were originally located in the Solo, Yogyakarta, Cirebon, Sidoarjo and Madura regions, but after the recognition of Indonesian batik, the production of batik became widespread in several regions in Indonesia, mainly in East Java. Each region competed to develop batik motifs by raising the local city icon as batik motifs. The development of batik motifs is not only developed by batik artisans.

In this modern era, it is closely related to the use of technology in everyday life. In the world of art and design the influence of technology is also very large, especially in the production process that currently has computer-based graphic software used in making designs.[2] This technology can also be applied to facilitate the design of batik motifs. Creating a batik design with a drawing technique, certainly requires a long
process, besides that in making this digital-based design we can try some simulations of coloring batik motifs that we will make.

Starting from these problems, the service team felt the need to conduct training on making batik motifs digitally to students at school. In this activity the service team provided training to teachers at each school representative, so that the teacher could assist students in their work.

2. Literature Review

There has been a lot of research focusing on batik motifs, Salma and Eskak have done the development of Aceh Gayo batik motifs with the ideas of Aceh Gayo kerawangan carving. [3] Mulyanto and Hartanto developed the Ponorogo batik motifs by developing reyog art ideas [4] Salma, Ristiani and Wibowo developed batik motifs from Papua traditional tools [5]. From some of the studies above it can be seen that there are still deficiencies that can be developed further. Almost all of the batik motifs developed by the researchers above still use manual drawings. So this study tries to develop batik motifs with digital techniques. Digital technique was chosen as an alternative to the development of batik motifs because it was considered effective in developing motifs in a short time.

Batik motif is the main story that gives meaning to a piece of batik cloth. Each batik cloth was created to describe a certain meaning. The meaning contained could be from the noble values that developed in the local area. The naming of batik motifs is always related to the philosophy of human life. All events, natural life events and their environment can be an inspiration or inspiration for the artists to create something. Some things that affect the creation of batik motifs are:

2.1. Fauna

Fauna depicted in batik motifs are usually selected animals that have features or animals that are widely available in the surrounding nature, both in the air, on land, or in the water.
2.2. Flora

Flora can also give ideas in creating batik motifs. In order to be able to decorating the forms of plants, we must observe carefully and appreciate the beauty of plants that are around us, and must first learn how to decorate parts of these plants.

2.3. The Natural World

The environment can also be a source of ideas for the creation of a batik motif, such as rain, cloud, mountains and others.

The structure of batik motifs is an element or basic principle in the preparation of batik. The composition of the batik consists of elements of batik patterns or motifs that are arranged based on standardized patterns. According to the elements of batik motifs are divided into 3 main parts, namely the main motif, additional motifs and isen motifs.

2.4. Main motifs

The main motive lies in the body and head of the fabric and looks dominant. Generally this main motive has a meaning, so that the arrangement of the decoration forms it into the soul or meaning of the motif itself. The main motive is a pattern, in the form of pictures of certain shapes, because it is a constituent.

2.5. Additional Motifs

Additional motifs are motifs that do not have their own meaning in the formation of motifs, only have functions as fillers in the field. Additional motifs are patterns in the form of images created to fill fields that are smaller in shape and do not form the meaning or soul of the pattern. Additional motives as strengthening the balance of composition or layout in the batik structure.

2.6. Isen Motifs

Isen batik functions to beautify the overall pattern, both the main ornament as well as the filling ornament that is filled in the form of decorations such as dots, lines, a combination of dots and lines is a variation to give aesthetic taste. Isen batik in batik
motif has a certain shape and name. Generally batik isen is small in size and is made after making the main pattern.

3. Method

The method used in developing batik motifs with digital techniques is the method of art creation. Art creation methods include exploration, design and realization.

3.1. Exploration

In the exploration step is the activity of finding data related to problems from various sources. Both verbal and visual data to get the concepts designed are related to the creation of batik motifs and identify the characteristics of Malang City which can be used as a reference in developing batik motifs.

3.2. Design

The design step is the process of pouring concepts that have been explored through the selection of ideas into sketch designs as an alternative in developing ideas.

3.3. Realization

The realization step of the work is the process of changing from a sketch form that has been selected to be designed into a prototype of a digital design of batik motifs.

4. Result and Discussion

4.1. Source of Idea Creation

Exploration of the source of the idea of creation is done by developing ideas or ideas of creation by identifying the uniqueness of the local culture of Malang. From the uniqueness of the local culture of Malang, it was found several characteristics of the source of creation ideas that were raised as a motif, so that the results of the design of the batik motif will produce a motif design that contains visual elements that are distinctly characterized by regional culture.
One element of Malang’s local culture that has become the identity of Malang city is the Malangan Puppet Mask. Puppet Mask or puppet wong is a performance of dancers who wear masks accompanied by dialogue conducted by the puppeteer. The wayang mask story was adopted from the story of Mahabarata, Ramayana, or the Panji story [6].

4.2. Motif Visualitation

![Figure 1: Monument Malang Batik Motifs](image)

The development of this batik motifs took the main idea of the Malang Monument. Malang Monument is one of the icons of Malang in the form of the Monument which is located in front of the Malang Mayor’s office. Malang Monument distillation as the main motif and geometric motifs as additional motifs.

This motif is a development by taking the idea of the poor mask as the main motive. Additional motifs are lotus flowers arranged geometrically.

5. Conclusion

Based on the discussion, it can be concluded that several Malang City icons such as Mask and Malang’s Monument can be used as a source of ideas in creating batik motifs based on local culture. The development of batik motifs with digital techniques can
provide time efficiency and effectiveness. The use of digital software can make it easier to process and combine motif images.

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