

The Application of Graphic Elements from Textile Patterns for Graphic Design

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Abstract—Currently, the purchase decision making of the consumers is not only concern about functional satisfying but they also consider the aesthetic appeal of the products and emotionally satisfying as well.

The research would like to focus on the searching of graphic design elements of Central region in order to apply for the product design to create the product identity and communication of graphic design. These can enhance the decision to buy of the consumers, add value to the product and attract more consumers.

The research aims to find graphic design elements with originating of central region by analysis of folk textile patterns in the central region

Data collection decided into three parts: 1) Collecting data of folk textiles of the central region and design principles. 2) Preparing questionnaires for experienced graphic designers in order to find out about graphic elements, design personality and guidelines to use in graphic design. 3) Design prototypes are created with research results to ask the audience or consumer satisfaction on the design.

The research findings are as follows: 1) The elements of graphic design from folk textile patterns of Pha Teen Chok. 2) Graphic design solutions that show identity of Central Region, Thailand.

Index Terms—First term, second term, third term, fourth term, fifth term, sixth term

I. INTRODUCTION

The design is part of everyday life and business. Design is not limited to clothing, hairstyles or building as it covers almost everything around us. The design is to use creativity to solve problems, add value, and create an identity for the product. Therefore, its definition is subtler than the concret. The decision making of the consumers to purchase products mostly depend on the quality and function of the product. But there are many consumers pay attention to the aesthetics of the product that shows the external appearance[1].

In the world of economic competition today, the benefits of the product are not the selling point to influence the decisions of consumers anymore. In contrast, the aesthetic of the product became key selling point to stimulate consumer-purchasing process. Graphic design media of the region doesn't have the clear principle on the identity or cultural forms of each own region. Hence, it is unable to identify the graphic design elements to create the uniqueness and to differentiate the products from others. Pha Teen Chok

is the folk textile, which is used for clothing and considered as the proper cultural product to study the social and cultural context as it considers as a symbol of the people in each community. It indicates the racial, ethnic and cultural differences. According to the narration of elders, Pha Teen Chok is able to identify the origination of each ethnic [1].

Therefore, this research aims to study the graphic elements of the folk textile patterns of Pha Teen Chok of central region in order to use as the guideline to create the standard graphic design, which reflect the cultural personality and identity of central region. This can add value to the products and promote Thailand tourism.

II. RESEARCH OBJECTIVE

- 1) To identify the elements of graphic design from the folk textile patterns of Pha Teen Chok in order to apply in the design of various types of media.
- 2) To find solution in graphic, which convey the cultural identity of central region that are clear and appropriate to the target audience.

III. LITERATURE REVIEW

Folk textile is one of four major factors of human life which binding human life from birth to death. Thai weaving technique has its own uniqueness in the invention of the patterns. It inherits from each generation and each community. This is art that makes the fabrics are exquisite. Therefore, the patterns that appear on each folk textile reflect the cultural and social context of the weaver and the wearer, as well as Thailand lifestyle. Because of this reason, the woven fabric is considered as suitable material to study the cultural and social context of each community. In addition, Pha Teen Chok is considered as the famous folk textile of central region. The pattern of Chok will be woven at the footer of the fabric. The famous woven fabric community is Khu Bua group, Ratchaburi province [2] as shows on Fig. 1.



Fig. 1. The structure of Pha Chok.

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According to data analysis, there are 7 of textile patterns, which are part of the fabric footer as below.



Fig. 2. The structure of Pha Chok, the textile patterns of Pha Teen Chok [2].

Fig. 2 is the picture of pattern textiles that are woven in the footer of the fabric. They are the main patterns that are the unique patterns of Khu Bua group [3].

A. Personality Theory of Color and Graphic Design

Shigenobu Kobayashi [4] studies the personality according to the taste and style of living. The research categorizes into a group of 15 personality types, each group has its own sub personality, which convey the same personality:

- 1) Casual personality: the following sub-elements are Young, Flamboyant, Enjoyable, Merry and Vivid.
- 2) Modern personality: the following sub-elements are Progressive, Metallic, Rational, Sharp and Urbane.
- 3) Romantic personality: the following sub-elements are Charming, Dreamy, Innocent, Soft, Sweet).
- 4) Natural personality: the following sub-elements are Generous, Intimate, Natural, Simple/Appealing and Tranquil.
- 5) Elegant personality: the following sub-elements are refined, Graceful, Delicate, Cultured.
- 6) Chic personality: the following sub-elements are Modest, Quiet, Simple, Sober, Subtle.
- 7) Classic personality: the following sub-elements are Classic, Heavy/Deep, Mature, Tasteful and Traditional
- 8) Dandy personality: the following sub-elements are Dignified, Placid, Reliable, Sophisticated and Substantial.
- 9) Clear personality: the following sub-elements are Bracing, Clean, Crystalline, Refreshing, Neat.
- 10) Gorgeous personality: the following sub-elements are Brilliant, Rich, Luxurious, Fascinating and Abundant.

