



Development of motif in ring-sling inspired by Lasem sling batik fabric

Citra Tifany Fahira ^{a,1,*}, Morinta Rosandini ^{a,2}, Arini Arumsari ^{a,3}

^a Telkom University, Bandung, Indonesia

¹ citratifanyf@student.telkomuniversity.ac.id; ² morintarosandini@telkomuniversity.ac.id;

³ ariniarumsari@telkomuniversity.ac.id

*Correspondent Author

KEYWORDS

Batik
Covid-19
Lasem
Motif
Ring-Sling

ABSTRACT

Baby Carrier products are growing rapidly along with the needs, diversity of maternal activities, and technological developments. Mothers' needs to carry their children is increasing attachment, as well as assist mothers in carrying out daily activities. The Covid-19 pandemic has made dominant activities carried out at home, thus affecting the needs of mothers in carrying children. The available sling products include *jarik*, ring-sling, stretch warps, to soft structure carriers. The purpose of this study is to determine maternity products that suit the needs of mothers and children both in terms of type, material, and motif based on existing problems. The motifs applied to the product are the result of development inspired by the Lasem sling batik of the *pohon hayat* (tree of life) and fauna as a continuation of previous research, as well as to produce new variations of motifs, especially in maternity products. Several things that can be further developed in this study such as the type of product, the use of material techniques for applying motifs according to existing problems, potentials, and market interests. A mixed method was used in this study, namely by searching for data through literature studies, interviews, observations, questionnaires, and exploration. To solve the existing problems, ring-sling slings are made of natural fiber materials that are comfortable to use, *batik* motifs resulting from the development of *pohon hayat* (tree of life) and fauna sling motifs that are applied using the *batik cap* technique as a traditional impression.

This is an open-access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



1. Introduction

Sling products in Indonesia have become a basic need for mothers in general. This maternity product can help mothers carrying children while doing other activities. There are various types of slings in Indonesia, *jarik* slings are traditional Indonesian slings. *Jarik* is a classic sling with batik motifs and techniques as traditional elements that make this type very full of meaning. The meaning contained in one of the *jarik* slings is hope and good prayers for its users (Rosandini and Kireina 2020). However, the use of *jarik* cloth is very rare. It caused by its impractical use, its shape is only in the form of a long cloth without any tools, also because of its existence which has begun to be rarely found in the market. One of the reasons is because *jarik* slings are rarely produced (Rosandini and Kireina 2020). The results of observations that have been made on three local brands providing mother and child product equipment, namely

Zakkal Baby Carrier, Foglia, and Kawung Project show that it is still rare to apply batik motifs to mother and child products, especially slings. On the other hand, there has been a development of sling products by Yuki Kireina, namely the application of motifs inspired by the *jarik* sling from Lasem and applied to the soft structure carrier.

The motif developed by Kireina and Rosandini (2020), was made more modern using Ruang Waktu Datar (RWD) styling with a childish impression, then applied with digital printing techniques (Rosandini and Kireina 2020). Based on the analysis of motif styling with current trends, the motifs made by Kireina, are still not suitable so that they become potential developments with modern styling according to the latest trends, namely flat design. The use of synthetic-based canvas-type materials is not convenient for sling users, especially babies and children who have sensitive skin. The type of Soft Structure Carrier (SSC) that is suitable for outdoor activities is also not suitable for needs during the current pandemic, because most of the daily activities are carried out at home. Therefore, it is necessary to develop product designs and motifs inspired by the batik cloth sling from Lasem, namely the *pohon hayat* (the tree of life) and fauna from Kireina's research (Rosandini and Kireina 2020). The purpose of this study is to advance the research of Yuki Kireina (Kireina and Rosandini 2020), by developing motifs inspired by batik of *pohon hayat* (tree of life) and fauna to be applied to different sling products, namely ring-slings, with different materials and application techniques. The development is carried out based on the current needs of mothers, especially during the Covid-19 pandemic. Ring-slings are suitable for activities at home, coupled with the pandemic, the need for sling products has also increased. Although it requires effort to be able to find a position and way of use that is good and comfortable to use for mothers and children, this type is easier to use than the *jarik* type because there is a ring that helps the user when tightening the sling.

