The Ancient Technique of Weaving with the Contemporary Art

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ABSTRACT
This study is a qualitative research method. The purposes are firstly to trial production of Pha Yok Dok which is one of the local handicrafts, found in the north-eastern part of Thailand. It is the guidelines for handling core issues of the creation and must start from studying motif of design, focus on techniques the golden fabric is located at weaving with gold threads, called Yok Thong. Secondly, to improve the pattern of contemporary fabric are the synthesis of Yok Dok textile design in making fabric. It is a complex process which requires highly skilled weavers. In researcher’s point of view, for weaving of each fabric depending on the design and used for similar was weaving 1500 shaft/Ta-kor. Thirdly to invent textile art inspiration from Yok Dok textile design to create new works of art. The results showed that the fabric weave of the operation weave structure on motifs of Yok Dok textile design. This is an outstanding special technique. The contemporary new fabric pattern can be operated by opening and closing of the warp yarn on a draw frame. The new pattern design and process of Yok Dok textile design by fabric weave selection. It is a supplementary weft technique that is the process and design which is the first method of fabric craft practice use for the manual textile art inspiration from Yok Dok textile design to those who is the weaver. Textile weaving process by adding a special fabric pattern these characteristics come from the roots and identity of steps and methods of natural fabric cultivation. It is completed by delicate skill of weaving alternatives for creating a product and to serve as a guideline for further research. This handicraft highlights the significance continuation and bridge the relationship between classic fabric contemporary. Art to humanity from the ancient world until the present day. In summary the researchers plan to design and contemporary Yok Dok, a synthesis between classical the golden fabric of the Royal cord of Rattanakosin period and the contemporary Thai litterateur work which telling design.

Keywords: pha yok dok, yok thong, shaft/ta-kor
INTRODUCTION
Pha Yok Dok is one of the local handicrafts found in north-eastern part of Thailand, reflecting human intelligence on how they invent weaving. It is a complex process which requires highly skilled weavers. The sophistication of the pattern varies technique where the patterns are set in the warp with additional pattern heddles, placed behind the main heddles and suspended over the warp with a support hung from the frame. It is genuine art textile weave of Thailand.

There are designing and weaving silk for famous, intricate, and elegant designs of weaving technique. The process of discontinuous supplementary weft: weavers used a long piece of bamboo to pick up the warp yarns, then, they added periodically a supplementary weft yarn under them from one side to another side along the direction of the weft yarns, continued through the width of cloth.

The result revealed the difficulty of this weaving technique to create a pattern such as floral, animal, and matter designs created in pattern of geometric motifs on grid. In many places of the Northern, Northeastern and Southern regions of Thailand, the several groups of women normally weave the finely detailed gold-etched or silver-etched shapes in the fabrics are done in a gorgeous. The Thai brocades are woven with gold or silver cotton threads or silk yarns.

Classic overall designs, including the star motifs, the elephant motifs, and the tray with pedestal motifs the peafowl tail motifs, and also weave in several forms. Especially, the form of each circles may be a flower, an animal, or a matter in the center, outside the circle floral (silver-etched or gold-etched motifs), called “Kaeo-Ching-Duang” in Thai and made multiple forms, for example, diamond-shaped quadrangles, rhombuses, squares, and hexagons, each form with a flower, an animal, and a matter in the center, called the “Thep-Pa-Nom” in Thai. Each deva is about a palm (10 cm) from one chest to another chest of each repeat.

This research focuses on studying motif patterns of Yok Dok textile design on the significant concepts and theoretical frameworks needed for understanding the background and history of Pha Yok Dok weaving technique to create a pattern including a review of related documents.

DESIGN/METHODOLOGY/APPROACH
The data was collected through in-depth interview with respondents who have experience in the community as well as the host of local authorities and government officers of The Support Arts and Crafts International Centre of Thailand (Public Organization). All interviewed parties have been involved with community based Pha Yok Dok, which is one of the local handicrafts, found in north-eastern part of Thailand. Data was analyzed through descriptive methods and observation results. The research method for this
study is based on approaches that are qualitative. There are main methods, including gathering empirical data, and interview. Various research instruments were used in order to obtain the most valid analysis results.

