

# Development of the Batik Pekalongan Model with Arabic Calligraphy Artistic Value

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**ABSTRACT:** In increasing written batik productivity, calligraphy artistic value is more effective, competitive, and accessible; it is necessary to develop alternative designs for batik models with the artistic value of calligraphy. This research is research on the development of the Borg and Gall model, with the following steps: (1) compile an initial model based on the needs analysis results of batik makers, batik entrepreneurs, and batik cooperative administrators; (2) the first feasibility test by asking for input from batik experts; (3) revising based on the results of the batik expert's input; (4) the second feasibility test by involving batik experts more widely; (5) revising the results of the second feasibility test, then producing a batik model. This study resulted in four models of calligraphy artistic value by collaborating with local values of batik Pekalongan, as follows: (1) symmetrical style of the throne with a maroon base color, (2) asymmetrical style of the garuda's head with a dark blue base color, (3) asymmetrical style of the garuda's head with a dark brown base color, and (4) uniting all the elements that have batik lines with a dark brown base color combined with yellow, white, and maroon. This research is expected to increase the productivity of written batik with the artistic value of calligraphy to be more effective, competitive, and accessible.

**KEYWORDS:** Batik Model, Pekalongan, Calligraphy, alternative design

## INTRODUCTION

Batik cloth is a form of textile whose surface is decorated with a wax-resist technique, which is color-blocking using wax and is most widely used in Southeast Asia. The long batik cloth and sarong, which are still used by women and men, especially in rural areas, have become an essential part of the realm of Malay clothing for centuries (van Roojen, 2001). Batik is a work of art produced by batik makers. It is a manifestation of its conditions; what is expressed is an outpouring of feelings and thoughts towards forces

outside of itself. The batik makers produce designs through self-deposition and meditation to get the whispers of their conscience, and then they are likened to receiving revelations. Religious matters play a significant role in shaping the noble values of a work of art through this process. In the sense of written batik, Batik is a physical activity and has a dimension of depth, containing prayers, hopes, and lessons. It is what gives a magical feel to traditional Batik so far. Material is not only beautiful and high in value but also shows the wealth of our nation in symbolic treasures (Rizali, 2015).

As practised by the craftsmen in Pekalongan Regency, this area is very well known for its batik art and is thick with Islamic values; traditional batik is monumental primarily in nature and the surrounding environment. It is an imagination of the religion and beliefs of the usually anonymous artist. In addition, batik motifs also contain symbolic-magical values intended for religious/belief functions and aesthetic values used as decorations (Indarmaji, 1983). Nevertheless, traditional batik artisans, especially in Pekalongan Regency, face many problems in running their business. Their main problem is that they have not developed the written batik's artistic value; they are working on it. They still follow traditional batik motifs and have not made use of technology. On the other hand, they face the proliferation of printed batik types (Christianto et al., 2019). Therefore, the priority problem faced by the written batik community in Pekalongan Regency is that it has not been able to develop artistic values in written batik, especially calligraphy art and has not utilized technology in creating it.

Calligraphy has become an Islamic cultural identity that has earned its place in the hearts of Muslim communities worldwide for centuries (ElAraby, 1997). In addition to having its characteristics and uniqueness, the combination of batik and calligraphy is a form of contact between two cultures manifested in unique works of art, which simultaneously complements the nation's cultural treasures and Islamic color in Indonesia. Calligraphy batik is expected to take at least two roles: spreading Islamic values and preserving the archipelago culture (nusantara). So that calligraphy batik can represent a typical Indonesian Islamic style, namely the Islam Nusantara.

Based on the problems above, it encourages researchers to research calligraphy motifs as alternative designs in batik, especially batik Pekalongan. The researchers concluded that the existing batik Pekalongan needed to be developed. Batik Pekalongan development forms are manifested in three aspects: the first, aspects of the batik process.

