

Mud-Mee Silk Design of Graphic Patterns Adopting from Architectural decoration of Khmer Temples in Buriram Province.

Sombat Prajongsant¹

Abstract

Based on a concept of promoting and developing the creative economy, the researcher has seen the value of the beautiful architectural decoration of the Khmer Temples or "Prasat Khom". For the reason that these patterns can be used as prototypes for creating contemporary and universal graphic patterns while the local identity is still preserved resulted in the development of products with the graphic patterns which were designed by using the patterns derived from Khmer Temples in Buriram Province. The objectives of the research were: 1) to test the prototypes of the graphic patterns which were designed by using architectural decoration derived from Khmer Temples in Buriram Province and then use the patterns to produce Mud-mee silk, and 2) to design and try to produce Mud-mee products. The research method employed in the study included determining the 10 patterns on the Grid table for production trail run. The research findings were the manufacturers can dye solid color according to the prototypes and the staining patterns equaled 100 percent while manufacturers can tie Mud-mee patterns with the right shape and proportion equaled only 80 percent.

Keyword: product design, silk, Khmer Temples

Introduction and objectives

The research has arisen from the concept of promoting and developing the creative economy that the economy will be driven on the basis of the use of knowledge, education, and work creation, and intellectual property associated with the cultural roots as well as the accumulation of knowledge of the modern society, technology, and innovation in Buriram Province area. The two important Khmer Temples that are located along the ancient Khmer cultural route linking Khmer Temples in Thailand to Kingdom of Cambodia in this area are Phanom Rung ruins and Muang Tam ruins. Both ruins are decorated with beautiful decorative architecture designs which can be used as prototypes for create contemporary graphic patterns.

¹ Faculty of Industrial Technology Buriram Rajabhat University 439 JIRA Rd Muang Buriram 31000

The created patterns can be applied to produce products of the community or industrial products and souvenirs that carried the local identity. In the year 2011, the researcher designed 14 graphic pattern prototypes (see figure 1) by using architectural decoration patterns from Khmer Temples as prototypes and disseminated 2 patterns to Mud-mee silk manufacturers for trial production and in the year 2012, the researcher tried to give 6 more patterns to the groups of Mud-mee silk manufacturers. The problems found were the inconsistency of the patterns. The research viewed that if there will be an experiment for developing the production will lead to the commercial production that will help promoting the use of wisdom of ancient Khmer arts and if there will be the product processing will help increasing the value of the products which will in line with the creative economy concept. This concept is promoting the creation of the local products that carry the unique and international looks. The 2 objectives of this research were: 1) to try to design graphic pattern prototypes by using architectural decoration patterns derived from Khmer Temples in Buiram Province, and 2) to design and try to produce Mud-mee processed products.

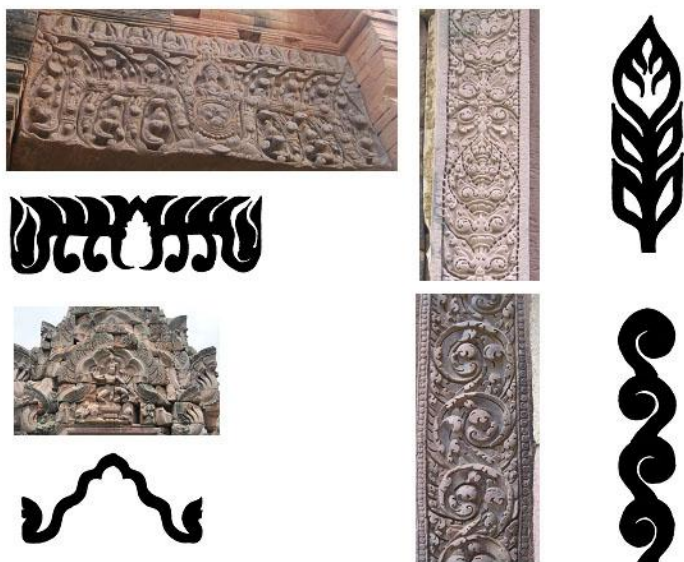


Figure 1: Graphic pattern prototypes adopting from architectural decoration of Khmer Temples

Methods

This research was a design creativity research. The research was conducted for creating design outputs that can be utilized for commercial use. The methodology consisted of 3 steps as follows:

1) Selecting at least 5 patterns from 20 styles of the graphic pattern prototypes designed from the architectural decoration patterns derived from Prasat Phnom Rung and Prasat Muang Tam in Buiram Province.