2. Method

The research methods used is qualitative by reading literature study, doing interview, observation. This method is used for data collection in conducting research in the following ways; (1) Literature Study is the collection of data through books and journals, such as the book "Batik Filosofi dan Kegunaan" and "Batik Pesisir Pusaka Indonesia", and others as the main data regarding phenomena, problems and theoretical foundations used in research; (2) The interview gave several questions to the speakers, one of which was interviewing Afifah Mu'minah as a carrying consultant from Indonesian Babywearers, about maternity products that support maternal and child protection efforts; (3) Observation is the activity of collecting data by observing directly or indirectly, such as visiting the official selling pages of mother and child supply stores to support other data. Exploration is the process of developing motifs both in shape, color, and composition which is carried out manually and digitally to produce innovation of new motives

3. Results and Discussion

3.1. Enrichment Analysis of Batik Motifs of Pohon Hayat and Fauna Slings

This analysis was carried out based on the drawing of batik cloth carrying the Hayat Tree and Fauna in the book *Batik Pesisir Pusaka Indonesia Koleksi Hartono Sumarsono* (Sumarsono 2011). Fig 1 show Batik Sling, styling. Based on Tabrani's theory (Tabrani 2015), Batik Gendongan Lasem has the characteristics of traditional motifs with the styling of Ruang Waktu Datar (RWD) which uses primitive visual language in which there are stories that are not limited to space, place and time. It can be seen from; (1) The large size of the motif affects the importance of whether the object is important; (2) Shows motifs from head to toe. There are good wishes and prayers on the fabric motifs such as fertility, prosperity, and happiness. Technique. The technique used in making the Hayat Tree and Fauna motif is written batik, it can be identified in the sling motif, namely; (1) The lines of the motif seem organic and not rigid; (2) The size of the line or outline, the shape of the same animal motif, as well as the size

have an unequal size. Color. The colors used are red, dark blue, as well as a cream-colored fabric background.




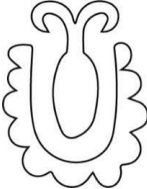

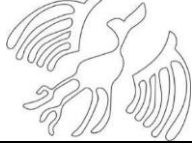

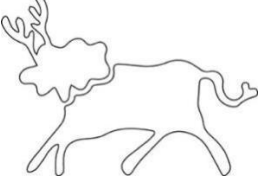





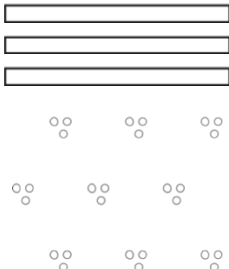
Fig 1. Batik Sling Analysis

3.2. Motif Experiment

The initial experiment carried out was to make an initial stylization based on the *pattern board*, the goal was to create new variation motifs and realize the research objectives, namely creating new variations of inspired motifs and Lasem batik motif fabrics. The first stage is to make a stylization of the motif according to simple styling, namely a flat design that uses curved lines, curvy edge shapes tend to be round, minimal detail and curves. The initial consideration made is so that the character of the image you want to convey can be displayed through flat design using digital sketches, see Table 1.

Table 1. Motif Experiment

| Motif | Inspiration | Stylization | Analysis |
|--------------|---|---|---|
| Pohon Hayat |  |  | The pohon hayat (tree of life) motif is made very simply by removing the small indentations in the initial stylization. The leaves and flowers on the tree are made separate and far from the stem. |
| Butterfly |  |  | The shape of the butterfly is still the same as the initial stylization, the shape of this motif is in accordance with the intended flat design style, namely reducing indentations, rounded motif shapes, and separating a part and giving distance between the body parts of the motif. |
| Hummingbird |  |  | The body parts from the head, body, to the feet of the huk are made together. While the two wings are made separate and far from the body of the bird. |
| Buffalo |  |  | The body, legs and tail of the buffalo are merged, while the head and horns are separated and spaced. Sharp and detailed indentations are removed, indentation forms are made more curved and rounded. |

| Motif | Inspiration | Stylization | Analysis |
|--------------------|---|---|---|
| Snail |  |  | The snail shape is made simpler than the initial stylization. The outermost layer of the snail, which was initially insulated, is made together and forms a shape with parts that are disconnected and spaced at the bottom. The middle layer is removed, the core remains with a more curved and rounded shape. Basically, the snail motif removes details to give a simple impression according to the flat design style. |
| Supporting Motives |  |  | The shape of a rectangle or line is a stylization of a part of the tassel that has been modified in size and number. The polka dots motif is inspired by isen-isen found on the inside of the main motif. There is an organic circle shape, which is composed with other circles so that the module is formed. |

