

**TRADITIONAL THAI DECORATIVE ORNAMENT:
FROM THE PERSPECTIVE OF MOTIF DESIGN**

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タイの伝統的な文様に関する研究：
モチーフの図案化について

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ACKNOWLEDGEMENTS

This research project would not have been possible without the support of many people. First and foremost, I wish to express my gratitude to my supervisor, Prof. Yoshito Nakano, who was extremely helpful throughout the entirety of this PhD thesis, offering invaluable assistance, support, guidance, many useful comments, remarks, and intellectual engagement through the learning process of the thesis. I would also like to express my sincerest gratitude towards the members of the supervisory committee, without whose knowledge and assistance this study would not have been successful.

I also have to convey my appreciation and thanks to Mr. Tsutomu Yoshii, advisor for international students, International Exchange Center of Kyoto Institute of Technology (retire March 2015). I am extremely thankful and indebted to him for being my best confidant and consultant, not only regarding the academic field but also for all the knowledge and know-how required to live my life in a foreign country. Thank you for sharing your expertise and for the sincere and valuable guidance and encouragement extended to me, without whom I would also not have had access to scholarship information and therefore I will not be where I am today.

Special thanks also to all my graduate friends for sharing the literature and for their invaluable assistance. I would also like to convey thanks to the Ministry and Faculty for providing me with the financial means to get through this course, and the laboratory facilities for me to conduct my studies to the end of the tenure of this PhD thesis.

Appreciation also goes out to Mr. Sattrawut Ponboon, Mr. Peerapong Kamolrungvarakul and Mr. Toss Lim for the proofreading, grammar correction and many good advices throughout the entirety of this project.

Also, I would like to thank the participants in my survey, who were willing to spare their precious time for the questionnaires and interviewing.

I gratefully acknowledge the financial sources that made my PhD life possible. My education was funded by the Monbukagakusho, the Japanese Government Scholarship, for my first three years and I was also supported with partial funding by the Kambayashi scholarship foundation during my fourth year.

I am grateful for the good health and wellbeing that were necessary to complete this thesis.

My time at Kyoto Institute of Technology was made enjoyable in large part due to the many friends who became a part of my life. I am grateful for the time spent with roommates and friends, for many joyful activities and many memorable trips. My Kyoto life will be nothing without them.

Lastly, I would like to thank my family for all their love and encouragement. For my parents, who raised me with their love and supported me in all my pursuits, I will be forever grateful for your love.

Thank you.

Suppata Wanviratikul
Kyoto Institute of Technology
June 2015

ABSTRACT

In the modern ages, accelerated urbanization and modernization have significantly transformed our society over the past years. This situation inevitably caused a great effect on the changing of culture and art. Likewise in Thailand, it is also the factor that most of traditional decorative ornament had been vanished from daily life, remnants limited only for specific places or groups of people.

From the research findings, one of the problems that caused the traditional Thai ornament to fall into a state of degeneration is the lack of information about the its history. There are no hard evidence nor definative story told about the ornament in term of motif design. Therefore, this study takes a look back at the history of the ornament from its past to present, to understand what caused it to adopt its present shape and form, and to look further into the characteristic or identity of the ornament in detail. This research shows the passage, metamorphosis and connotation of traditional Thai decorative ornament from the lotus ornament in Egypt to its current incarnation as a Thai ornament. Each type of ornaments will be scrutinized using structure analysis and hand drawn illustration to highlight the similarities and differences in design between the two periods. The consideration of ornament details, formation, and its meaning reveals several factors and foster understanding of the national culture and belief between Thai and the countries which influenced it. These factors ultimately affected the design and caused changes in their forms.

Besides, this research investigates and explores the current state of traditional Thai decorative ornament in the society as well as the attitude of Thai people toward these vanishing ornaments, by using the questionnaire and interview. The result will make understanding to the situation and lead the way on how best to improve the situation.

Moreover, this research will present and consider three case studies from famous Thai designers, as the examples, which use traditional Thai decorative

ornament and achieve success in our modernized society.

In conclusion, this research provides and suggests several means to help the designers and anyone who might be interested to develop, adapt, and use those ornaments properly. It is not supposed to just make the ornaments survive this era but to actually enable them to thrive again, and re-emerge with the strength to effectively survive into the next era.

概要

現代は、都市化が加速し社会を著しく変化させている。この状況は必然的に、文化と芸術にも大きな影響をもたらした。タイにおいても同様に、伝統的な文様が特定の場所や人々のグループの為のものを残して大多数が日常から消え去る要因となった。

本研究の調査によって、タイの伝統的な文様の歴史に関する情報の不足が、これらの伝統的な文様の衰退の要因となっていることが分かった。これまで、文様に使用されているモチーフやデザインに関する詳細な資料は存在しない。しかし現代における形態や構造の要因を解明するためには、過去から現代までの文様の歴史を振り返るだけでなく、文様の特徴や独自性をデザインの的に解明することが不可欠である。

この研究は、エジプトで作られた蓮の文様からタイの伝統的な文様へと、形と意味が変化する過程を示す。そして、二つの時代におけるデザインの類似点と相違点を明らかにするために、各時代の装飾を構造分析と図解を用いて調査するものである。文様の要素や構造、その意味を考察することで、それぞれの要因を明らかにし、タイと影響をもたらした国との間における文化や考え方を理解する。そして、これらの要因はデザインに影響を与え、形態に変化をもたらしていることを明らかにする。

その後、社会における伝統的なタイの文様の現状と、消えゆく文様に対するタイの人々の意見を、アンケートとインタビューを用いて調査し追求する。本研究結果によって、現状を理解し、現状を改善する方法を導くものとする。

さらに、伝統的なタイの文様をデザインに取り入れた結果、現代社会で成功した例として、3人の著名なタイ人デザイナーに関する事例調査を実施し、考察する。

結論として、これらの研究は、デザイナーや文様に興味のある人々に対して、文様を効果的に取り入れ、さらには発展させる方法を提案するものである。さらに、タイの伝統的な文様が再び復興し、将来的に存続させることを目的としている。

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CHAPTER 1

INTRODUCTION

1.1 Background and purpose

Throughout the long history of mankind, the traditional decorative ornament has, ever since its original conception, been the symbol of identifying and representing the nation. It has become a communication tool between man and man, nation and nation. It articulates a realm of the imagination. The ornament is a natural and universal system of human communication that can present a valuable segment of human thought (Bloomer, 2000). The ornament has been created from the memory of what the creators had seen or experienced and been transformed what the creators sense to be the natural laws into unreal forms (Kühnel, 1949).

A large number of traditional decorative ornaments that were created in the past have survived a lot of generations

to our present day. It is the culture-based philosophy and ethnic belief behind the tradition that lead the world to change the way of life and therefore begets more satisfaction sensually, emotionally, intellectually, and spiritually, which in turn, keeps their respective art and culture thriving into the future.

However, in the modern ages, the greatly accelerated pace of urbanization and modernization have significantly transformed society over the years. This situation inevitably caused a great ripple effect on the changing of culture and art. Likewise, the traditional decorative ornament has also changed. Nowadays, it can be assumed that the derivation has been neglected and the correct meaning of the ornament has been distorted. Without proper understanding of their original meanings and conceptions, the later generations will lack a way to interpret and correctly appreciate what these ornaments stand for, eventually leading to the demise of the inherited traditional ornament in modern day society.

Likewise in Thailand, where many cultures have been assimilated and intertwined, most of the traditional decorative ornament have vanished from the daily life, leaving only remnants, limited in its audience, only for specific places or groups of people.

Hence, this research objective is to investigate and explore the current state of traditional Thai decorative ornament in the society and the attitude of Thai people toward these vanishing ornaments. In addition, this research summarizes how to improve the situation, to help

the designers develop, adapt and use those ornaments properly, in order to make it infinitely survive into the modernized future.

This study also presents the ornament from its past to present, in order to understand what caused the evolution of the shape and form of present ornament. The characteristic or identity of traditional Thai decorative ornament that reflect back to Thai society are also revealed. The result makes understanding to the national culture and belief between Thai and its original foreign influence, which affected their design and caused changes in their forms.

1.2 Research definition, methodology, and structure

The word “Ancient lotus ornament” in this study means the lotus ornament that appeared in Egypt, Greek, Roman, Assyrian, Byzantine, Indian, Hindu and Chinese (ca 3100 BC - 1644 AD). Moreover, the word “traditional Thai decorative ornament” refers to the basic traditional Thai ornament that is presently well known and commonly in use within Thailand.

The Illustrations used in this study are from various publications, which are referred to in the reference section. They are the most prolific form from that era. The illustrations represent the style of those periods and nations. A comparatively large share of attention has been devoted to the ancient lotus ornament to relate to this thesis subject.

Most of the figures presented in this study are hand-drawn illustrations since there was no camera in the ancient period. The original decorative ornaments are faded and destroyed. Many ornaments are missing their clear and proper structure or arrangement. Some ornaments are owned by the Royalties and as a result are restricted to the public. Drawing such ornaments require expertise and skill. Therefore, this research compels to use archeologist hand-drawn illustrations to clearly demonstrate the design and fill in the faded and missing part of the ornaments.

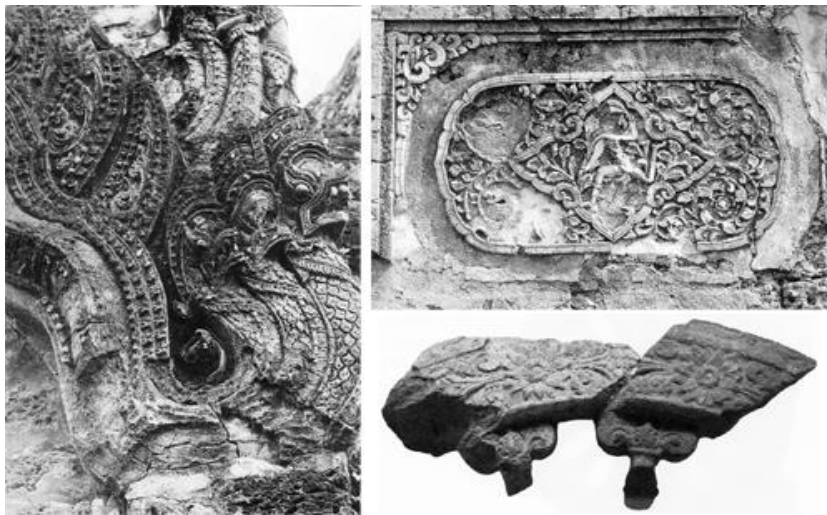


Fig.1-1:

Fragment of the ornaments, which don't have clear forms and need to be fulfilled by the archeologists.

Left –

Ornament at Chutamanee Temple, Phitsanulok (Leksukhum, 2002)

Top, right –

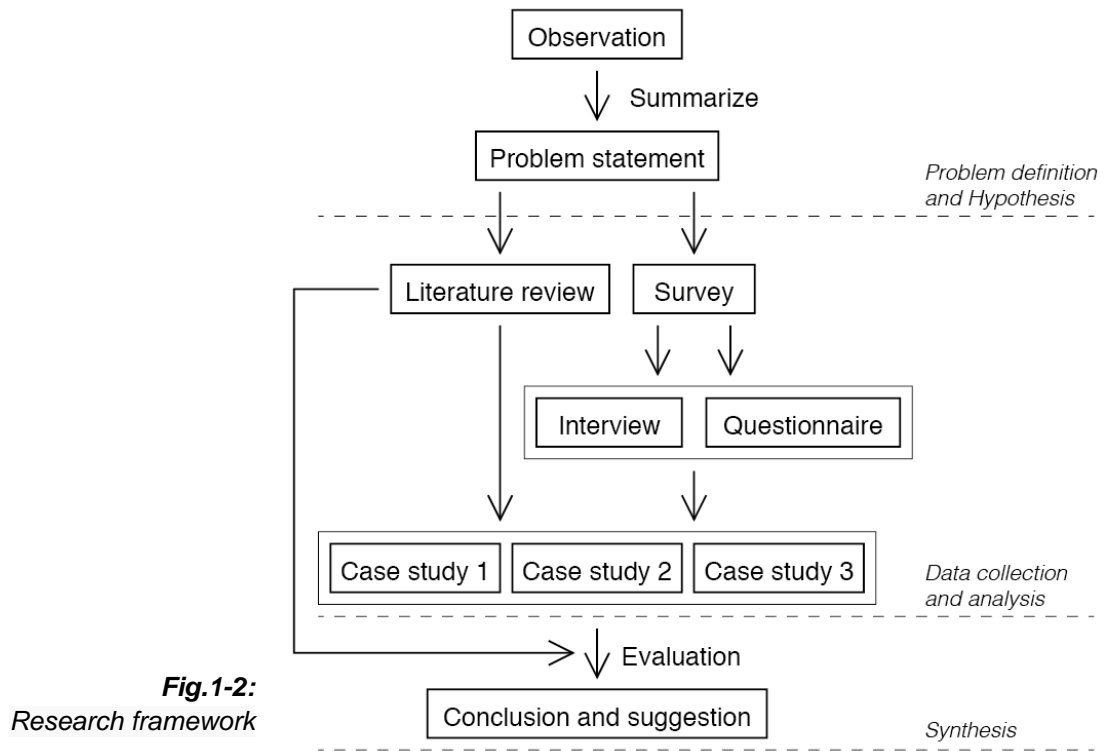
Ornament at Nangphaya Temple, Ayutthaya (Leksukhum, 2009)

Bottom, right –

Part of Dharmachakra, Lopburi. (Leksukhum, 2010)

This research focuses mainly on the ornamental design regardless of the archeology degree.

This research methodology is based on a qualitative study. The designation of questionnaire, interview and literature review for the data collection are demonstrated and concluded. Fig.1-2 below shows the research framework and summarizes the main idea of the study.



The methodology presents three steps, including the problem definition and hypothesis, data collection and analysis, and synthesis.

First, the problem definition and hypothesis method starts with fieldwork of Thai society observation focusing on a big viral city where design takes an effervescent role such as Bangkok. The collected data uses to summarize the problem statement of this research.

Second, the data collection and analysis use several distinguished literature review and three case studies to quantify and understand the problem clearly.

Besides, three hundred questionnaires with ordinary Thai people and three interviews with experts working in the area of Thai art and craft have been conducted. All

gathered data is analyzed to recapitulate the problem of tradition Thai decorative ornaments in the present day.

Last, the synthesis concludes all results of the study and suggests the important ideas for the future society.

1.3 Research content

This research comprises of five chapters. This first chapter provides a brief introduction of the research. It covers the background, purpose, methodology, and research structure.

Chapter 2 introduces a short prelude to traditional Thai decorative ornament.

Chapter 3 reviews the previous distinguished studies about decorative ornament from well-known experts around the world. The first part investigates and explores what led to the designs iterations that result in the shape and form of the present ornament. It also explores the origin and transformation of the characteristic or identity of the traditional decorative ornament in Thailand. It includes the research beyond the Thai history of the first documented drawing of Thai ornament. It demonstrates the connection between Egyptian lotus and traditional Thai ornament. The second part presents the analysis and comparison study of structure, arrangement and connotation of the ornament between the ancient and modern periods.

Chapter 4 discusses the current problem of traditional Thai decorative ornament. It is accomplished by using the methodology of observation, three hundred questionnaires and interview with three of the expert in traditional Thai art and craft area.

Chapter 5 presents and considers three case studies from famous Thai designers who use the traditional Thai decorative ornament in their works and has achieved considerable success in the modernized society.

Chapter 6 illustrates the conclusion and suggestions from this research. It shows some guidelines to help the designers, to develop and adapt, while preserving the traditional characteristic and value of the ornament for the next generation. It is supposed to guide how to use those ornaments properly and to make it infinitely survive in the modernized future.

CHAPTER 2

PRELUDE OF LAI THAI

...If one has not made a deep study of Thai art, one may be misled into thinking that it is based on no principles. But, in fact, Thai art follows the principles not only of its own but also of many other subjects including psychology. To give an example, the religious edifices, shrines and halls of ceremony built by our ancestors are not only beautiful but also inspire the visitors with piety and noble ideas. All this is not achieved by mere chance, but by following certain definite principles (Phrombhichitr, 1952).

The above quotation explains the essential of knowledge of Thai art that has developed for more than a thousand years. All of history made its unique characteristic. In order to understand any aspects of Thai art, a study of Thai ornament, or Lai Thai in Thai language, or Kranok is necessary and deserves serious attention.

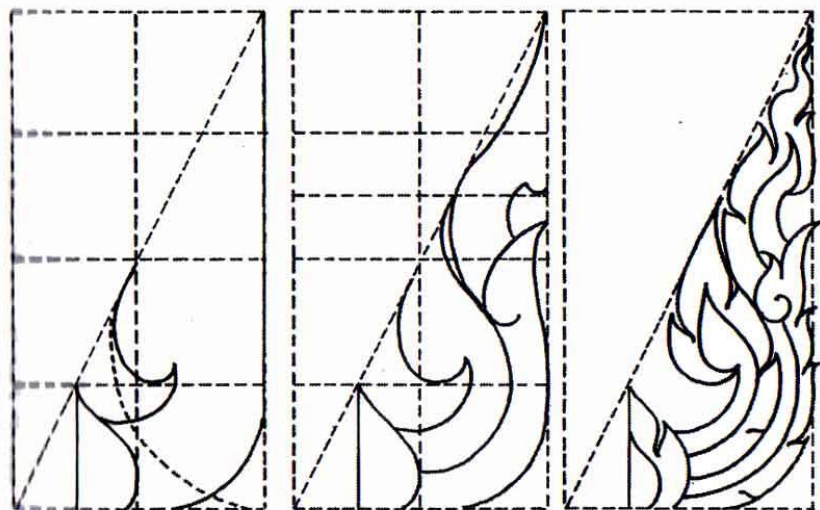
2.1 Meaning of its name

Phra Phrombhichitr claimed that “Lai” in Lai Thai means the patterns in the shape of flowers, vines and leaves, real or imaginary, employed for decorating ceilings, walls, pedestals, panels, etc. “Kranok” means Thai arabesque pattern of interlaced leaves and branches. Thai arabesques patterns are composed of flowing lines interspersed with leaf-like patterns, which resemble the flames or strips of cloth fluttering in the wind. Moreover, Kranok in Sanskrit means thorn, which can be seen in any Kranok pattern. It has a sharp form at the end of the pattern like a thorn such as that found on natural flora. However, there exists contradictory claims regarding this issue. Suwankiri (2002) claims that the King Rama V explains about Kranok in the Tra-Pha-Khan novel as the golden pattern since it was used to call the patterns drawn with gold lines in the past.

2.2 Shape of Kranok or Lai Thai

From the numerous forms of Thai ornament or Lai Thai, Kranok is widely considered to be the most fundamental of Thai ornament. Most of Lai Thai has been created from the basis of this form. The shape of Kranok originated from a right-angled triangle. Starting from a curved line at the bottom-left of the shape as its base, it shapes up with the curved lines like a spiral from the base to the middle and upward to the top, as in Fig.2-1-left.

Fig.2-1:
Shape of Kranok or Lai Thai
(Blogspot, 2012)



A single Kranok pattern may be incorporated in many ornaments or combined with the other patterns to create more sophisticated ornamentations. For example, the triple Kranok (Fig.3-right) also represents a significant part in the creation of Thai ornament.

2.3 Origin of Kranok or Lai Thai

Since Lai Thai has been created from the ancient time and lacked of referable source, there is no evidence to prove where Kranok shape is originated from. However, since Thai arts are traditionally related to Buddhism, Suwankiri believes that Kranok's shapes are primarily derived from the halved lotus (Fig.2-2 and Fig.2-3). Some other shapes came from three lotuses tying together, ear of rice, and other natural elements found within Thailand.

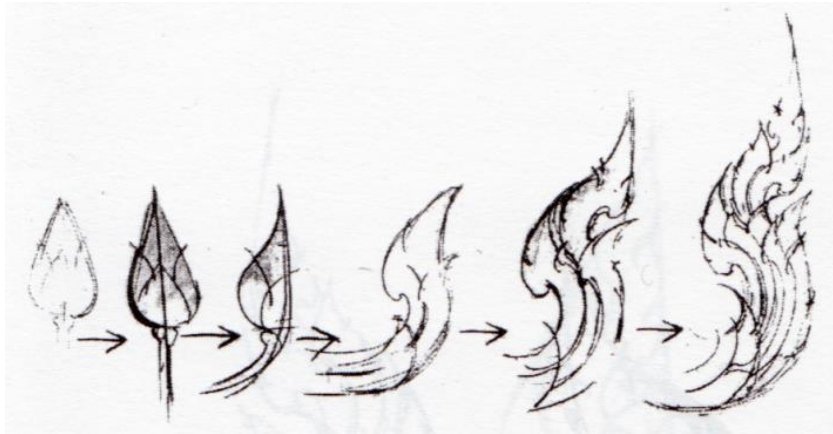


Fig.2-2:
From shape of halved lotus
to Kranok or Lai Thai
(Suwankiri, 2012)

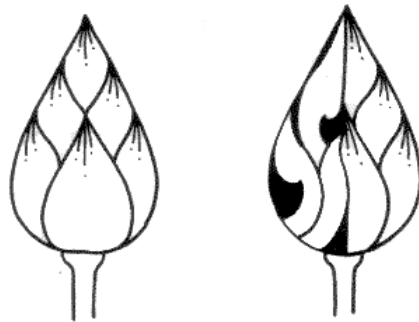


Fig.2-3:
Kranok in the shape of lotus
(Blogspot, 2012)

Phra Phrombhichitr once depicted about the top Chief Master of Thai art, Prince Narisaranuwattiwong, in his book. The prince enlightened Phra Phrombhichitr that the origin of Thai Art is from the lotus. He explained that the lotus existed since Buddha's era. It is a miraculous flower that embraces Buddha's power throughout his life. It is also the main flower to be presented in the Buddhist ceremony. The main idea that the Prince Narisaranuwattiwong bestowed was that the lotus is the origin of Thai Art. Ultimately, the lotus is often featured in both Thai traditional and contemporary media, including novels and visual arts. The visual artists have used lotus on the temples and significant monuments to show that Thais have a positive connection with the lotus shape. This is evident when we observe that Thais use lotus shaped carved wood and shaped clay almost everywhere.

The Lai Thai manuscript by Khanachang (1955) also said that the origin of Lai Thai is lotus. The main reason is that lotus has the soft curved lines match with Lai Thai than any other elements. It is used as a basic foundation when creating Lai Thai.

By interleaving a more sophisticated pattern into the drawing, the evolution of Lai Thai has been catalyzed. For example, the more sophisticated lotus is given a name as Ta-Oy. Later on, the natural stem is replaced with a more elaborate drawing called Poom-Khao-Bint (Fig.2-4). Tua-Ngao (Fig.2-5) is derived from a partially curved shape instead of using a whole shape. Tua-Thet (Fig.2-6) and some component parts of Thai pattern (Fig.2-7) are adapted from a lotus petal. It resembles the Egyptian "Grape ornament".

Fig.2-4 (left):
Poom-khao-bint
(Blogspot, 2012)

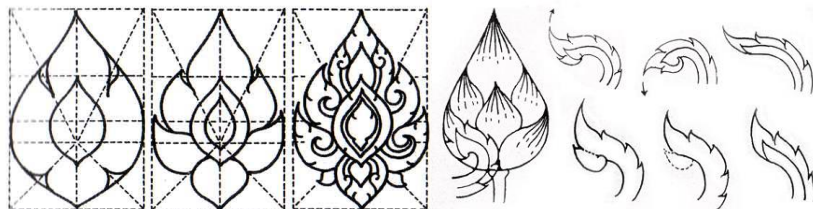


Fig.2-5 (right):
Tua Ngao from a shape of
lotus (Daradas, 1995)

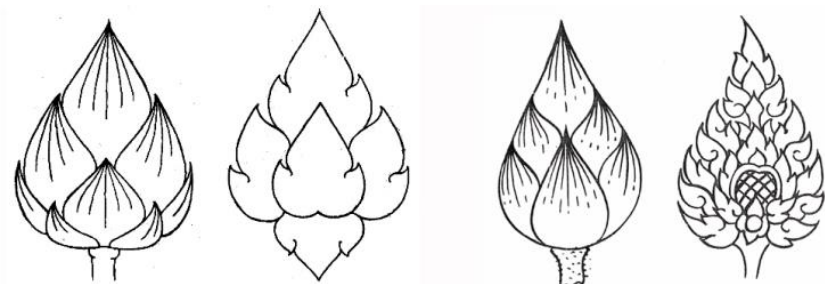


Fig.2-6:
Lotus and Tua-Thet
(Daradas, 1995)



Fig.2-7:
Lai Thai by petal of the lotus
(Blogspot, 2012)

Phra Devabhinimmit (1943) concluded that whatever the origin of the inspiration of the Kranok might have been, it is clear that it has been developed on the principle of subjecting nature to the dictates of aesthetics.

Lotus is an important source of inspiration in Thai Arts. Most of Lai Thai's shapes and forms are adapted from this highly symbolic flower. The Thai arts masters use lotus as a foundation to create many patterns of Lai Thai above and even beyond their own imagination.

