

## Development of Toba Batak Gorga Ornaments in Written Batik



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**ABSTRACT:** Medan is rich in culture, especially in ornamental crafts, this the development of Batak Toba ornament creations in batik tulis is carried out. The ornaments studied include the form of the Gorga desa Naualu, Gorga simeol-meol, and gorga hariara sundung di Langit which are developed into batik tulis cloth products. The purpose of this study was to determine the development of the Gorga desa Naualu, Gorga Simeol-Meol, and Gorga Hariara Sundung di Langit ornaments in batik tulis and to examine the feasibility of these ornaments in this context. The results of the study showed: (1) As many as 79% of consumers stated that there was a need for the development of Batak Toba Gorga ornaments; (2) Design experts assessed the development of batik tulis ornaments with a very good percentage (89.58%); (3) Batik experts assessed the development of batik tulis ornaments with a very good percentage (79.16%); (4) The results of the small group test obtained a score of 90%, the medium group test obtained a score of 87.5%, and the large group test obtained a score of 83.43% for the Batak Toba batik motif, all of which are in the very good category. This proves that the Batak Toba Gorga ornament that was developed is very suitable for use in the batik motif.

**KEYWORDS:** Development, Batik, Writing, Batak, Toba

### I. INTRODUCTION

Indonesia is a country with diverse wealth, both in terms of environmental resources and its culture. The ethnic groups in Indonesia have various cultures, traditions, and customs, resulting in a wide variety of decorative arts. North Sumatra is a region on the island of Sumatra that also boasts a diversity of cultural patterns and artistic expressions. According to BPKP data, the population of North Sumatra, based on ethnic groups, consists of indigenous people from North Sumatra, immigrants, and foreign residents, as well as the Karo Batak, Malay, Simalungun Batak, Pakpak Batak, Toba Batak, Nias, coastal communities, and Mandailing Batak.

One of the cultural and artistic expressions of the Toba Batak people is gorga Batak Toba. Gorga Batak Toba is the closest representation of the social identity of the Toba Batak tribe. Historically, gorga was used as decoration in Toba Batak houses, particularly on the upper part of the ceiling, especially in the front above the door and in some areas inside the house. It was believed to provide protection for the home and its inhabitants from malevolent spirits coming from outside. Toba Regency is a region located on the shores of Lake Toba and is one of the ancestral areas of the Toba Batak community, along with Tarutung (North Tapanuli) and Samosir. This regency still holds the history of the Toba Batak people, including traditional houses. Traditional houses feature gorga that is carved or decorated around them. In February 2024, researchers conducted observations at a traditional house known as Rumah Bolon to see firsthand the form of gorga Batak Toba, where gorga itself serves as a symbol of the identity of the Toba Batak tribe.

As time has progressed, gorga Batak has been found in traditional musical instruments, government buildings, and traditional markets. Gorga symbolizes strength and beauty, reflecting the unique identity of the Toba Batak community. Unfortunately, to this day, the development of gorga's beauty remains very limited. One area affected is batik craftsmanship, where batik designs have not yet fully captured the beauty of gorga ornaments optimally. This is echoed in the research conducted by Wahyu Tri Atmojo and Misgiya in 2018, titled "Eksplorasi dan Implementasi Ornamen Sumatera Utara dalam Karya Batik" from North Sumatra, which serve as a source of local culture, is still very limited.

The development of gorga ornaments is one way for the author to preserve local culture as an essential aspect of contemporary life. Gorga Batak Toba, as part of Indonesia's cultural wealth, holds valuable heritage in the form of gorga ornaments found in Batak Toba culture. The researcher has chosen three ornaments to develop: gorga desa naualu, gorga simeol-meol, and gorga hariara sundung di langit, which will be used as motifs in batik production. In this study, the batik technique employed is hand-drawn batik. The growth of locally-based batik is an interesting phenomenon to observe, as this industry has significant potential to elevate local culture and serve as an alternative choice amid the rapidly advancing batik trends. This research aims to empower an object so that it possesses high economic value while innovating without altering the philosophical values and meanings inherent in gorga Batak

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Toba. The development of gorga Batak Toba ornaments will provide opportunities for batik artisans in Toba Regency to produce handicraft art with high economic value. The final process involves realizing gorga Batak Toba ornaments in the form of hand-drawn batik, ensuring that the fundamental values of gorga are maintained, so that the results carry a higher functional value. The development of gorga Batak Toba ornaments in hand-drawn batik represents a traditional motif rich in meaning and symbolism within Batak culture..