In this aspect, what needs to be developed are the steps for making batik, batik motifs, batik making techniques, and the field of use of batik. Second, the calligraphy aspect. Batik Pekalongan needs to be developed with a calligraphy motif designed. The elements of calligraphy used as the batik Pekalongan motif are: (1) Arabic letters are needed as an aesthetic element of the room and an element of accessories. (2) Arabic words are needed as an aesthetic element of the room and accessories. (3) Pieces of verses from the Koran that fit the theme are needed as an aesthetic element of the room. (4) Hadith pieces that match the theme are needed as an aesthetic element of the room. Third, the technology aspect. This study concludes the need for technology in the batik-making process. Technology in batik has many roles; namely, it can help produce many batik design motifs, it can make it easier to find the desired motif, and technology can help find various types of motifs from around the world.

The researcher will refer to the results of the researches namely: First: Community service activity with the title "Preservation of Archipelago Culture and Spread of Islamic Values in Calligraphy Batik Patterns in Pekalongan Regency" (Nuruddin et al., 2015). This activity produces batik models designed with Islamic calligraphy to preserve the culture of the archipelago. In this activity, the calligraphy design in batik is carried out manually and has not been created using technology, so the resulting model is not optimal.

Second, Community service activity with the title "Development of Batik Motifs with Calligraphy Styles to Improve the Community's Economic Resilience in Cirebon Regency. (Nuruddin et al. 2016). This activity continues the last action, almost the same as the previous activity, namely 2015. This activity is better because producing batik models with Islamic calligraphy motifs, using batik, not only batik for clothing but also batik for clothing, decorations and accessories.

In this research, batik Pekalongan will be designed with calligraphy motifs. Calligraphy as a motif will be essential to enrich batik motifs in the northern coastal areas of Java, especially Pekalongan, because the people in this region are thick with Islamic values of the archipelago. Calligraphy as art is not merely an expression of skill in the beauty of writing, but more than that, calligraphy is an integral part of the divine expression inspired by the Quran (Jinan, 2010), so that batik that has been designed with calligraphy motifs fits perfectly with the patterns of the people of Pekalongan and its surroundings, which are thick with Islamic values.

The majority of the population is in Java's northern coastal region. To express its beauty in various art forms such as singing in its recitation, writing it in various beautiful manuscripts and writing pieces of the verse in calligraphy and other art forms such as batik (Ibrahim, 2008). As a devout Muslim, the calligraphy motif batik is a medium for expressing art and religious values because the holy book's verses always guide calligraphy batik artisans. Therefore, calligraphy refers to the view above in the idea of the north coastal community of Java as having an essential meaning because it comes from the holy book of the Koran.

Meanwhile, batik is a work of art that utilizes many drawing ornaments on cloth with the dyeing process (Soedarsono, 1985). Batik is an illustration of the decorative variety on the fabric where the working technique uses the closing process with wax or batik wax, which is followed by the process of dyeing or giving color to the cloth that has been batik (Laksmi, 2010).

In some areas of Java, batik making and wearing have initially been ritual activities. Originally, batik was only done by the palace princesses. Batik is done based on spiritual values that require concentration of mind, patience, cleanliness of the soul and based on requests for guidance and the pleasure of God Almighty. Some batik patterns are also considered prohibited designs that anyone should not use or make. The prohibition pattern relates to the user and the history of appearance. The parang pattern is a prohibition pattern because kings usually use this pattern. In contrast, the Sembagen Huk pattern is a prohibition pattern because it was historically created by Sultan Agung Hanyokrokusumo (Doellah, 2002). The presence of batik is related to the view of life or philosophy of the owner's community. Javanese batik motifs have a relationship with the Javanese philosophy of life, especially the palace. The motif of Semen Rama is related to the Javanese view of life who adopted the Ramayana story with the teachings of Hasta Brata (Sarwono, 2005).

Based on some of the views above, batik in calligraphy motifs combines physical art with spiritual processing. Calligraphy, which is based on the verses' sacred values, is integrated with batik as a physical art centred on the mind, patience, and clarity of the sou

## **METHOD**

This research is research on the development of the Borg and Gall (2003) model, with the following research steps: (1) developing an initial model based on the results of the needs analysis of batik makers, batik entrepreneurs, and batik cooperative administrators, (2) the first feasibility test by asking for input from batik experts, (3) revise based on the results of the input of batik experts, (4) the second feasibility test by involving batik experts more broadly, and (5) revise the results of the second feasibility test, then produce a batik model. The data for this research, namely (1) data in written batik works in the batik cooperative office in Weradesa District, Pekalongan Regency. Jl. Raya Gumarang, Wiradesa District, Pekalongan Regency. Second, the need for written batik has artistic calligraphy value originating from batik makers, batik entrepreneurs, and local batik cooperative administrators. Third, notes from batik experts in providing input and corrections to the draft batik model due to the needs analysis.