3.3. Design Concept

The design concept of this research is the development of motifs on ring-sling slings with a modern style and according to the needs of mothers in pandemic situations and adaptation in the new normal period, so as to create innovations in the form of designs that can be an alternative choice of ring-sling. The considerations carried out in the design and production process are as follows:

- The material used is a material that is convenient for mother and child, and easy to clean and dries quickly. The type of sling that fits those criteria is a ring-sling (Fahira and Rosandini 2021). Materials that are comfortable to use by mothers and children are materials made from natural fibers such as tencel (Ali Fahmy Diab et al. 2021), cotton, bamboo (G, T, and S 2019), linen, and other natural basic materials, because they do not cause irritation.
- Motifs with modern styling are flat designs that use color blocking techniques with several outline accents and other detailed accents. Color blocking, minimalist impression or removing everything that is not important including shadow effects, textures, and bevels, so that it looks neat, clean and does not have any ornaments, is certainly a similar character that is also owned by The Swiss Style (Anindita and Riyanti 2016). The motif is processed by stylizing the stylization of the motif according to the original sling, namely RWD (Ruang Waktu Datar).
- The batik stamp technique was chosen to create a traditional impression with a high craftsmanship (Lias et al. 2020). It was chosen because it allows it to be mass-produced if it is compared to the writing batik technique as used in the original fabric, because the design will remain the same, besides that the duration of manufacture is shorter.

3.4. Design Development Concept

'*Dalam Dekapan*' is inspired by carrying activities. The position of the child in the mother's arm feels comfortable so that it can calm the child's mood (Ainsworth 1964). Showing a visual of the mother holding the child in casual clothes shows the activities of the mother and child during the pandemic which are often carried out at home, as well as depicting the closeness and comfort of the child while in the mother's arms. The batik motif of the Hayat tree sling and fauna has the meaning of protection, in harmony with the mother who wants to always protect

her child (Katz 2019). The motif is applied to ring-sling made from natural fibers with a modern impression as a result of the development of the sling batik motif with the technique of applying batik stamp reps.




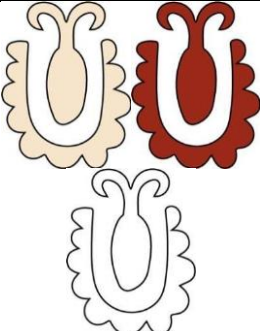






Fig 2. Dalam Dekapan Concept



3.5. Color Exploration

After the stylization is made simpler and in accordance with the styling of the flat drawing, then the stylization is again colored. The color used in each motif is only one, then applied with color blocking technique or blocking the same color to all parts of the motif. The colors used include white, cream, light brown, medium brown, dark brown, dark blue, red, and pink. Each color has its own meaning, white and beige mean holy, brown means lush and simple, dark blue means elegance, and red represents spirit.

Table 2. Colored Stylization

| Motif | Inspiration | Stylization | Analysis |
|-------------|-------------|-------------|--|
| Pohon Hayat | | | The colors used are red, cream, and brown throughout the motifs of the pohon hayat (tree of life) as well as the leaves and flowers, using a color blocking technique. |

| Motif | Inspiration | Stylization | Analysis |
|-------------|---|---|--|
| Butterfly |  |  | <p>The colors used in the butterfly motif are beige, red, and white in all parts of the butterfly's body, from the tentacles, body, to the wings, using a color blocking technique.</p> |
| Hummingbird |  |  | <p>The colors used in the hummingbird motif are red, brown, and white in all parts of the huk's body, starting from the head, body, wings, to the legs of the bird using a color blocking technique.</p> |
| Buffalo |  |  | <p>The colors used in the buffalo motif are beige, dark blue, and red all over the buffalo's body, from the horns, head, body, legs, to the tail using color blocking techniques.</p> |
| Snail |  |  | <p>Coloring with color blocking technique is used in the snail motif, the colors used are beige, white, and red in all layers of the conch body.</p> |

| Motif | Inspiration | Stylization | Analysis |
|--------------------|---|---|---|
| Supporting Motives |  |  | <p>The shape of a rectangle or line is a stylization of a part of the tassel that has been modified in size and number. The colors used are beige and white.</p> <p>The polka dots motif is inspired by isen-isen found on the inside of the main motif. There is an organic circle shape, which is composed with other circles so that the module is formed. The colors used are beige, dark blue and red.</p> |