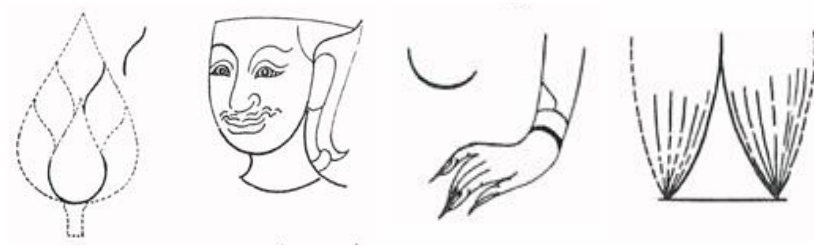


Fig.2-8:
Lai Thai from a shape of lotus
(Daradas, 1995)

CHAPTER 3

LITERATURE REVIEW

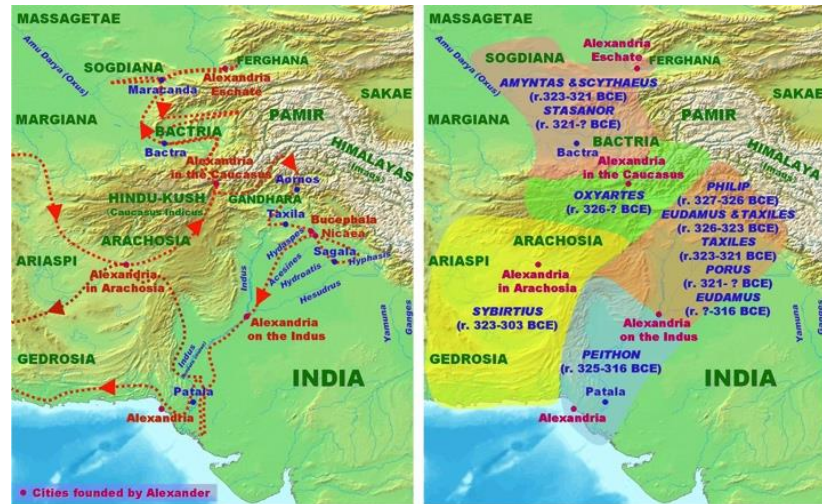
After examining the Thai ornament history, there are no hard evidence or reliable story mentioned about the ornaments from the perspective of motif design. This understandably causes several longstanding problems, such as the degeneration of the traditional Thai decorative ornament. People in the present day lack sufficient knowledge and understanding about the history of ornament. This problem affects the understanding of the ornament, such as lack of meaning, how to adapt the form, or where to use those ornaments. Therefore, this chapter reviews many historical literatures and try to find out the supplementary means that could spark the resurgence of the Thai ornament.

It has been reviewed earlier that lotus is the origin of traditional Thai decorative ornament. One of the oldest story related to the lotus ornament in Thai art history

describes the drawing of lotus ornament brought to Thailand by a group of Buddhist missionary from India. Therefore, it is believed that most of the traditional Thai decorative ornament originated from India and transformed its shape due to the uprising influence from powerful neighboring countries, before obtaining unique characteristics like in the present day.

However, Indian Art also had been influenced since 50 BE, from Greek and Roman. Bloomer (2000) and Rawson (1984) both agree that the ornament moved from the borders of Greek temple into Indian temple in both form and arrangement. When Alexander the Great from Greek had conquered a part of present India in 200 BC, some rank and file stayed behind to rule the colony. The Greek ornament started to travel into India during this period. Once the Roman ruled the Greek, their influences started trickling into India also. After that, the Arabian started to travel into India around 1000 AD. During that period, the Muslim started to invade northwestern part of India, bringing their arts along with them. Arabian art became the major influence on Indian Art when the Mughal Empire ruled the country around 1500 AD. Thus, this story shows a link between Greek art, and India art before its influence on Thai (Diskul S, Prawattisard Silpa Pratet Klaikieng, 2010).

Fig.3-1:
Left –
Campaigns and landmarks of Alexander's invasion of India
Right –
Hellenistic satrapies in India after Alexander



Bopearachchi (2012), a research director of the French National Center for Scientific Research (CNRS), stated in his speech at Ho Center for Buddhist Studies that the Indian conquest of Alexander the Great has a mythic analogy in the Indian triumph of Dionysos. Dionysos, the god of wine, inspired many Indian artists of Gandhara, a prominent center of Buddhist culture. Judging from the archaeological findings, this god was also particularly popular among the Scythians and Greeks. As the god who taught Indians how to cultivate the vine, he is shown with Ariadne drinking wine prepared by his companions. Sileni, Satyrs, Pan, and other fertility demons are shown on Buddhist reliefs drinking, dancing, harvesting, kissing or indulging in sexual intercourse. These Dionysian scenes could be understood as a symbolic representation of the middle region of Gandhara or Yakshas.

Fig.3-2:
Left –
An Indo-Corinthian capital with the Buddha at its centre, 3-4th century, Gandhara
Right –
Greek scroll supported by Indian Yakshas, Amaravati, 3rd century AD.



In Greek temple, upright statues of important men were generally located between the columns of the monuments, theatres, and tombs, with scrolls running along the entablatures over their heads. Those enshrined figures were placed there for political and didactic purposes, and viewers are exalted by their presence within the architecture. When the early Indian Buddhists adopted some of the elements in Greek architecture for their temples, they placed the Buddha statues between the columns and appropriated the ornaments from the Greek (Bloomer, 2000). This style of arrangement has also passed on to Thailand and still exists until present day.

In order to find out what shaped up the form of traditional Thai decorative ornament with regards to the design, this section demonstrates the association between traditional Thai decorative ornament design and ancient lotus ornament design. The analysis of the sample ornaments, their transformation, their basic structure, and their details are conducted. Moreover, the consideration in ornament formation and its background meaning is performed to understand the national culture and belief between Thai and the cultures that influenced it, which affected their design and caused changes in their forms. This part also demonstrates the fascinating feat that ancient people could transform their intangible value into the visual forms since the ancient time.

3.1 Transformation

To understand the traditional Thai decorative ornament,

Kranok or Lai Thai², which is derived from the lotus, this study takes a closer look at the history of lotus before it arrived in Thailand. There are no exact evidences to prove where the traditional Thai decorative ornament originated. However, there are some evidences shown that the ornament is influenced from the neighboring countries, particularly from India. Leksukhum (2010) claims that the ornament had reach Thailand via Buddhist missionaries from India since 800 AD when India had influence in the Asian region. Diskul (1976) claimed that Gupta culture, which was influenced by Amaravati culture, influenced the ornament. At that time, Amaravati had a rich culture in decorating their vine branch patterns that influenced directly by Greek, Roman, and Iran.

Moreover, this study also has found many evidences suggesting that there are lotus ornamentation and its transformation throughout human history from Egyptian lotus to Greek Palmette, Roman Corinthian, Byzantine Anthemion, Indian lotus, Chinese Peony and Kranok or Lai Thai. Even though the name or what so call of the ornamentation in each period are different, they were created by a common base form. Among the lotus ornamentation in human history, the oldest evidence can be traced back to ancient Egypt.

² Traditional Thai decorative ornament is called Lai Thai in Thai language. And, Kranok is widely considered to be the most fundamental ornament of Lai Thai.

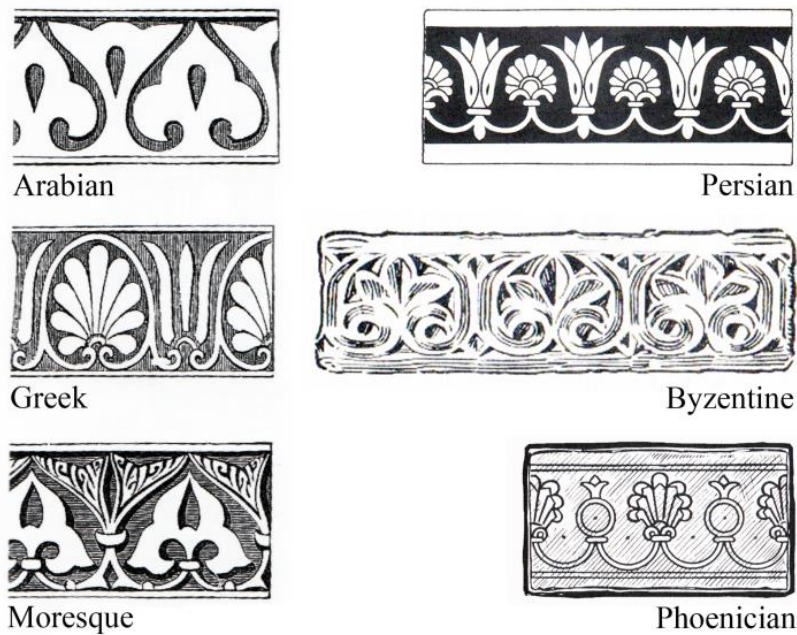


Fig.3-3:
*Sample of the lotus ornament
 in many ages. (Jones, 1856)*

Even though most of the Thai art history said only that Thai art has been influence mostly from India, but Indian art was also influenced by Greek, Roman and Arabian art since 50 BC. By considering the shape and form of the lotus, there are some similarities between Egyptian and Thai lotus. Both Thai and Egyptian shapes were drawn from the half lotus form inspired by nature. Both have opened and closed form with sharp pointed tip. Both arrangements are symmetrical and graceful. Egyptians and Thais used lotus ornament throughout its sacred architectures even though they have different beliefs.

Considering the perspective of nature, there are three species of lotus in Egypt, the white lotus (*Nymphaea lotus*), the blue lotus (*Nymphaea Caerulea*), and pink lotus (*Nelumbo Nucifera*). All three species were depicted in Egyptian arts. In Thailand, the lotus is called Bua. Likewise, there are also three species of lotus in Thailand. Bua Luang or Pathum (*Nelumbo Nucifera*) is equivalent to

the pink lotus in Egypt, Bua Sai or Ubon (*Nymphaea lotus*) is equivalent to the white lotus in Egypt, and Bua Kradong (*Victoria* sp.). Therefore, Thailand and Egypt share two species of lotus, the white and pink lotuses.

It raises the interest that there might be the possibility that Kranok or Lai Thai has some associations with the Egyptian lotus. To clarify the hypothesis, this research shows the evolution and metamorphosis of these two denominated species from Egyptian lotus into traditional Thai ornament.

3.1.1 Egyptian Period (ca. 3100 BC - 332 BC)

The concept of Egyptian ornament was derived directly from inspiration by nature. From the record, Egyptian has no foreign or prior influences. They experienced things by their eyes and transfer their experiences by their hands. Thus, it is assumable that origin of lotus ornamentation is from Egypt.

There are many types of patterns and ornamentation derived from lotus in Egypt. Among them, Palmette³ is one of the ornamentation that has noticeable migration and influence on Kranok or Lai Thai.

Palmette, Goodyear (1891) explained that it represents

³ The palmette is a motif in decorative art, which in its most characteristic expression, resembles the fan-shaped leaves of a palm tree. The essence of the palmette is a symmetrical group of spreading fronds that spread out from a single base, normally widening as they go out, before ending at a rounded or fairly blunt pointed tip. There may be a central frond that is larger than the rest. The number of fronds is variable, but typically between five and about fifteen.

the combination of the lotus rosette with sepals and calyx. Egyptian transforms dried lotus ovary stigma taken from nature into rosette and later assimilates them into part of lotus-Palmette. Fig.3-4 shows how Egyptian transform dried ovary stigma into the lotus-rosette and use it on the column.

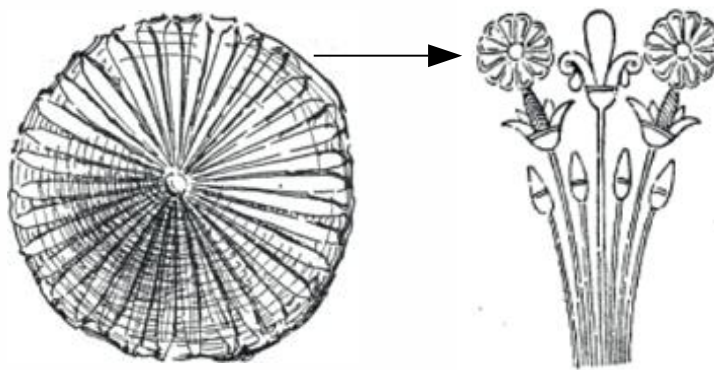


Fig.3-4:

Left –

Dried ovary stigma of the lotus after seeding, pictured from nature.

(Goodyear, 1891)

Right –

Lotus buds supporting rosettes, columns at Esneh.

From PRISSE D'Avennes

(Goodyear, 1891)

There are many lotus combinations form, which the Palmette is derived. For example, in the tomb-ceiling patterns of Prisses d'Avennes, there is a frequently recurring motive, illustrated by Fig.3-5-Left. The motive also occurs with a conventional outline for the Palmette portion as in Fig.3-5-Right, which also includes an inverted bud. It can be stated with certainty that Fig.3-5 represents lotuses.



Fig.3-5:

Egyptian Palmette in the tomb-ceiling patterns of Prisse d'Avennes

(Goodyear, 1891)

The connotation of the Palmette's shape is from the oldest

shape in ancient Egypt. It was a rosette or daisy-like lotus flower emerging from a 'V' of foliage or petals resembling the 'akhet' hieroglyph depicting the setting or rising sun at the point where it touches the two mountains of the horizon – 'dying', being 'reborn' and giving life to the earth (Fig.3-6). Notice the similarity of the outlining shape in Fig.3-5, 3-7, and 3-8.

Fig.3-6:

The Ancient Egyptian papyrus (of Ani), the vignette in the British Museum

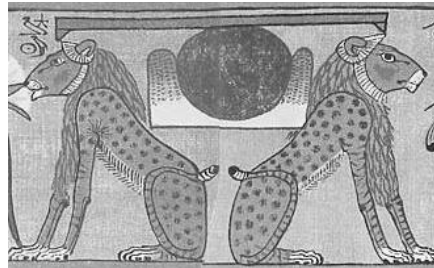


Fig.3-7:

Left –
A gold jewel from ancient Egypt (Hamlin, 1916)

Right –
Drawing of Palmette Necklace (Hamlin, 1916)

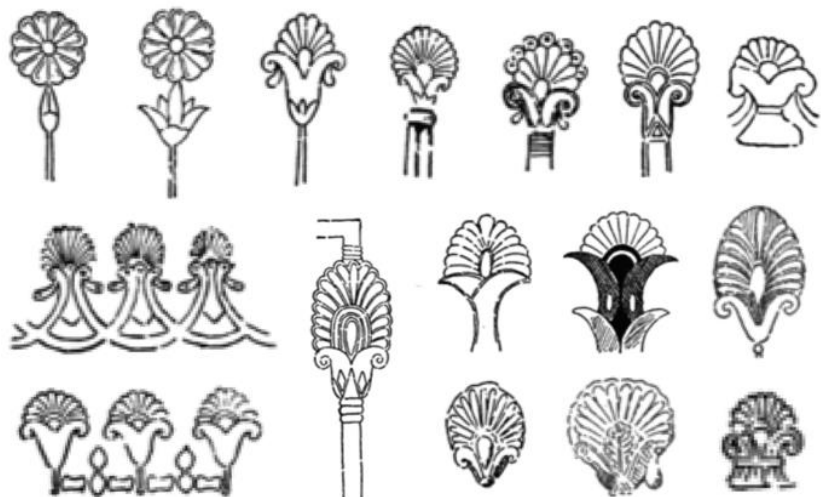
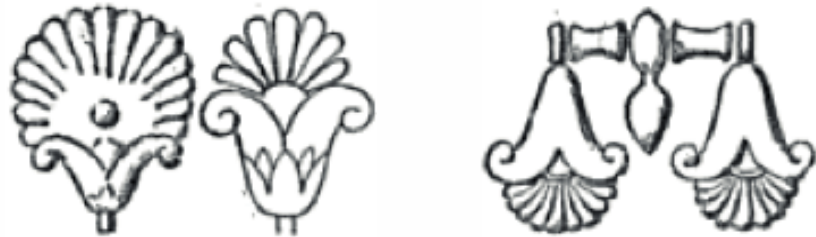


Fig.3-8:

Common Palmette shape and drawing in Egypt (Goodyear, 1891)

In conclusion, the Egyptian lotus ornamentation mostly appeared in a form of Palmette. The Palmette crown is the

rosette drew from a dried lotus. However, some of the Egyptian Palmette does not portray the whole rosette. It denotes a supposed concealment of a portion of the rosette. This can be attributed to decorative consideration, with 2 sepals always curved outward. The calyx is closely mimicking the nature. The stem is straight and simple. In this period, the Egyptian used lotus ornament mainly to decorate their architecture that made from stone, earth, sand, and wood. Therefore, the pattern was drawn by a simple line, based on geometry shape with fewer components.

3.1.2 Assyrian and Persian Period (ca. 934 BC - 609 BC)

The Assyrian and Persian borrowed the style from the Egyptian, but modified the style to suit the local region and habits of the Assyrian people (Jones, 2001). Comparing between Assyrian and Egypt ornaments, it is apparent that the same mode of representation has been adopted and the objects are quite similar. The Assyrians originated only a little in the way of decorative motives. They even used the same material and technique as Egypt.

The details regarding to the provenance of the pattern in Fig.3-9 is rather descriptive than illustrated. It was obvious from this form that the Assyrian Palmette derived from the Egypt. They both have similarity in the shape of lotus. Assyrian followed the natural law of the radiation and tangential curvature as the Egyptian but much less accurately as they were drawn from the habit instead of the instinct.

Fig.3-9:
Assyrian Palmette with lotus flower (left) and with lotus bud (right) from fresco, British Museum (Goodyear, 1891)

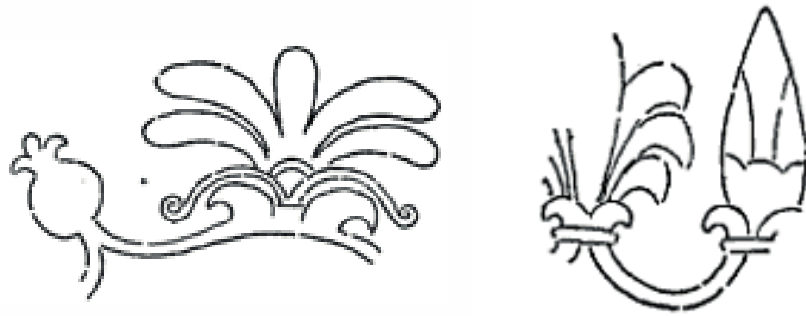
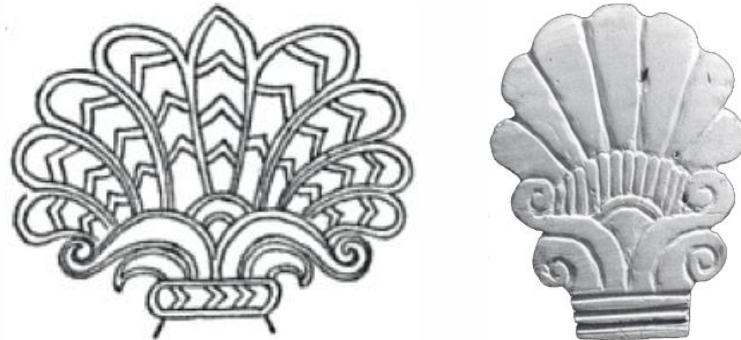


Fig.3-10:
Left –
Assyrian Palmette drawing
Right –
Palmette-shaped as an isolated ornament 900 – 800 BC (Thomas, 2012)



Since the Assyrian borrowed the idea from Egypt, they were freely modified to what they mean to be (Hamlin, 1916). The Palmette has gracefully curved petals and sepals. The petals were enlarged and the sepals were shrunk. It was given a new elaborate calyx. Nevertheless, the Assyrian mostly removed the stem.

It can be seen that Assyrian and Persian style did not follow nature as closely as the Egyptian, nor so exquisitely conventionalized it as the Greek (Jones, 2001). This study can conclude that Assyrian was the rightful passage from Egyptian to the Greek.

3.1.3 Greek Period (ca. 800 BC – 600 AD)

Greek art was a redevelopment, or a re-imagination of an old idea in a new direction and unrestrained by religious laws. It was partially influenced by both Egyptian and

Assyrian. However, Greek ornament lacked meaningful inferred meanings and were, purely decorative, never representative, and can hardly be said to be constructive when compared with the Egyptian (Jones, 2001).

The most remarkable change appears in Greek art in the seventh century BC when the Eastern pictorial motifs were introduced. Palmette and lotus compositions are one of those motifs. Certain phases of the Egyptian lotus were exactly identical with the certain phases of the Greek anthemion form (Goodyear, 1891).

From many perspectives, when comparing the 2 different periods of ornament, the fan-like petals remain the same. The two sepals curves down are slightly different, while the ovary shape in the middle remains the same. There are three triangles at the calyx of the rosette from Egyptian period but it decreased to only one triangle in the Greek period.



Fig.3-11:

Left –

Ionic lotus, supporting demi-rosette. Detail in stone carving from Cyprus, decorating handles of the enormous stone bowl in the Louvre (Goodyear, 1891)

Middle –

Drawing of Assyrian terminal Palmette (Hamlin, 1916)

Right –

Greek anthemion. Detail from the handle of a Greek bronze vase, from Sidon (Goodyear, 1891)

Regarding the motive and pattern, the Greeks curved the petals of the Palmette in various ways; they refined their forms in an extraordinary variety of ways, created out of monotonous and lifeless Palmette, an entirely beautiful ornament.

Fig.3-12:
Anthemion with Volute scrolls,
from a vase (Jones, 1856)

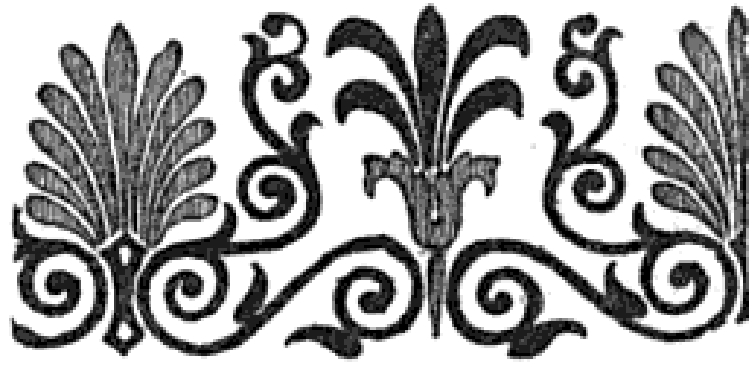
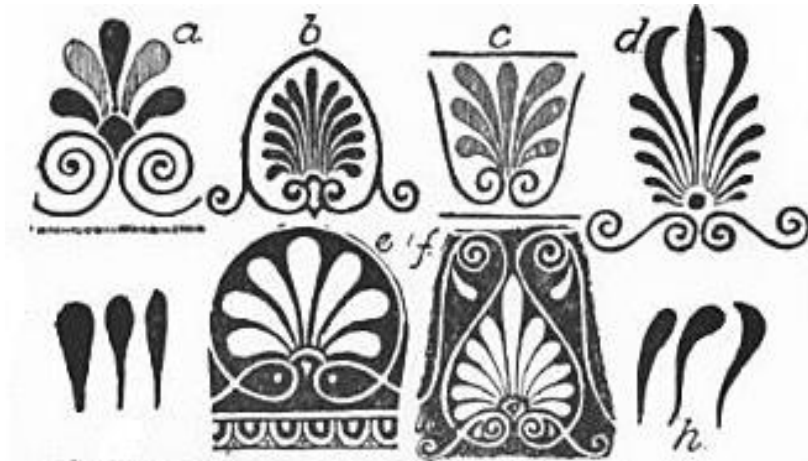


Fig.3-13:
Various types of Anthemion
motives (Hamlin, 1916)



As many evidences in this study from the three great laws, geographical and political reasons show, both Goodyear (1891) and Jones (2001) suggest that the Egyptian lotus had passed through Greek. The Greek had adopted and changed it to suit their lifestyle and purposes.

3.1.4 Roman Period (ca. 753 BC – 480 AD)

The conquest of the Hellenistic kingdoms (Last ancient Greek kingdom) triggered a fusion between Roman and Greek culture. The characteristic of the Roman art can be described as a form of self-glorification. From the base of the column to the apex of the pediment, every part is overloaded with ornament. It has a tendency to dazzle by quantity than to incite appreciation by the quality of the work. Even the design lacked of the refinement and

restraint of the Greek, but it was definitely more varied and more flexible. It was eminently adapted to the purposes, which it had to serve.

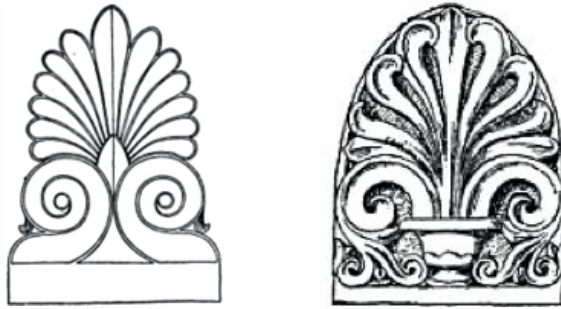


Fig.3-14:

Left –

Greek Anthemion of the Parthenon (Jones, 1856)

Right –

Illustration of Roman Anthemion (Hamlin, 1916)

Fig.3-14 demonstrates the similarity of the Anthemion or Palmette shape of the Roman and Greek period. There is some distinction between them but it is hard to deny the similarities. The shape of the Anthemion remains the same oblong with the fan-like shape on the top. However, the Roman infused the curve tip while the Greek has straight tip. The Roman sometimes added the pottery at the base as a decoration, while entirely omitting the oval shape in the middle entirely. Moreover, the two curve down sepals are similar but the Greek tug the tip of the petal when roman just maintain the curve as others petal up top.