- 11) Formal personality: the following sub-elements are Majestic, Earnest, Precious, Authoritative and Solemn.
- 12) Pretty personality: the following sub-elements are Native, Childlike and Cute.
- 13) Cool Casual personality: the following sub-elements are Agile, Steady, Smart, Sporty.
- 14) Dynamic personality: the following sub-elements are Active, Provocative, Forceful, Vigorous, Fiery.
- 15) Wild personality: the following sub-elements are Robust, Ethnic, Untamed and Wild.

Sittisak Thansrisawat (2013) describes that Graphic elements or symbol that taken together and transform to shapes to be expressed in a meaningful and creative. From this statement This research studied the plane shape of the textile patterns, which are key elements for graphic design.

A shape is the form of an object or its external boundary, outline, or external surface, as opposed to other properties such as color, texture and material composition [5].

B. Shape Divided into 6 Types as Follows [6]

The shape is a straight line, which have relationship to each other mathematically such as circles, squares, triangles and rectangles.

1) Organic shape

Composition of curves are similar a liquid growth. Shapes are created with no reference to a subject; they represent nothing other than the pure shapes we see.

2) Rectilinear shape

The shape is a straight line consists of a straight line, which has no relationship to each other mathematically.

3) Irregular shape

The unusual shape consists of curves and straight lines, which have no relationship to each other mathematically

4) Hand-Draw shape

Drawing shapes is freely with handwriting.

5) Accidental shape

Made by mistake, usually the result of a process or material.

The applications of patterns in graphic compositions are divided into the following 3 ways:

- 1) Using pattern as a primary illustration (Key Visual).
- 2) Using the pattern in style of repetition.
- 3) Using pattern as the shape of picture frame.



Fig. 3. The applications of patterns in graphic compositions.

The typefaces are an important element in graphic design.

The typefaces are an important element in graphic design. The typefaces as letters, has developed a new invention over long periods. Currently there is a letter that is capitalized on numerous almost countless. However, those types of letters can be divided into categories as categories as follows [7].

7) *Serif typefaces*

A type is named for the features at the ends of their strokes.

ลวดลายผ้าชิ้นตีนจก
Pha Teen Chok

Fig. 4. Serif typefaces.

8) *Sans-serif typefaces*

A type is not part of the base or polyps. Sometimes it is called the most often characterized by the thickness of the characters as well as letters.

ลวดลายผ้าชิ้นตีนจก
Pha Teen Chok

Fig. 5. Sans-serif typefaces.

9) *Display typefaces*

A type is printed with a special variant of the word as often. There are patterns for decorative use only and not suitable to be used to print a message. Therefore, it is suitable for a short message. The headline or title

ลวดลายผ้าชิ้นตีนจก
Pha Teen Chok

Fig. 6. Display typefaces.

10) *Script or cursive typefaces*

A type is the type that looks like a handwritten letter is a continuous line between each. Most often characterized by the thickness of the letters is not the same throughout the letter.

ลวดลายผ้าชิ้นตีนจก
Pha Teen Chok

Fig. 7. Script or cursive typefaces.

IV. METHODOLOGY

This research is divided into two parts storage below. The first is to collect information about the textile patterns of Pha Teen Chok. The collection of documents and related research are qualifying for the textile patterns of Pha Teen Chok unique to central and Related Research. Then be used for the design of personality, which is important. By focusing on main patterns that woven onto the footer of cloth. And are a component of the most unique designs that can be considered comparable to the graphic design elements.

Then prepare a questionnaire for graphic design professionals ask about graphic elements. Using data compiled from the information in Part 1:

The questions related to the following variables.

- 1) Personality of the design for the textile patterns of Pha Teen Chok.
- 2) The elements of graphic design from the textile patterns of Pha Teen Chok.
- 3) Approaches applied in graphic design.
- 4) Typeface appropriates to personality the textile patterns

of Pha Teen Chok to graphic design.

The results from the questionnaire and then use the results of research into graphic design prototypes for the query sample population to receive comments on the graphic media. Responses from a population sample to indicate the success of the research, principles of the graphic elements and approaches in designing materials can distinguish the region or not.

V. RESEARCH RESULTS

The findings can be summarized results without breaking the pattern and graphic elements in 4 groups according to the personality of the design.