3.6. Composition and Color

Fig 3, the first composition has the main motif on the sides, as well as on the sides of the flowing ends of the fabric. The motifs on the sides are hummingbirds, buffaloes, plum blossom leaves, and conch. There are supporting motifs, namely the *pohon hayat* (tree of life) and three organic points that fill the empty space in the middle of the cloth. The *kemadha* part of the *jarik* cloth is removed, replaced by a straight line on the outer circumference of the fabric as a form of modernization of the composition of the sling cloth. The color used is dark blue, while white indicates the shape and part that was blocked using the batik stamp technique.

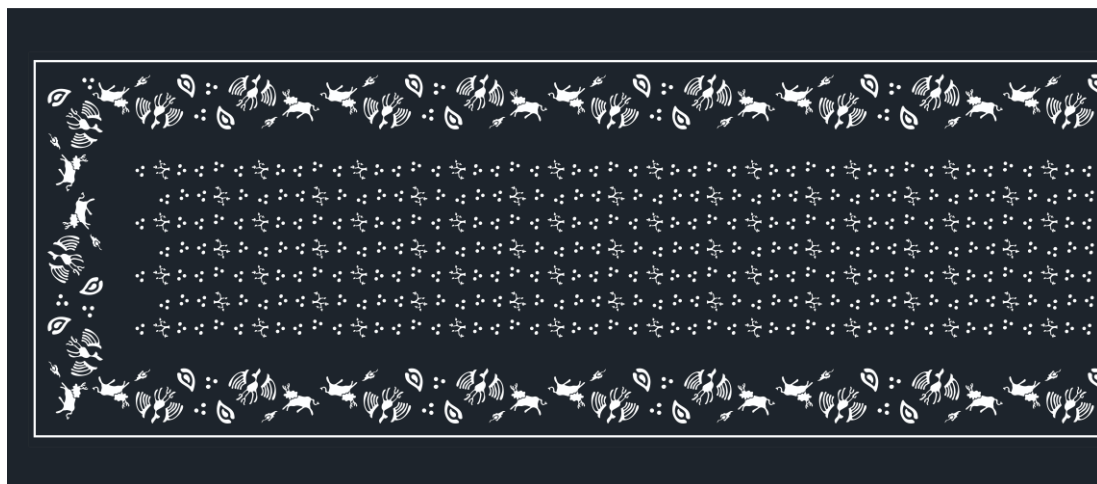


Fig 3. Composition and Color the *pohon hayat*

The next composition is not much different, on the horizontal side and the edge of the flowing cloth there are motifs of crows, buffaloes, plum blossom leaves, and conch, Fig 4. The center of the cloth is filled with supporting motifs in the form of three dots and a marching *pohon hayat* (tree of life), as well as spaced lines which are one of the characteristics of modern batik motifs. On the horizontal side of the fabric, there are three lines which are a development of the *kemadha* part of the *jarik* cloth, but it is made more modern. The color used on the background is dark brown, while the motif part is colored beige. All beige colors seen in the composition are parts that are stamped using batik stamp prints.



Fig 4. Composition and Color the *pohon hayat*

The third composition has the simplest impression, because the motif is made smaller in size when compared to the previous two compositions, there is a distance between the motifs, there are only two main types of motifs, and two types of supporting motifs, Fig 5. On the lower side there are three straight lines as markers for the top or bottom of the fabric, this line is useful for sling users to easily distinguish the top and bottom. At the end of the flowing fabric, there is a supporting motif in the form of a spot-shaped outline. In the middle part is filled with the main motifs, namely butterflies and *pohon hayat* (tree of life), there are also spots in between the main motifs. The background color used is red, while the motif in the production process is the part that is covered by the night using the batik stamp technique, given a beige color.