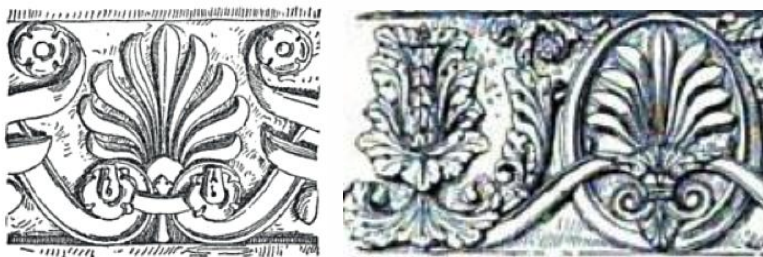


Fig.3-15:

Left –

Drawing of typical roman carved Anthemions. (Christie, 1969)

Right –

Fragment form, Forum of Trajan in Lateran Museum (Jones, 1856)

From the conquest of Hellenistic kingdom to the assimilation of Greek arts, it is certainly evident that the Egyptian lotus has travelled through the Roman.

3.1.5 Byzantine Period (ca. 330 AD – 1453 AD)

Pure Byzantine ornament is distinguished by the broad-toothed and acute-pointed leaves, which in sculpture are beveled at the edge, are deeply channeled throughout. The running foliage is thin and continuous. The imitations were crude and imperfect. They mixed the speaking art of the Egyptian, the natural grace, and refinement of the Greek, and created the geometrical combinations of the Roman and their own.

In all Byzantine decorative carving, the patterns were chiefly based on the Acanthus and Rinceau (foliage) in bud-bloom pattern. Hamlin (1916) suggests that the Acanthus came from the Roman version of the anthemion on the vase ornament, surviving in Roman carving and Mosaic.



Fig.3-16:
*Anthemion Frieze at St. Mark's
Venice, 600 AD (Hamlin, 1916)*

The shape of the Anthemion is the same oblong shape. The upper element is a fan-like shape. However, the Byzantine reduced the number of petal and used both the broad-tooth and acute-pointed leaves rather than a curve tip. The Byzantine has essentially replaced the flower with Acanthus leaves. The flowers are really Acanthus leaves in disguise.



Fig.3-17:

Left –

Acanthus leaves on stone sculptured ornament, Santa Sofia Constantinople. 600 BC (Jones, 1856)

Right –

Byzantine Anthemion carving on portion of a capital, St. Michael's church. 1200 AD (Jones, 1856)

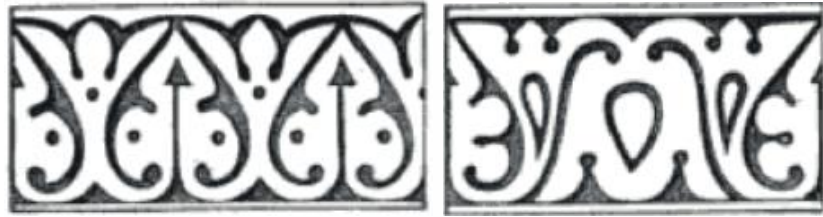
The Byzantine used the sepal to outline the shape of the Anthemion. This pattern passed to the Arabians later on (Fig.24 – left). It is not exactly the same, Hamlin (1916) has explained that this is due to the influence of the Asiatic Greek that naturally combine the Asiatic love of the surface decoration in the detail all-over the patterns, with the traditional motives of Greek classic and Roman art.

3.1.6 Arabian Period (ca. 632 AD – 1031 AD)

The Arabian simply imitated Byzantine. The imitations were crude and imperfect. This imperfection gave a birth to a new style of art identical to what happened in Byzantine.

The Arabian imitated the Acanthus from the Byzantine. The flower is the prime example of how crude and imperfect. The Arabian discarded all the details of Byzantine carved Anthemion. Comparing between Fig.3-16 and Fig.3-18, the only characteristic that remained intact is the outlining shape of the flower.

Fig.3-18:
Scrollwork around the windows
from the Mosque of Touloun,
Cairo 876-7 AD (Jones, 1856)



The Arab adapted the Byzantine ornament to its own use with some modifications. The art in Byzantine was three-dimensional whereas the one in Arabian period is a two-dimension art mainly found as painting on vases, walls, and tiles. No matter how crude or imperfect the imitation was, there are undeniable similarities of the outlining shape of the flower and scrollwork. It can be confirmed that Greek, Roman, and Byzantine elements influenced the Arabian ornament.

Fig.3-19:
Palmette pattern painted in
luster on a vase found at Fustat,
11th Century, Victoria and Albert
Museum (Christie, 1969)

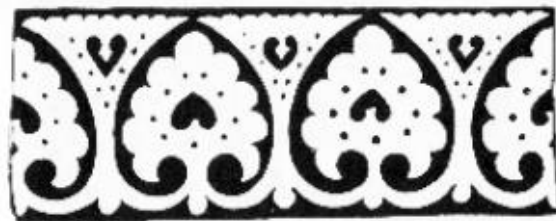
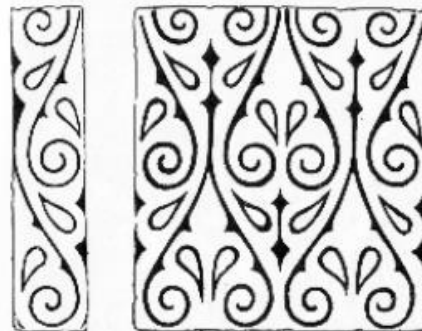


Fig.3-20:
Left –
Border of split-Palmette foliage,
from the Mihrab of the Mosque
of Sultan Hasan, Cairo, Middle
14th Century
Right –
Surface pattern developed from
Left (Christie, 1969)



3.1.7 Indian Period (ca. 3000 BC – 1400 AD)

The Indian united the severe forms of Arabian art with the graces of Persian refinement. All of the Indian works have the same guiding principles; there is always the same care

for general form and the same absence of all excrescences or superfluous ornament. The Indian style ornament is somewhat more flowing and less conventionalized, and has been subjected to significant direct Persian influence.

The lotus ornamentation in India can be divided into 2 types. First, the flower in the early Indian period looks like the lotus-rosette of the Egyptian period. There is undeniable similarity of Fig.3-21 and Fig.3-4. This type of ornament looks like lotus dried ovary stigma, drawn from top view. Fig.3-22 shows the crown is half rosette with calyx and sepals at its base, which has the same basic elements of the pattern as Egyptian lotus ornament. This type of pattern is derived directly from Egyptian through Hindu. Second, the patterns derive from the lotus. This pattern derived directly from Greek's Palmette. The pattern has been considerably changed from the ancient Egyptian ornament.

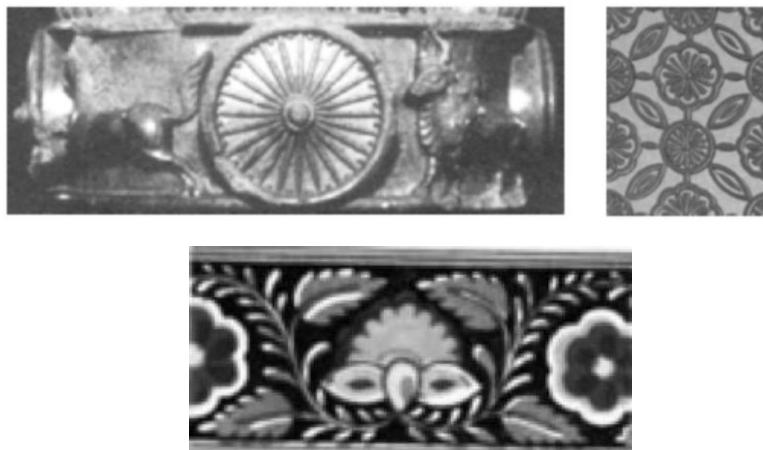


Fig.3-21:

Left –

Part of the top of Ashoka The Great's stone column, Ancient India, Sarnath Museum (Diskul, 2010)

Right –

Ornament in painted boxes, the Indian Collection, Paris (Jones, 1856)

Fig.3-22:

Fabric ornament, the Indian Collection, Paris (Jones, 1856)

By receiving influence from many cultures, India has many varieties of pattern, quite noticeably more than any civilization. There are not only the natural lotus patterns,

but also the abstract lotus patterns that look very different from conventional lotuses as well.

From Fig.3-23-Left, the cone's form is a conical in shape, but lotus-like in detail, and the flower is metamorphosed into a strange Chinese style of scroll. This is the knop and flower pattern. It is proved by the curved line, which unites the base of the knop with the base of the flower. On the shawl border (Fig.3-23-Middle), the knop becoming the cone and the branches of which fan out like the fronds of the lotus. From Fig.3-23-Right, there is a striking similarity to the Greek and Roman Palmette, Byzantine Anthemion, and Arabian arabesque.

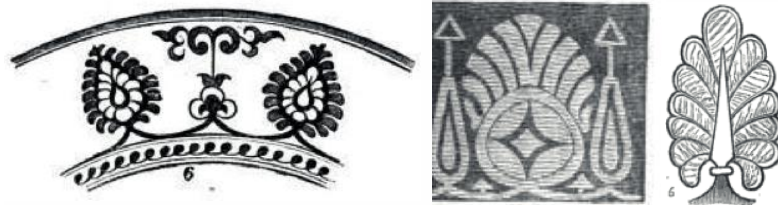
Fig.3-23:

Left –

A typical Persian plates, Middle - Knop and Flower pattern on a Delhi shawl (Molesworth, 1878)

Right –

Indian Palmette from Baden Powell's "Punjab Manufactures" (Molesworth, 1878)



The later Indian period the flower looks similar to those of Byzantine and Arabian Acanthus (Fig.3-24).



Fig.3-24:

Ornaments from Works in Metal, the Indian Collection, 1851. (Jones, 1856)

From the findings mentioned above, it can be shown that Egyptian Palmette and Arabian Acanthus have influenced the Indian ornament. The evidence shows in their metal work and textile, typical household items in an Indian's day

to day life. The similarity of Indian Palmette and Greek/Roman Palmette/Anthemion is beyond deniability. It is beyond any doubt that the Egyptian's lotus has travelled through Indian continent, thus influencing their art and ornament.

3.1.8 China Period (ca. 221 BC – 1644 AD)

The Palmette and scrolls, brought to China to decorate Buddhist architecture, seems to have remained tied to architecture and to the embellishment of Buddhist figures (Rawson, 1984). Bloomer (2000) claims that Chinese artisans adopted the half-Palmette because it has a vivid thrusting action that punctuates the direction of translation when repeated. The minimal arrangement of wave and half-Palmette that migrated into China was sufficient to perpetuate the foliated scroll and to nourish the development of elaborate flower patterns that were uniquely Chinese influence.

Chinese artisans, abandoning the rigorous symmetry and geometry of the Greek Palmette, dynamically rotated the half-Palmette into a fan shape growing out of a joint along the wavy stem (Fig.3-25). This elegant radiation features a miniature cluster of scrolls sprouting from its base. On either side of the newly sprouted plant figure, slightly detached scrolls trail off into space and plumes of vapor reminiscent of Asian cloud motifs. In subsequent designs, such clouds seem to assert themselves and demand their own sky (Fig.3-26) in the turbulence of a rather free and calligraphic composition. The ancient Greek forms were giving way to Chinese portrayal of elegance and energy.

Fig. 3-25:
The half-Palmette was transformed into a fan (Bloomer, 2000)



Fig.3-26:
The scrolls are detached and trail off, while the clouds assert themselves within the pattern (Bloomer, 2000)



After the tips of blossom shapes, which originally derived from the Palmette and the lotus, dissolved into clouds, the blossom itself was transformed into a peony (Fig.3-27-Left). By the 11th century, the dominant motif consisted of a peony forming, billowing around the axis of the wavy line, and emitting clouds from its tips. By the 14th century, the lotus had reappeared as the principle motif on a foliated scroll (Fig.3-27-Right). The ancient lotus motif has pointed tips while the Asian peony motif has round tips. This new flower seems to be the peony-lotus. The vine revolving about the flowers is sprouting scrolls as well as scrolls issuing clouds that seem to be leaves. Thus, an illusion of natural vining is also a semblance of spiraling wind.

Fig.3-27:
Left –

As the lotus dissolves into a cloud, the blossom was transformed into peony (Bloomer, 2000)



Right –

As accomplishment of the Ming dynasty was the rediscovery of the lotus flower as a decorative motif. (Bloomer, 2000)



From Fig.3-25 to 3-27, it is quite clear that the Greek lotus has travelled through the Silk Road into China. Chinese had adopted it and tweaked them as if they were their own.

3.1.9 Hindu Period (ca. 200 BC – 100 AD)

In the 19th century, Hindu was used as a very general term for any oriental styles of architecture, including Indian, Chinese, and Moorish. Many ornaments originated from Buddhist beliefs or reflect one. Most of the decorations were figurative showing scenes from the life of Buddha. Lotus and Jewel seemed to be the principal element of the decoration on the molding.

The ornament in Fig.3-28 comes from a statue of Surya, an Indian sun god. In many images, the god was portrayed with a lotus in each hand. As in Egypt, lotus was a symbol of the sun.

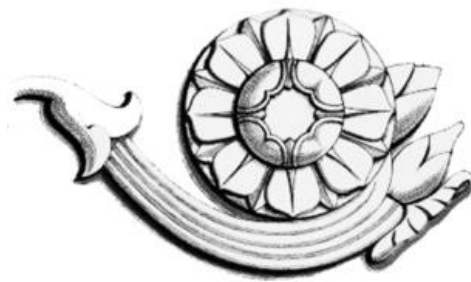


Fig.3-28:
*Ornament from a statue in
basalt at the house of the Royal
Asiatic Society (Jones, 1856)*

Rawson (1984) offers an explanation of the means by which the foliated scroll moved from the borders of Greek temples into the similar spaces upon the elevations of Buddhist cave temples. There are enshrined figures, upright statues of important men located between the columns with scrolls running along the entablatures over

their heads. They were placed there for political and didactic purposes and were exalted by their presence within the architecture. When the early Buddhist adopted some of the elements, they placed Buddhas between columns and appropriated scrolls. The scrolls that prevailed in the early years of their adoption were crude compared to the Greek prototype, but still contained all the genetics.

A stone relief from 2nd to 3rd century AD Buddhist cave temple in Gandhara (Fig.3-29) illustrates a simple wave stem sprouting partial scrolls efflorescing into half-Palmette.

Fig.3-29:
A wave stem from a Buddhist cave temple; sprouts half-formed Palmette (Bloomer, 2000)



3.1.10 Thai Period (ca. 1200 AD – Present)

The first evidence of early Lai Thai sketches is from the Sukhothai period, around 800 years ago. Patterns were engraved at the corners of Wat Srijum's wall. This temple is located in Sukhothai province in the northern part of Thailand (Devabhinimmit, 1943).

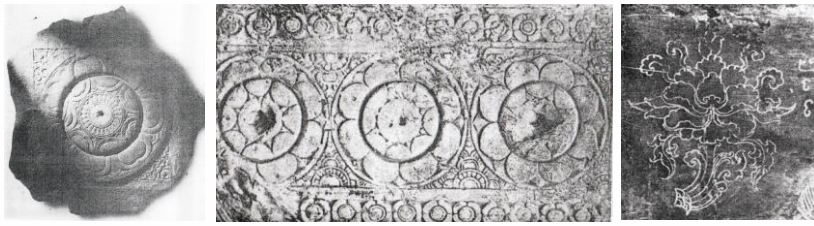


Fig.3-30:

Lotus and early Thai ornament sketch, Carved Stone, Sri-chum Temple, Sukhothai, ca. 1300 AD

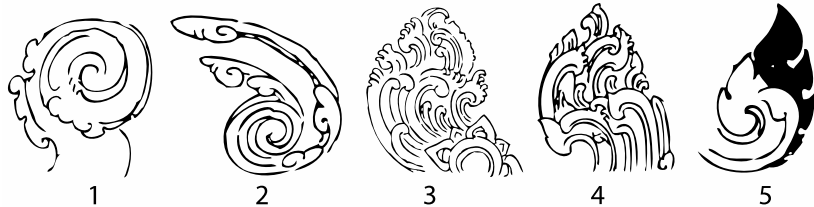


Fig.3-31:

Early Thai ornament sketches:

1 –

Dvaravati period, ca. 558-957

(Leksukhum, 2004)

2 –

Khmer period, ca. 1207

(Leksukhum, 2004)

3 –

Sukhothai period, ca. 1308-1357

(Leksukhum, 2004)

4 –

Lanna period, ca. 1328

(Leksukhum, 2004)

5 –

Before Ayudha period, ca. 1258-

1307. (Leksukhum, 2004)

The early Thai patterns are curly head, have curved ending, and are full of curved lines. The patterns are very similar to Chinese, Hindu, and Indian. Fig. 3-30-Left and Middle, the picture representing the natural lotus, signifying religious beliefs. This form is similar to the figure from Hindu (Fig.3-28). Fig.3-30-Right is a decorative ornament, this form resembles Indian fusions with Chinese. It looks like the Indian lotus with Chinese gentleness, with a resemblance of spiraling wind. Although this pattern may or may not incorporate the flower into its pattern, the main focuses are stem and leaves. This China-influenced cloud and spiraling wind pattern became a very explicit pattern to Lanna (a region in Thailand) because the belief behind their meaning of contented life style, abundance, and free of nature disaster (Misssupen, 2011). This pattern was mostly used in plaster for decoration. At first, the spiraling wind pattern did not have any obvious Kranok pattern mixed into it. Later on, Kranok Pattern had developed into its own particular form. It has the sharp edge at the end of the pattern, like a thorn (Fig.3-31–5). It is presumed that Thai later on received this form from the Khmer. This form is mixed into almost all of

the patterns and implicates the reaching for the god or heaven.

3.2 Structure

This study categorizes the ornament by using the principle of the ornament arrangement based on two renowned experts, Franz Seles Meyer (1920), a professor at the School of Applied Art Karlsruhe, and Kent C Bloomer (2000), a Professor at Yale Schools of Architecture.

Meyer arranges the decorative ornament according to their functions, the reciprocal relation between the construction of the object, and the application of the ornament. These can be grouped into five divisions including band, free ornaments, supports, enclosed ornament, and repeating ornaments. This section describes the comparative structure study of the ancient lotus ornament and traditional Thai ornament in all these five divisions.

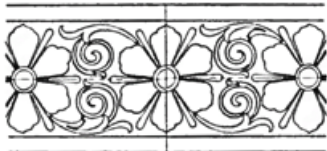

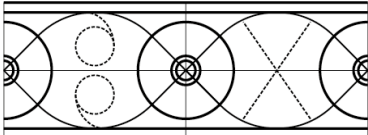
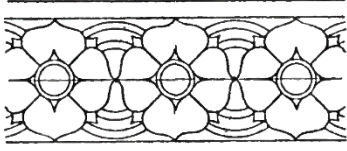
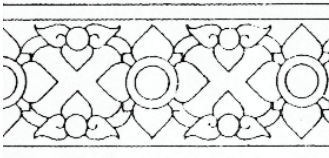
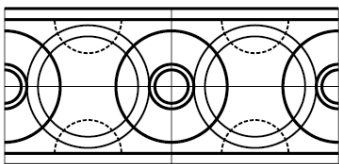


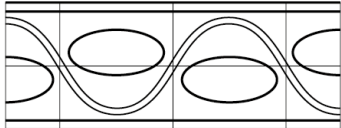
From the “Structure Analysis” column in every table, the solid line shows the similar structure between ancient lotus ornament and traditional Thai ornament, while dotted lines illustrate the different structure. The thickness of the line refines the position of the line. The thicker lines are in front of the thinner lines.

3.2.1 Bands

Bands represent any ornamental forms that give the

expression to the ideas of bordering, framing, and connecting. The application of bands is on the enclosing of ceilings, walls, floors, and panels, on certain architectural constructions. Meyer (1920) concluded that the principal bands ornaments are the fret and chain. Also, it can be any interlaced patterns and foliated band in various forms of rosette, palmette, flowers, leaves, and scroll Bands.

Table 3-1. Structure Analysis of Bands

Ancient lotus ornament	Traditional Thai ornament	Structure Analysis
 <p>Fig.3-32-A: <i>Antique pattern, after Jacobsthal (Meyer, 1920)</i></p>	 <p>Fig.3-32-B: <i>Lai Pra Chum Yarm Garnd Yang (Chainombnom, 2005)</i></p>	
 <p>Fig.3-33-A: <i>Indian carving (Meyer, 1920)</i></p>	 <p>Fig.3-33-B: <i>Pra Chum Yarm Look So (Daradas, 1995)</i></p>	
 <p>Fig.3-34-A: <i>Romanesque, portal of cathedral, Lucca (Meyer, 1920)</i></p>	 <p>Fig.3-34-B: <i>Lai Mali Loey (Chainombnom, 2005)</i></p>	

From Fig.3-32-A and 3-32-B, both Band's main flowers were drawn from the top view of the flower. They were placed as the center of the ornament with stalks and sprays coming out of the main center flower on the

background. They have inward curves on both left side and right side. Although the level of detail is noticeably less in ancient ornament, the inward curve direction remains the same. Both bands are entirely without direction. They are symmetrical not only from top to bottom, but also from right to left. The stalks and sprays interlace the main flowers together with elaborate form and pattern. Both ornaments have a defined parallel straight lines border to accent the ornament.

From Fig.3-33-A and 3-33-B, the structure of the ornaments are similar to Fig.3-32-A and 3-32-B. Both Bands' main flowers were drawn from the top view of the flower. They were placed as the center of the ornament with stalks and sprays coming out of the main center flower connecting to the adjacent flower in circle shape. The detail of stalks and sprays in Fig.3-33-A applied the simple shape of circles on top of each other while the stalks and sprays in Fig. 3-33-B has additional elements attached over the circles. Furthermore, the main flowers look somewhat identical. They have four petals sprayed out in the same exact direction with two circles in the middle representing the ovary. Both ornaments also have a defined parallel straight lines border to accent the ornament as same as Fig. 3-32-A and 3-32-B.

From Fig.3-34-A and 3-34-B, both Band's main flowers were drawn from the side view of the flower. The band has only one main stalk curving up and down throughout the band. The ornament is directional; the flowers came out from the main stalk to fill the space between curves on different side alternately throughout the band. The main

flowers coming out of the main stalks went in one direction and are located at the same positions in both bands. The details of ornament in Fig.3-34-B are more elaborate and pointy than in Fig.3-34-A. Both ornaments also have a defined parallel straight line border to accent the ornament, as with the case of Fig.3-32-A and 3-32-B.

3.2.2 Free Ornaments

Free Ornaments are those ornaments that are applied to suggest the end or finish of an object. The word “free” implies a freely treated edge-ornament, not a severely enclosed band or panel. Endings with an upward direction are most numerous; and as plants, with their natural, upward growth, are adapted for this purpose.

Table 3-2. Structure Analysis of Free Ornaments

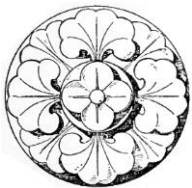

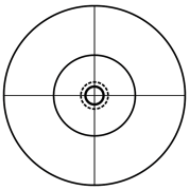


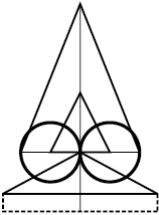
Ancient lotus ornament	Traditional Thai ornament	Structure Analysis
 <p>Fig.3-35-A: <i>Free ornament on the door of baptistery Parma (Meyer, 1920)</i></p>	 <p>Fig.3-35-B: <i>Lai Dork Loy (Chainombnom, 2005)</i></p>	
 <p>Fig.3-36-A: <i>Greek Antefix, Parthenon, Athens (Meyer, 1920)</i></p>	 <p>Fig.3-36-B: <i>Lai Krajuk Hu (Chainombnom, 2005)</i></p>	



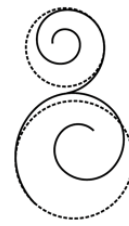
Fig.3-37-A:

*The frieze of the theatre at
Patara (Jones, 1856)*



Fig.3-37-B:

*Lai Prachumyam Kanyang
(Chainombnom, 2005)*



From Fig.3-35-A and 3-35-B, the ornament has only one main flower, drawn from top view, without any stalk or spray. The petals of the flower are divided into many layers. The First layer is a small flower with a circular ovary on the center. Its petals grow from the center and radiate outwards. The other layers are group of petals placed behind the first layer. This technique make the ornament appears multi-dimensional. They are symmetrical, not only from top to bottom but also from right to left. The petals in Fig.3-35-A, however, look more realistic than petals in Fig.3-35-B, which are basically geometrical shapes.

From Fig.3-36-A and 3-36-B, the ornament has only one main flower, drawn from the side view of the flower. Both ornaments share the same outlining shape. They could be described as lotus-like shape with wide mid-section, sharp top and hidden curved bottom behind the calyxes. The calyxes also have the same lotus-like shape. The petals grow upward from their calyx and curl a little at the end. Both ornament have two sepals grow out in front from the bottom and curved outwards left and right. However, the outline shape of sepals in Fig.3-36-B are more integrated with the outlining shape of the flower than the sepals in

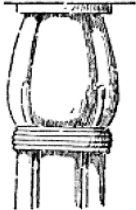
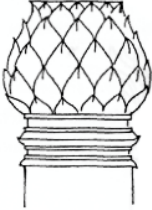
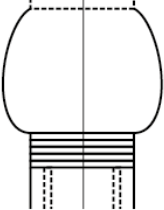
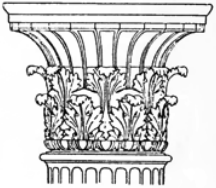
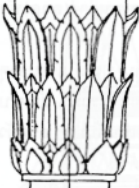
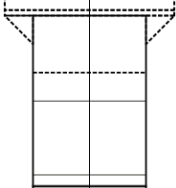
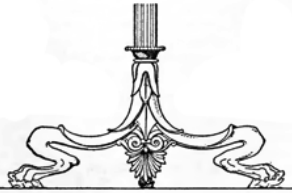


Fig.3-36-A. Every parts of the ornament in Fig.3-36-B have more elaborate details than ornament depicted in Fig.3-36-A.