The importance of this research lies in establishing a foundation for absorbing traditional local resources from the Toba Batak ethnic group as a conceptual basis for creating batik handicrafts that are expected to appeal to the market. The goal is to meet the daily needs of people who tend to seek better quality products. This research involves understanding the elements of gorga ornaments and how these ornaments are applied in hand-drawn batik. Through this research, it is hoped to contribute to the development of batik works, aesthetics, and value in hand-drawn batik. Considering the background above, the title of this research has been determined 'Development Of Toba Batak Gorga Ornaments On Batik Tulis'.

## II. METHOD

In this research, the product development model used is the 4-D development model, which was developed by Thiagarajan. This model is carried out through four stages: define, design, develop, and disseminate.

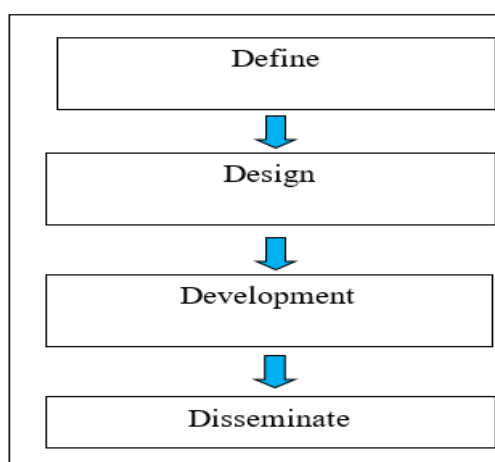


Figure 1. 4D Model Flowchart (Source: Maydiantoro, 2021)

The development of the Toba Batak gorga ornaments was carried out using the research and development method. This development research was carried out in Balige District, Toba Regency.

## III. RESULT AND DISCUSSION

The research model used in this study is the 4D model, a research model consisting of 4 main stages, namely Define, Design, Develop, and Disseminate. The following is the development flow of the 4D model.

