

Batik Motif Development for Decorative Elements on Metal Ceiling



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ABSTRACT: Batik is a traditional art developed in Java. Batik has a variety of motifs and it is exquisite. One of the valuable sources on batik is classical batik, which developed in several places in Java before Indonesian independence. Besides being picturesque, it also has values guided by the teachings of Javanese culture which are contained in its motifs. Then batik motifs are used in this study as the basis for development in the manufacture of contemporary decorative designs. In this study, the development of batik motifs was redesigned from classic batik motifs which were then applied to metal plates used for ceilings. The goal is to produce room decoration with a new look that is more elegant following the present era which originates from the roots of Indonesian culture. The methods used in this study are emic-ethical research, experimentation, contemplation, and formation. Besides design development motifs, this research also produces space designs that use decorative elements of batik motifs applied to ceilings using metal materials.

KEYWORDS: Classical Batik, Ceiling, Decoration, Motif, Metal Materials

I. INTRODUCTION

Batik is a traditional art, developed in Java since before Indonesia's independence (Iskandar, 2017). Batik has very beautiful motifs with many variations and shapes. One such batik is classical. It is batik which is influenced by the mindset of the palace or past kingdoms in Java (Ahmad, 2021). This batik has a philosophical meaning as well as symbols implied in its motifs, concerning the teachings of Javanese culture and its values developed in the past. This culture was later recognized as a part of the noble culture of the Indonesian nation. Based on this, the research idea was born of how to develop batik that is adapted to the needs and tastes of today's society. Batik motifs are developed and then applied to products people use every day. This product is not only in the form of cloth, but also applied to non-fabric products, such as metal, leather, and ceramic materials. One focus of the application of batik motifs that is quite interesting is as a decorative element for room decoration. Batik motifs are applied to aspects of interior decoration elements, one of them being the ceiling. The ceiling is an important form in the interior, especially in a room. The ceiling is generally made of a plain material such as gypsum or wood (Irtanto, 2019). In this very fast development of the times, innovative products in the ceiling have emerged. It inspires to development of batik motifs as products that have cultural, aesthetic, and modern values that are beneficial to the wider community.

The ceiling is the upper interior surface that relates to the top of a room. Generally, the ceiling is not a structural element, but a surface that covers the floor of the roof structure above (Awuy et al., 2023). The development of the ceiling mostly only prioritizes its function from time to time. It inspired us to create an idea for creating a metal ceiling with a batik pattern. This batik-patterned metal ceiling is an innovation to support it from a functional, aesthetic, and cultural point of view. The elements of metal ceiling decoration give a luxurious impression to the decoration of homes and rooms (Santoso & Santosa, 2013). This engineered product design has many advantages. Besides being durable and long-lasting, this product also has other advantages such as termite resistance, fire resistance, and easy maintenance. The design for the development of batik motifs on metal ceilings is an innovative combination of art, culture, and technology. Arts-culture and technology are two fields often considered different, but the creative combination of the two often results in extraordinary innovations. One example is the batik motif developed for metal ceilings. In this case, traditional arts and technological developments blend in a charming harmony. The innovation is only creates an appealing visual aesthetic but also respects the rich cultural heritage. To blend art and culture with technology, the researchers experimented with the idea of applying traditional batik motifs to various surfaces, including metal ceilings. Modern printing and processing techniques allow batik motifs to be applied very precisely to various materials, even metals. It opens up new possibilities for decorating rooms in ways that have never been thought of before. One of the interesting developments in

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batik motifs for metal ceilings is the contrast between the smoothness of the batik motifs and the strong metallic effect. The soft and intricate batik motifs, contrasted with the hard metal, create a beautiful mix in the room.