From Fig.3-37-A and 3-37-B, both ornaments have one main curved stalk with another one curved stalk growing out from it. The Fibonacci-like spiral on the attached stalk is smaller than the main stalk. A flower buds out at the tip of each stalk. However, the flower in Fig.3-37-A was drawn from top view while the flower in Fig.3-37-B was drawn from side view. Both ornaments have many curved leaves developed throughout the stalk. The curved leaves grow in the same direction as the stalk. The leaves and flowers in Fig.3-37-A look more realistic than leaves and flowers in Fig.3-37-B. Entire shape of the ornament in Fig.3-37-B appears bolder and wider than in Fig.3-37-A.

3.2.3 Supports

Supports are type of elements, designed for supporting or weight-bearing. Supports are intended to bear a considerable weight, usually have a strong cylindrical or prismatic structure, and generally tapering toward the top. Meyers (1920) classified shaft, base, capital, panel, candelabrum foot, candelabrum shaft, baluster, the terminus, the parapet, railing post, furniture leg, trapezophoron, the console, the bracket, the caryatid, and the atlantes as support.

Table 3-3. Structure Analysis of Supports

Ancient lotus ornament	Traditional Thai ornament	Structure Analysis
 <p>Fig.3-38-A: <i>Egyptian lotus capital, Beni Hasan, XIIth Dyn, Chipiez, Histoire Des Ordes Grecs (Goodyear, 1891)</i></p>	 <p>Fig.3-38-B: <i>Lotus Terminal, Wi Harn Kot, Wat Prasrimahatard, Phitsanulok (Leksukhum, 2002)</i></p>	
 <p>Fig.3-39-A: <i>Antique Corinthian, Melos (Meyer, 1920)</i></p>	 <p>Fig.3-39-B: <i>Lotus Terminal, Bua JongGol (Leksukhum, 2002)</i></p>	
 <p>Fig.3-40-A: <i>The candelabrum base (Meyer, 1920)</i></p>	 <p>Fig.3-40-B: <i>Kha Singh, Tharn Busabuk Thammart Narai Ratchanivet meseum (Leksukhum, 2002)</i></p>	

From Fig.3-38-A and 3-38-B, both capitals are lotus bud-like shape, drawn from side view. The petals are pointing skyward. Both ornaments have realistic shape, as a result of trying to mimic nature as much as possible. The elaborate decoration is quite limited comparing with other elements. There are no leaves or stalks to cluster the capital only the parallel lines to portray strings that tie the flower to the capitals. There are many layers of small

petals in Fig.3-38-B than Fig.3-38-A. The pointy tip of petals on the top of capital in Fig.3-38-A is hidden while the petals in Fig.3-38-B are freely curved a little outward from the outlining shape. The lotus bud-like shape in Fig.3-38-B is wider and shorter than in Fig.3-38-A. Both ornament are vertically symmetrical.

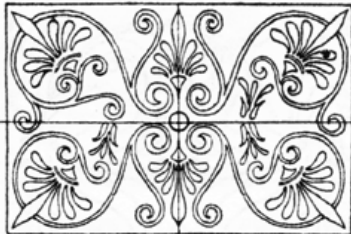
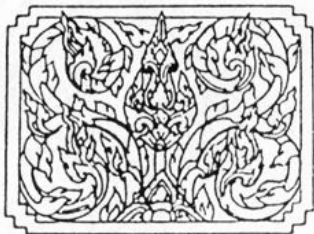
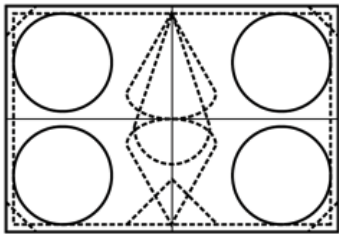
From Fig.3-39-A and 3-39-B, same as in Fig.3-38-A and 3-38-B, both capitals are derived from the lotus shape with highly detailed decoration. Each petal points skywards with gentle curves. They have the same multiple layers of petals with outward direction tips. The arrangement of petals in both ornament are also the same with alternate layering pattern. Nonetheless, the top of the capital in Fig.3-39-A is curved outward compared with the straight lines in Fig.3-39-B. The lotus like shape in Fig.3-39-A is wider and shorter than in Fig.3-39-B. Both ornaments are also vertically symmetrical.

From Fig.3-40-A and 3-40-B, the main similarity is focused at the center of the ornament. They both have the triangle shape pointed downward with highly detailed decoration. There is a small upward triangle placed at the opposite side of the main triangle. Moreover, the outlining shapes of their legs are also similar. They share the S-like shape legs protrude from both side of the triangle. Both ornaments are also vertically symmetrical. However, the legs in Fig.3-40-A mimic the real animal legs, while Fig.3-40-B used abstract pattern. Moreover, the tips of the legs in Fig.3-40-A point downward while the tips of the legs in Fig.3-40-B point upward.

3.2.4 Enclosed Ornament

The enclosed ornament or “panel” is ornament designed for a definite and bounded space, such as an oblong, according to artistic rules. It fits exactly into the space alone. They principally have to consider the following shapes: the square, the other regular polygons, the circle, the oblong, the ellipse, and the various forms of the span rail. The character of the ornament may be natural or artificial, and adapted to some pre-arranged leading-lines of the shape.

Table 3-4. Structure Analysis of Enclosed Ornament

Ancient lotus ornament	Traditional Thai ornament	Structure Analysis
		
<p>Fig.3-41-A: Greek, Painted coffers of ceilings, Propylaea, Athens (Meyer, 1920)</p>	<p>Fig.3-41-B: Lai Karn Kod, carved wood (Leksukhum, 2002)</p>	

From Fig.3-41-A and 3-41-B, both ornaments have many flowers drawn from the side view in a single pattern. In Fig.3-41-A, the ornament is symmetrical in all directions. There are four flowers surrounded with their curved stalks and sprays placed in each corner, and another two flowers placed opposite side in the middle of the ornament. In Fig.3-41-B, there are four curved spirals of stalk and sprays placed at each corner of the ornament, and a single upward direction flower placed right in the middle.

Even though, the ornament in Fig.3-41-B is only vertically symmetrical and there is only one flower placed at the center of the ornament, the arrangement still appears similar to Fig.3-41-A. The details in flowers, stalks, and sprays in Fig.3-41-B are more complex than in Fig.3-41-A.

3.2.5 Repeating Ornament

Repeating ornament or “diaper” is the duplication of ornament that may extend itself in any direction. The details of the patterns are repeated regardless to any definite boundary. The elements are either geometrical, organic, or a combination of both geometrical and organic elements. Sometimes they are extended with the addition of figures and artificial accessories.

Table 3-5. Structure Analysis of Supports

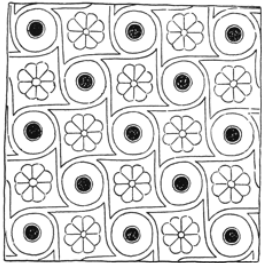

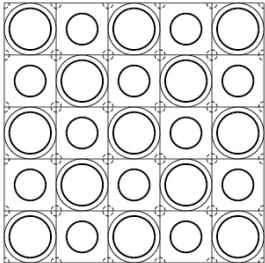
Ancient lotus ornament	Traditional Thai ornament	Structure Analysis
 <p>Fig.3-42-A: Spiral pattern from a painted ceiling. Egyptian, 18th dynasty (Christie, 1969)</p>	 <p>Fig. 3-42-B: Lai Ku Dun dorg lai (Chainombnom, 2005)</p>	



Fig.3-43-A:

Pattern from a cotton-printer's block. Indian, 19th century (Christie, 1969)

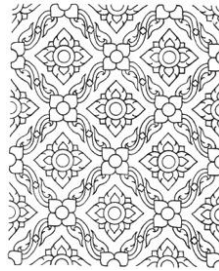
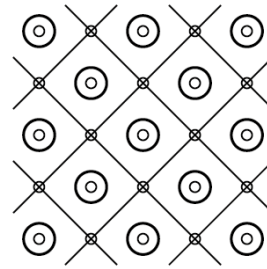


Fig.3-43-B:

Lai prachum yarn karn yang (Chainombnom, 2005)



From Fig.3-42-A and 3-42-B, both ornaments are decorated with the main flowers and supportive elements. The main flowers were drawn from the top view. Both have round circular spirals in diagonal direction. In Fig.3-42-B, the main flowers are placed inside the circle while the main flowers in Fig.3-42-A are placed in alternate position of the circle. The main flowers appear to separate freely from the supportive elements in rhythmic ordered. The main flower is accentuated by the space around it. The supportive elements in both ornaments also are placed in alternate position with the main flower. Nevertheless, the details of main flower and supportive elements in Fig.3-42-B are more exquisite than in Fig.3-42-A. As with before, the arrangement of the ornament is symmetrical in any direction, from top to bottom and also from left to right.

From Fig.3-43-A and 3-43-B, the structure of the ornament is similar to Fig.3-42-A and 3-42-B, both ornaments have the main flowers and supportive flowers drawn from the top view. Both have similar supportive elements from the flowers and stalks in diagonal direction with the main flowers and supportive flowers in alternate position.

However, in Fig.3-43-B the supportive flowers are the part of diagonal pattern itself. Same as Fig.3-42-A and 3-42-B, the details in both main flower and supportive elements on Fig.3-43-B are more exquisite than Fig.3-43-A. The arrangement of the ornament is symmetrical, not only from top to bottom but also from left to right.

3.3 Form & Arrangement

This topic discusses two types of ornamental formation styles classified by Wornum (1855). It consists of the symbolic and the aesthetic. The symbolic are those that appeal to our understandings and the aesthetic are those that appeal to our feelings. The details of both elements are described as follows.

3.3.1 Symbolic





- *The realistic issue*

Looking back to the history, the most ancient civilization that has lotus ornamentation is Egypt. Most of the ancient lotus ornamental forms were derived from the lotus in Egypt. Thus, to reveal the origin, this topic focuses on the Egyptian lotus ornament. Comparing between Thai and Egyptian, the lotus shapes were drawn inspired by the natural real lotus. The ancient people in Egypt experience things by their eyes, remember things by their head, and transfer their experience by their hands. They drew lotus from their memory and use their imagination to mimic the nature. However, Thai people drew lotus from their

imagination and archetype, beliefs which mostly originated from India.

The following table shows the type of lotuses, which appear in nature in both periods.

Table 3-6. Type of Lotus Appeared in Egypt & Thailand

	Lotus name	Picture of the lotus	Egypt	Thai
Common name <i>Binomial name</i> Thai name	White lotus Tiger lotus Egyptian white water-lily <i>Nymphaea lotus</i> Bua Sai or Ubon		✓	✓
Common name <i>Binomial name</i> Thai name	Pink lotus Indian lotus Sacred lotus <i>Nelumbo nucifera</i> Bua Luang or Pathum		✓	✓
Common name <i>Binomial name</i> Thai name	Blue lotus Blue Egyptian water-lily Sacred blue lily <i>Nymphaea caerulea</i> -		✓	✗
Common name <i>Binomial name</i> Thai name	Giant water-lily <i>Victoria</i> Bua Kradong		✗	✓

From Table 3-6, Thailand and Egypt share two species of Lotuses, the white lotus and pink lotus. This is reflected in the form of the ornament. Both Thai and Egyptian lotus ornament has both open and close forms. However, the majority of the ornament depicts in the open form with multiple pedals and a round seedpod inside, as shown in Fig.3-35-A and 3-35-B.

While Egyptian ornamentation mostly designed based on the white lotus, Thai ornamentation, which was influenced

directly from India, mostly designed based on the pink lotus. Resulting in a slightly different ornament formation. The early Thai lotus ornament proportion looks quite round with short bold petals. It has rounder and sturdier bud than the lotus from ancient Egypt, as depicted in Fig.3-38-A and 3-38-B.

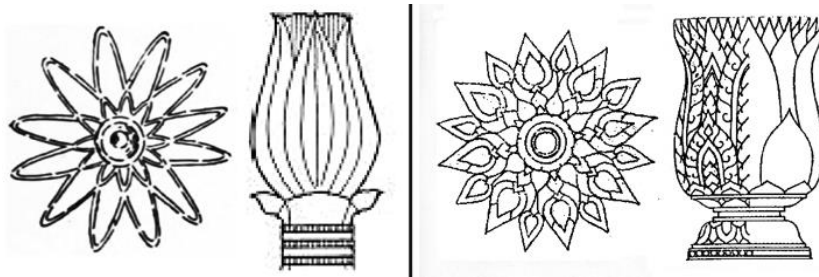


Fig.3-44:

Sample similarities in both open and close form, drawn from top view and drawn from side view of the flower

Left –

Ancient lotus ornament

Right –

Traditional Thai decorative ornament

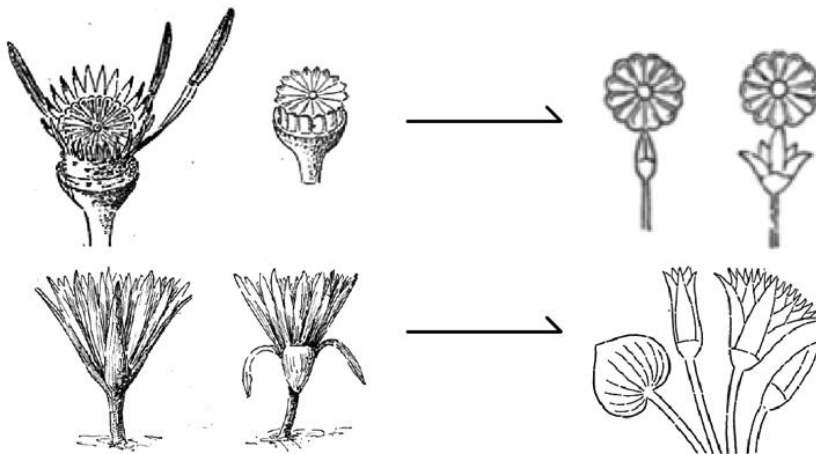


Fig.3-45:

Top –

From the ovary stigma of the white lotus to the Egyptian ornament (Goodyear, 1891)

Bottom –

From the blue lotus and their three sepal spikes to the Egyptian ornament (Goodyear, 1891)

However, the blue lotus, which appears only in Egypt, made its type of ornament as another image. The ornament looks sharply pointed and straight petals with tall long stems. These are the regular features in Egyptian lotus ornament.

The giant water-lily which has the very large green leaves usually lay flat on the surface of water. The size of its leaf can extends up to 3 meters (9.8 ft.) in diameter, and 7–8

meters (22.9-26.2 ft.) on a stalk in length. This type of lotus appeared only in Thai ornament. Due to its large size, it encourages Thai to use this lotus ornament in large-scale decoration, such as base of Thai architecture, sculptures, and monuments. Moreover, Thai lotus ornaments, by characteristic of giant water-lily, has more elements due to its larger size and more horizontal arrangement than in Egypt.

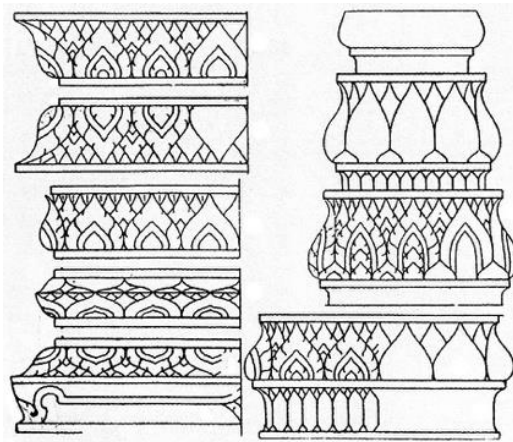


Fig.3-46:
*Various traditional Thai
ornament used in large-
scale decoration
(Chainombnom, 2005)*

- The connotation issue

First the white lotus, which appears in both periods, was worshiped since the ancient times, especially in Egypt, as it was considered as a symbol of creation. In the ancient Greece, it was a symbol of innocence and modesty. The Egyptian utilizes white lotus as the national flower while it is depicted on many of the provincial seals in Thailand. This shows that both Egypt and Thai use the white lotus to connote the grandeur and the magnificent of the subject.



Fig.3-47:

Left –

Seal of Pathum Thani province, Thailand.

A lotus flower with two rice ears bending over it.

Both symbols stand for the fertility of the province

Right –

Seal of Ubon Ratchatani province, Thailand.

A lotus flower in a pond referred to the meaning of the name of the province, 'Royal city of the lotus flower'.

Second, the pink lotus, from ancient time it has been a divine symbol in Asian traditions representing the virtues of sexual purity and non-attachment. Hindus revere it with the divinities Vishnu and Lakshmi often portrayed on a pink lotus in iconography. It is often used as an example of divine beauty. Its unfolding petals suggest the expansion of the soul. The growth of its pure beauty from the mud of its origin holds a benign spiritual promise. Most deities of Asian religions are depicted as seated on this pink lotus flower. In Buddhist symbolism, the lotus represents purity of the body, speech, and mind as it floats above the muddy water of attachment and desire. According to legend, Gautama Buddha was born with the ability to walk, and pink lotus flowers bloomed everywhere he stepped.

Third, the blue lotus is very frequently depicted in Egyptian art, especially in stone carvings and paintings. It is frequently depicted in connection with party scenes and dancing, or in significant spiritual and magical rites such as the rite of passage into the afterlife. It was considered extremely significant in Egyptian mythology since it was said to rise and fall with the sun. Therefore, most of the Egyptian arrangements are vertical. Consequently, due to

its colorings, it was identified, in some beliefs, as having been the original container, in a similar manner to an egg, of Atum, and in a similar vein of belief, Ra, both solar deities but belonging to different religions. As such, its properties form the origin of the lotus variant of the Ogdoad cosmogony. It was also the symbol of the Egyptian deity Nefertem. This Egypt belief in blue lotus is similar to Hindus and Buddhist in pink lotus.

Fig.3-48:

Left –
*Egyptian funerary
 ornament with blue lotus
 on bottom of scene.
 Thebes, 7th century B.C.*

Middle –
*Drawing of Buddha
 stepping on a pink lotus.
 Tunpinetch S., 1966*

Right –
*Drawing of Lakshmi deity
 sitting on the pink lotus*



Fourth, the giant water-lily. Stories relating to the flower or its meanings do not exist in any folklore. However, its leaf is able to support quite a large weight due to its well structure, although the leaf itself is quite delicate. To counter the fragile nature of the leaf, the weight needs to be distributed across the surface through mechanical means, such as a sheet of plywood. This allows the leaf to support up to 70 pounds. This ability might be considered refer to the ability to support or handle big heavy things with gentleness and its equivalent belief in Buddhist.

In conclusion, the concept of meaning in both Egyptian and Thai lotus ornament are similar. It was derived directly from nature's inspiration. Whatever type it is, it

overwhelmingly connotes life, birth, purity, beauty, superior and spirit. This results in those open and close forms of flowers, upward direction to reach the sun, and beauty of joy in the long stalks and sprays, also the various arrangement of the lotus ornament. It is the highest regard among flowers. It always uses in relative with gods and nobles, to symbolize the upper class value.

3.3.2 Aesthetic

To determine the ornament formation from the aesthetic point of view, this study uses the principles of design stated by Lidwell (2010). Both ornaments from two different periods appear to have the same design principles as shown in the example figures in the Ornamental Structure subject, as noted in Table 7.

Table 3-7. Principles of design appeared in example ornaments in the Ornamental Structure subject

Principles of design	Ancient	Thai
Unity in proximity, similarity, continuation, repetition and rhythm	3-42-A	3-42-B
	3-43-A	3-43-B
Balance in symmetry, asymmetry and radial	3-35-A	3-35-B
	3-41-A	3-41-B
Hierarchy	3-37-A	3-37-B
Emphasis	3-33-A	3-33-B
Similarity and contrast	3-43-A	3-43-B

From Table 3-7, both ornaments in two periods share all of the same design principles. However, one of the prominent differences between traditional Thai ornament and ancient lotus ornament is that the traditional Thai

ornament has more variations in design pattern and arrangement. This might be described by three reasons as follow:

First is the time, where the most important reason is the difference in time. The traditional Thai decorative ornament developed much later compared to the ancient lotus ornament. Thai artists learned from the ancient ornament and develop their own forms and styles based on ancient ornament forms and arrangements. Therefore, traditional Thai ornament has many more structures and styles than the ancient ornament.

Second is the new medium. There is a wider variety of materials to use as a medium. In ancient time, the basic materials were wood and stone. As the civilization developed, more materials were discovered, including metal, plaster, silk, ceramic, leather, or cement as examples. From that reasons, Thai Artists have more mediums to express their creativity than those artists in the ancient time.

Lastly is the technique. New tools create more possibility for the sophisticated techniques of expression onto media. The way artist paint, carve, and sculpt have been improved over the last several centuries.

CHAPTER 4

THE SOCIAL SURVEY

In Thailand nowadays, most of the traditional decorative ornament are a distant memory that are far removed from the daily life. This phenomenon raises the question of our interest what are the reasons behind. Therefore, this chapter performs the comprehensive survey to Thai people using questionnaires and interviewing as a means to prove this hypothesis. This survey tries to investigate and explore the current state of traditional Thai decorative ornament in the society and what is the attitude of Thai people toward those vanishing ornaments.

4.1 Questionnaires

This segment outlines the results from the questionnaires conducted from late January to early February 2015 in the downtown of Bangkok, Thailand. Three hundred Thai

people were selected randomly.

4.1.1 General information of the questionnaire

The aim of the questionnaire is to explore the attitude of Thai people towards their traditional Thai decorative ornament. The findings are expected to provide a level of understanding of the situation regarding the traditional ornament in Thai society.

The questionnaire was distributed in Thai language. The questionnaire consists of five parts. The first part contains questions about personal information, gender, age, occupation, and education. The second and third part asks about their perceptions and opinions toward the traditional Thai decorative ornament. The fourth part refers to their familiarity with the ornaments. Finally, the last part asks about their knowledge of ornament regarding the form, meaning, and origin.

The participants were randomly selected in the city of Bangkok. People who work in art and design field are preferable. However, people works in other areas are also welcome. On average, the participants could complete all the questions in five minutes.

The questionnaires were taken at Siam Square, Bangkok, Thailand, in front of a boutique coffee shop. Since this location is the demography, customers who patronize this area are often interested in good design, are often well-groomed, sophisticated with modern lifestyle. It is to emphasize on those who work in the design industry.

4.1.2 Demographics of the questionnaire participants

From the data collected, the makeup of the participants are 58% male and 42% female with a ratio of about 3:2 (Fig.4-1). This data quite accurately depicts the Thai design industry that has slightly higher number of male workers than female workers.

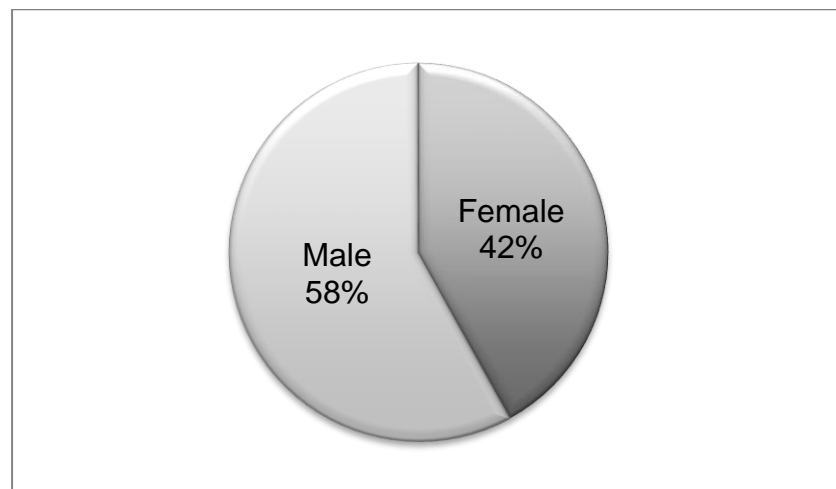


Fig.4-1:
*Gender of people who
completed questionnaire*

Most of the participants' age are between 26-35 years old with a mean average of 31 years old (Fig.4-2). At this age, the participants are already experienced adults and have reached the maturity. This is the age that the participants can form their own opinion, working as productive member of Thai society and still have enough time to make a difference in changing, and incorporating the traditional Thai decorative ornament into their day to day life.

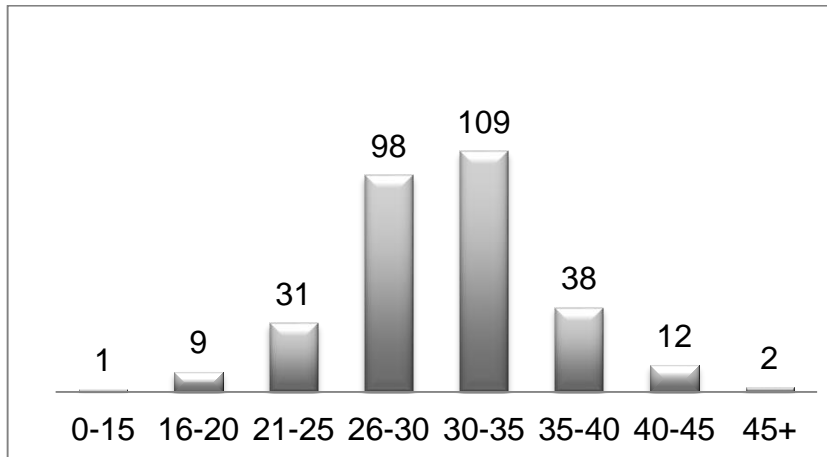


Fig.4-2:
Ages of people who completed questionnaire

Most of the participants complete the education at the bachelor degree (Fig.4-3). This research has got most of the participants in younger working generation. This generation is the one who can give this study a meaningful state of traditional Thai decorative ornaments. They are the fashion leader, the influencer, and the ones who are consuming, spending, and influencing the Thai society in a meaningful way.