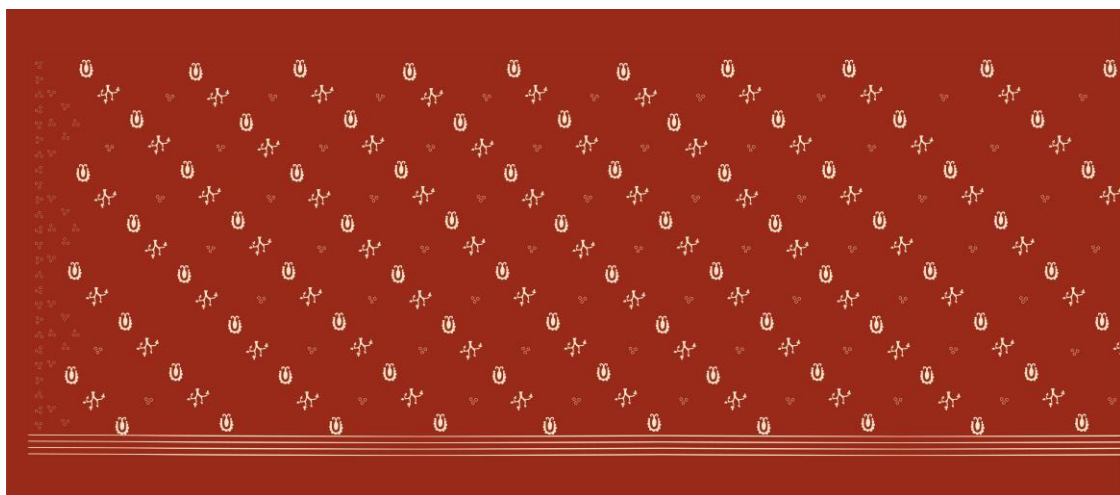


Fig 5. Composition and Color the *pohon hayat*

After the composition is made, the next process is the process of designing a composition with colors based on the consideration of printing and coloring batik techniques. The creation of a dominant background color over the area that is blocked is also the result of consideration of batik cap production.

3.7. Application to Products

Printing or the process of printing motifs on a 1: 1 scale wolvis fabric, using the CMYK color format as many as 3 different compositions of motifs and colors, Fig 6. The technique used is sublimé digital printing.



Fig 6. Prototyping

After making a prototype, the product is made on the actual fabric using the batik stamp technique. The composition, motif and size are made according to the prototype that has been made. Fig 7 are the results of the Lasem Hayat Tree and Fauna ring-sling sling products.

| Tech Pack | | Style No: 1 Description: Ring-Sling Designer: Citra Tiffany | | Date: 27/06/21 | | Tech Pack | | Style No: 2 Description: Ring-Sling Designer: Citra Tiffany | | Date: 27/06/21 | | Tech Pack | | Style No: 3 Description: Ring-Sling Designer: Citra Tiffany | | Date: 27/06/21 | |
|---------------------|----------------------------------|---|--|-----------------|-----|---------------------|----------------------------------|---|--|-----------------|-----|---------------------|----------------------------------|---|--|-----------------|-----|
| Material & Supplies | | Sample Size: All-size | | | | Material & Supplies | | Sample Size: All-size | | | | Material & Supplies | | Sample Size: All-size | | | |
| Material | Primisama Cotton | FRONT | | Gathered | | Material | Primisama Cotton | FRONT | | Gathered | | Material | Primisama Cotton | FRONT | | Gathered | |
| Supplies | Alumunium Rings Diameter 8 cm | BACK | | Batik Cap Motif | Sew | Supplies | Alumunium Rings Diameter 8 cm | BACK | | Batik Cap Motif | Sew | Supplies | Alumunium Rings Diameter 8 cm | BACK | | Batik Cap Motif | Sew |
| Design | | Gathered | | | | Design | | Gathered | | | | Design | | Gathered | | | |
| Color | | 2 Rings | | | | Color | | 2 Rings | | | | Color | | 2 Rings | | | |

Fig 7. Worksheet

The ring-sling measuring 75 x 200 cm is made of primisama cotton fabric. The additional material used is a silver ring, measuring 8 cm, made of stainless steel without gaps. This sling has a motif inspired by batik fabric of the *pohon hayat* (tree of life) and fauna from Lasem, applied using the batik stamp technique. The colors used are dark blue, dark brown, terracotta, and beige.

3.8. Batik Stamp Production

The process of briefing, or discussion about the shape, size, and plan of applying motifs to fabrics using batik techniques. In this process, the digital design is handed over to the craftsman to enter the stamp making stage, Fig 8.