2) Presenting and disseminating the prototypes to community enterprise groups in the area in



order to select the suitable graphic patterns designed from the architectural decoration patterns from the two temples for producing Mud-mee silk.

3) The manufacturers tried to produce Mud-mee silk products with the 10 graphic patterns designed from the architectural decoration patterns derived from the two temples.

Findings

In terms of Mud-mee silk products, the researcher disseminated the found patterns to the local textile manufacturer groups. The 2 manufacturer groups that were interested in conducting the trial production were given the 10 styles that designed by the researcher as the prototypes for production. The researcher conducted the follow-up on the outputs and compared the outputs with the designed patterns. It was found that the manufacturers can dye the solid color according to the prototypes equaled and the staining patterns according to the prototypes equaled 100 percent while manufacturers can tie Mud-mee patterns with the right shape and proportion equaled only 80 percent, including the consistency of the weaving was good.

Results	Analysis	Results	Analysis
 <p>K1</p>	<ul style="list-style-type: none"> - The person who tied Mud-mee pattern could tie the threads similar to the determined pattern, but the proportion of the pattern could not be maintained - The person who tied Mud-mee pattern could dye the solid color and staining pattern according to the determined color in the pattern. - The consistency of the weaving was good 	 <p>K2</p>	<ul style="list-style-type: none"> - The person who tied Mud-mee pattern could tie the threads similar to the determined pattern and the proportion of the pattern could be maintained - The person who tied Mud-mee pattern could dye the solid color and staining pattern according to the determined color in the pattern. - The consistency of the weaving was good
 <p>K3</p>	<ul style="list-style-type: none"> - The person who tied Mud-mee pattern could tie the threads similar to the determined pattern and the proportion of the pattern could be maintained - The person who tied Mud-mee pattern could dye the solid color and staining pattern according to the determined color in the pattern. - The consistency of the weaving was good 	 <p>K4</p>	<ul style="list-style-type: none"> - The person who tied Mud-mee pattern could tie the threads similar to the determined pattern and the proportion of the pattern could be maintained - The person who tied Mud-mee pattern could dye the solid color and staining pattern according to the determined color in the pattern. - The consistency of the weaving was good

Results	Analysis	Results	Analysis
 <p data-bbox="236 584 272 613">K5</p>	<ul style="list-style-type: none"> <li data-bbox="459 309 820 510">- The person who tied Mud-mee pattern could tie the threads similar to the determined pattern and the proportion of the pattern could be maintained <li data-bbox="459 533 820 779">- The person who tied Mud-mee pattern could dye the solid color and staining pattern according to the determined color in the pattern. <li data-bbox="459 712 820 779">- The consistency of the weaving was good 	 <p data-bbox="842 584 879 613">K6</p>	<ul style="list-style-type: none"> <li data-bbox="1066 309 1426 510">- The person who tied Mud-mee pattern could tie the threads similar to the determined pattern and the proportion of the pattern can be maintained <li data-bbox="1066 533 1426 689">- The person who tied Mud-mee pattern could dye the solid color and staining pattern according to the determined color in the pattern. <li data-bbox="1066 712 1426 779">- The consistency of the weaving was good
 <p data-bbox="236 1072 272 1102">K7</p>	<ul style="list-style-type: none"> <li data-bbox="459 797 820 999">- The person who tied Mud-mee pattern could tie the threads similar to the determined pattern and the proportion of the pattern can be maintained <li data-bbox="459 1021 820 1267">- The person who tied Mud-mee pattern could dye the solid color and staining pattern according to the determined color in the pattern. <li data-bbox="459 1200 820 1267">- The consistency of the weaving was good 	 <p data-bbox="842 1072 879 1102">K8</p>	<ul style="list-style-type: none"> <li data-bbox="1066 797 1426 999">- The person who tied Mud-mee pattern could tie the threads similar to the determined pattern and the proportion of the pattern can be maintained <li data-bbox="1066 1021 1426 1178">- The person who tied Mud-mee pattern could not dye the solid color and staining pattern according to the determined color in the pattern. <li data-bbox="1066 1200 1426 1267">- The consistency of the weaving was good
 <p data-bbox="236 1561 272 1590">K9</p>	<ul style="list-style-type: none"> <li data-bbox="459 1285 820 1487">- The person who tied Mud-mee pattern could not tie the threads similar to the determined pattern and the proportion of the pattern could not be maintained <li data-bbox="459 1509 820 1666">- The person who tied Mud-mee pattern could dye the solid color and staining pattern according to the determined color in the pattern. <li data-bbox="459 1688 820 1756">- The consistency of the weaving was good 	 <p data-bbox="842 1561 879 1590">K10</p>	<ul style="list-style-type: none"> <li data-bbox="1066 1285 1426 1487">- The person who tied Mud-mee pattern could not tie the threads similar to the determined pattern and the proportion of the pattern cannot be maintained <li data-bbox="1066 1509 1426 1666">- The person who tied Mud-mee pattern could dye the solid color and staining pattern according to the determined color in the pattern. <li data-bbox="1066 1688 1426 1756">- The consistency of the weaving was good