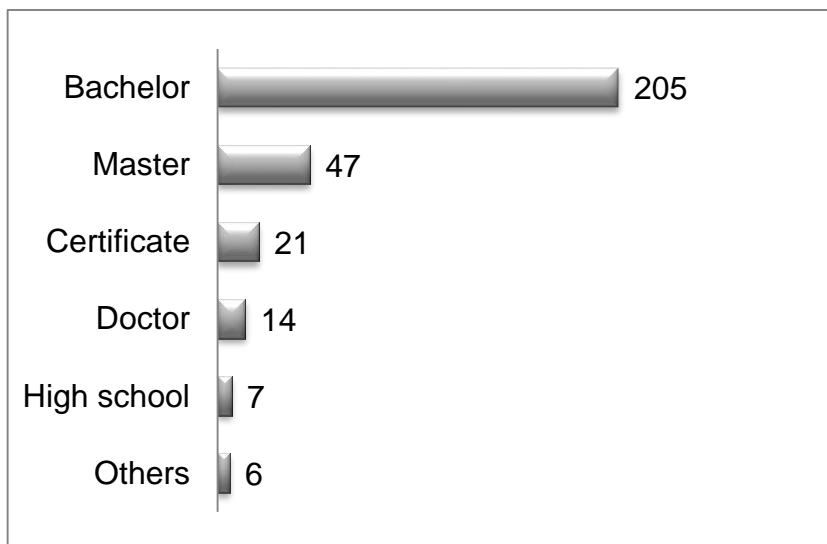


Fig.4-3:
Education level of people who completed questionnaire

This demographic chart shows that the location yields the participants who the study aims to target. As expected,

most of the participants are working in the art and design field while engineer, service, student, own business and other areas are distributed almost equally (Fig.4-4).

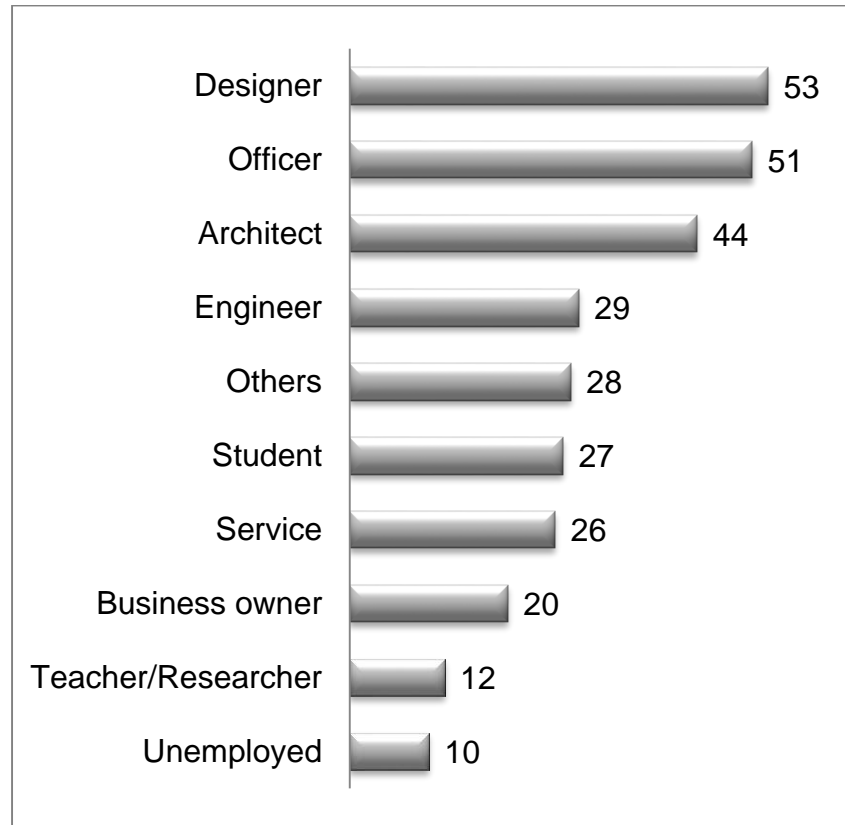


Fig.4-4:
*Occupation of people who
completed questionnaire*

This research divides the findings into two groups, the people who work in the design related field, and the others. The former group is called the designer while the latter group is called the non-designer. The results of both groups are compared to understand the differences of their opinions between the designers and non-designers. It is expected that the designers have a background knowledge and work experience in art and craft. On the other hand, the non-designers might not be familiar with art and craft. This point might make a great impact on the answers.

There are 97 participants in the designer group, which equals to one-third. On the other hand, there are 203 participants in the non-designer group, which equal to two-third.

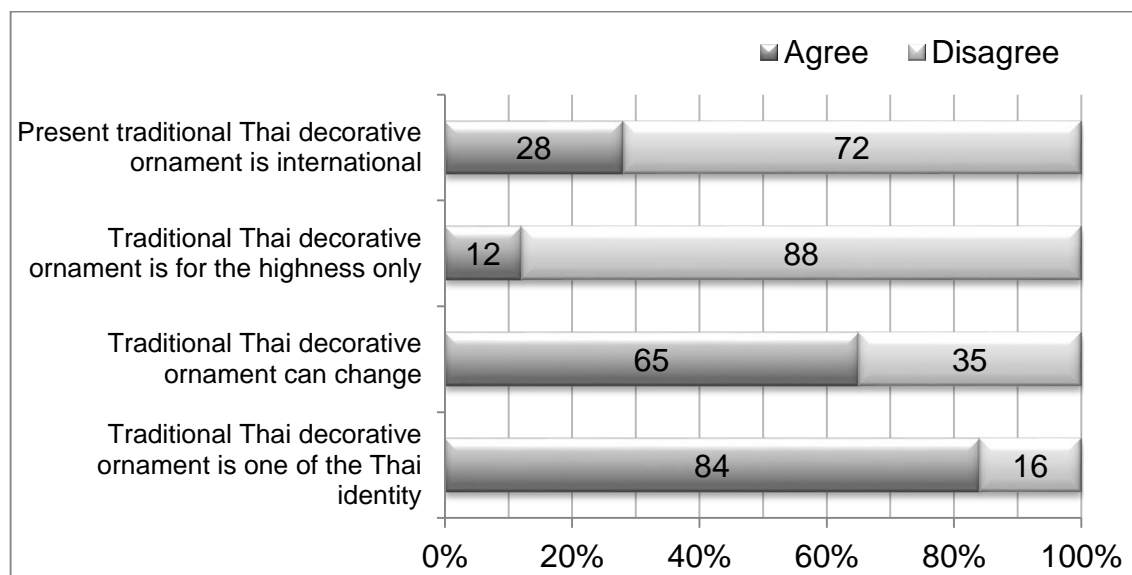
4.1.3 Results and Discussion

Part 1: Questions about perceptions on traditional Thai decorative ornament

These series of questions focus on the attitude toward the traditional Thai decorative ornament of the participants. The participants can answer with five levels of agreement and disagreement with the additional feedbacks.

Fig.4-5 demonstrates the results from the first part. The Overall Summary of the answers from all the participants is shown below:

Fig.4-5:
Summary answers about
attitude of participants



The first statement is “Present traditional Thai decorative ornament is internationally recognizable”. This statement

measures how participants have a sensation about the universality of the ornament. The answer shows that 28% of the participants agree with this statement, which means only about a quarter of the participants believe traditional Thai decorative ornament is well recognized internationally. It shows that Thai culture is mixed and influenced from many countries. Accordingly, it is hard to specify what the Thainess⁴ is.

The second statement is “Traditional Thai decorative ornament is for the highness only” (upper ranking members of society or royalty). This sentence measures if Thai people think they can adapt ornament into daily life. The answer shows that 12% of the participants agree with this statement. It means most of the participants accept that traditional Thai decorative is not restricted to the specific place or group of persons. In other words, it can use by the commoner. This leads to a swift widespread adoption of the traditional Thai decorative ornaments in the daily life.

Third statement is “Traditional Thai decorative ornament can change”. This statement measures the attitude of Thai people toward the possibility of adapting the ornament occasionally. The answer shows that 65% of the participants agree with this statement. It means most of the participants believe that traditional Thai decorative ornament is not stagnant and can be adapted to our modern lifestyle. However, another staggering 35% of the participants believes that the traditional Thai decorative ornament could not be changed or adapt into the modern

⁴ Thai Style. The quality or state of being Thai. Etymology: Thai+ness.

lifestyle. This group of participants represents a significant amount of Thai people. Basically, if the traditional Thai decorative ornament is unchangeable, it might cause problems for itself because it cannot blend into our modernized society. In order to ensure the re-emergence of traditional Thai decorative ornament, it is important to disseminate the knowledge to this group of people that the traditional Thai decorative ornament can be changed as long as it conveys the same meaning and follow the same design principle as the original traditional version.

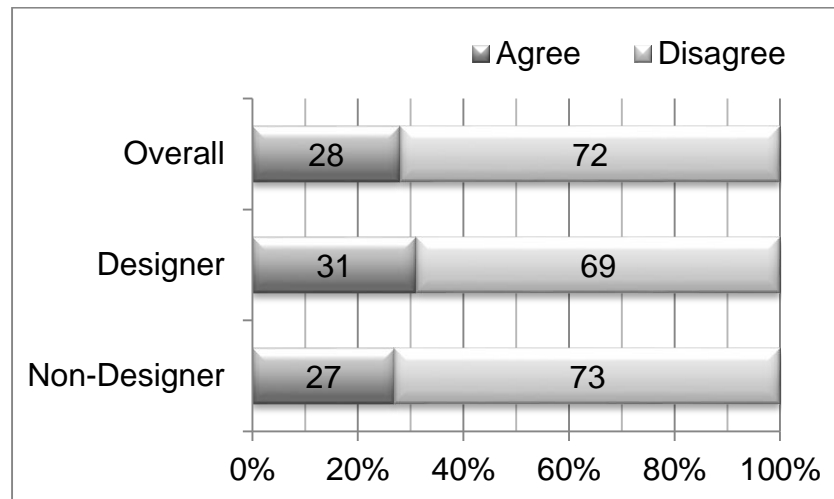
The last statement is “Traditional Thai decorative ornament is one of the Thai identity”. This statement measures if Thai people feel proud about the ornament. The answer shows 84% of the participants agree with this statement. It means most of the participants appreciate the traditional Thai decorative ornament even if its popularity is in a declining state. Consequently, this might conclude that the cause that led to the degeneration of the ornament is not from the negative attitude of people.

The next section describes the answers in details. The results are divided into two groups, the designer, and non-designer as shown below.

- Present traditional Thai decorative ornament is international

Fig.4-6 shows that both designer and non-designer groups agree on this statement with no significant difference. However, a larger proportion of the designer agrees with this statement little more than the non-designer.

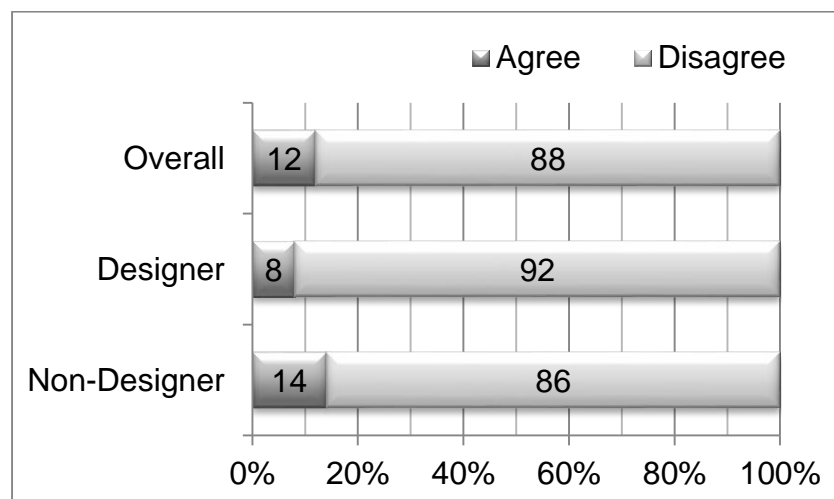
Fig.4-6:
Answer on “traditional Thai
decorative ornament is
international”



- Traditional Thai decorative ornament is for highness only (upper ranking members of society or royalty)

The next figure also shows a slight difference between the designer and non-designer (Fig.4-7). However, unlike the results from Fig.4-6, the designer agrees with this statement more than the non-designer. It shows that the non-designer is more conservative on this issue than the designer.

Fig.4-7:
Answer on “traditional Thai
decorative ornament is for
the highness only”



- Traditional Thai decorative ornament can change

The result on the statement “traditional Thai decorative ornament can change” presents a huge gap between designer and non-designer opinions. Most of the participants [79% in the designer group] agree that the traditional Thai decorative ornament can be changed (Fig.4-8). By nature, the designer has a perception of creativity and has a chance to see various examples of adapted ornaments. Thus, they are fairly quick to agree with this statement. It is very encouraging since it leads to changes in the future because the majority of the designer agrees that the ornament can be changed.

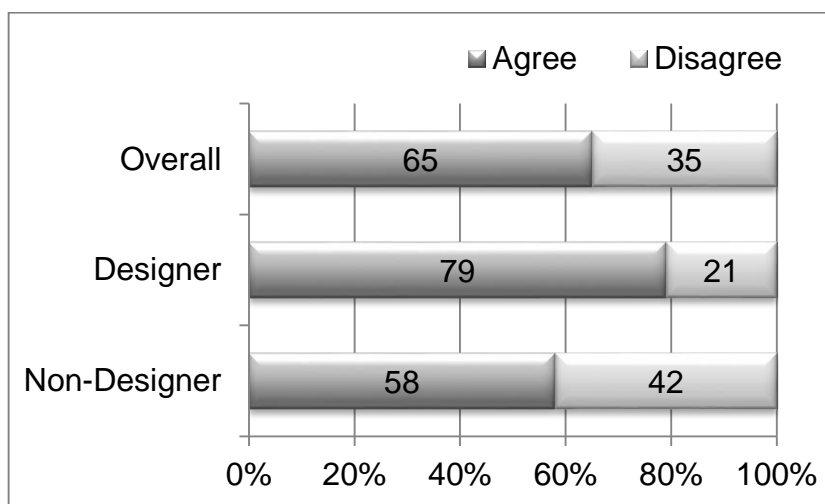


Fig.4-8:
Answer on “traditional
Thai decorative ornament
can change”

- Traditional Thai decorative ornament is one of the Thai identity

The result on the statement “traditional Thai decorative ornament is one of the Thai identity” presents the significant different opinion between the designer and non-designer. Almost the entirety of the designer, 94% agrees with this statement (Fig.4-9). It shows that majority of the

designer have a positive attitude toward the ornament, which will lead to widespread adoption in the future. On the other hand, there remain a portion of the non-designer (21%) that do not agree that the traditional Thai decorative ornament is not the Thai identity.

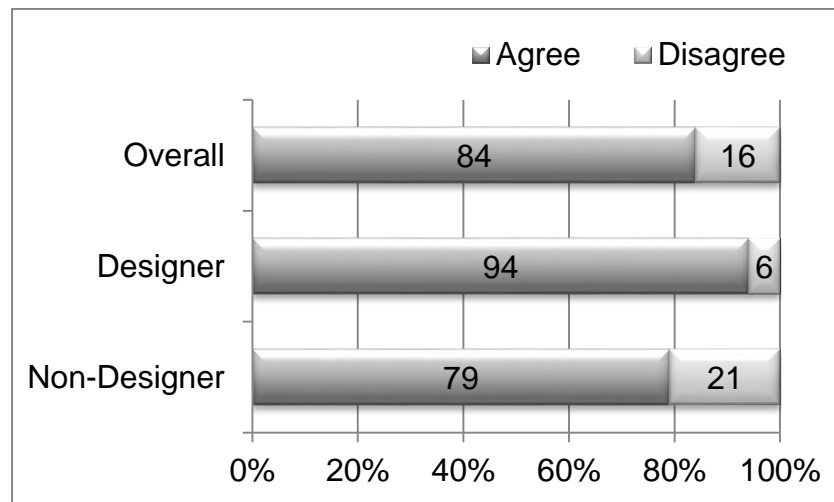


Fig.4-9:
Answer on “traditional Thai decorative ornament is one of the Thai identity”

Part 2: Questions about opinions on traditional Thai decorative ornament

This part comprises questions made up of sets of word with the opposite meanings aim to find out how the participants feel about present traditional Thai decorative ornament. The participants can circle the answers with a scale of -3 to 3 depending on how they feel, with 0 means neutral. Sample of the questionnaire table is as below:

Old	3	2	1	0	1	2	3	New
------------	---	---	---	---	---	---	---	------------

Summary answer of overall participants is shown below:

Fig.4-10 shows the average answers of the participants in four categories of this question. In conclusion, the majority

of the participants agree that the appearance of traditional Thai decorative ornament in the present day is complex, but they also insist that it is old-fashioned and old as shown in the figure. The complex, old-fashion, and old, they are almost the same level at about 2. However, it shares almost the same proportion between looking cheap and expensive. A slightly higher number of participants think that the ornament looks expensive by a little.

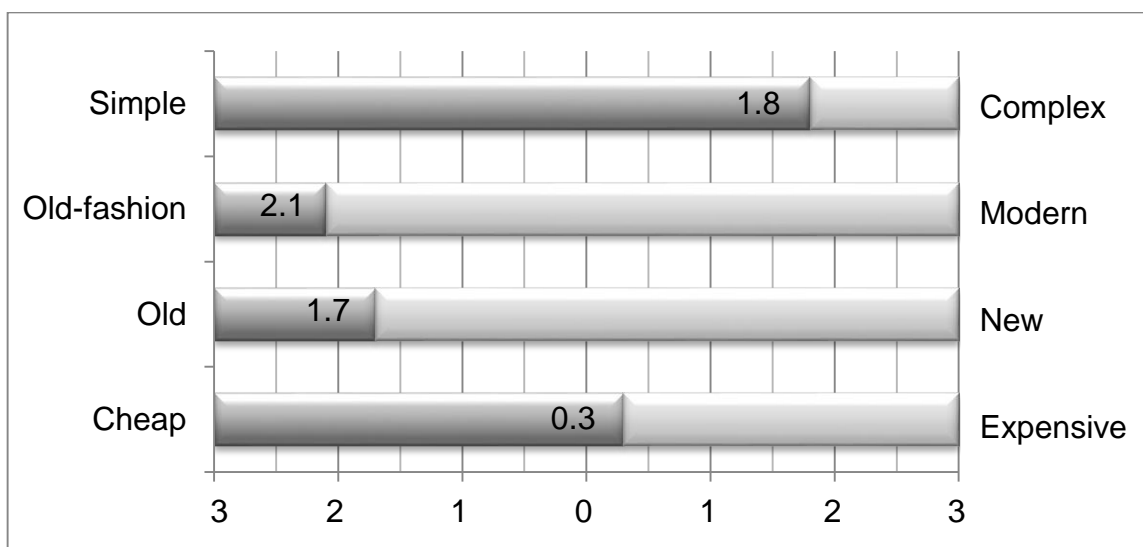


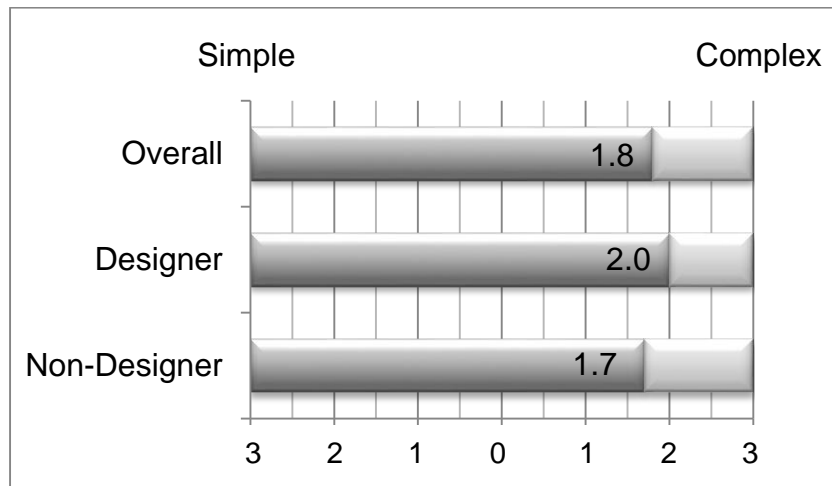
Fig.4-10:
Summary answer about opinion toward traditional Thai decorative ornament of people who completed questionnaire

The next section describes the above answers in details. The results are divided into two groups, the designer, and non-designer as shown below.

- Simple / Complex

There is no significant difference between the designer and non-designer. Most of the participants accept that the traditional Thai decorative ornament is quite complex, as seen from the score of about 2 in total (Fig.4-11).

Fig.4-11:
Opinion toward traditional
Thai decorative ornament:
Simple / Complex



- Old-Fashion / Modern

Overall, most of Thai people consider the traditional Thai decorative ornament as old-fashioned (Fig.4-12). However, there is a big difference between their opinions. The result shows that the non-designers are more conservative regarding this issue than the designers. It means that there is a big proportion of the designer who believes that Thai decorative ornament is quite modern.

Fig.4-12:
Opinion toward traditional
Thai decorative ornament:
Old-Fashion / Modern



- Old / New

As with the previous result, even though most of the participants accept that traditional Thai decorative ornaments are old, there is a big gap between designer and non-designer (Fig.4-13). While only a few of the non-designer thinks that the ornament is rather new, there is double that number from the designer group who agreed on that thought too.

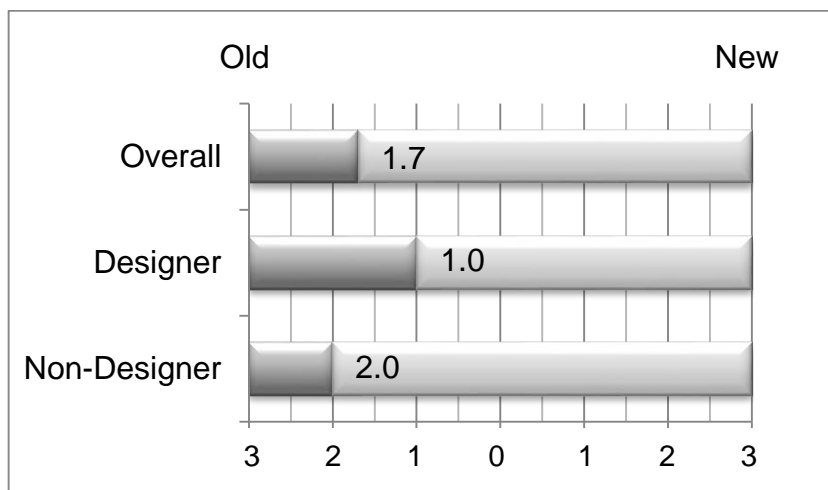
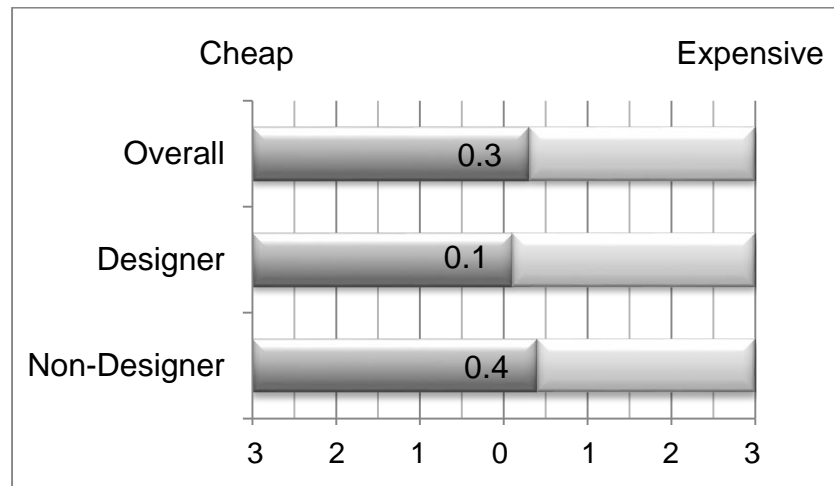


Fig.4-13:
Opinion toward traditional
Thai decorative ornament:
Old / New

- Cheap / Expensive

The result in this question is the most divided topic of all the answers. The answer shows almost an equal number of response on whether the Thai decorative ornament is cheap or expensive (Fig.4-14). There are few differences between the designers and non-designers. From the result, it is hard to conclude whether the appearance of the ornament looks cheap or expensive.

Fig.4-14:
Opinion toward traditional
Thai decorative ornament:
Cheap / Expensive



Part 3: Questions about usage frequency

The aim of this part is to understand whether the participants are familiar with the traditional Thai decorative ornament. The questions ask if the participants have ever used the ornament in their work within the past three years. The participants can answer yes or no. The participants are requested to provide the reason if the answer given is no. The questionnaire has four pre-given reasons to choose together with an open-ended answer where they can respond freely with their reasons.

- The participants have ever used the traditional Thai ornament in their works within recently three years

This dataset demonstrates that 85% of the participants have never used traditional Thai decorative ornament in their work (Fig.4-15). Only 15% of the participants responded that they have. It proves our hypothesis that the traditional Thai decorative ornament has fallen into declining stage. It is not considered trendy with Thai people and it will soon be further removed from Thai

lifestyle if there is no interventions in the near future. Nevertheless, there still exist chances for the designer to work with the ornament more than most other occupations.