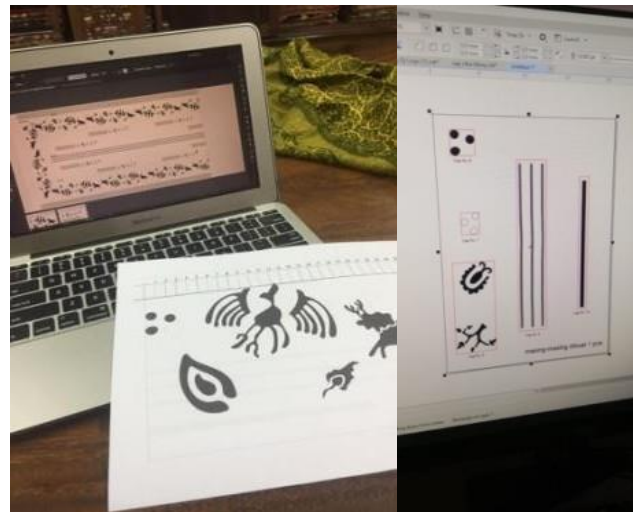


Fig 8. Batik Stamp Production

The process of making stamps, using copper plates that are formed according to the motifs that have been submitted in the previous process, Fig 9.



Fig 9. Batik Stamp Production

After the stamp is finished, then testing is carried out using batik wax on the fabric. The goal is to ensure the resulting motif of the stamp that has been made, corresponds to the initial design, Fig 10. A total of 10 stamps made of copper plates are made as prints of batik stamp motifs. The manufacture of stamps is made in two different places, namely in Pekalongan and Bandung. This is done to be able to produce 10 batik stamps at the same time according to a predetermined time. The final result corresponds to the design given to the craftsman.



Fig 10. Batik Stamp Production

3.9. Batik Swatches Sampling

Before making swatches, the naphthol color to be used is first selected. Color selection is carried out by matching the colors of the test-print results with batik fabrics that are already available in the showroom, see Fig 11.



Fig 11. Sampling Production

The process of making batik swatches on primisima fabric measuring 25 x 25 cm begins with the process of stamping using copper molds, and batik wax as a barrier, Fig 12.



Fig 12. The process of stamping using copper molds

After the wax is dry, the next stage is to dye the fabric on a solution of naphthol dye, see Fig 13. Here's the naphthol formula used; (1) Red: ASOL (15 grams), 91 (15 grams); (2) Dark Blue: 04B (10 grams), ASD (10 grams); (3) Dark Brown: ASG (7 grams), ASBO (3 grams), see Fig 13.



Fig 13. The fabric with a solution of naphthol dye

Next, the fabric is dyed on saline solution, see Fig 14. After finishing dyeing on a solution of naphthol and salt, the cloth is dried to dry in the sun. Here's the salt formula used; (1) Red: CG (20 gram), R (20 gram); (2) Dark Blue: BB (20 grams); (3) Dark Brown: ITB (15 grams), BRB (5 grams).



Fig 14. The fabric is dyed in a saline solution

After the fabric is dry, the process of loosening or softening wax on the fabric is then carried out, Fig 15. Then the cloth is again dried to dry. Some of the fabric is re-dyed to produce a beige color on the motif, others have completed the dyeing stage.



Fig 15. The process of loosening or softening wax on the fabric

After the fabric is dry, the swatches are finished making. The final result of the five swatches made is quite good, the batik fabric has brown and red colors that are close to the initial color sample chosen, while the blue fabric has a lighter color than the sample, Fig 16.