Data were collected using document analysis techniques and in-depth interviews. Document analysis techniques are used to obtain document data from existing batik models, while interviews are used to obtain data on calligraphy's artistic value as an alternative design. In the form of analysis, field research need for batik with the artistic value of calligraphy was carried out with the aim that the batik model to be designed based on theoretical studies could be adjusted to the real needs of batik users or market share and according to the needs of the cooperative. This connection analysis is conducted on interviews conducted with artisans, entrepreneurs, and managers of batik cooperatives. The second interview is with an expert or batik expert to get input and corrections to the draft model that has been generated from the needs analysis. The characteristics of qualitative research, interviews are conducted in-depth, exploratory, semi-structured, or unstructured. In this study, interviews were conducted in a semi-structured and in-depth manner. This model aims to ensure that the data collection process does not deviate far from the research focus.

## **RESULTS AND DISCUSSION**

### **Description of Research Results**

In this section, the researcher describes the final model of calligraphy writing in collaboration with local elements of batik Pekalongan digitally. The researcher first summarizes the process of the steps towards the final model.

#### **Initial Design**

The design is drawing a decorative pattern on paper. After that, the decorative pattern image was transferred to the cloth using a drawing pencil. The image design that the researcher produces proceeds in three stages, namely,

### Stage of Lettering and Sketching

A series of two Arabic letters, “*fā*” (ف) and “*nūn*” (ن), are formulated at this stage. These two Arabic letters are then assembled into the word “*fann*” (فن). The combination of these two letters forms the word “*fann*” (فن) which means art.

At this stage, the researcher did it in five steps: first, making an initial sketch of the Arabic letters “*fā*” (ف) and “*nūn*” (ن) manually.



Figure 1

Sketch of the Arabic letters *fā*’ (ف) and *nūn* (ن)

Second, combine the letters “*fā*” (ف) and “*nūn*” (ن). The merging of the two Arabic letters is because they have simultaneous lines and have the identical/similar characters.



Figure 2

The merging of the Arabic letters *fā*’ (ف) and *nūn* (ن)

Third, repeating the letters “*fā*” (ف) and “*nūn*” (ن) and modified with various variations. This third step produces a stage 1 motif, which is a combination of “*fā*” and “*nūn*” “*fā*” (ف) and “*nūn*” (ن), creating a unified form that can stand alone and develop into other formats (transformation).

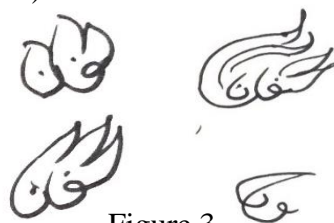


Figure 3

The Arabic letters combination between *fā*’ (ف) and *nūn* (ن) into other formats

Fourth, changing, reforming, and beautifying the letters “*fā*” (ف) and “*nūn*” (ن) then producing a stage 2 motif in the form of a sketch with calligraphy letters added with a leaf.



Figure 4

Sketch with calligraphy letters added with leaf

Fifth, The results of the drawing that have been stirred are then scanned and go through a digital tracing stage. The formation of this stage 3 motif is a refinement through a digital process.



Figure 5

The result of drawing with a digital process

### Design Exploration Stage

In this section, the researcher divides it into five steps as follows.

#### **Batik Design with the Symmetrical Motif of Throne with Digital Mirror Technique**

In the early part of the exploration stage of this symmetrical batik motif design, a throne (*singgasana*) motif design was made by first sketching it on paper (figure 6a). In this step, the Arabic calligraphy elements have not been included in a combination of the letters “*fā*” (ف) and “*nūn*” (ن). This batik throne sketch is designed symmetrically, and then digital tracing is done to produce a symmetrical throne batik motif (figure 7b).