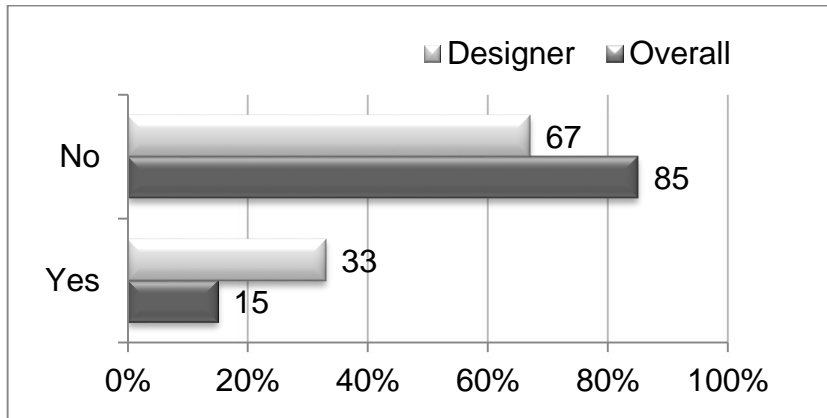


Fig.4-15:
Answer about usage
frequency of traditional Thai
decorative ornament

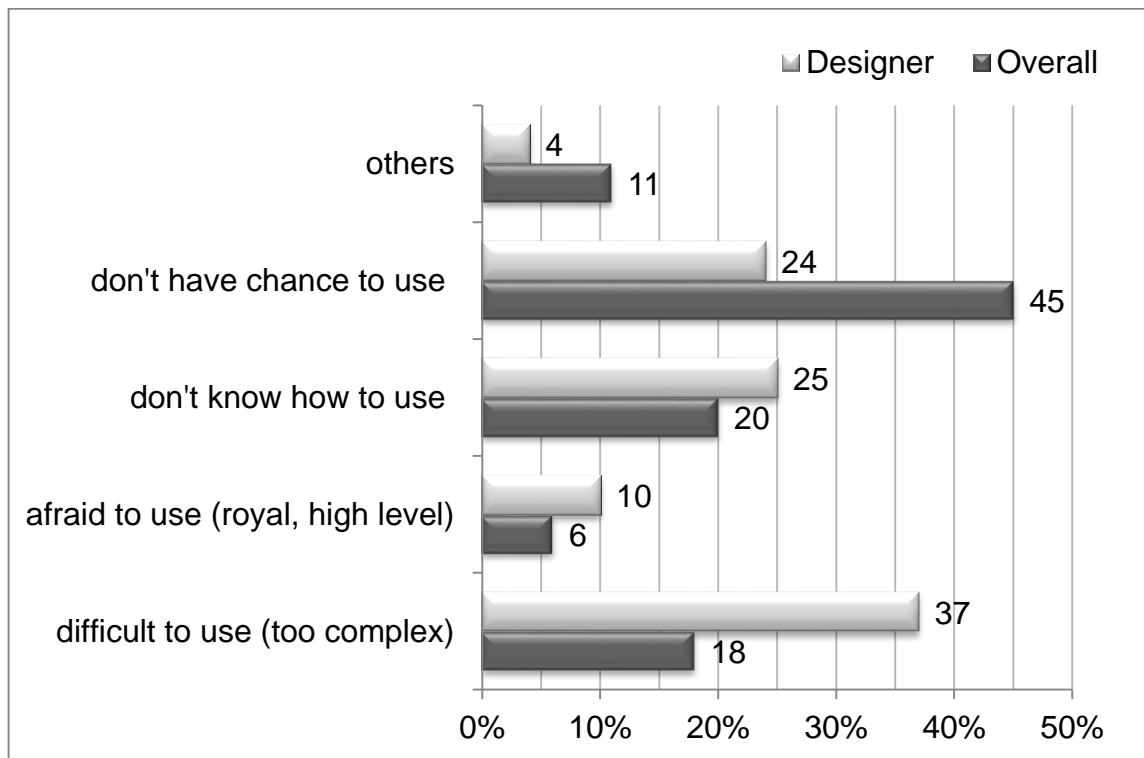
- The reasons why participants never use traditional Thai decorative ornament in their work within recently three years.

A large amount of the participants does not have a chance to use the traditional Thai Decorative ornament in their works. From the above research, it can assume that the ornament doesn't command attention from the public and therefore limits chances that it could feature in a designer's work. However, the designer has about double the chance to use the ornament than the non-designer.

Considering the insight gained from the answers of all the participants, the main reason why Thai people never use traditional Thai decorative ornament recently because they do not have a chance to use. This answer takes up almost half the number of all the responses (45%). The second and third reasons are they do not know how to use (20%) and it is difficult to use (18%), respectively.

In contrary, if considering the designer group only, the main reason why Thai people never use traditional Thai decorative ornament recently because it is difficult to use (37% of all responses). In other word, it is a bit complex or complicate to use. To solve this problem, the ornament needs to be further developed to make it simpler for Thai people. The second and third reasons are they do not know how to use (25%) and they do not have a chance to use (24%), respectively (Fig.4-16).

Fig.4-16:
Answer of the reasons why
participants never use
traditional Thai decorative
ornament in their work



Part 4: Questions about knowledge

This part of the questionnaire is composed of open-ended questions. The participants are requested to give their opinions regarding where the shape and origin of the traditional Thai decorative ornament came from, and what its meaning is. The participants filled their answers in a

blank space. They can leave it blank if they cannot answer these questions.

- Where is the shape of the traditional Thai decorative ornament come from?

The first question is [From what is the shape of the traditional Thai decorative ornament derived from?] 77% of the participants claimed that they do not know (Fig.4-17). Only a small group of participants could correctly answer that they are the lotus (12%) and the flame (8%).

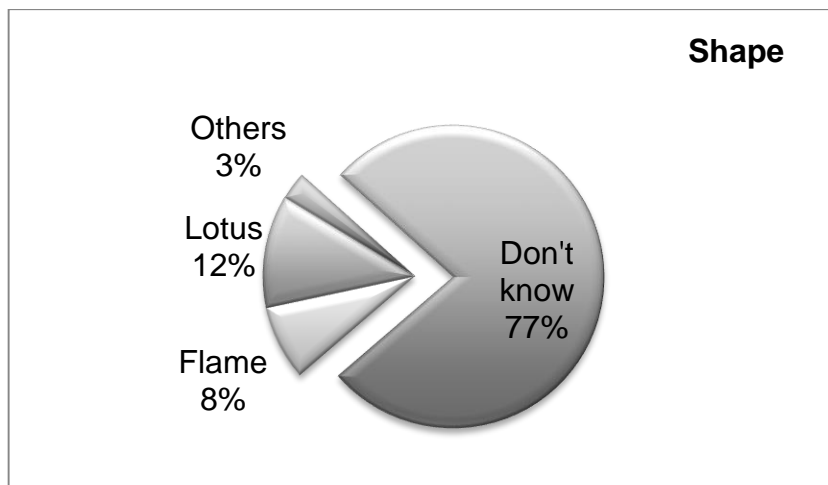
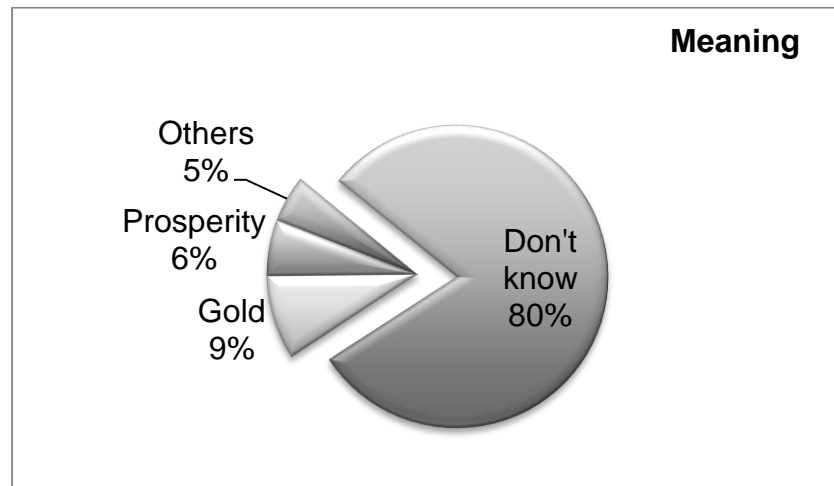


Fig.4-17:
Answer of knowledge
about shape of the
traditional Thai decorative
ornament of people who
completed questionnaire

- Where is the meaning of the traditional Thai decorative ornament?

The second question asks whether they understand the meaning of the traditional Thai decorative ornament. From Fig.4-18, 80% of the participants do not know what the meaning is. Only 9% answered gold while another 6% answered for prosperity.

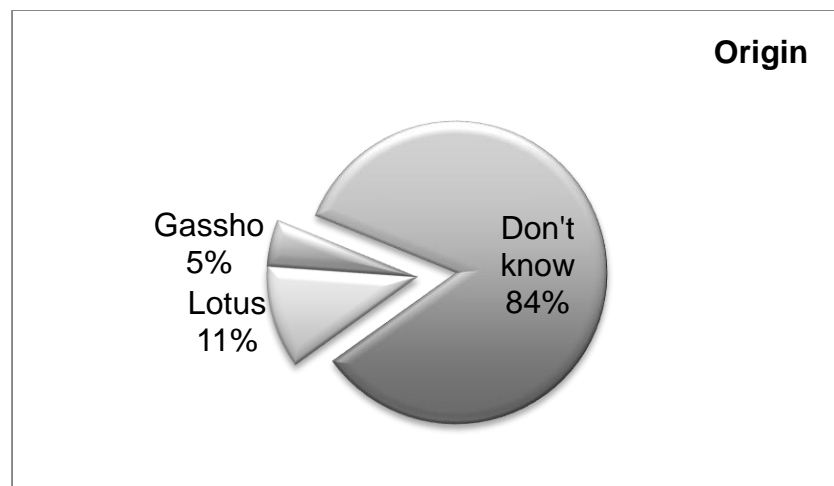
Fig.4-18:
Answer of knowledge
about meaning of the
traditional Thai decorative
ornament of people who
completed questionnaire



- What is the origin of the traditional Thai decorative ornament?

The third question focuses on the originality of the traditional Thai decorative ornament. From Fig.4-19, 84% of the participants do not know what the originality is. Only 11% answered that it is the lotus while another 8% answers for the Gassho, the shape formed by putting the palms of the hands together.

Fig.4-19:
Answer of knowledge
about shape of the
traditional Thai decorative
ornament of people who
completed questionnaire



In conclusion, most of the participants do not understand the background and usage of traditional Thai decorative

ornament. This knowledge is required for adapting the ornament to the future. This problem is actually prevalent and widespread within the Kingdom of Thailand and lead to the gradual vanishing of the ornament. A comprehensive study of the ornament in all facets needs to be performed further.

4.2 Interview

This segment outlines the results from the interviews on three experts in the area of Thai art and craft field. The interview was conducted in September 2014 in Bangkok, Thailand. It was a one on one interview with experts of different subject matters. The place and time of the interviews are listed below.

4.2.1 General information of the interviews

The aim of the interview is to explore the current attitude toward the traditional Thai decorative ornament of the experts. The finding can help understand the state of the ornament in the Thai society in more details as they are the experts working in this area.

The questionnaire was compiled in Thai language by using simple questions. The average interview time is about 30-40 minutes.

The experts, who were interviewed, were selected by their occupation, experience, and reputation. Each of the experts has more than five years of work and more than

two years of research experience in traditional Thai art and craft area. They are now working in different areas including the private sector as an architect, public sector as a government officer, and a freelance designer. All of them work in the same design vocation but in different areas of interest.

There are three parts of this interview. The first part examines their personal information, gender, age, occupation, and education. The second part focuses on their attitude on traditional Thai decorative ornaments. The last part concludes on the problems and suggestions on how to sustain the ornaments in the long term.

4.2.2 Biography of the experts

1) Nathakrit Sunthareerat

Mr. Sunthareerat is a foremost expert in the field of traditional Thai art and architecture. He is one of a few graduated people whose major is Thai architecture. And he has been working in this field for more than 9 years including several more years in the academic sector. He has been working in and visiting many areas of Thailand. He devoted his time as visiting lecturer at Faculty of Architecture Chulalongkorn University, Faculty of Architecture and Planning, Thammasat University and Faculty of Education, King Mongkut's Institute of Technology Ladkrabang to teach the younger generation how to incorporate traditional Thai art into their architectural design. He is also a designer, director, and founder of PILLAR architect & associate Co., LTD. His

company becomes the top leading architecture firm in Thailand nowadays. His renowned works include many temples, monuments, Buddhist sculptures, traditional Thai paintings, modern Thai architectures and many more.

Table 4-1. Summary of a biography of Nathakrit Sunthareerat

Occupation	<ul style="list-style-type: none"> - Visiting Lecturer at Faculty of Architecture, Chulalongkorn University - Visiting Lecturer at Faculty of Architecture and Planning, Thammasat University - Visiting Lecturer at Faculty of Education, King Mongkut's Institute of Technology Ladkrabang - Designer director and founder of PILLAR architect & associate Co.,Ltd.
Experience	<ul style="list-style-type: none"> - Working experience: 9 years - Research experience in this field: more than 10 years
Education background	<ul style="list-style-type: none"> - Master & Bachelor of Architecture, Chulalongkorn University
Awards	<ul style="list-style-type: none"> - Office of The Civil Service Commission Scholarship - Chulalongkorn University's Scholarship for Master of Architecture (Thai Traditional Architecture) - Academic Honored Award, HRH Prince Naris Scholarship (2004)

II) Pairoj Teeraprapa (Roj SiamRuay)

Pairoj Teeraprapais best known for his contribution to the Thai vernacular style in graphic design, and for his creation of the family of SiamRuay (SR) fonts. He is nationally known as Roj SiamRuay, the name given by his T-shirt shop fans. He holds his undergraduate and

graduate degrees in Visual Communication Design from Silpakorn University. He started out as a graphic designer at Sam Nor the Thailand's iconic graphic design firm before shifting to advertising agencies Leo Burnett, JWT and TBWA after that. The "SR FahtalaiJone" font, which had not even been completed by the time the film was shown, was so eye-catching and so characteristically Thai. It became the most downloaded free font in Thailand. Pairoj continued to collaborate with Wisit Sasanatieng on many of his subsequent films and producing several fonts like "Mah", from the film Citizen Dog, latest hit Insee Dang, and "SR PenChoov", from the film The Unseeable. His type design and lettering work are one of the most important highlight of his career. Apart from his accomplishments in typography, he also founded a souvenir shop, SiamRuay. This shop offers his graphic designs printed onto shirts, bags, and other goods with Thai vernacular typography touch. However, SiamRuay closed down in 2012. Pairoj now dedicates himself to giving talks and engaging in discussions about the state of design, and teaching courses on typography in the universities. He is also the founder and owner of his new shop, the Chonabod, after SiamRuay's shut down.

Table 4-2. Summary of a biography of Pairoj Teeraprapa

Occupation	<ul style="list-style-type: none"> - Visiting Lecturer at Silpakorn University (Thai Vernacular Style for graphic design) - Visiting Lecturer at Bangkok University (typography) - Designer director and founder of Siam Ruay Design Co.,Ltd. - Owner of The Chonabod (souvenir shop)
Experience	<ul style="list-style-type: none"> - Working experience: 26 years - Research experience in this field: more than 30 years
Education background	- Visual Communication Design, Faculty of Decorative Arts, Silpakorn University
Awards	<ul style="list-style-type: none"> - Silpathorn Awards 2014 - Best Alumni Awards 2012, Silpakorn University

III) Panida Thothong

Panida Thothong is working at the Office of contemporary art and culture, Ministry of Culture in Thailand. She is the most authoritative figure in the Thai government in traditional Thai art and craft and cultural heritage. Her responsibility is to control a substantial amount of public sector funding in restoring and encouraging Thai people to use and incorporate traditional Thai art and craft in their day to day life. Moreover, she is a policy maker on the traditional Thai art restoration and modernization. She mentioned that the findings of this research are supposed to suggest the information to incorporate into Thailand's National Policy and Procedure in Restoring and Modernization of Thai Art. Even though she has been worked at Ministry of Culture for only two years, she has been involved in academic research in this area for more than ten years. Ms. Thothong have been worked as a

liaison team at Maha Chulalongkorn Rajavidyalaya University or MCU, the one of two public Buddhist universities. It is located at Wat Mahathat Yuwaratransarit in Bangkok, Thailand.

Table 4-3. Summary of a biography of Panida Thothong

Occupation	- Cultural Officer of Office of Contemporary Art and Culture, Ministry of Culture, Thailand
Experience	- Working experience: 2 years - Research experience in this field: more than 10 years
Education background	- M.A. Cultural Resource Management, Silpakorn University
Awards	- Silpathorn Awards 2014 - Best Alumni Awards 2012, Silpakorn University

4.2.3 Interview date and place

I) Nathakrit Sunthareerat

16 September 2014

at PILLAR architect & associate Co.,Ltd.

II) Pairoj Teeraprapa (Roj SiamRuay)

25 September 2014

at The Chonabod

III) Panida Thothong

25 September 2014

at Office of contemporary art and culture, Ministry of culture, Thailand

4.2.4 Questions and answers

Part 1: Questions about attitude

Q1. What is Thai style?

The question aims to find out what are the definition of Thai style and the boundary of Thai style. The aim is to understand and define Thai style in the present day definition.

Sunthareerat explains that the definition of Thai style is the water-related culture. Since Thailand located in the tropical monsoon climate, the weather is considered hot throughout the year. For that reason, he believes Thai people have a characteristic of living the slow life.

Teeraprapa describes that the Thai style in his thought is the hand-made. Because of Thailand is an agricultural country, not an industrialized country, the design of Thai style must be meticulous, rough, gentle, inaccurate, and flexible.

Finally, Thothong responses that Thai style has many definitions and inconclusive. In her opinion, anything exists in the boundary of Thailand can be claimed as resembling Thainess. The same phenomenon that still remains today is that Thai people like to emulate whatever is popular at that certain point of time.

Q2. Is it necessary to study Thai style before design?

The objective of this question is to find out if Thai style is fundamentally important in the current design study and what the experts thought; whether the Thai style is still important and relevant.

All of them agree that the Thai style is important as a root of the design principle. The Thai form cannot be used without understand the meaning and originality. They recommend that studying the past to become acquainted with the root as important as working today to use tomorrow.

Q3. Can Thai style be changed?

It is worthy to ask for expert opinion whether the Thai style is still adaptable and be relevant in today's fast paced world. Their answers could determine the fate of Thai style in the 21st Century. If Thai style becomes outdated and irrelevant, the style might become extinct eventually.

Sunthareerat believes that some of Thai style can be changed and some cannot. If it can be changed, it probably be a little bit. It is almost impossible to change entirely. He believes that everything can be developed, depends on the skill of developers. The meanings of the forms can also be changed too. However, he tries to avoid to do that because some of them are inauspicious.

Teeraprapa also agree with Sunthareerat. He explains that Thai style should be changed consecutively but should remain true to its original identity. By understanding its meaning, it will help the designers to use

that particular style correctly. The conservation does not mean keeping everything the same, but it must be adapted.

Thothong explains her answers with the comparisons. It depends on what you are going to use. For example, the natural pattern or vegetation pattern can be changed because nature and the botany also change to follow weather, season, environment, etc. However, the creatures in Thai literature cannot be changed. The Thai literature is never changed. The story in the past and in present must remain the same.

Q4. Don't you think if Thai style was changed, the original spirit will be gone?

This question tries to find out if the Thai style will lose its identity and definition once it changed by the younger generation. It would lead to loss in the definition, the correct usage, and a Thai style itself.

All of them disagree on that assumption. They believe that it is changing every day. If we do it in the right way, nothing is going to harm the original design. Especially for Teeraprapa, he would like others to think further about the design grammar and its meaning. He always leaves this task to his students and others. It is one of the tasks of a graphic designer to learn for.

Q5. What is the uniqueness of Thai style?

This question tries to find out what is the most distinguished thing of Thai style, in the opinion of the experts. Is there any uniqueness in Thai style? The answer will assist in creating awareness and help to create slogan and theme to popularize Thai style in the future.

The responses from the experts are quite different. Sunthareerat explains that Thai style is something that is living near the water. It is long-lasting, usually from birth until death. On the other hand, Teeraprapa describes that it is colorful, meaningful, liveliness, and delicate. Yet, it is truly powerful. Lastly, Thothong mentions that it is simple-minded, humorous, and sanguine.

Q6. What is the root of traditional Thai arts?

This question is to find out the understanding of experts, what they thought where the traditional Thai art come from.

Sunthareerat's answer was that it probably had its origin in the lotus and the water mixed together. The lotus is an aquatic flower and represents the heart and core spirit of Thai arts. However, since it has been developed thru a long history, its origin seems to be lost. Some people use a shape of lotus, but not use its meaning. Some people use a shape of lotus and interpret it in entirely new ways. Therefore, its originality is faded and a new perception is created. This circle might confuse the new generations as to what is a real root of Thai arts.

On the other hand, Teeraprapa believes it comes from the Dharma teaches, including the birth, live, and death. Like

the Thai style, it can be newly born, disappear, or even recalled like a loop. It is difficult to find the exact evidences to prove what the origin are. They probably depends on what period we are referring to.

Nevertheless, Thothong mentions that the historian, archeologist, and artist do not use the same criteria. Therefore, it is difficult to conclude what the root of Thai art is.

Q7. What is the most necessary thing to know before using Thai style in design?

This question tries to find out the most necessary things to know before using Thai style in design. It is first and foremost the utmost important subject. The answer would be noted as something designers are required to know before using Thai style in any design terms.

All of them agree that shape and form are moderately crucial. However, the most important factors are the meaning and message. The shape and form can be modified but its value and meaning should remain. Likewise, the designers have to know what, where and who they are designed for.

Part 2: Questions about Problems and Solutions

Q8. Don't you think Thai style is not popular and why?

The aim of this question is to find out whether Thai style is still admired among Thai people and foreigner recently or

not. If it is not, what are the root causes of the problem. The answers are expected to help in improving Thai style tremendously.

All of them agree on this statement and explain the reasons in many issues as follow:

Sunthareerat explains that Thai style is unclear. The designers have a limited skill and knowledge to adapt Thai style in their design. Some designers might have bad outlook about Thai style. Anything that claims to be Thai is old and out of date. Some senior people try to limit their development by claiming that it should not be touched upon. Then again, some designers are afraid of touching this subject as they fear it will be inauspicious.

Likewise, Teeraprapa describes that the trend has not been built. The Thai designers find it difficult to use Thai style and reach the people. People are not proud to use Thai style in their daily life. However, the situation became better because of the attention from foreigners. Some of the new generations misunderstand its meaning. And the important thing is the designers don't know how to translate the Thai style into form.

Lastly, Thothong understands that Thai style is not popular because it is difficult to use and lack of variety for a designer to choose. Some people might have a negative attitude about Thai style. Anything that claim to be Thai is old and out of date. From that reasons, it seems like the customers do not give an opportunity for the designers to work in this regard.

Q9. What is the solution to solve above problems?

This question tries to find out the solution of how we can improve the declining situation of Thai style. The suggestions from the experts are supposed to give the ideas and methods to develop the ornament.

Sunthareerat and Thothong suggest that the most important solutions are to educate people and to change people's attitude. The designers should know the proper way to use Thai style. The social value of Thai style should be promoted. Additionally, Thothong advised to use social media as a tool to creating new trends, forging a pathway that provides inspiration and courage to the designers to further strengthen the role of the Thai ornament.

Besides, Teeraprapa suggest that the designers should study or ask the knowledgeable people before using Thai style in their work. The design school should include a course in the curriculum and change norm. The government should make Thai people understand Thai value and proud to use Thai style. In this case, the government policy is also concerned.

CHAPTER 5

CASE STUDIES

One of the important findings from previous chapter shows that there is high proportion of the non-designer believes that the traditional Thai decorative ornament cannot change (42%). Moreover, amount of people answered that the ornament is quite complex, old-fashion, and old. Almost half of them (45%) had no chance to use the ornament in their normal life. These results probably reflect the undesirability to extend the existing of the ornament.

In order to bring to attention several examples, this chapter will touch on three case studies from the famous Thai designers who use the traditional Thai decorative ornament in their works and have also achieved considerable success marketing their talent in the modernized society.

5.1 Case study A: The contemporary Benjarong

The first case study is the state-funded research by a team of design academics from Department of Industrial Design, Faculty of Architecture, Chulalongkorn University, Thailand. This research is a study that can bring new life to Benjarong traditional pottery by reconciling innovation with tradition. The outcome of the study even earned recognitions from abroad, most notably by a major arts and culture hub like Florence, Italy.

5.1.1 Background

Benjarong, which is a name of Thai traditional polychrome hand-painted pottery, is considered as one of the most popular souvenirs that tourists purchase from Thailand. Most Thais genuinely believe that the Benjarong can represent Thainess very well, which in fact make Benjarong a representative of Thai art and culture. For centuries, Benjarong was produced for the Thai royal court and earned its well-deserved popularity among Thai royalty as well as the elite classes for their domestic use from the ancient Ayutthaya period (ca 1400 AD) to the early twentieth century. However, after King Chulalongkorn's reign (1910), Benjarong's popularity among Thai aristocrats gradually declined as attention shifted to the mass-produced, industrially produced tableware from the West (Pattanopas, 2007). Nowadays, most Benjarong that can be found on the market today are the Benjarong souvenirs, which are little more than imitations of traditional designs with little relevance to contemporary, present day usage requirement. Most of

the Benjarong has been made merely as a the reproduction of those ancient designs or even imitated as the production of fake antiques in some cases, all these merely to earn fast money from unsuspecting tourists, a cause and reason which diverges even further away from a cause that could support Thai arts and crafts. There is also a big hurdle faced by designers, and that is the Benjarong's homogeneity within Thai culture which implies that it cannot or should not be changed nor modified. As a result, the development of Benjarong in terms of design has been frozen for almost a hundred years. From a design point of view, it is apparent that, in spite of a rather large volume of products, the Benjarong industry is in a state of steady decline.