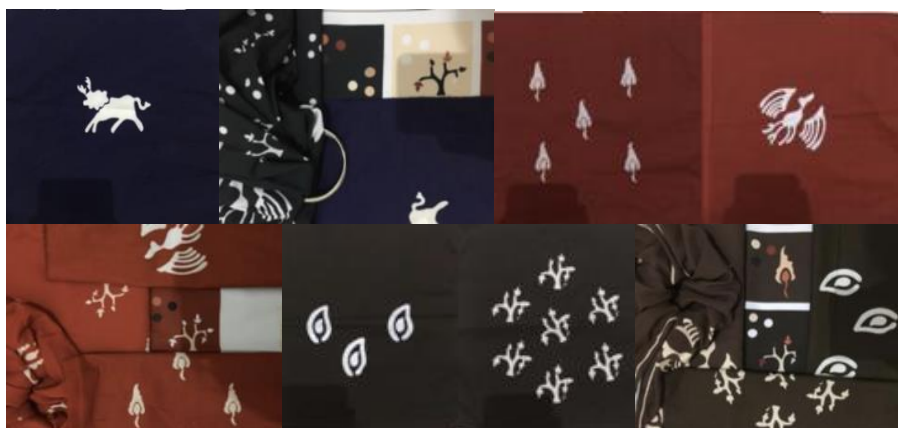


Fig 16. The final result of the five swatches

In the process of making samples of batik stamp cloth, there are stages that are passed. Starting from the process of color selection, stamping, color dyeing in naphethanol solution, then saline solution, wax softening, to drying fabric. The process takes four working days. Overall, the sample results are quite good and close to the selected color sample. In blue fabrics, the resulting color should be dark blue almost black, but due to weather factors and lack of sunlight, the resulting blue color is brighter than the color it should be. In brown and red fabrics, the resulting colors are in accordance with the sample and close to the colors selected according to the color scheme.

3.10. Batik Process

The stamping process on primisima cotton fabric measuring 110 x 250 cm according to the selected composition, Fig 17.



Fig 17. The stamping process

After the finished fabric is stamped with wax, then the wax will be dried. Next is the staining process in the naphethanol liquid, Fig 18. Here's the naphthol formula for every 5 liters of water used: Red: ASOL (15 grams), 91 (15 grams); (1) Dark Blue: 04B (10 grams, ASD (10 grams); (2) Dark Brown: ASG (7 grams), ASBO (3 grams).



Fig 18. The staining process in the naphethanol liquid

Next, the fabric is dyed on saline solution. After finishing dyeing on a solution of naphthol and salt, the cloth is dried to dry in the sun, Fig 19. Here's the salt formula used; (1) Red: CG (20 gram), R (20 gram); (2) Dark Blue: BB (20 grams); (3) Dark Brown: ITB (15 grams), BRB (5 grams).



Fig 19. The cloth is dried to dry in the sun

After the fabric is dry, the process of loosening or softening wax on the fabric is then carried out. Then the cloth is again dried to dry. Some of the fabric was re-dyed to produce a beige color on the motif with the indigosol IRD color formula of 5 grams, others have finished dyeing, Fig 20.



Fig 20. The process of loosening or softening wax on the fabric

After the cloth is dry, the batik cloth is finished making. The final result of the five fabrics made is very good, the batik fabric has brown, red, and blue colors that match the sample, Fig 21.



Fig 21. The batik cloth is finished making

In the process of making batik cap cloth measuring 110 x 250 cm, the stages are the stamping process, dyeing in naphthol liquid, dyeing in salt liquid, wax decay, dyeing with indigosol dye, and drying the fabric. The results are in accordance with the selected samples, namely dark brown, dark blue, and terracotta red.

3.11. Final Product

The ring-sling measuring 75 x 200 cm is made of primisima cotton fabric. The additional material used is a silver-colored ring, measuring 8 cm, made of stainless steel without gaps. This sling has a motif inspired by the batik fabric of the pohon hayat (the tree of life) and fauna from Lasem, applied using the batik stamp technique. The colors used are dark blue, dark brown, terracotta, and beige, Fig 22.



Fig 22. Batik Ring-Sling

4. Conclusion

Based on the results of research that has been discussed regarding the design of ring-sling products with the inspiration of the Lasem sling batik motif, it can be concluded that: (1) The process of creating innovations or developing new motifs from Lasem batik motif research is carried out by reviewing literature studies in the form of books and scientific articles, after doing this stage next, it is to analyze batik motifs from Lasem, especially the motifs of *pohon hayat* (tree of life) and fauna. The results of the analysis showed that there were at least 10 motifs on the batik cloth of the sling from Lasem, these motifs were primitive in style. Primitive characters have many details and indentations on each part of the motif. Furthermore, the process carried out is to make stylization in the form of developing motifs with new styling. Modern new styling in accordance with the chosen trend, namely *flat design*. This type of styling has a simpler form, only its silhouette is used. The colors used in the developed motifs are dark brown, dark blue, terracotta, and beige, taken from the colors in the *color scheme* and *image board* that have been made. After the stylization is made, the next step is to make a composition that suits the size and field of application, namely the ring-sling cloth; (2) The development of ring-sling products in terms of techniques and materials is carried out by reviewing literature studies in the form of books, scientific articles, observations, interviews, and questionnaires according to data needs. The final stage carried out is experimentation by making stylization, composition, to product design. The ring-sling product is made of primisima cotton, which is a natural fiber material, the sling is given a modern batik motif inspired by the batik motif of the sling from Lasem, namely the life and fauna trees applied using the batik stamp technique which gives a traditional impression.; (3) The application of motifs using the batik stamp technique is selected based on the results of studies and analysis of literature studies in the form of books, and scientific articles. After studying and analyzing, the next step is the exploration process, which is to make a stamp motif design based on considerations with the color to be used. Furthermore, the design is given to batik stampers to be made into molds made of copper plates. After the batik stamp is completed, the next process is to make a sample stamp and its coloring on the primisima cotton fabric as the colors that have been determined in the design process, namely dark blue, dark brown, terracotta red, and beige using naphthol and indigosol dyes. After the sample is complete and according to the

