

# The Understanding of Marine Biota Through Creativity of Batik Painting in Art Education

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**Abstract**—The world of education does not fully discuss the preservation of Indonesia's marine wealth although the Indonesia Minister of Marine Affairs emphasizes that the sea biota have to be protected. Through art education, innovation in the batik motive can be lessons for students at school. The purpose of this research is to encourage innovation in the art of batik inspired by the richness of Indonesia flora and fauna in the sea so that art education will play a role in safeguarding marine wealth. This research method is focused on the experimental approach through cold wax and visual studies by reinterpreting the visual narrative from the creation of maritime batik artwork. The visual narrative in batik motifs is an underwater object of Java. The basic colors, such as blue, green, purple, are made as to the gradations. The conclusion of this research is the visualization of batik with maritime motifs that can be a new alternative motif through color gradations by a brushstroke technique.

**Keywords:** *art education, batik, fauna, flora, sea*

## I. INTRODUCTION

A novelty is essential in a visual image. This image needs to be explored to create the identity of fine art [1]. The novelty intended in this study is discovering the natural resources of Indonesia to inspire the development of the batik theme based on flora and non-figurative design [2]. In the technique of drawing batik, the various patterns are continuously developed. However, the pattern focusing on marine life is still around the coastal areas and does not penetrate yet the areas without the sea.

This issue seems to be related to the world of education that does not fully discuss the preservation of Indonesia's marine resources yet although the Indonesia Minister of Maritime Affairs states that Indonesia marine biota needs protection [3]. Indonesia is also a country with a high level of environmental threat, especially the occurrence of species extinctions and habitat destruction, which causes a decrease in

biodiversity. Therefore Indonesia is one of the priority areas of world biodiversity conservation [4].

This research intends to know the way to push the innovation of batik art, inspired by the flora and fauna of Indonesia, to create the learning design in fine arts that can develop creative imagination in the future. To attain this goal; therefore, this research designs the creative process to strengthen maritime comprehension through the painting art of batik from the sea biota.

The creative ideas that always appear in the art are associated with beauty, pleasure, and recreation [5]. To create the ideas of art, the ability to create something new and translate perception into visual language through drawing is needed. The drawing is the mental and thinking activity and to form the concepts related to cognitive ability [6].

## II. METHODS

### A. Method Used

This research employs the qualitative method. The data are taken by using the related literature [7]. The descriptive method is used to analyse data by interpreting visual narration of the artwork creation of the maritime batik.

### B. Steps of the Study

To find out the batik that has a visualization of marine biota themes, the study at the initial stage is done by a literature study that is followed by field observations. After that, interviews with batik collectors, crafters, or batik agents, collectors, and artisans at batik centers are executed.

After the data are recorded and sorted, they become a source of ideas for the creative process [8]. To strengthen the understanding of the creative process, the role of a teacher is needed to convey information about the various maritime

resources of Indonesia. Therefore, the contents of the sea can be an inspiration in the process of batik paintings.

The selected object is a protected marine biota [9], for example, sea turtles (*Testudinata sp*). The selected biota is identified and made into a picture integrated with batik technique of ornament motive to fill space and brushstroke as a coloring technique.

**III. RESULTS AND DISCUSSION**

The visual narration in the batik motif that will be discussed is the biota below the sea of Java that is made by the repetition and combination with ornament motive to fill space.

**A. Sea Biota and Creative Potency**

The sea biota consists of flora and fauna in one area. One of them is fish, which its life cycle is in the sea [6]. This condition becomes a challenge in art education. It is because the students in the city never go to the sea, either for vacation or for study. They will go to the sea if they get the tasks to collect

information about the diversity of the sea. The maritime resources can turn into creative ideas if they are developed and explored in the art field. One of them is to complement library with Indonesia's marine diversity. Indonesia's marine wealth can be an idea in finding creative ideas, so it has creative potential that can be developed and explored in the arts. The next step was to experiment with the processing of local materials derived from tamarind seed powder which was dried, processed and used as a substitute for hot nights, then poured on cloth. Gutta tamarind derived from tamarind seeds which are made into powder / flour is used as a substitute for hot wax used in batik [10].

**B. The Creative Process to Create the Painting Batik in the Art Education**

How can a teacher elaborate on the result of a visual study into artworks? Data from the field explain that the sea of Indonesia has the largest number of anemones and fishes in the world [11]. Of course, these objects can be implemented as the learning materials of the art for the students.

TABLE I. TRANSFORMATION OF THE SEA BIOTA INTO THE PAINTING ARTWORK OF BATIK





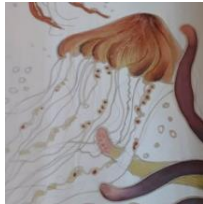

Visual study	Visual process	Artwork
		
<p>Fig. 1. Turtle.</p> <p>Source: <a href="https://www.profauna.net/id/kampanye-penyu/konservasi-penyu-perancak-bali/pedoman-teknis-pengelolaan-konservasi-penyu#.XbaUj-YzblU">https://www.profauna.net/id/kampanye-penyu/konservasi-penyu-perancak-bali/pedoman-teknis-pengelolaan-konservasi-penyu#.XbaUj-YzblU</a> [Accessed on: 20 October 2019].</p>	<p>Fig. 2. The turtle in the batik artwork painting.</p> <p>Source: Author's documentation</p>	
<p>Visual description: The selection of the turtle is due to extinction and this becomes the unique theme. Therefore, drawing and interpreting of the turtle based on the theme and the composition are needed. After visual process transformation, the color in the middle part of the turtle shell is orange in the edges around its shell is purple.</p>		
		