Fig.5-1:
*Ancient and today's traditional
Benjarong pottery
(Pattanopas, 2007)*



5.1.2 Objective

This research was set that the new Benjarong designs were not intended for existing markets (local, tourist, and Arabic). It was rather that the new Benjarong designs would help expand Benjarong's market to Europe and America. From a design standpoint, the researchers saw

Benjarong as a ceramic decoration technique with the strong potential to add sophistication to industrial ceramic wares. Balancing the new with the old was their major challenge. Most importantly the new designs had to acknowledge today's tastes and consumers' behavior, while maintaining its uniqueness in terms of styles, as well as hand-painted qualities.

In their preliminary surveys, the researchers found that potential Western consumers find it difficult to accommodate Benjarong pottery into their domestic context. This problem mostly concern with the design including forms, motifs, and colors. Another reason that caused the slow adaption and evolution of the patterns on Benjarong despite the speed of today's fashion trends and consumer tastes is that the traditional method of transferring pattern onto the porcelain wares relies heavily on highly dexterous craftsmen. The traditional process of applying Benjarong patterns by drawing precise lines on the curved surfaces of the ware requires a high level of skill. In their survey, the researchers found that within a traditional Benjarong production line, less than 20% of the craftsmen can reliably achieve this task on a regularly production schedule. Furthermore, to draw the new patterns requires considerable lag time in the form of a lengthy training period. The more complicated the new motif and pattern, the more time is required practicing. This situation ultimately translates into less income for the craftsman.

5.1.3 Solution

- Technical Issue

To understand the outcome of this study, systematic tests are also conducted. The research team found that the design development of Benjarong would be possible through the use of decalcomania. Decalcomania is a method to transfer printed on-glaze patterns onto glazed ceramic surfaces. It allows the outlines of Benjarong patterns to be printed before other colors are filled in by hand. By doing that, the special skill to draw the outlines directly onto ceramic wares is no longer required anymore. Over the past few decades, Benjarong is mostly designed and created by upcountry craftsmen. Most of them tend to repeat the traditional designs or adapt and evolve them at an extremely slow pace due to the reason of homogeneity stated above. As a result, both patterns and the color palette of Benjarong become somewhat limited, especially within the context of global markets. The combination between printing (decalcomania) and hand painting is a game changer by placing the designers right at the beginning of the development process, something that was not possible before its discovery.



Fig.5-2:
The new process of the
contemporary Benjarong
developed by the researchers
(Pattanopas, 2007)

- Coloring Issue

From the coloring issue, since on-glaze colors of the wares react chemically to produce colors, mixing them can be very complicated. It is different from mixing such pigment colors as oil paint, watercolor, or tempera. Changing Benjarong colors can be technically complicated for upcountry craftspeople. This method prohibits craftspeople from modifying Benjarong color palettes over time. The research team collaborates with ceramic scientists to create the new formulae for on-glaze colors to produce new color palettes suitable for current color trends, while maintaining Asian flavor and feel on the product. Furthermore, by considering the demands of potential European and American customers for decorative products, the researchers make use of information concerning future trends from major trend forecasters, especially in Paris and New York.



Fig.5-3:
The testing process of the on-glazed colors to be matched with the Pantone color trends from Paris (Sudhikam, 2006)

- Shaping Issue

Regarding its form and shape, most traditional Benjarong have a lid with sharp top and a ware base. Taking into account the market of Europe and America, the research team found that this form is difficult to use as-is within the western dining setting. More importantly, sometimes this shape of ware resembles urns used to store the ashes of dead people and thus, is offensive in nature. Therefore, the research team adapted the form and function of traditional Benjarong into the centerpiece wares for set in the western dining style. As a result, the form of traditional Benjarong is reshaped into the big salad bowl or the tray.

- Motif Issue

From the motifs issue, the research team had experimented with different pattern structures, such as the motifs of imaginary plants, genetic science, and modern cosmology. Some of them have never been used in the old Benjarong patterns. For instance, they explored the

use of 'Sintao' or a visual device for dividing the scenes in Thai mural paintings as well as collage. This led designers to experiment with multi-layered patterns, which resulted in very sophisticated motifs comparable to lace patterns. The latter design is so successful that the collection called Malila Lace, which was constructed from two sets of patterns intricately intertwined and won a national award for best tableware design from Elle Decor magazine in Thailand in 2004.



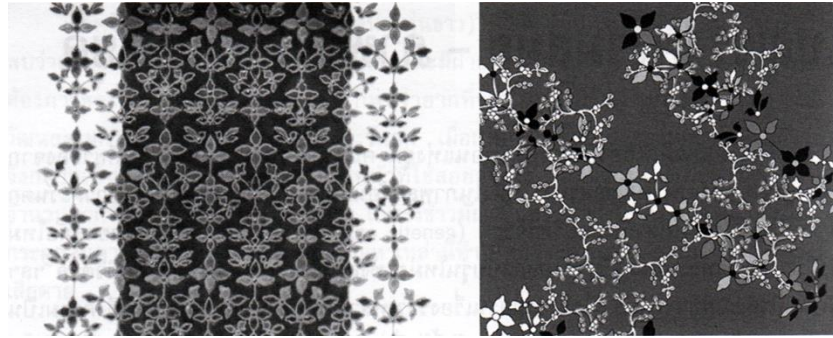
Fig.5-4:
*The award-winning Malila
Lace collection
(Sudhikam, 2006)*

The most significant finding of the patterns in contemporary Benjarong is the involvement between the form of wares and its patterns. The surface of traditional Benjarong is entirely painted on every surface and leaves no blank space of the wares. Nevertheless, the researchers try to make the patterns in contemporary Benjarong with the rhythm of motifs and space. They thought that the space is part of the patterns elements. Moreover, they create the interaction between the form of wares and the patterns to raise its relation.

Fig.5-5:
Examples of pattern structures that resulted in radical changes in motifs and patterns of traditional Benjarong pottery (Pattanopas, 2007)



Fig.5-6:
Examples of pattern developed from traditional Thai decorative ornament to apply with the western tastes (Sudhikam, 2006)



5.1.4 Summary

It could be fairly stated that the Contemporary Benjarong project are immensely successful both in terms of research and design. The products are publicly mentioned and warmly praised by design academics, designers, and international traders. In October 2005, Pattanopas and Sudhikam were invited as the keynote speakers at the International Conference Design (Design Infinito) organized by the Centro Studi Giovanni Klaus Koenig of the University of Florence, Italy. In 2006, Pattanopas received a 2006 National Invention Award from the National Research Council of Thailand. In April 2007, Pattanopas and Sudhikam were the only two artists from Thailand in the guest artist exhibition titled Ethnic, Its Abundance and Freedom in Ceramic House III at the 4th World Ceramic Biennale, in Icheon, Korea. Nowadays, some of their works are exhibited in the permanent collections of the museum of the World Ceramic Exposition Foundation (WOCEF). And most recently,

more than 30 pieces of their works were selected by the French art curator Cédric Morisset to be on the display by the ancient Benjarong collections of James HW Thompson, the founder of the Jim Thompson silk empire. It can be concluded that the Contemporary Benjarong research is one of the first successful systematic R&D projects aimed at Thai traditional crafts. Further research and businesses are already expected.



Fig.5-7:
Malila Chaquer collection, the patterns developed from late Ayutthaya's motifs, integrated with computer software. The platters are now in permanent collections of the museum of the World Ceramic Exposition Foundation (WOCEF). (Sudhikam, 2006)

5.2 Case study B: Rang Bun Darn Thai

The second study is the work of Pairoj Teeraprapa and his design fellowship named “Rang Bun Darn Thai”.

5.2.1 Background

Pairoj Teeraprapa or Roj Siamruay has been working in the graphic design field for more than 30 years. He is one of the first designers who re-integrated Thai traditional style into Thai design society. Recently, he received the

Silpathorn Awards 2014⁵ from the Office of Contemporary Art and Culture, Ministry of Culture, Thailand, for his contribution to promote Thai traditional style thru many media to the Thai society.



Fig.5-8:
*Pairoj Teeraprapa, when
he received the
Silpathorn Award 2014*

Pairoj Teeraprapa works with Thai vernacular style on a regular basis. He started his graphic design career with an advertising agency company called “Sam Nhor” right after his graduation. One of his works with this company is to design a calendar with an old-fashioned theme for Thai Telecom. This project led him to research traditional Thai style from old advertising publications. He analyzed those

⁵ The Silpathorn Award is an honor for living Thai contemporary artists presented annually by the Office of Contemporary Art and Culture, Ministry of Culture of Thailand. The awards were established in 2004 to promote Thai contemporary artists who are considered to be in their mid-career and who have already made notable contributions to Thai fine arts and culture. Artists are honored in the fields of visual arts, literature, music, film, performing arts, design and architecture.

media and came to the conclusion that traditional Thai style already possesses a well-defined characteristic. It is interesting, charming, and beautiful. It piqued his interest in designs with traditional Thai style. Later, he incorporated elements of Thai traditional style into his works in order to inspire the audience to use the Thai traditional style in many different perspectives. Even now, he welcomes anyone to use his idea as an inspiration to develop his or her own style. Since Thai traditional style is new to the Thai society in that era, it has the added benefit of creating new trends, new jobs, and new business and industries for many people.

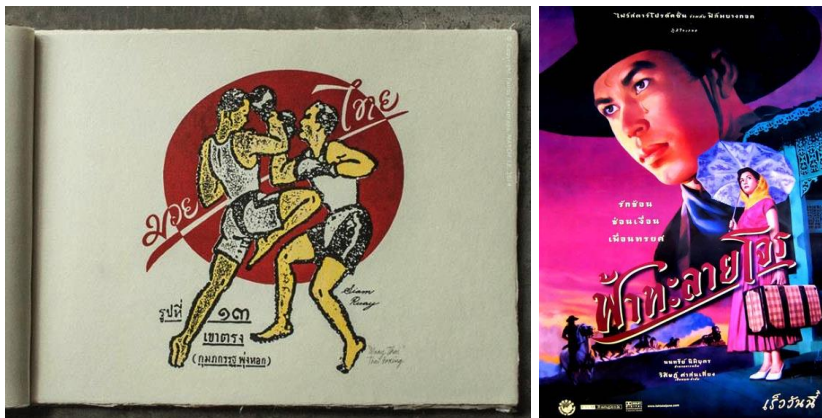


Fig.5-9:
Graphic design works
with the elements of
traditional Thai style from
Pairoj Teeraprapa

Teeraprapa is also a member of “Rang Bun Darn Thai”, a three years old design fellowship. Rang Bun Darn Thai literally means the inspiration to Thai style. This group comprises of prestigious members named Pairoj Teeraprapa, Pairoj Pittayamatee, Arwin Intrungsi, and Thirawat Photwibunsiri. Within this fellowship, Teeraprapa enjoys presenting Thai vernacular style and traditional art in the newly creative ways. It has become his own personal identity style.

Teeraprapa mentioned that the problem of using traditional Thai style in Thai graphic design society is that Thai style is still ambiguous, and the people's perception of Thai identity is still unclear. Therefore, the Rang Bun Darn Thai fellowship has been established to present ideas and give inspiration for using traditional Thai style in the modern design work to the society. The fellowship has organized many ongoing seminars and exhibitions to showcase contemporary Thai graphic design works. In the hope that some of the specimens might inspire other designers to use Thai style in their works. Moreover, they distribute their original cliparts, Thai fonts, and other design materials to inspire further and ease for other designers into adopting Thai style. Thai designers prefer to use cliparts for their works. However, there is no cliparts that consort with Thai style in the past. Therefore, this fellowship created the cliparts as a tool to spread traditional Thai style to the society.

Fig.5-10:
*Activities arranged by the
Rang Bun Darn Thai group*
Left –
Poster of the exhibition
Right –
Seminar atmosphere



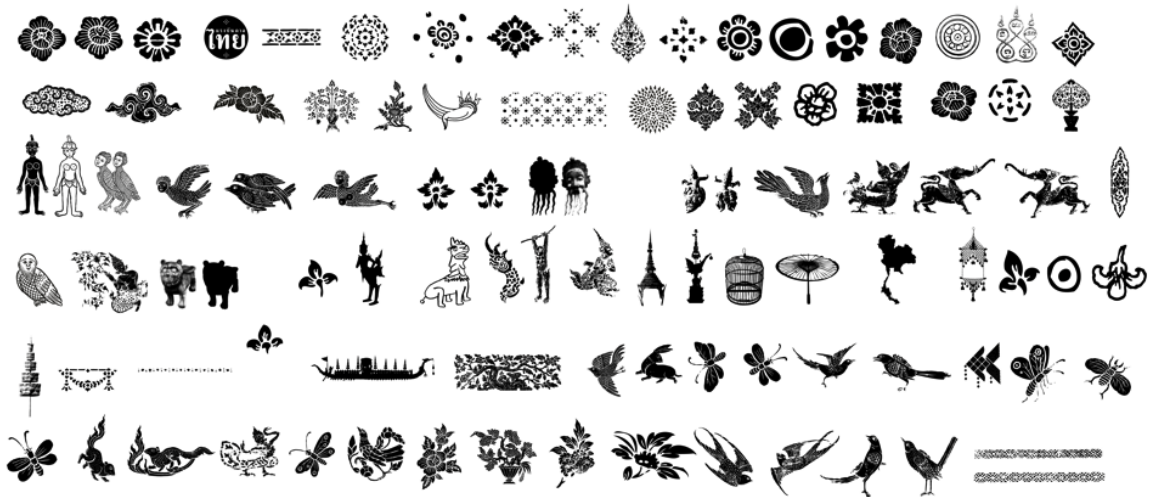


Fig.5-11:

Sample of the cliparts that has been distributed to the other designers for free

5.2.2 Objective

The objective of Rang Bun Darn Thai is to see many other designers incorporate Thai style into their works rather than omit or ignore the Thai style altogether from lack of notable sample and inspiration. What the fellowship does is not specific only to the graphic design but also inspire others field of design too. For example, they organized the best of the best photographic exhibition of Thai arts to inspire the designers who do not know how to appreciate Thai style to want to witness the real object in the real world setting.



Fig.5-12:

Photographic exhibition atmosphere



Fig.5-13:
One of the exhibition rooms

5.2.3 Solution

- Sourcing Issue

Teeraprapa explains that Thai vernacular style is often a reflection of traditional Thai culture, folklore, traditional children games, and people daily lifestyle, which are intangible. To transform the intangible value into the tangible graphic design, he suggests that there are many different methods. For instant, the happiness can be represented through many tones of colors, the colors of the seven-color-cloth used to tie a trees which is one of the traditional Thai folk art can be use in the poster to promote local cultural tourism, forms, or weaving patterns of fishery tools can be use to create Thai fonts, etc. Traditional Thai art that exists at temples or historical places can also act as inspiration too. By visiting a temple, the designers can observe the way colors are used. The way colors matched with each other can be easily applied in a design work.

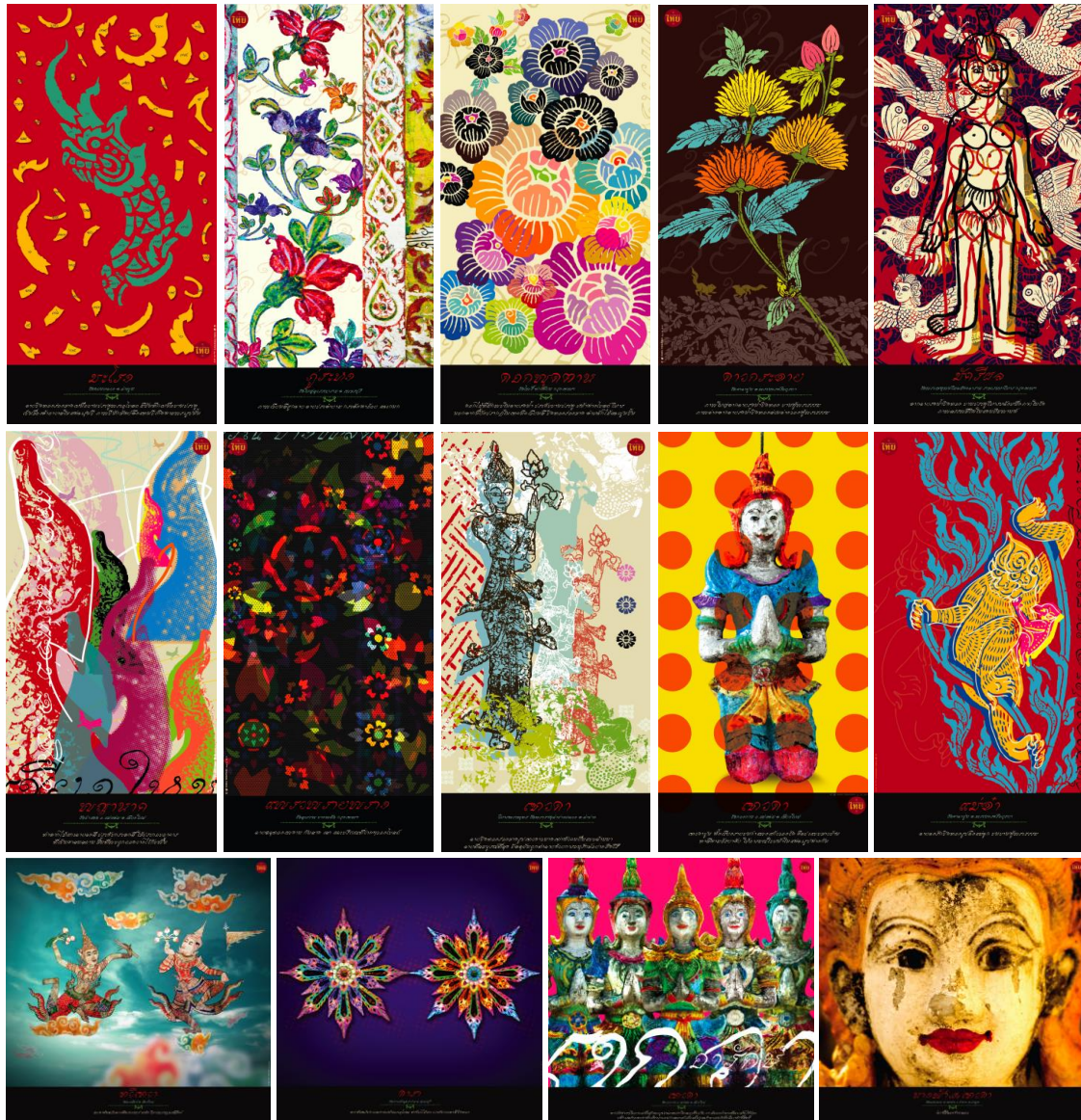


Fig.5-14:
Sample of exhibition works
by Pairoj Teeraprapa

Teeraprapa considers agriculture as an art. There is local intellect in Thai agricultural society, especially in the tools and ways of life. He thinks craftsmanship is very charming. He started from taking photos of what he has seen and felt impressed by. Later, he came up with an idea of doing an exhibition that presented this aspect of life at the Gallery of Art and Design, Faculty of decorative arts, Silpakorn University.

- Perception Issue

Teeraprapa thought that to adopt Thai folk art or Thai vernacular style and incorporate into modern graphic design work is harder than using the higher level of Thai art that are already pleasing on the eyes. Even if Thai folk art is not elaborate like the higher level of Thai art, but upon closely examining the folk art, he finds that it reveals several interesting design elements that he appreciates and finds touchable. Therefore, inventing a new way on how to incorporate Thai folk art, which can be seen in daily life, into graphic design work is challenging to him.

However, Teeraprapa thinks that his works are not represent the entirety of Thai style. They are just one of the many parts of Thai style. He said that Thai style has many characteristics, tastes, and sounds. His work is just a sample of Thai style and they are just his own Thai style.

- Processing Issue

As a pioneer in reviving, creating, and applying Thai vernacular style, Teeraprapa gives suggestions about how to extend the idea of using Thai culture and Thai art to do the business. It begins with who you will sell to and who is your target and choose the right level of Thai art. Then, make products to match with the level of Thai art and your target market. There are many levels of Thai art to choose from such as the higher level, the middle level or the folk art. To make it easy to understand, the Buddha statue with elaborated decorating ornaments considered as a higher level of Thai art should target rich people who can afford

it, while wooden Buddha statue should target the commoner or middle-class customers.

At his own shop, The Chonabod, he creates graphic design in the form of souvenirs, t-shirt, bags, and postcards. The selling point is his graphic design. He believes that graphic design has value and can make a difference. As his targets are the excursionists, he anticipates what they need or what they want to be reminded of. Therefore, his graphic design, for example, has a picture of Chao Phraya River⁶, the laborers working on a boat, etc. Whatever reflects Thainess, pictures, sketches or fonts, he uses all of these elements in his works. He wants to show other designers as many styles as he can before letting them choose what style that they like. Even in Thai style, there are still many levels to choose from.



Fig.5-15:
Pairoj Teeraprapa at his own shop, the Chonabod

- Prospect Issue

Not only does this fellowship need to inspire the designers, but also enable the designers to make a living,

⁶ A major river in Thailand with its low alluvial plain forming the center of the country. It flows through Bangkok and then into the Gulf of Thailand.

in other words, business is a part of the solution. Currently, graphic designers alone who work with Thai style are not a complete part of the solution. Teeraprapa is hoping that the fellowship could raise awareness to the investors who might be willing to invest in Thai style. It might change their perception of Thai art positively. Therefore, it hopes to change their perspective of Thai style in term of business opportunities and bring in more work for the designers who work with Thai style.

Fig.5-16:
The Chonabod shop
atmosphere and its goods



- Knowledge Issue

Teeraprapa also commented that he is a general designer who does not know much about the history and the Rang Bun Darn Thai fellowship is not an archeology group. They are designers who work with research. They live a normal life but with more curiosity and keen eyes of observation, trying to find the inspiration from their daily life. As the old saying goes, it is not the destination, but the journey that is important. You might find something unexpected and learn from it during the journey to the destination.

5.2.4 Summary

The Rang Bun Darn Thai fellowship started in 2012 and their reputation has been spreading in mainstream Thai society to a considerable degree. Teeraprapa is hoping that it will spread and raise awareness even more in the future. He suggests that if anybody want to work with Thai style, he or she is welcome to study how the fellowship do it and eventually develop his or her own style. It does not require being the same context. Maybe they can develop a better design, which will help in expanding the use of Thai style. Together, everyone can help expand the use of Thai style, which cannot be done only by himself or his group. The new generations need to continue to support this collective effort.

5.3 Case study C: Queen Sirikit Museum of Textiles

The third case study is the corporate identity design of the Queen Sirikit Museum of Textiles in Bangkok, Thailand, which was recently opened in 2011.

5.3.1 Background

The story of this museum started in 2003 when Her Majesty Queen Sirikit requested a permission to use a then-vacant building on the grounds of the Grand Palace to house a new museum of textiles. The 1870 Ratsadakorn-bhibhathana Building was graciously granted for this purpose by His Majesty King Bhumibol Adulyadej. The office building, which used to be the Ministry of

Finance for many decades, was completely renovated and turned into a state-of-the-art museum. It has modern facilities, which include a new lobby, galleries, storage, an education studio, a library, a lecture hall, and Thailand's first dedicated textile conservation laboratory. Nonetheless, its past is still very much present, through the preservation of its original facade and many internal architectural details.

The transformation of this office building into a textile museum was superintended by Mr. Grittip Sirirattumrong of DSDI International Co., Inc., a specialist in historic preservation and restoration. Fascinating traces of the building's nineteenth-century origins were found during the renovation, including a pediment ornament bearing the emblem of King Rama V and a cache of 33 cannonballs, relics of the site's military past. The finished museum combines sleek, modern galleries, and state-of-the-art back-of-house facilities while that retaining a wealth of periodic architectural details that honor the building's original era and style.

5.3.2 Objective

The mission of the museum is to collect, display, preserve, and serve as a center for all who wish to learn about textiles, past and present, from Southeast Asia, South Asia, and East Asia with a special emphasis on the textiles of, and related to, the royal court and Her Majesty Queen Sirikit. Additionally, its goal is to create public awareness of Thai identity and culture, and the beauty of Thai traditional textiles, through research, exhibition, and

interpretation. The museum's objectives, set by Her Majesty, are being diligently worked on by the museum staff, guided by Her Royal Highness Princess Maha Chakri Sirindhorn.

5.3.3 Solution

The corporate identity design of the museum was designed by MGMT. Design, LLC, the collaborative design studio based in Brooklyn, New York. Although, the subsequent promotional medias was designed by the museum's own in-house graphic designer. The concept of these designs came from the pattern in old traditional Thai textiles. The museum has many graphic identities, each inspired by a textile pattern. The graphic identities help define the overall identity of the organization. Therefore, the inspiration in designing the graphic identity, which used in the promotional print and other medias were derived from these textile patterns. There are 6 basic patterns that made up the CI.