K1

K2

K3

K4

K5



K6

K7

K8

K9

K10

Summary

After conducting the follow-up on the outputs of the Mud-mee products and comparing the outputs with the designed patterns, it was found that the manufacturers still could not dye the solid color, staining pattern and could not maintain the shape and proportion of the pattern without faults which is different from the study of Sombat Prajonsant (2012: 80). The findings from the study showed that the manufacturers could dye the solid color according to the determined pattern equaled 50 percent, the staining pattern according to the determined pattern equaled only 37.50 percent and the shape and proportion of the pattern could be maintained equaled 25.00. These findings corresponded to Sakchai Sikkha's findings. Sakchai Sikkha (2011: 132) stated that designing the patterns in the Grid table is very important for producing Mud-mee silk. Moreover, the researcher who is the pattern designer does not know how to tie and dye the Mud-mee fabric which is in accordance with the ideas of the Department of Industrial Promotion (2003: 15). It was viewed that the person who will design the Mud-mee silk patterns should practice how to tie and dye the fabric until the person has gained the understanding towards the Mud-mee silk making wholly before designing the patterns. Otherwise, the rural people who are manufactures will not be able to make the Mud-mee silk according to the designed patterns. However, this research also had a step for creating the patterns in the Grid table for maintaining the shape and the proportion of the shape and proportion of the prototype pattern without faults.

To make the Mud-mee silk to have the patterns and the colors as the designed patterns, it is the need to have an important step. That is the step of analyzing and determining the colors of the vertical and the horizontal threads in order to create the coordination of the silk colors when mixing together by

vision. The mixture will create the shiny look which is the charm of the silk. The outstanding color will be the color of the horizontal threads, for example if orange solid color fabric is needed, the output received from dyeing vertical and the horizontal threads will be orange as required but it will not produce contrast colors enough for giving the shiny look, but if using the darker colored horizontal threads than required or bright deep pink with light grey colored vertical threads, the outputs will be orange but does not as bright as the first one but it will give a shinier look. However, if the solid color fabric in any colors is needed, the horizontal threads must be dyed brighter than desired or two colored silk threads can be used. In terms of designing, the limitation of the Mud-mee techniques which have the basic in creating the patterns from the coordination of the horizontal threads and the vertical threads as in the tabulation which is suitable for the patterns that contained angle. It is difficult to make curve patterns. To tie the Mud-mee patterns for determining the directions of the patterns, if the patterns are required to turn the head to the same direction, the patterns must be tied vertically. If the patterns are required to face each others, the patterns must be tied horizontally. The number of the stalks must be in an odd number only but if the Mud-mee is the Mud-mee "Lai" type or oblique patterns, the number of the stalks must be in an even number.

Acknowledgements

This research funded by Research and Innovation for Technology Transfer to the Rural Community Project. Lower Northeastern Higher Education Network, FY 2012.

References

- Department of Industrial Promotion, Bureau of Industrial Sectors Development, Textile Industry Section. (2003.) **Mud-mee in a New Perspective**. Bangkok: Process Color Design & Printing.
- Sakchai Sikkha. (2011). Creation of Unique Textile Patterns in Esarn Region. **Industrial Technology Journal of Ubon Ratchathani Rajabhat University**. (1, 2) p. 119-132.
- Sombat Prajongsant. (2011). **Research Report on Development of Prototype Patterns of 2D Graphic Design of the Decoration architecturePatterns of Prasat Khom in Buriram province**. Buriram Rajabhat University.
- Sombat Prajongsant. (2012). **Research Report on Designing Local Textile Patterns from the Prototypes of the 2D Graphic Design of the Decoration architecturePatterns of Prasat Khom in Buriram province**. Buriram Rajabhat University.