TABLE I: DESIGN PERSONALITY AS CHIC / CASUAL / DANDY

Pattern name	1) Kab 2) Na-Morn
Shape	1) Geometric Shape 2) Irregular Shape
Applying	1) Use as a primary illustrate (Key Visual) 2) Use as an illustration of a pattern (Pattern) 3) Use as The shape of the image frame
Typeface	Serif

From Table I above, we can see that Kab pattern and Na-Morn Pattern are used Geometric shape and Irregular shape in the composition, and also applied as the primary illustrations, the patterns and the shapes of image frames. Serif is the appropriate typeface for use to design. The personalities of design are as chic, casual and dandy.

TABLE II: DESIGN PERSONALITY AS MODERN / GORGEOUS / COOL CASUAL

Pattern name	1) Khong-Kheng 2) Khong-Kheng-Sorn-Sia
Shape	1) Geometric Shape 2) Irregular Shape
Applying	1) Use as a primary illustrate (Key Visual) 2) Use as an illustration of a pattern (Pattern) 3) Use as The shape of the image frame
Typeface	Serif

From Table II above, we can see that Khong-Kheng pattern and Khong-Kheng-Sorn-Sia Pattern are used Geometric shape and Irregular shape in the composition, and also applied as the primary illustrations, the patterns and the shapes of image frames. Serif is the appropriate typeface for use to design. The personalities of design are as modern, gorgeous and cool casual.

TABLE III: DESIGN PERSONALITY AS PRETTY / ELEGANT / DYNAMIC

Pattern name	1) Kab-Dok-Kaew 2) Kab-Sorn-Hak
Shape	1) Geometric Shape 2) Rectilinear Shape
Applying	1) Use as a primary illustrate (Key Visual)
Typeface	Display Typefaces

From Table III above, we can see that Kab-Dok-Kaew

pattern and Kab-Sorn-Hak Pattern are used Geometric shape and rectilinear shape in the composition. And appropriate for most applications are primary illustrate. Display is the appropriate typeface for use to design. The personalities of design are as pretty, elegant and dynamic.

TABLE IV: DESIGN PERSONALITY AS CLASSIC / FORMAL / ELEGANT

Pattern name	1) Dok-Sia
Shape	1) Geometric Shape
Applying	1) Use as a primary illustrate (Key Visual) 2) Use as an illustration of a pattern (Pattern)
Typeface	Display Typefaces

From Table IV above, we can see that Dok-sia pattern and Na-Morn Pattern are used Geometric shape. And also are applied as the primary illustrations and the patterns. Display is the appropriate typeface for use to design. The personalities of design are as classic, formal and elegant.

The results of the research can be applied in the design of the prototype has 4 options as follows.



Fig. 8. Designed the prototype.

TABLE I. THE RESULTS OF THE QUERY FROM THE AUDIENCE OR CONSUMER SATISFACTION ON THE DESIGN.

Graphic Design Prototype	Communication	Satisfy
Option 1	38%	55%
Option 2	10%	6%
Option 3	13%	9%
Option 4	39%	30%
Total	100%	100%

Table V summarizes the ability to communicate the

uniqueness of Central Region by sampling population comments that Option 4 (39%), and 1 (38%) able to communicate very clearly. Next is Option 3 (13%), and last Option 2 (10%).

Graphics prototypes that most satisfaction is Option 1 (55%) next are 4 (30%), Option 3 (9%), and last Option 2 (6%).

Conclude that the textile patterns of Pha Teen Chok In groups 3 and 4 is suitable to be applied in graphic design that communicates its central region.

VI. CONCLUSION

Conclude that the graphic elements from the textile patterns ideally in groups of 4 and 1 are the most suitable to be used in graphic design that communicate the uniqueness of Central Region.

Group 4 consist of the graphic elements derived from Dok-Sia pattern of Teen Chok that show personalities of classic, formal, and elegant. Geometric are shapes that have been analyzed. Using as a primary illustrate and Display typeface are most recommended.

Group 1 consist of the graphic elements derived from Kab and Na-Morn pattern of Teen Chok that show personalities of chic, casual, and dandy. Geometric and Irregular are shapes that have been analyzed. Using as a primary illustrate and Serif typeface are most recommended.

The results of this research led to discover the graphic elements from cultural materials to be used in graphic design. It can also be used as a guideline for finding the art from inspired by others. And to provide designers with new principle that can be applied to graphic design efficiency.

Moreover, Comments and the tastes of the target audience on a different graphic design can be expanded into other graphic media and more. It also adds value for design to satisfy consumers by pay more attention to aesthetics than functionality alone. The benefit of this research is to persuade the business owners to realize the importance of design, to add value for their own products.

Watcharatorn Pensatorn [8] has introduced the subject of Photography that it is important to communicate of graphic design. Therefore, the use photos in the graphic design should be chosen to match the personality of the design. This will make the design more efficient and captivate their target audience. Therefore, it should emphasize the principle of using the photo image.

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