Ceilings that were once considered only utilitarian elements have now become magnificent works of art. The application of batik motifs on metal ceilings not only affects the visual aesthetics but also the overall experience of the room. The room that was previously monotonous and unpleasant now gets a unique look that attracts attention. The moment someone entered the room, their eyes immediately fell on this beautiful ceiling. This ceiling creates a feeling of warmth and comfort. Thus, the cultural heritage of batik continues to be revived and introduced to the younger generation. In a changing world, the protection and respect of cultural heritage is essential. By blending deep batik motifs with modern elements, a new generation can appreciate this traditional art in its proper context. Of course, the development of batik motifs for metal ceilings also faces several challenges. One of them is maintaining the quality and precision of motif details when applied to various metal surfaces. However, this challenge also opens up opportunities for the development of more advanced and precise printing techniques. The design of the batik motif on the metal ceiling is a true demonstration of how art, culture, and technology can blend harmoniously. It is a way to honor the rich cultural heritage and introduce modern technological innovations. This research activity not only visually decorates the space, but also invites one to reflect on the importance of preserving and rediscovering cultural roots.

This study aims to explore much more information that can be applied to research on the development of batik motifs, especially on metal ceilings. This research explores more deeply the process of developing batik motifs on metal ceilings, including the design process, motif transfer, coloring, and finishing processing.

II. METHOD

The method for realizing the ideas in this study uses three main stages. They are exploration (looking for sources of ideas, concepts, and the basis for creation), design (the design of the work), and embodiment (creating the work) (Gustami, 2007).

A. Exploration

Exploration is a depiction of the spirit of exploration in exploring sources of creation in the field as well as collecting data, references, and various books and pictures connected to works. In addition, by obtaining references to the existence of the latest models of batik motifs that are in demand by the public, this stage is useful for determining the theme in creation. Exploration of the main material as a basic material, namely metal, requires exploration such as characteristics, characteristics, and what batik motifs can be used and add to the aesthetic beauty in it.

B. Design

The design stage includes several stages. The first is an alternative design draft (sketch). From the several sketches, some of the best sketches were selected as the selected design. The planning stage of making a sketch must first consider aspects in form, process, technique, materials used, materials, tools, and functions in embodiment. Then a second stage refines the selected sketches into a perfect design, adjusted for size, scale, original shape, and placement. The final stage is making working drawings, which consist of design sketches, metal materials, and motif sketches, as well as other equipment contained in the work. The embodiment stage is realizing ideas, concepts, foundations, and designs into works. At the creation stage. conducted by preparing materials and tools, making digital motif designs, making transfer patterns on metal, the process of creating tools, cutting patterns, applications, and final finishing.

C. Embodiment

The work at this stage is the embodiment of ideas, concepts, and designs that are ready to be displayed. The creation of this work requires patience, thoroughness, and good skills in order to produce maximum product work. After going through the design process, the development of batik motifs on metal ceilings then enters the trial process of transferring motifs and colors to metal materials.

III. DISCUSSION

Research with the theme of batik motifs as ceilings using metal materials is a new thing in the interior field and in the development of batik. Research with the theme of batik motifs as ceilings using metal materials is a new thing in the world of interiors and the development of batik. The development of batik motifs on the ceiling is an innovative combination of art, decoration, and technology. Utilization of metal as a material is a choice because it gives a different impression from the previous material. Some of the selected metal materials include copper, aluminum, and galvalume. The reason is copper gives the impression of luxury. Meanwhile, aluminum provides an alternative option at a more affordable middle price, and galvalum is chosen as an alternative material that is popular, and inexpensive. Therefore it can be used by all levels of society.

The development of batik motifs on metal materials offers very interesting and potential things to be developed in society. Development and exploration in this field are still rare and very limited. Hence, it needs in-depth design and research both from the development of batik motifs and the strategy for developing metal ceilings. Conceptual understanding of the characteristics of batik motifs also needs to be studied carefully, consequently, the motifs can be applied to the main ceiling materials. The research steps that have been carried out to produce this metal ceiling are described as follows.