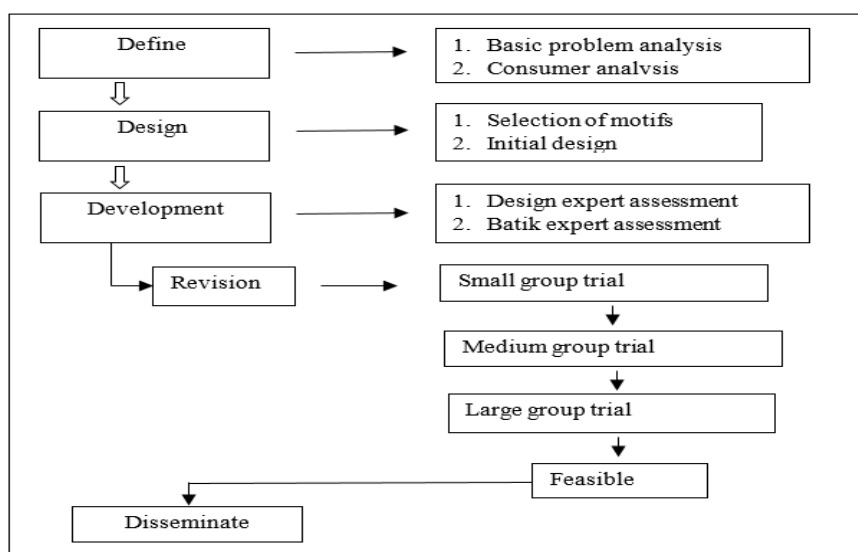


Figure 2. Product development flow with a modified 4-D model

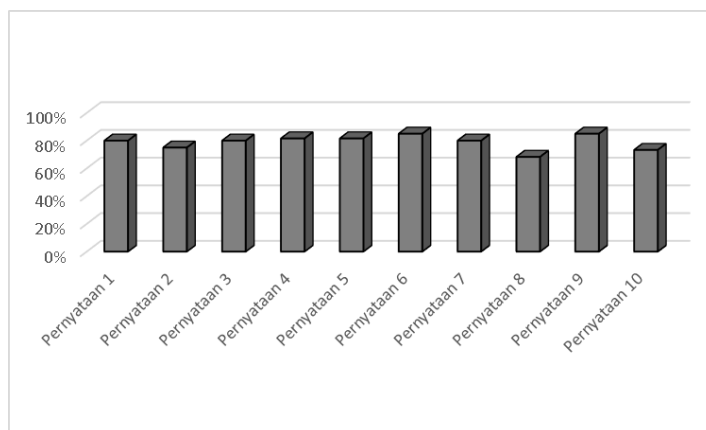
Source: (Sa'adah et al., 2022)

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The research and development of the ornaments are conducted based on the procedure for developing gorga Batak Toba ornaments, referencing the 4D research and development model by Thiagarajan. The 4D development model consists of four steps. The first step is define, the second step is design, the third step is develop, and the fourth step is disseminate.

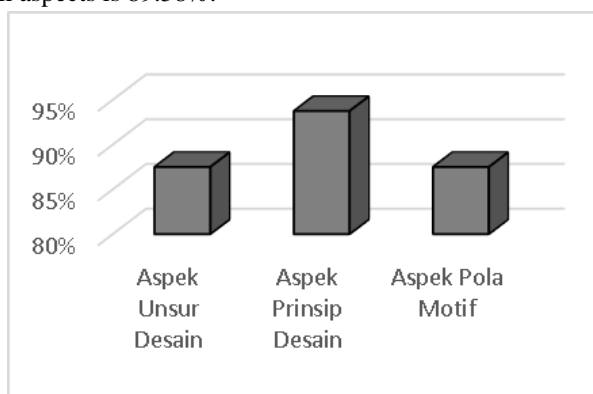
In the define step, the research performs a front-end analysis and consumer needs analysis. The purpose of this step is to analyze what consumers need. The needs analysis is conducted by distributing questionnaires to 15 consumers who use batik.

Based on the data analysis results from the 15 respondents through the consumer needs analysis questionnaire regarding the development of gorga Batak Toba ornaments, an average percentage value of 79% was obtained. It can be said that batik users strongly agree with the development of gorga Batak Toba ornaments using gorga desa naualu, gorga simeol-meol, and gorga hariara sundung di langit.



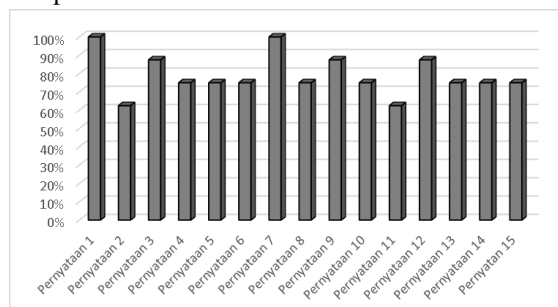
**Figure 3. Average Percentage Diagram of Consumer Needs Analysis Results for the development of Toba Batak gorga ornaments on written batik**

At this stage, the ornaments developed as motifs for hand-drawn batik fall into the category of very good / highly suitable, with expert design assessment percentages of 87.5% for design elements, 93.75% for design principles, and 87.5% for motif patterns. The overall average percentage for all aspects is 89.58%.



**Figure 4. Diagram of Percentage Results of Design Feasibility Testing by Design Experts on the Development of Gorga Batak Toba Ornaments in Hand-Drawn Batik**

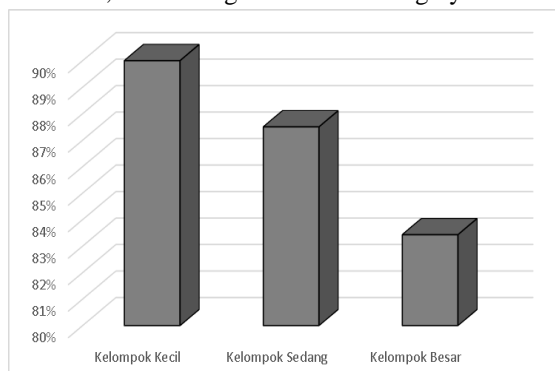
At this stage, the developed ornaments fall into the category of very good / highly suitable, with an average percentage score of 79.16% obtained from the batik experts' assessments.