1. Thai Design
This kind of fabric is made using the supplementary weft and warp technique, which are rarely found. It is not clear evidence document how the Siamese court ordered brocades from China and India. The Siamese court employed merchant to act as middlemen who ordered textiles and delivered the finished products to the court. The orders were sent with instructions, desired designs and fabric samples. In some cases, foreign weavers created designs especially for the Siamese.

As explain the Siamese court appreciated the value, beauty and uniqueness of brocades, these woven textiles responded to the court’s need to uphold the status of the monarch. The Royal court thus chose brocades as an important instrument, together with other types of fabrics, to create this image. The Royal ordered made brocades from the southern province of Thailand and also imported them from foreign countries such as China and India. The resources of the Siamese court allowed the extensive use of brocades woven with gold thread, used plain silk brocades with occasionally some gold designs woven into the panels.

Nowadays, local weavers produced textiles with designs similar to the traditional or royal designs because they were a part of and understood the local culture. However, textiles woven by foreign weavers deviated from Thai designs. Different types of loom were used resulting in different kinds of fabrics.

Figure 1 Pha Yok Dok in Surin. The golden fabric is located at the Tha Sawang Village, Tambol Ta Sawang, Amphoe Mueang, Surin
2. Methodology
Process to study:
2.1. Collect the document to define the scope of the study.
2.2. Survey and collect the data area of textiles about Yok Dok in Thailand.
2.3. Analyze the problem of weaving process of Yok Dok in Thailand.
3. The Approach of Design

3.1. History and background of Pha Yok Dok Thailand

Pha Yok Dok began at the period of the was a princess of Chiang Mai, Siam (later northern Thailand) Princess Dara Rasmi daughter of King Inthawichayanon and Queen Thipkrasorn Rajadevi of Chiang Mai descended from the Chet Ton Dynasty. She was one of the princess consorts of Chulalongkorn, King Rama V of Siam and gave birth to one daughter by King Chulalongkorn, Princess Vimolnaka Nabisi. The ruler of Chiang Mai mostly wore a skirt. He put on effort to invent new patterns, fabricated by weaving an intern in the house to give a master class for adults, and it is part of Lampoon. Princess Suonboon, the daughter of the ruler of Lampoon, inherited knowledge of woven mantles from Princess Dara Rasmi in Chiang Mai. The restoration and promotion of the fabric, which had been known for a long time in Lanna, quoted the expert weaving sarong and trainer Teenjok weavers. The plant weaving behind her residence. A loom 20 after the Holy Family from Lampoon city to study weaving yok dok skirt. And be trained in the capital for the Lampoon, and expertise. It was passed down from generation to generation until now. Weaving business has spread to the public and become a product of Chiang Mai and Lampoon section at the present.

Figure 4 Pha Yok Dok Lampoon, Retrieved July 23, 2016, from http://www.tci-thaijo.org/index.php/jiskku/article/view/6348
Indonesia: This technique, rarely seen in Indonesia, requires a special skill and is executed on a body-tension loom with two types of warps, one for the ground, and one for pattern. To program this supplementary warp, a special string model, called pahudu is needed (fig 3). It is prepared as a guide before weaving with strings in the warp direction and with small bamboo or palm sticks in the weft direction. The string models (pahudu) are woven and worn in the same context, they have similarities in their iconography. The most common pattern such as horse, fish, bird, and deer. The same iconography is also observed on accessories like sculpture tortoise shell combs and the fabulous gold omega-shaped ear ornaments called mamuli worn by women. That is like textiles play an essential role in the elaborate gift exchanges that bound Sumba society together, in marriage negotiation for instance. The women in that family were not weaving any longer and instead of burning the pahudu upon the death of the last women-weaver as is the custom, they had finally agreed to part with them. It is difficult to craft a successor expertise may be ended in the 20th century. The James H. W. Thompson Foundation Symposium Papers, Jane Puranananda River Books, 2004, 181 page, Retrieved July 23, 2016

3.2. Cultural significance
Cultural regression models began to play a role in the art of weaving is classified as a class. Pha Yok Dok are silk woven with a special technique and it is outstanding. Each brocades could be woven typically on a draw loom. It is a supplementary weft technique that is the ornamental brocading is produced by a supplementary, non-structural, and weft in order to the flatten weft that holds the warp threads together.