The next step is to design the symmetrical throne batik motif by incorporating Arabic calligraphy elements combined with the letters “*fā*” (ف) and “*nūn*” (ن). Combining these two letters forms the word “*fann*” (فن) which means art. Arabic calligraphy elements in the form of the word “*fann*” (فن) are also carried out symmetrically at the top and bottom, resulting in a complete throne motif (figure 7c) as the final result of symmetrical batik motif design.



Figure 7a  
The sketch of a throne motif  
design on paper



Figure 7b  
Digital tracing of a symmetrical  
design throne motif



Figure 7c  
The result of the  
complete throne motif

### Asymmetrical Batik Motif Design: A Combination of Calligraphy and Garuda Head

At this stage, a sketch of the design of the garuda head motif is made by directly combining calligraphic elements in the form of the word “*fann*” (فن) (figure 8a). Digital tracing is carried out to produce an asymmetrical garuda head batik motif (figure 8b). The next step is to design the asymmetrical garuda head motif by incorporating Arabic calligraphy elements combined with the letters “*fā*” (ف) and “*nūn*” (ن). Combining these two letters forms the word Fannun/ which means art. Arabic calligraphy elements in the form of the word “*fann*” (فن) are also done asymmetrically both at the top and bottom of the garuda head motif to produce a complete garuda head motif (figure 8c) as the final result the asymmetrical batik motif design.



Figure 8a  
The sketch of Garuda head  
motif design on paper



Figure 8b  
Digital tracing of asymmetrical  
design of Garuda head batik motif



Figure 8c  
The result of the complete  
Garuda head motif



## Design a Combination of Symmetrical and Asymmetrical Batik Motifs

At this stage, a sketch of the design of the Garuda head feathers motif is made by directly combining calligraphy elements in the form of the word “*fann*” (فن) (figure 9a). Next, digital tracing was carried out to produce an asymmetrical garuda head feathers motif (figure 9b). In the next step, the digitalization of the batik motif design is carried out, a combination of a symmetrical throne motif and an asymmetrical garuda head (figure 9c). Then, the garuda head feathers motif is combined into the asymmetrical garuda head motif and placed in the middle between the two symmetrical throne motifs, resulting in a more complete combined garuda head motif flanked above and below the symmetrical throne.



Figure 9a  
The sketch of Garuda head feathers motif design on paper



Figure 9b  
Digital tracing of asymmetrical design of Garuda head feathers motif



Figure 9c  
The result of complete Garuda head feathers motif

## Model 1: Design of Batik Motifs in the Form of A Series of “*Fā*” (ف) and “*Nūn*” (ن)

In this section, the researchers sketch the design of the batik motif from a series of letters “*fā*” (ف) and “*nūn*” (ن) to “*fann*” (فن) (figure 10a). Next, digital tracing was carried out to produce an asymmetrical calligraphy batik motif (figure 10b). After that, the digitalization of the batik motif design was carried out by adding asymmetrical motifs on the top and bottom (figure 10c). In this step, the researchers combine the asymmetrical calligraphic motif of the word “*fann*” (فن) with the calligraphy motif of “*fann*” (فن) smaller above and below the existing batik motif.



Figure 10a  
The sketch of letters *fā* and *nūn* to *fann*



Figure 10b  
Digital tracing of asymmetrical design of the word *fann*



Figure 10c  
The result of

## Model 2: The Design of the Batik Motif is in the Form of a Series of “*Fā*” (ف) And “*Nūn*” (ن) Sets

In this section, a sketch of the batik motif design is made from a series of letters “*fā*” (ف) and “*nūn*” (ن) to “*fann*” (فن) which is different from the batik motif in the first model (figure 11a). Next, digital tracing was carried out to produce an asymmetrical calligraphy batik motif (figure 11b). Finally, the digitalization of the batik motif design was carried out. At this stage, the asymmetrical calligraphic motif of the word “*fann*” (فن) is combined with a smaller “*fann*” (فن) calligraphy motif and placed on top of the existing batik motif. Then, this motif is remade in reverse, resulting in a second model of calligraphy batik motif design (figure 11c).



Figure 11a  
The sketch of letters *fā*' and *nūn* to *fann*



Figure 11b  
Digital tracing of asymmetrical design of the word *fann*



Figure 11c  
The result of complete motif

## Collaborative Design

In this section, the researchers divide it into five steps as follows.