<p>Fig. 3. Jellyfish.</p> <p>Source: <a href="https://travel.tribunnews.com/2018/10/23/semprot-beredar-di-masyarakat-3-mitos-tentang-ubur-ubur-ini-ternyata-hanya-boax">https://travel.tribunnews.com/2018/10/23/semprot-beredar-di-masyarakat-3-mitos-tentang-ubur-ubur-ini-ternyata-hanya-boax</a> [Accessed on: 20 October 2019].</p>	<p>Fig. 4. The jellyfish in the batik artwork painting.</p> <p>Source: Author's documentation</p>	
<p>Visual description: The choice of jellyfish to depict marine biota because they have various types in Indonesia. In this figure, the jellyfish is drawn brown.</p>		

TABLE I. Cont.










Visual study	Visual process	Artwork
		
<p>Fig. 5. Lionfish.</p> <p>Source: <a href="https://pixabay.com/photos/lion-fish-water-ocean-sea-70500/">https://pixabay.com/photos/lion-fish-water-ocean-sea-70500/</a> [Accessed on: 20 October 2019].</p>	<p>Fig. 6. The lionfish in batik artwork painting.</p> <p>Source: Author's documentation</p>	
<p>The depiction of fish with fins gives inspiration to many artists by changing the stiff to the flexible fins and the color from white to orange. The color change gives the impression that fish are heavier than it should be.</p>		
		
<p>Fig. 7. Anemone.</p> <p>Source: <a href="https://www.dunia-perairan.com/2017/07/anemon-laut.html">https://www.dunia-perairan.com/2017/07/anemon-laut.html</a> [Accessed on: 20 October 2019].</p>	<p>Fig. 8. The anemone in the batik artwork painting.</p> <p>Source: Author's documentation</p>	
<p>Visual description: Anemone that grows on the reef actually has one color. When making the painting, this anemone can be drawn in various colors.</p>		
		
<p>Fig. 9. Coral reefs.</p> <p>Source: <a href="https://3.bp.blogspot.com/-38nW9rQlc88/Utd1Vot03TI/AAAAAAAAAH8/5odXXUEXi5c/s1600/P6079023.jpg">https://3.bp.blogspot.com/-38nW9rQlc88/Utd1Vot03TI/AAAAAAAAAH8/5odXXUEXi5c/s1600/P6079023.jpg</a> [Accessed on: 20 October 2019].</p>	<p>Fig. 10. The coral reefs in the batik artwork painting.</p> <p>Source: Author's documentation</p>	
<p>Visual description: The coral reefs that grow in the sea are damaged by the water pollution and the devastation of boats that pass in the shallow water so that their color is not attractive anymore. To make them interesting, the additional color needs to do.</p>		

Table 1 explains the steps from the visual study to the artwork. First of all, the visual study from the identification process in the existing literature is through the internet and books related to sea biota. This statement follows Ruwahyudi stating the visual study is the accomplishment of the visual source that keeps the process of the drawing story in the theme set in advance [12]. Secondly, the visual process is identified by making sketches that denote the visual study and themes. Finally, the artwork is made by drawing batik according to the concept resulted from themes.

After three steps are done for each object, the final combination can be seen in Figure 11. The final output refers to the sea as the symbol of the underworld. In the first panel of figure 11, two fishes and two circles of waves exist.

Two fishes are drawn blue and pink, respectively and each fish follows the movement of each wave. The lesson from this panel is the students can learn about coloring technique based on the imagination and the exploration of the object movement.

In the second panel of figure 11, one lionfish and two jellyfishes exist. The lionfish acts as the center point. Furthermore, the jellyfishes function as the balance that moves

up and down to create harmony. The lesson from this panel is the students can learn about the rhythm than can make harmony among objects.

In the third panel of figure 11, the jellyfish, the waves, turtle, anemones, and coral reefs exist. The anemones and coral reefs are on the bottom of the sea. They are interestingly drawn by using the various colors. The lesson from this panel is the students can learn and memorize the protected rare sea biota.



Source: Author's documentation.

Fig. 11. Batik painting consists of three panels.

Overall, these artworks have the composition with dynamic and balanced sequence, a complementary unity, and the use of dark and light colors in the painting that gives the impression of the space. The separation into three panels can be appreciated through the colour change. The understanding of the sea biota can be reflected through artworks that express creativity in art learning. For students, learning the artwork of batik painting is the step of the creative process associated with aesthetics.

The beauty of visualization can be combined through objects, colors, and compositions. The bigger the object, the more important the meaning. The experience of the students to start the beginning idea in art learning can help them to actualize their impression into the batik painting artwork, develop their imagination related to the sea biota, increase their understanding to protect, like, and preserve the resources of flora and fauna in the sea of Indonesia.

#### IV. CONCLUSION

This visual study exploration provides convenience in the art learning process; therefore, it is expected to give pleasure to students. The positive value of this creative stage is the use of local wisdom material of tamarind seed powder to be processed

into cold wax. This provides an alternative convenience to make the batik paintings by adopting the beauty of the sea contents of Indonesia. As a result, it makes new identities of local wisdom. The contribution of this study is to provide an alternative choice of the media that can be used by teachers at schools and the object of cultivation to create batik motifs that explore various marine biota. The visualization of batik with these motifs becomes a new alternative creation of shapes through the color gradations made by using the technique of brushstroke. It is hoped for the future that it will be opportunities that contribute to the development of maritime batik motifs in Indonesia.

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