selected color, then the process of making batik stamp is carried out on a fabric measuring 110 x 250 cm as a material for making sling products. The batik process is carried out by stamping, dyeing in a solution of naphthol and salt, drying the cloth, shedding wax or *nglorod*, re-dyeing in cream color, and the final drying process.

Reference

- Ainsworth, Mary D. 1964. "Patterns of Attachment Behavior Shown by the Infant in Interaction with His Mother." *Merrill-Palmer Quarterly of Behavior and Development* 10 (1): 51–58.
- Ali Fahmy Diab, Walaa, Doaa Abdul Qadir Al-Qatari, Alaa Abdel Fattah Arafa Badr, and Asma Abdel Moneim Mohamed Ali. 2021. "Effect of Fabric Properties Knitted from Tencel and Tencel/Egyptian Cotton Blends with Different Fabric Structure on Fabric Sewability." *Journal of Arts & Applied Sciences (JAAS)* 8 (4): 47–57.
- Anindita, Marsha, and Menul Teguh Riyanti. 2016. "Tren Flat Design Dalam Desain Komunikasi Visual." *Jurnal Dimensi DKV Seni Rupa Dan Desain* 1 (1): 1–14. <https://doi.org/10.25105/jdd.v1i1.1816>.
- Fahira, Citra Tifany, and Morinta Rosandini. 2021. "Analisa Jenis Produk Gendongan Yang Sesuai Digunakan Para Ibu Di Masa Pandemi Covid-19." *SINGULARITY: Jurnal Desain Dan Industri Kreatif* 1 (2): 56–61.
- G, Nagarajan, Ramachandran T, and Boobalan S. 2019. "An Analysis of Quality Characteristics of Bamboo/Cotton Blended Yarns of Rotor and Ring Spun." *International Research Journal of Science and Technology* 1 (1): 31–34. <https://doi.org/10.46378/irjst.2019.010105>.
- Katz, Emma. 2019. "Coercive Control, Domestic Violence, and a Five-Factor Framework: Five Factors That Influence Closeness, Distance, and Strain in Mother–Child Relationships." *Violence Against Women* 25 (15): 1829–53. <https://doi.org/10.1177/1077801218824998>.
- Kireina, Yuki, and Morinta Rosandini. 2020. "Pengolahan Motif Yang Terinspirasi Dari Kain Batik Gendongan Lasem Untuk Pengembangan Produk Gendongan Soft Structure Carrier (SSC)." *eProceedings of Art & Design* 7 (2): 3334–44.
- Lias, Hamdan, Ahmad Rasdan Ismail, Norfadzilah Jusoh, and Haslinda Abd. Hamid. 2020. "Technological Development of Bamboo for 'Batik' Stamp in Malaysian Textile Industries." *IOP Conference Series: Earth and Environmental Science* 616 (1): 012037. <https://doi.org/10.1088/1755-1315/616/1/012037>.
- Rosandini, Morinta, and Yuki Kireina. 2020. "Kajian Bahasa Rupa Pada Batik Gendongan Lasem Motif Pohon Hayat Dan Satwa." *Gelar: Jurnal Seni Budaya* 18 (1): 16–22. <https://doi.org/10.33153/glr.v18i1.3022>.
- Sumarsono, Hartono. 2011. *Batik Pesisir Pusaka Indonesia. KPG (Kepustakaan Populer Gramedia). Jakarta.*
- Tabrani, Primadi. 2015. "Pendidikan Seni, Hubungannya Dengan Ambang Sadar, Imajinasi Dan Kreativitas Serta Manfaatnya Untuk Proses Belajar Yang Bermutu." *Wimba: Jurnal Komunikasi Visual* 7 (1). <https://doi.org/10.5614/jkvw.2015.7.1.1>.