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A. Development of Batik Motifs

The development of batik motifs can be developed from existing batik, such as classic batik or classic pattern batik. Classical batik motifs and classic patterns have several characteristics that can be grouped into three parts, namely main motifs, supporting motifs, and *isen-isen* (decorative background filling in batik patterns) motifs (Sudarwanto, 2022). The main motif is the style that determines the meaning of the motif (Sudarwanto, 2022; Yulianita & Sukendro, 2019). Supporting motives are additional motives to support the main motive. While the *isen-isen* motif is a variety of patterns to fill in the empty fields. There are several types of batik motif groups, namely *batik pola semen* (cement pattern batik), *batik pola ceplok* (fried pattern batik), *batik pola miring* (oblique pattern batik), and *batik pola pinggir* (edge pattern batik). After being researched and reviewed, it turns out that for the development of batik motifs on metal ceilings, the *batik pola ceplok* tends to be more suitable since the *batik pola ceplok* has a characteristic shape that is symmetrical and repetitive. The *batik pola ceplok* gives an elegant impression of metal material, therefore it adds a distinctive impression of beauty. Actually, other patterns can still be used, but these other patterns tend to have dense and complicated motifs, making them quite difficult to apply to metal materials. However, this does not rule out the possibility of being applied and used on metal ceilings.

The development of batik motifs is carried out by adapting and updating traditional motifs and combining them with a modern touch. The grouping of batik motifs is studied and examined carefully. It was conducted to dissect existing motifs, and then create motifs with the latest breakthroughs in the development of batik motifs for metal ceilings. After all is considered sufficient, batik motifs can be made based on classic motifs and developed into new motifs. The results of the sketches that have been made are then selected to get the selected design that is appropriate. Furthermore, it can be continued with the digitalization of batik motifs so that later the motifs can be properly applied to metal ceiling materials when they are made as a reference print. However, before being used as a metal ceiling, the motif is also tested digitally on other products so that the performance of the motif can be seen. The performance of testing batik motifs on other products has a crucial purpose. First, measuring the extent to which batik motifs can be adapted to non-traditional products such as modern clothing, furniture, or accessories. Second, ensure that these motifs respect the cultural and aesthetic values of batik, and do not misuse cultural heritage. Third, identifying whether batik motifs can maintain their attractiveness on other products without sacrificing authenticity and beauty. The test results help to understand the changes in motifs, materials, or sizes needed to maintain cultural integrity while creating attractive, innovative products. The following shows the motifs of the research results that are applied to research-derived products.