### Collaboration 1: The Symmetrical Style of the Throne with Maroon Base Color

In this collaborative design 1, the researcher designed the finished symmetrical throne batik motif by first sketching with Pekalongan batik artists. In this collaboration, the central motif of the symmetrical throne is added with other motifs that are characteristic of Pekalongan batik. This 1st collaboration resulted in a symmetrical styled throne motif by providing the maroon base color.



Figure 12.

A symmetrical styled throne motif  
by providing the maroon base color

**Collaboration 2: Asymmetrical Style of the Garuda Head with a Dark Blue Base Color**

In collaboration 2, the existing asymmetrical garuda head batik motif was first sketched and then developed with Pekalongan batik artists. In this collaboration, the central motif of the asymmetrical garuda head is added to other motifs that are characteristic of Pekalongan batik. This phase 2 collaboration resulted in an asymmetrical style Garuda head batik motif with a dark blue base color.

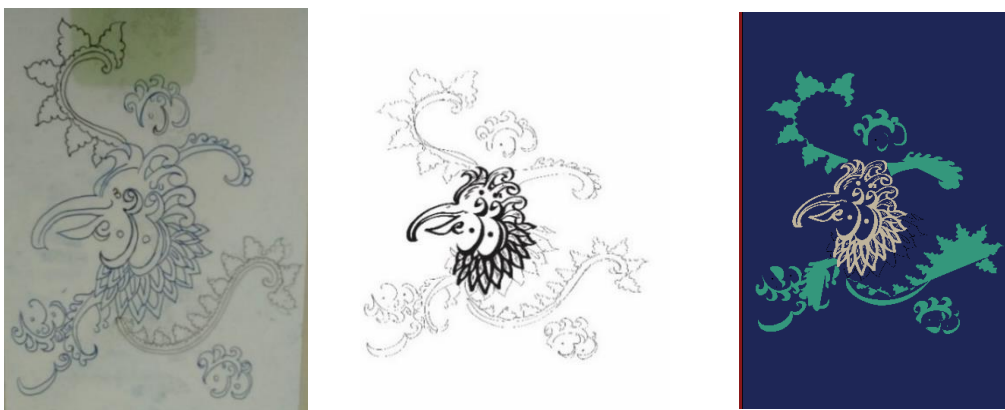


Figure 13.

An asymmetrical styled Garuda head motif

with a dark blue base color

**Collaboration 3: Asymmetrical style of the Garuda head with a dark brown base color**

In collaboration 3, researchers designed the asymmetrical garuda head batik motif by first sketching it and developing it by collaborating with Pekalongan batik artists. In this collaboration, the central motif of the asymmetrical garuda's head is added to other motifs. This 3rd collaboration gave birth to the asymmetrical style of the garuda's head batik motif by giving it a dark brown base color.



Figure 14.

An asymmetrical styled Garuda head motif  
with a dark brown base color

**Collaboration 4. Unite all the elements with batik lines with a dark brown base color combined with yellow, white, and maroon**

In collaboration 4, the researchers designed the existing symmetrical throne batik motif. However, first, a sketch was made and developed with Pekalongan batik artists. At this stage, the main motif of the symmetrical throne has added another motif that is different from the motif in collaboration 1. This collaboration resulted in a symmetrical throne



unites all elements with batik lines with a dark brown base color combined with yellow, white, and maroon inside.

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Figure 15.

A symmetrical throne motif with a dark brown base color combined with yellow, white, and maroon inside

**Expert Analysis of Calligraphy Batik Motifs Through Digital Techniques**

**First Expert Analysis (Sarnadi Adam)**



The design of batik motifs due to the development of existing patterns in Pekalongan with several Arabic calligraphy letters (*fā*” and “*nūn*) adds to the variety, not only sacred motifs (traditional grip). Still, it has been enriched with development motifs and even contemporary motifs.

The making of motifs is also no longer manually but in digital form (software), making it easier and enriching the development of motifs. Batik motifs have many choices, making it easier to choose which one you like. The motif of your choice will give the impression of classic and character, both complicated and straightforward motifs. Batik is no longer a regional form but has become a national cultural identity.