The purpose of this is to give the appearance that the weave was actually embroidered on. The luxury fabrics and cloth of gold, made with real gold thread, were only worn by royalty.
Purple was also preserve of the monarchy, and gold patterned silk became the ultimate expression of dressing power, elegance and fashionable. Brocade fabrics are used mostly in modern times for upholstery and draperies. Appreciation of precious and semiprecious stones in the adornment of brocades is not common but has been replaced with the use of sequins and beading as decoration. Brocade fabrics are now largely woven on a Jacquard loom that is able to create many complex tapestry-like designs using the Jacquard technique. Although many brocade fabrics look like tapestries and are advertised by some fashion promotions but they are not to be confused with genuine. Patterns such as brocade, brocatelle, damask, and tapestry-like fabrics are known as Jacquard patterns.

The Jacquard machine required a higher skillful textile designer and technician because of its complexity and cost of maintenance. The effective punching card machine causes the effective design system of Jacquard machine. The Jacquard machine is more effective and capable than Dobby machine. It operates regularly fast but it takes time to change a set of design card. It is suitable for a mass production. Jacquard machines were mechanical, and the fabric design was stored in a series of punched cards which were joined to form a continuous chain. The Jacquards often were small and only independently controlled and relatively a warp ends. It required a specific width of fabric a number of repeats across the loom width. The more the machine is high capacity, the more a factory must choose looms and shedding mechanisms to suit its commercial requirements. As a rule, the more warp control required the higher the expense. Therefor it is not economical to purchase Jacquard machines and use it for dobbys work.

The Damask weave is used extensively throughout the fashion industry due to its versatility and high-quality finish. Damask is usually used for mid-to-high-quality garments, meaning the label tends to have a higher definition and a more “expensive” look. The motif patterns as the product of Damask weave is a reversible figured fabric of silk, wool, linen, cotton, or synthetic fibers, with a pattern formed by weaving. They are woven with one warp yarn and one weft yarn, usually with the pattern in warp-faced satin weave and
the ground in weft-faced or sateen weave. Twill damasks include a twill-woven ground or pattern. Modern damasks are woven on computerized Jacquard looms.

Damask weaves are commonly produced in monochromatic (single-color) weaves in silk, linen, or synthetic fibers such as rayon and feature patterns of flowers, fruit, and other designs. The long floats of satin-woven warp and weft threads cause soft highlights on the fabric which reflect light differently according to the position of the observer. Damask weaves appear most commonly in table linens and furnishing fabrics, but they are also used for clothing. (From: The free encyclopedia, Retrieved July 23, 2016, Wikipedia.)

![Figure 8 The Damask weave.](source: From the free encyclopedia, Wikipedia, July 23, 2016.)

3.3. The impacts of cultural heritage

Highlights of the Thai traditional weaving process is a motif of design weaving is aligned vertically a number of threads. It is called end yarn and these threads are known as warp threads. Once they are hung it is called heddle, other threads are interlaced horizontally on a loom, one round to the vertical warp. They are called filling yarn or weft threads and they are packed tightly against each other. On a weaving loom, the warp threads can be lifted up. Lifting or lowering the warp threads in a specific pattern determines the weave of the fabric. Basic patterns make use of weave, also known as flat weave or plain weave. In this case, the weft thread crosses the warp thread by going up, then going down the next. The one weft thread crosses the evenly numbered warp threads, while the crossing warp threads were covered. Complicated patterns arise when the weft thread crossing two or more warp threads. It takes time the continuous chain to change the whole set of motif of design weaving relates designing a textile pattern for weaving on a Loom, then down to the next without the engine or any electrical power.
Technical textile applications and the model for modern reproduction as well as tablet weaving (often woven fabric cards in the US) due to materials and tools are relatively cheap and easy to obtain tablets of the popular apparel. Woven fabrics hobby housewife to household or art weaving techniques with a tablet or a card to do just the rest will be forwarded to the foot of the craft anonymous. Citizenship and culture. Currently, most weavers produce a tablet that has a long line of narrow fabrics such as belts, straps or trim on clothing. Functions such as cards, usually a piece of cardboard with the one in control, automation or data for data processing. Both the statement and the information that has come with or without holes in a predetermined position. Today, tablet weaving is constructed of obsolete paper tape punched cards were widely used throughout the 19th century to control textile looms. The impact of cultural heritage as it happens in the right way. Lost the taste of the market and the manufacturer. Tangible indication of the origin of culture, identity and more.