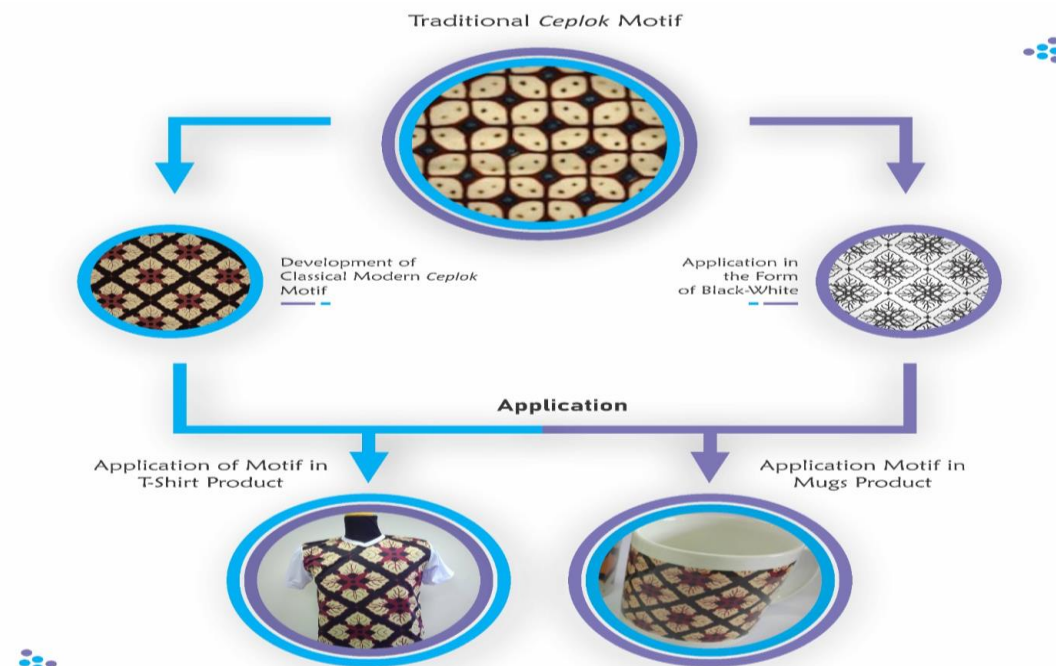


Figure 1. The Application of Batik Motifs on Derivative Products as a Form of Testing Motifs on Different Materials and Products Allows it to be used as a Development
(Sketch by Aan Sudarwanto, 2023)

B. The Design Engineering of Metal Ceiling

The dynamics of social life always correlate and collaborate closely with the development of needs, problems, and challenges, as well as innovations that need attention from the parties. One of them is the need for living room decoration. In the interior design field, the ceiling is no longer only considered as a utilitarian element. Instead, the ceiling has become a canvas for creativity and innovation in designing living spaces (Erwanto, 2018). One of the approaches used in this study is the use of metal in ceiling

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design engineering. With its unique standout, metal ceilings offer an elegant aesthetic and integrated functionality. Metal ceiling exudes an undeniable aesthetic charm. Its presence provides a contemporary and industrial touch that can enrich the overall appearance of the room. Metal, with its ability to be sculpted and transformed into various shapes, allows for the depiction of more complex and artistic designs. From futuristic geometry to classic ornamentation, metal ceilings can suit a variety of decor styles, giving the space an added dimension. Some of the advantages of this engineering are as follows.

1) Durability and longevity

One of the important advantages of metal ceilings is their great durability. Metal is durable and resistant to damage caused by moisture, temperature changes, and insects (Gunawan, 2019). In the long term, this means that investing in a metal roof can save on maintenance and replacement costs. Its ability to remain sturdy and attractive over the years makes metal ceilings a smart choice for those looking for a long-term interior design solution.

2) Integrated Functionality

The use of metal ceilings does not only focus on decorative elements but also integrated functionality. In modern designs, metal ceilings are often integrated with concealed lighting, ventilation, and sound systems. This creates a clean, minimalist look that is not only aesthetically pleasing but also optimizes space usage. In spaces with metal ceilings, technology devices, and everyday utilities can be seamlessly integrated without compromising on visual beauty.



**Figure 2. Application Engineering Design of Metal Ceiling in the Living Room
(Illustration Photo by Aan Sudarwanto, 2023)**

3) Harmony with Other Materials

One of the interesting aspects of metal ceilings is their ability to blend with a variety of other materials in interior design. Whether combined with wood, stone, glass, or concrete, metal ceilings can create an interesting contrast or harmonious balance depending on the design choices made. This opens up limitless creative opportunities for designers to incorporate various material elements in living spaces.

4) Creative Expression and Technology

Metal ceilings offer endless opportunities for creative expression. With increasingly sophisticated metal processing technologies, designers can produce intricate patterns, interesting textures, and fine details on metal ceilings. This freedom inspires designers to create unique and personal works of art, as well as realize aesthetic visions that were previously difficult to achieve.

Metal ceiling design engineering has changed views related to ceilings, from just a functional element to a dazzling work of art. From striking aesthetics to durability and integrated functionality, metal ceilings offer several benefits that make them a more attractive home decor option. In an era where innovation continues, metal ceilings provide limitless opportunities for designers to realize their creative visions in creating unique and beautiful spaces.

C. Design

Besides being a roof cover, the ceiling also has an important aesthetic role in a room (Rustam & Dkk, 2021). Likewise, metal ceilings with batik motifs will give the impression of its beauty, namely the combination of modern and classic. The steps that have been taken in this design are starting from selecting motifs, digitizing designs, and selecting materials.