In this batik motif, the dynamics of the expression can be seen, which has vast possibilities to be developed even more. The series of motifs that form symmetrical formations tend to describe the elegance of certain characters—moreover, combined with classic colors such as maroon, black, brown and so on. Batik colors are getting more interesting, not only soga colors like brown, black, and white that feel "calm". There is also batik with bright colors, such as red, green, blue. Almost all colors go into batik, which gives a "cheerful" impression. So, whatever color you like, you can find it in batik, one color or a variety of colors.

This batik motif's Arabic calligraphy letters (*fā*” and “*nūn*) seem to melt into an inseparable part in a unique and exciting batik pattern. Sometimes, it gives the impression of a decorative shape of a bird's head or a peacock developing its wings. All of this is achieved through the ability to operate technology to support productivity factors. This work of batik motifs appreciates and enriches the treasures of ornamental variety that already existed in Indonesia.

## Second Expert Analysis (Edy Fausi Effendy)

### Visual Data

The series of letters *fā*” and “*nūn*, which are used as decorative motifs, strive to become calligraphy batik patterns that still resemble organic natural forms, such as the shape of a leaf or the body of a bird's wing. From the combination of these motifs, a good motif sketch is formed.



Figure 16.

The Arabic letters combination between *fā'* (ف) and *nūn* (ن)

The combination of the letters *fā'* and *nūn*, repeated and modified with various variations, forms a repetitive rhythm. After creating a specific motif, the motif is distilled into a rich motif with ornament inserts. That way, the result of the transformation looks even more beautiful. The sketch of the motif stirred, then scanned, and through the digital tracing stage, makes the shape precise and perfect. This beauty can be seen in the second stage of the motif process, a motif with calligraphy letters added with leaf style. In addition, it also looks at the symmetrical batik motif with the digital mirror technique (the throne batik motif). The combination of curved line motifs, ukel lines, multiple twists, and dots as *cecek* on batik makes khat or calligraphy letters still traceable for their beauty.



Figure 17.

The combination of the letters *fā'* and *nūn*, repeated and modified with various variations

### Description

Judging from the purpose of the calligraphy design applied to batik motifs, in the process, the designer seems to be very careful so that the calligraphy does not pronounce its meaning. Visually, the shape of the motif takes precedence. In addition, the process of making calligraphy batik motifs through digital techniques is carried out by combining motifs into batik patterns and the collaboration of two symmetrical styles that are made harmoniously. Thus, the final result of the digital technique remains in the original batik motif.

This symmetrical batik pattern with a calligraphy theme becomes an orderly ornament because the motifs are placed symmetrically in pairs on the left and right. The groups of motifs above and below are also paired regularly. Likewise, ornaments with calligraphic motifs become the bird's head as the focus remains a unified whole. In the end, when applied to batik cloth, the motif will become a lovely patterned batik.

### **Analysis**

Aesthetically, the technique and shape feasibility of the batik motif design with the calligraphy theme managed to find a new, original form. The success of the motif design, among others, Unity of structure, is well achieved in the combination of khat/letter, which manages to form a harmonious line style. In addition, the composition is supported by rhythmic repetition of shapes and layouts, a focus on ornamentation and a precise balance of placement. Examples include the asymmetrical (free) batik motif design and the combination of calligraphy styles with other garuda head batik motif.

Likewise, the digital technique used at the tracing stage seemed successful. The selection and placement of motifs and background colours still show the characteristics of the batik. However, there are shortcomings in the alternative colour samples. The combination of red and blue in design 1 looks complementary, so the charisma of batik is less intense as batik is known for its soga colour between brown and white lines as traces of canting and the richness cecek as texture points like batik in general.

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## CONCLUSION

This study resulted in four collaborative batik models with artistic calligraphy values by collaborating with local values of Pekalongan batik, as follows: (1) symmetrical style of the throne with red heart base colour, (2) asymmetrical style of garuda head with the dark blue base colour, (3) the asymmetrical style of the garuda's head with a dark brown base colour, and (4) uniting all elements that have batik lines with a dark brown base colour combined with yellow, white, and red hearts.

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