3.4. Cultural identity conservation
Thailand handicrafts are legacy that has a long history and reflects the wisdom of our ancestors. The formation of the culture of Thailand in each period has evolved hierarchy (there is a hierarchy of development). The art and crafts are important to the national economy and help create income for the people in rural families. In addition, it creates proximity and the beauty to original inhabitant people. For heritage crafts conservation Thai ancestors, it required development of craft product styles to suit the functional, aesthetic and artistic quality of crafting. The nature of the materials used in production for the benefit should also be taken into account. Moreover, they have formed a unique local crafts as part of the culture of Thailand.

In researcher’s point of view, the researcher focusses on techniques Pha Yok Dok in Surin. The golden fabric is located at the Tha Sawang Village, Tambol Ta Sawang, Amphoe Mueang, Surin (about 10 kilometers from Surin along Ke Loi-Mueang Lieng Road). It is
a fabric of ancient silk weaving with gold threads, called Yok Thong. The process is to dye very small silk threads and weave them under many ancient designs such as the famous and beautiful golden brocade silk fabric which is made of pure silver threads being woven with silk threads.

The long process, each design 2-3 months or a year for weaving of each fabric depending on the design and the number of production (selection of silk yarns) used for weaving 1500 shaft/Ta-kor (maximum was 1500). Surin province has continually made an impression by being selected as the material for shirts and shawls the souvenirs, which were given to the leader and spouse of each country, who participated in the APEC Summit which was hosted by Thailand.

This weaving project is supported and promoted by the Bureau of the Royal House Hold and Her Majesty the Queen's Foundation. Silk selection as the fabric to be produce in form shirts for all country leaders in the APEC Meeting in the year 2003. This cloth traditionally commands high prices due to the special weaving technique, as it is thickened so that each piece becomes double-sided. The edge of the cloth is traditionally sewn only with silk thread. Pha Yok Dok clothes were a luxury item worn by wealthy ladies or those who knew how to weave their own cloth and only for special occasions. This complex craft was taught to daughters by their mothers, with the designs committed to memory and handed down through generations of families.

In Thailand, the lifestyle of high society development foundation from different ethnic, religious, social, cultural and geographical surroundings. Each location has a unique culture and traditions of different regions and help them live happily together in the same society. Creating a culture of local crafts, fabric art, which existed directly from local wisdom and reveal the goodness and beauty that has been accumulated and inherited from generation to generation in each area. Pha Yok Dok are woven textile fabric to be used in special occasion.

There are many steps of procedure to be mentioned sequentially and weaving method need to be explained in detail. Since there is no common procedure of weaving because each piece of art work can be done differently depending on it individual design. These characteristics of the ethnic group and the identity of the procedures and the methods of cultivation each of them, need particular procedure method. Using natural fibers for use in complex and delicate skills of weaving. This is an important craft tradition. Two aspects must be considered: study of history, aesthetic and art, and the means of passing the tradition of clothing and apparel
from one generation of craftsman, artisan or designer to the next. This is the key contribution to humanity from past to present.

The researchers intend to present the differences and similarities of pattern that has distinguished itself as an educational process in the form of design motifs. To study the problem of weaving process of Yok Dok in Thailand the researcher made survey of four provinces: Lampoon in the north; Nakhon Si Thammarat in the south; Roi- Et in the north Isan and Surin in the south Isan. The researchers have to find the differences and similarity of the production process, artistic and aesthetic of the regional weaving tradition.

**The Concept of Adoption**

The guidelines, is based on William Morris (24 March 1834 - 3 October 1896) an English textile designer, poet, novelist, translator, and socialist activist. According to the British Arts and Crafts Movement, he was a major contributor to the revival of traditional British textile arts and methods of production. Morris founded a decorative arts firm with Edward Burne-Jones, James Rossetti, and others: The Morris, Marshall, Faulkner & Co. Becoming highly fashionable and much in demand, the firm profoundly influenced interior decoration throughout the Victorian period, with Morris designing tapestries, wallpaper, fabrics, furniture, and stained glass windows. He posthumously became better known for his designs. Almost sixty years after William Morris died the William Morris Society is devoted to his legacy, while multiple biographies and studies of his work have seen publication.