**Figure 5. Diagram of Percentage Results of Feasibility Testing by Batik Experts on the Development of Gorga Batak Toba Ornaments in Hand-Drawn Batik**

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At this stage, the developed gorga Batak Toba ornaments are deemed suitable for use as batik motifs. Based on feedback from batik users in a small group test, a score of 90% was obtained; in a medium group test, a score of 87.5% was achieved; and in a large group test, a score of 83.43% was received, all meeting the criteria of highly suitable.



**Figure 6. Diagram of Percentage Results of Feasibility Testing for the Development of Gorga Ornaments by Small, Medium, and Large Groups**

After the developed ornaments are deemed highly suitable for use as batik motifs, the dissemination step can proceed. Based on the assessment instrument that was prepared to determine score data through questionnaires given to design expert validators, an overall average percentage score of 89.58% was obtained, with detailed scores of 87.5% for design elements, 93.75% for design principles, and 87.5% for motif patterns. It can be said that the batik design using the ornaments of gorga desa naualu, gorga simeol-meol, and gorga hariara sundung di langit, which have been stylized, falls into the "very good" category.

Based on the assessment instrument prepared to determine score data through questionnaires given to batik expert validators, an overall average percentage score of 79.16% was obtained. It can be concluded that the batik design using the ornaments of gorga desa naualu, gorga simeol-meol, and gorga hariara sundung di langit, which have been stylized, is also categorized as "very good."

Based on trial results conducted with 30 respondents through a feasibility test questionnaire regarding the development of gorga Batak Toba ornaments, an average percentage score of 86.97% was obtained, with detailed scores of 90% for small-scale trials, 87.5% for medium-scale trials, and 83.43% for large-scale trials. It can be stated that the design of batik using the motifs of gorga desa naualu, gorga simeol-meol, and gorga hariara sundung di langit, which have been stylized, falls into the "very good" category and is suitable for batik users. The development of gorga Batak Toba ornaments is conducted using research and development methods. This development research is carried out in the Balige District of Toba Regency.

The products produced are hand-drawn batik with the motifs of gorga desa naualu, gorga simeol-meol, and gorga hariara sundung di langit. In the process of developing the ornaments, the first stage that must be prepared is the stylization of the motifs. The results of the stylization are as follows:


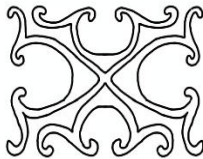




Initial Motif	Stylization Results
<p>Gorga Desa Naualu</p> 	
<p>Gorga Simeol-Meol</p> 	
<p>Gorga Hariara Sundung di Langit</p> 	



Table 1. Stylization Motif



Figure 7. Design Results of Development of Toba Batak Gorga Ornaments on Written Batik

### CONCLUSIONS

Based on the results of the research and development outlined, the following conclusions can be drawn: The outcome of this research is the development of gorga Batak Toba ornaments using a development technique that applies stylization to the motifs. The method used in this research employs the Research and Development (R&D) approach, following the 4D development stages by Thiagarajan et al., which consist of four phases: (1) define phase, including front-end analysis and consumer analysis; (2) design phase, including motif selection and initial design; (3) develop phase, involving expert validation and feasibility testing; (4) disseminate phase. After completing these four development stages, the product resulting from this research is hand-drawn batik with gorga Batak Toba motifs.

The assessment results from design expert validators yielded an average score of 89.58%, which falls into the "very good" category. Batik experts provided an average score of 79.16%, also categorized as "very good." Based on the feasibility testing conducted, the developed design is deemed "very good."

Testing was conducted in three stages: a small group test with an average score of 90%, categorized as very good; a medium group test resulting in an average score of 87.50%, categorized as highly suitable; and a large group test with an average score of 83.43%, also classified as very good. Based on the three testing groups, the overall average feasibility score in this research is 86.97%, which falls into the "very good" category. Therefore, it can be concluded that the developed design is "suitable."

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