In the selection of batik motifs, this becomes an important element of the ceiling design. Classic batik motifs such as *ceplok gorda*, *ceplok kawung*, or *lereng* can be matched with metal designs. Starting from the size of the room, the overall style of the room, and the desired impression. The motif chosen must be in harmony with the general concept of the interior of the room. In this design, the *ceplok gorda* motif is the main choice. The next step is to design the motif in digital format. It is conducted to measure, scale, and adjust the design to a size that fits the ceiling dimensions. The use of powerful graphic design software can help in producing detailed and accurate designs. The last step of this design is the selection of the right metal material. Metal

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materials such as aluminum, galvalume, or copper can be used depending on preference and budget. The advantages of metal are its high durability and ability to form into various shapes and textures. Metal surfaces can be finished with techniques such as polishing, or staining to achieve the desired look.

D. Embodiment

After the design is planned, a high-quality metal is selected for the inlay process, namely aluminum metal is used because of its good ability to be inlaid and engraved. The metal surface is then prepared by cleaning and smoothing to make it ready to receive the batik pattern. The inlaid process begins with the formation of the main lines of the batik motif on the metal surface. This is the basic stage which roughly maps out the pattern. The inlay technique involves striking the metal with a special chisel to form the desired indentations and patterns. In providing detail and depth in the carving process, finer details are inlaid and give depth to the batik pattern. This is a process that requires a lot of patience and skill, as the inlay must be precise and consistent to produce a satisfying result.

After the inlay is finished, the batik-patterned metal ceiling will go through the finishing stage. Metal surfaces can be given a protective coating to prevent corrosion and provide a beautiful shine. In this creative work, finishing is done by polishing, so it gives a shiny impression. The finish of the metal ceiling with batik motifs produced through inlay techniques is a unique combination of cultural heritage and modern artistic craftsmanship. The beauty of the batik motifs that adorn the metal ceiling not only decorates the room but also reminds us of the value of beauty and cultural diversity.



Figure 3. The Invention Result of Batik Motif Application in the Form of *Ceplok Gurda* on a Metal Ceiling, Namely Aluminium (Photo by Aan Sudarwanto, 2023)

IV. CONCLUSION

Research on the development of batik motifs on metal ceilings still needs to be studied further by conducting lots of experiments so that the products produced meet standards in the industrial world and the interior field. The development of batik motifs as decorative elements for metal ceilings has become an interesting innovation in the world of interior design. In this article, we have explored in depth how batik motifs from Indonesia's rich cultural heritage have been integrated into modern metal ceilings to create a unique and beautiful ambiance. From this discussion, it can be concluded that the combination of traditional beauty and modern needs can create excellent results. First, the development of batik motifs for metal ceilings offers a new perspective in combining traditional art with modern technology. With this collaboration, the metal ceiling is no longer just a functional element that is part of the building structure, but also a means of artistic expression. This opens up opportunities for designers and artisans to explore creativity in creating various batik motifs from classic to contemporary. In addition, the use of batik motifs on metal ceilings can enrich the visual space of the place. When someone walks into a room with elegant batik motifs on the ceiling, they immediately feel warm and different. A wisely chosen batik motif can create an atmosphere that fits the purpose of the room, be it a calm and relaxed atmosphere in the living room or a dynamic and energetic atmosphere in the study room. In addition, this development has a positive impact on the preservation of local culture. Batik motifs are an integral part of Indonesia's cultural heritage. By integrating these batik motifs into the metal ceiling, we are indirectly helping to preserve artistic and cultural values that have been passed down from generation to generation. This is important to ensure that future generations stay connected to their cultural roots. However, this development also has several challenges that must be faced. One of them is adjusting the mass production process to the character of each batik motif. A production process that is too massive can weaken the authenticity and artistic value of each work. Therefore, a careful approach is needed so that even in large quantities, each ceiling with batik motifs still has its quality and uniqueness. In short, it can be said that the development of batik motifs for metal ceiling decorative elements is a creative step to combine tradition and modern harmony. The beauty of the batik motifs that adorn the metal ceiling

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creates an unparalleled artistic impression creating a different and immersive atmosphere in every room. However, keep in mind that this development must be carried out with full respect for cultural values and maintain the quality of art in each work produced. Thus, the combination of batik motifs and metal ceilings continues to inspire and amaze the world of interior design.

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