Morris produced items in a range of crafts, mainly those to do with home furnishing, including over 600 designs for wall-paper, textiles, and embroideries, over 150 for stained
glass windows, three typefaces, and around 650 borders and ornamentations. He emphasized the idea that the design and production of an item should not be divorced from one another, and that where possible those creating items should be designer-craftsmen, thereby both designing and manufacturing their goods. In the field of textile design, Morris revived a number of dead techniques, and insisted on the use of good quality raw materials, almost all natural dyes, and hand processing. He also observed the natural world first hand to gain a basis for his designs, and insisted on learning the techniques of production prior to producing a design.

William’s fond of hand knotted Persian carpets and advised the South Kensington Museum in the acquisition of fine Kerman carpets. Morris taught himself embroidery, working with wool on a frame custom-built from an old example. Once he had mastered the technique he trained his wife Jane, her sister Bessie Burden and others to execute designs to his specifications. An important line of business for its successor companies into the twentieth century.

By the 1870s, the firm was offering both embroidery patterns and finished works. Following in Street's footsteps, Morris became active in the growing movement to return originality and mastery of technique to embroidery, and was one of the first designers associated with the Royal School of Art Needlework with its aim to "restore Ornamental Needlework for secular purposes to the high place it once held among decorative arts.”

Morris took up the practical art of dyeing as a necessary adjunct of his manufacturing business. He spent much of his time at Staffordshire dye works mastering the processes of that art and making experiments in the revival of old or discovery of new methods. One result of these experiments was to reinstate indigo dyeing as a practical industry and generally to renew the use of those vegetable dyes, such as the red derived from madder, which had been driven almost out of use by the anilines. Dyeing of wools, silks, and cottons was the necessary preliminary to what he had much at heart, the production of woven and printed fabrics of the highest excellence; he was absorbed in the production of textiles (1877–78), and more especially in the revival of carpet-weaving as a fine art. (From: The free encyclopedia, Retrieved July 23, 2016, Wikipedia).

Figure 11 William’s carpet design of 1873
DISCUSSION AND CONCLUSION

The researcher found that technology of the pass was very useful and can be applied to the manager local wisdom and knowledge. It allows learners to have access to the source of knowledge and enhance practice weaving much easier. As mentioned above the study can be used as a study guide. The objective of this study for researcher with innovative ideas in both artistic and academic in concept of bringing this fascinating weaving process to create art form. Its value is much more than usual clothing which use all types of cotton and chemical dyes.

Body of knowledge in this finding can be applied to studying the process and design, the first method of fabric craft practice. As a researcher, it is expected that with this research is a search of the roots and identity of the art tradition, what suggesting should be done, what is the most acceptance or most possible practice.

The art of weaving is not just the classic tradition of the past; it can also be a source of inspiration for contemporary design in Thailand. Finally, researcher has tried to make an investigation of the experimental results. Using string coated yarn used in weaving. Pattern design motif new image. Approach of contemporary art that is different from the traditional model. To make learning easier and more understandable. If the two concepts can be combined with alternations and the possibility of further development of the twenty-first century. The researcher is proud of the cultural heritage of the country, its status as a living tradition of art. What is created is new, simplifying, it is inspiring traditional art form of weaving art.

In summary, the researcher plan to design and create a synthesis between contemporary classical Pha Yok Court Royal of Rattanakosin and illustrating Thai themes and stories through design in the contemporary version. Only small number of older generation know the story of Yok Dok, so is the number of the younger generation who are interested in the succession of the Yok Dok woven fabric. The material is durable and suitable for the storage of this data. In the past, there is no clear feature document in any form to educate apprentice.

The extra warp weaving techniques begun in the past (more than a century), it is possible that the contemporary style can be made from the old technic. In the present the artwork in the form of a suspension or temporary installed is the means of presentation. The researcher propose that it is not necessary, to show the loom to the public only to the fabric alone can reflect many aspects of idea and knowledge, such as the cognitive aspect of technic and material, social and historical significances, aesthetic and artistic and the affective aspect of taste or beauty appreciation, as you'll see in the next step in the research. The research will bring the above information to make the maximum amount of cultural and commercial benefit.
REFERENCES


ONLINE RESOURCES