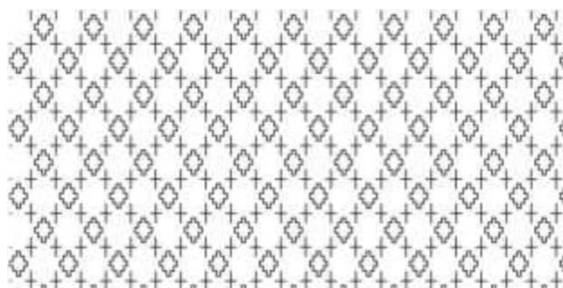


Fig.5-17:
Pattern 1 – Khmer Diamond Lattice

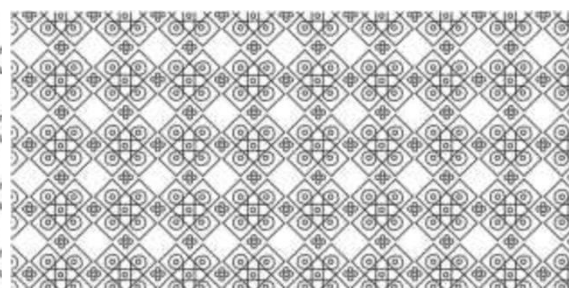


Fig.5-18:
Pattern 2 – Khit Floral Diamond

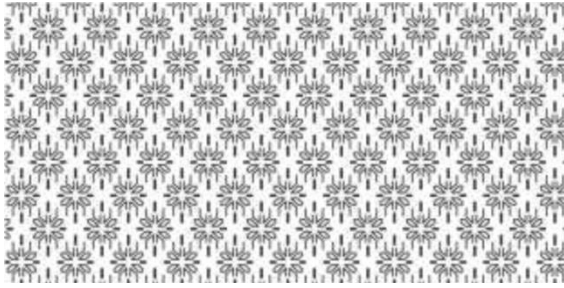


Fig.5-19:
Pattern 3 – Praewa Floral Grid

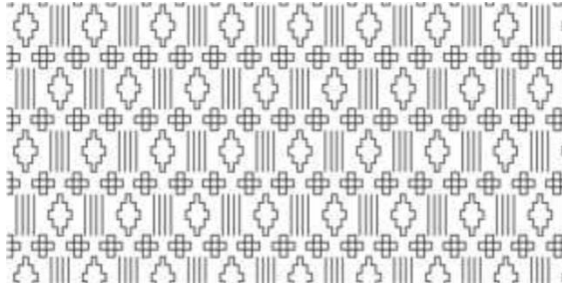


Fig.5-20:
Pattern 4 – Matmee Diamonds and Bars

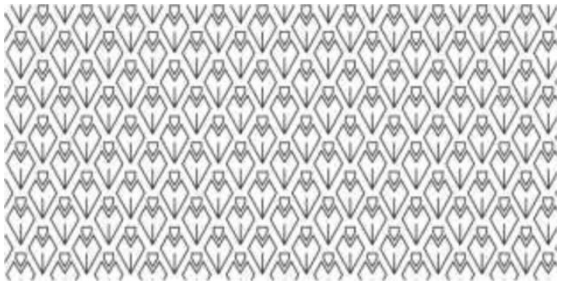


Fig.5-21:
Pattern 5 – Phakoma Arrow

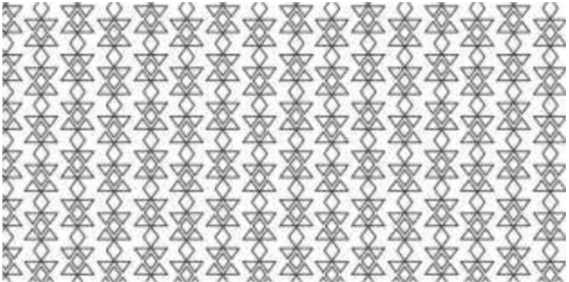


Fig.5-22:
Pattern 6 – Teenjok Triangle

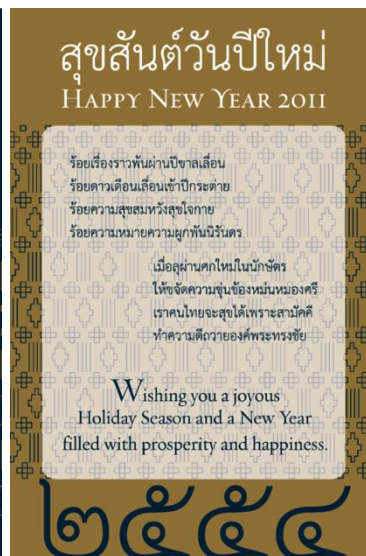


Fig.5-23:
Sample of the promotional medias that use graphic CI patterns

The identity appears to be bilingual and incorporate the existing logo of the Queens' foundation. The developed graphical patterns could be used as a flexible system within the institution as well as the exhibitions.



Fig.5-24:

Sample of the souvenirs that use graphic CI patterns to design the products

Moreover, the museum not only used all of the six basic patterns, they continue to develop and design with more new patterns. All of them derived from the textile patterns and get to be redeveloped into graphic design for modern sensory perception. Most of the patterns are developed into souvenir products that available in the museum shop.



Fig.5-25:

Sample of the souvenir products that available in the museum shop (1)

On some occasion, the museum highlights the aesthetic and intricacy of a real piece of invaluable fabric. They use a special photographic technique to take pictures of the fabric to make it look and feel modern. For example, the pictures of the royal clothing that were used in their promotional media.



Fig.5-27:
Sample of the promotional medias used photographic technique for modern expression

CHAPTER 6

CONCLUSION AND SUGGESTION

This chapter summarizes all results from this study and suggests certain important ideas for improvements applicable to the future society. It is supposed to serve as a form of supplementary guideline to help the designers to develop, adapt, and preserve the traditional characteristic and value of the ornament for the appreciation of the next generation. It also advises how to use the traditional Thai ornament properly and to make it infinitely survive in the modernized future.

6.1 Conclusion

As was mentioned, since most of the traditional Thai decorative ornament has vanished from the daily life, this

research objective attempts to investigate and explore the current state of the ornament in the society and the attitude of Thai people toward these vanishing ornaments.

This research starts by understanding the deep principle of Lai Thai or Kranok. It is found that Lai Thai or Kranok are primarily derived from the halved lotus or three lotuses bonded together, ear of rice, and other natural elements found within Thailand. Since Thai arts are traditionally related to Buddhism, it is truly interesting to track back the history timeline until the ancient time.

It was realized that the Thai ornament did not originate from the Buddhist era, but even further back; from the Egyptian civilization. Even though it is more than 6,000 years apart, the noticeable passages between each period are listed until the point of arrival in Thailand. However, the passage of the ornament from Egypt to Thailand is not a direct path of influence. Thailand received influence of many different cultures, including Persian, Greek, Roman, Byzantine, Arabian, Indian, Hindu, China, before arriving in Thailand.

As reflected in the aforementioned reviews, it can be seen that the ornament does get transformed throughout time. There are some factors that made part of them survive and yet other factors that made part of them vanish. Therefore, the public survey was performed, to understand the opinions of the people and experts on this issue. It was found that even though most of people did not use the ornament and did not understand the meaning of them, but they agree that the ornament is one of the

Thai identities and it can be changed along the time. In addition, the results from interviewing the expert provide us with the valuable feedback especially on how to save the traditional Thai decorative ornament from vanishing throughout the time in the future.

Studying and doing only research could very likely not extend nor guarantee the life of the traditional Thai decorative ornament. There are some groups of people and organizations that have already tried their hardest to enliven them.

The first is the contemporary Benjarong by a team of design academics from Chulalongkorn University. It brings a new life to Benjarong traditional pottery by reconciling innovation with tradition. The outcome of the study even earned recognitions from abroad.

The second is Rang Bun Darn Thai. It is the work of Pairoj Teeraprapa and his design fellowship. Their works inspire many other designers to incorporate Thai style into their artistic works. What the fellowship does is not specific with only to the graphic design, but also inspire in the other fields of design too.

The third is the corporate identity of the Queen Sirikit Museum of Textiles. The mission of the museum is to collect, display, preserve, and serve as a center for all who wish to learn about textiles, past and present, from Southeast Asia, South Asia, and East Asia with a special emphasis on the textiles of, and related to, the royal court and Her Majesty Queen Sirikit. Its design creates public

awareness of Thai identity and culture.

The thorough conclusion in each section can be described as follows:

6.1.1 Prelude of Lai Thai and literature review

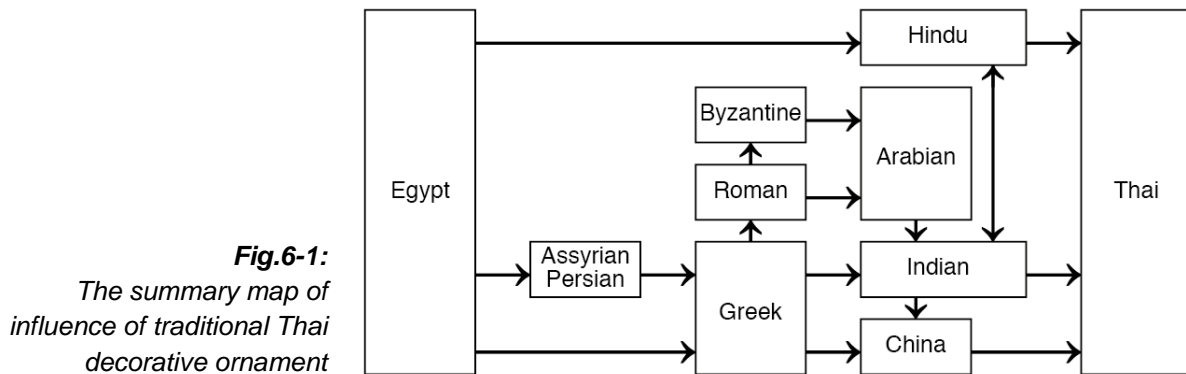
This section shows that the culture and beliefs have greatly influenced the shape and forms of ornament throughout the history of mankind. It proves that people are capable of translating their own beliefs into the visual arts since the era of Egyptian civilization.

This part reviews the lotus ornament since its first appearance in Egypt and discusses how it is transformed from time through time. The noticeable passage between each period is listed until it arrived in Thailand. It can be confirmed that the Egyptian lotus has some influences on the recent traditional Thai decorative ornament. The Egyptian lotus and the traditional Thai decorative ornament have not only been conceived more than 6,000 years apart but also the lack of evidence to prove their association may lead to assumption that the Egyptian lotus and the traditional Thai decorative ornament have nothing in common. On the contrary, some strong influences are still noticeable.

However, the passage of the ornament from Egypt to Thailand is not a direct path of influence. Thailand received influence from many different cultures, which can be demonstrated in Fig.6-1.

The map shows three major influences of the traditional

Thai decorative ornament. It can be seen that they can track back to the most ancient civilization of Egypt. As the Fig.6-1 shown, it can be assumed that the real origin of the Thai ornament is from the ancient lotus ornament in Egypt.



There are 2 types of the lotus ornament that flowed into Thailand. The first is the natural lotus ornaments; this type of ornament tries to imitate the natural lotus as much as possible. Therefore, there is no significant change in the design. This type of ornament is mostly influenced by Hindu, which was influenced directly from Egypt. The second is the abstract lotus ornament. The artists would like to convey the meaning, belief, and most importantly the decorative purposes. Thai received this type of ornament mainly from India and China. Since this type of ornament has traveled through many culture and belief, the shape and form had been significantly changed until there is no perceivable similarity among the old and new lotus forms left (Fig.6-2).

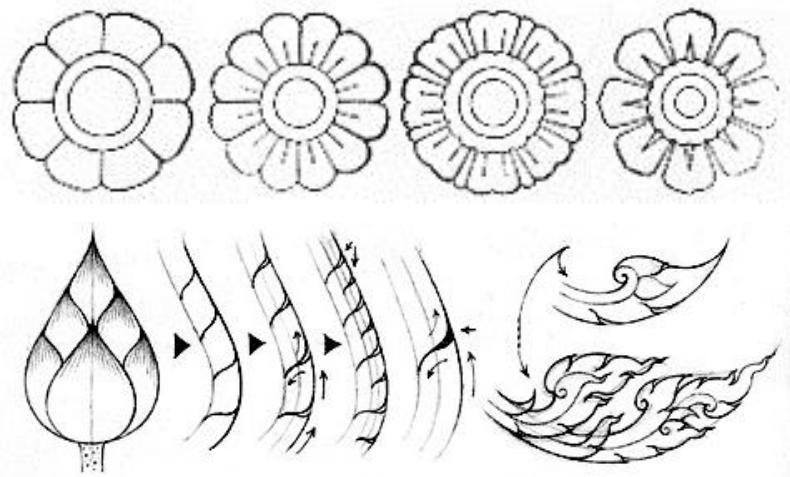


Fig. 6-2:

Two Types of lotus ornament flowed into Thailand

Top –

The ornament try to imitate natural lotus, in this case from the top view

Bottom –

The ornament has inspired or developed from the natural lotus

The development of shape and forms of ornament demonstrates that craftsmen were more likely to exploit forms inherited from their predecessors than to search out the new motifs. In particular, they were unlikely to devise the ornament based directly on the representations from life. However, social or religious demands might probably cause them to make changes to the shape and forms of ornament.

It also demonstrates that the lotus ornament has a strong bond with architecture. In the ancient time, the lotus ornaments were used to decorate the architecture. Wood and stone are primary materials. Carving stone and wood only allowed the certain technique to be used. Therefore, the patterns are primitive and simple, for example as shown in Fig.3-8. As time passed, the lotus ornament has become more advance and produced by various materials like fabric, metal, and ceramic. It allows the advanced techniques to be used and more advanced patterns emerged, as presented in later Indian (Fig.3-24) and China period (Fig.3-27).

From the literature, there are similarities and differences between Thai and Egyptian ornamental formation. Table 6-1 compares between the ancient lotus and the traditional Thai decorative ornament.

Table 6-1. Comparison of the ancient lotus ornament and Thai ornament

Ancient ornament	Thai ornament
<i>- Shape</i>	
Draw from nature inspiration	Draw from nature inspiration and archetype
Use realistic form and abstract form	Use mostly abstract form
Has open & close form	Has open & close form
Draw from top view & side view of the flower	Draw from top view & side view of the flower
Mostly depicted from white lotus	Mostly depicted from pink lotus
Sharp and straight	Short and bold
Based on geometric form	Based on geometric form
Mostly symmetry	Mostly symmetry
Simple form	Complex and floridness
<i>- Connotation</i>	
White lotus as a symbol of innocence and modesty	White lotus as a symbol of fertility and grandeur
Blue lotus as a symbol of spiritual rites and represent gods and kings.	Pink lotus as a symbol of sexual purity, beauty and represent gods.
-	Giant water-lily as a symbol of gentleness and equivalent
<i>- Structure</i>	
Has all of the Principles of design	Has all of the Principles of design

Although Thailand and Egypt have no direct relationship and believe in different religious, the similarities of the

structure and arrangement of all example ornaments in all categories are undeniable. This study clearly shows that Egyptian influences and some ancient beliefs have traveled into Thailand through India and other great civilizations. Thus, there is a possibility that the traditional Thai decorative ornament has some association with the ancient lotus ornament. The similarities are overwhelming that it affects the ornamental design.

The arrangement of the ornament is one of the strong proofs that lineage of the design of the traditional Thai decorative ornament was from ancient lotus ornament. Their arrangement appears to be quite similar. Basically, the shape of the ancient lotus ornament has changed obviously by different factors, e.g. time, beliefs, countries, and cultures. However, the arrangement does not seem to change significantly as same as the shape. One of the reasons may be that the arrangement does not represent belief, religious, or political climate of the culture or period that it went through. The arrangement is purely there for the decorating reasons. That is why it is hardly changed.

In addition, the reason that made the lotus ornament does not only survive but also thriving, still developing and still growing throughout the history of mankind, is that it has all the fundamental principles of design. The principles of design bring beauty and value to those ornaments and make people appreciate and accept it for such a long time.

The differences and the similarities of ornaments from different periods are also discussed. The similarities show the origin of the traditional Thai decorative ornament. On

the other hand, the differences are the unique characteristics of the traditional Thai decorative ornament. They can define as theirs highly in details, sharp point tip, boldness, sturdy, and powerful movement.

Furthermore, it can be concluded that people's beliefs and culture are the main influences on the art since the ancient time. People use the ornament not only for the beauty of the decoration, but also as a tool to express their respect, worship, and delight to the god. It can identify the importance of places as well.

Lastly, an investigation into the nature, value, and potential of the ornament, deserves serious attention to be a gradual renewal of interest in the subject of public, professional, and academic realms.

6.1.2 The social survey

This section performs the comprehensive survey to Thai people using questionnaires and interviewing. It tries to investigate and explore the current state of traditional Thai decorative ornament in the society and what is the attitude of Thai people toward those vanishing ornaments.

Most of the participants who completed the questionnaire are male (58%), age between 26-35 years old with the mean average of 31 years old. Most of them complete the education at the bachelor degree and 32% of them are working in the art and design field.

Regarding to the perceptions on traditional Thai decorative

ornament, the answers show that;

- 28% of all participants agree with the statement “Present traditional Thai decorative ornament is international”.
- 12% of the participants agree with the statement “Traditional Thai decorative ornament is for the highness only”.
- 65% of the participants agree with the statement “Traditional Thai decorative ornament can change”.
- 84% of the participants agree with the statement “Traditional Thai decorative ornament is one of the Thai identity”.

In addition, if comparison between the answers of the participants from two groups, the designers and the non-designer, are considered. It is found that;

- 31% of the designer and 27% of the non-designer agree with the statement “Present traditional Thai decorative ornament is international”.
- 8% of the designer and 14% of the non-designer agree with the statement “Traditional Thai decorative ornament is for the highness only”.
- 79% of the designer and 58% of the non-designer agree with the statement “Traditional Thai decorative ornament can change”.
- 94% of the designer and 79% of the non-designer agree with the statement “Traditional Thai decorative ornament is one of the Thai identity”.

The answers between the designer and non-designer

have no significant difference in the statement “Present traditional Thai decorative ornament is international.” Likewise, there is only slightly difference in the statement “Traditional Thai decorative ornament is for the highness only”. However, they show a huge difference in the statement “Traditional Thai decorative ornament can change” and “Traditional Thai decorative ornament is one of the Thai identity” as summarized in the Table 6-2.

Table 6-2. Answers of agreement with the statement in percentage

Statement	Overall	Designer	Non-designer	Comments
Present traditional Thai decorative ornament is international	28	31	27	no significant difference
Traditional Thai decorative ornament is for the highness only	12	8	14	slightly difference
Traditional Thai decorative ornament can change	65	79	58	huge difference
Traditional Thai decorative ornament is one of the Thai identity	84	94	79	huge difference

Regarding to the opinions on traditional Thai decorative ornament, the answers show that the appearance of traditional Thai decorative ornament in the present day is complex with a score 1.8, while they also insist that it is old-fashion with a score 2.1 and old with a score 1.7, out of 3. However, it shares almost the same proportion between the appearance of cheap and expensive. Participants think that the ornament looks expensive by only a little score 0.3 out of 3.

In addition, if considering the answers of the participants

divided into two groups, the designers and the non-designer, the answers have no significant difference for the opinion toward simple/complex and cheap/expensive. However, they show a huge difference in the opinion toward old-fashion/modern and old/new as summarized in the Table 6-3.

Table 6-3. Score out of 3 of the opinions on traditional Thai decorative ornament

Opinions	Overall	Designer	Non-designer	Comments
Simple / Complex	1.8	2.0	1.7	no significant difference
Old-fashion / Modern	2.1	1.3	2.5	huge difference
Old / New	1.7	1.0	2.0	huge difference
Cheap / Expensive	0.3	0.1	0.4	no significant difference

From questions about usage frequency, the answers show that 85% of the participants have never used the traditional Thai decorative ornament in their work within the last three years. The designer has more chances about double times to work with the ornament more than the other occupations. The reasons from overall participants can explain as follow;

- Do not have a chance to use 45%
- Do not know how to use 20%
- Difficult to use (too complex) 18%
- Afraid to use (royal or high level) 6%
- Others 11%

In addition, if considering the answers from the designer only, the reason can describe as follow;

- Difficult to use (too complex) 37%
- Do not know how to use 25%

- Do not have a chance to use 24%
- Afraid to use (royal or high level) 10%
- Others 4%

From the questions about knowledge, the answers show that;

- 77% of the overall participants do not know what is the shape of the traditional Thai ornament came from. While the others answer are the lotus 12%, flame 8%, and others 3%.
- 80% of the overall participants do not know what is the meaning of the traditional Thai ornament. While the others answer are gold 9%, prosperity 6%, and others 5%.
- 84% of the overall participants do not know what is the origin of the traditional Thai ornament. While the others answer are the lotus 11% and Gassho 5%.

From interviewing the three experts, a summary of their answers is as in the Table 6-4.

Table 6-4. Summary answers from the interviews

Questions	Nathakrit Sunthareerat	Pairoj Teeraprapa	Panida Thothong
What is Thai style?	Water-related culture	Hand-made	Inconclusive
Is it necessary to study Thai style before design?	Yes	Yes	Yes
Can Thai style be changed?	Some	Some	Depends

Don't you think if Thai style change, the original will be gone?	No	No	No
What is the uniqueness of Thai style?	Living near water	Colorful, meaningful, and delicate	Simple-minded, humor, and sanguine
What is the root of traditional Thai arts?	Lotus and water	Dharma teaches	Inconclusive
What is the most necessary thing to know before using Thai style in design?	Shape, form, message, and meaning	A way to use.	What and where
Don't you think Thai style is not popular and why?	Yes Obscurity	Yes No trend	Yes Difficulty
What is the solution to solve above problems?	Educate and change attitude	Educate and make trend	Educate and change attitude

Overall the outcomes from the social survey have raised the awareness that;

- Thai culture is mixed and it is hard to specify what is Thai style. Even the experts understand Thainess in their different ways.
- Most of Thai people belief that the traditional Thai decorative ornament can be developed and adopted into the daily life, but should be done in the proper way.
- Most of Thai people have positive attitude toward the traditional Thai ornament.
- The way to improve the appearance of the traditional Thai decorative ornament is to make it more simple, modern, and looks new.
- The designer has more chances to work with the traditional Thai ornament than the non-designer.
- The most problematic aspect is the traditional Thai decorative ornament doesn't command attention from the public and it causes in less working opportunity with

the ornament.

- Most of Thai people do not have knowledge about the traditional Thai decorative ornament. Therefore educating people is definitely important.
- The shape, form, and meaning of the traditional Thai decorative ornament is the most necessary things to know before using Thai style in design.

From the survey, the suggestions to solve the above problems are listed as follow;

- Provide the education for both the non-designer and the designer to change their attitude to the traditional Thai style.
- The designer should pay attention to the proper ways to improve Thai style or should study from people who have background knowledge and experience before use Thai style.
- The design school should include a course in the design school curriculum.
- The organization should provide some examples, inspiration, and encourage to the designer.
- The government should encourage Thai people to understand Thai value and proud to use Thai. The government policy is also concerned.
- It can use social media as a tool for promoting a trend for Thai style.

6.1.3 Case studies

This part of the research revises three case studies which considerable success in the current Thai society. The study of methods that were used in each case study can

offer an example, inspire, and apply for the other contemporary projects further.

The first case study is the project that investigates to make new Benjarong traditional pottery by reconciling innovation with tradition. The project was set that the new Benjarong designs would help expand Benjarong's market to Europe and America. The problems and solutions of this project can be concluded as follow:

Table 6-5. Problems and solutions from case study A:
The contemporary Benjarong

Problems	Solutions
<i>- Technical issue</i>	
The traditional method of transferring pattern onto the wares relies heavily on highly dexterous craftsmen	Use the decalcomania, a method to transfer printed on-glaze patterns onto glazed ceramic surfaces
<i>- Coloring issue</i>	
Mixing colors are very complicated since on-glaze colors of the wares react chemically to produce colors.	Collaborates with ceramic scientists to create the new formulae to produce new color palettes suitable for current color trends.
<i>- Shaping issue</i>	
The form of traditional Benjarong is difficult to use within the western dining setting.	Adapt the form and function of traditional Benjarong into the centerpiece wares.
<i>- Motif issue</i>	
The motif does not match today's taste and consumer's behavior.	Experiment with different pattern structures, such as the motifs of imaginary plants, genetic science, and modern cosmology.

The second case study is the work of Pairoj Teeraprapa and his design fellowship named “Rang Bun Darn Thai”. Teeraprapa works with Thai vernacular style on a regular basis. He incorporated elements of Thai traditional style into his works in order to inspire the audience to use the Thai traditional style in many different perspectives. Teeraprapa describes his methods to promote Thai traditional style as follow:

Table 6-6. Problems, solutions and suggestions from case study B: Rang Bun Darn Thai

Problems	Solutions and suggestions
<i>- Perception issue</i>	
Thai style is ambiguous, and the people’s perception of Thai identity is still unclear.	Present ideas and give inspiration by organize many ongoing seminars and exhibitions to showcase good works.
<i>- Sourcing issue</i>	
Thai designers found it is difficult to adopt Thai style into their works.	Distribute their original cliparts, Thai fonts, and other design materials.
<i>- Processing issue</i>	
The designers don’t know how to apply Thai style into their business.	Begin with choosing the target, then select the right level of Thai art and make the according products.
<i>- Prospect issue</i>	
There are less business opportunities and works for the designers who work with Thai style presently.	Raise awareness and change the perception to the investors who might be willing to invest in Thai style.
<i>- Knowledge issue</i>	
The designers are lack of knowledge.	Live with more curiosity and keen eyes of observation and trying to find the inspiration from daily life.

The last case study is the corporate identity design of the Queen Sirikit Museum of Textiles in Bangkok, Thailand. The ideas of creating this project can be summarized as follow:

Table 6-7. Objectives and design solutions from case study C: Queen Sirikit Museum of Textiles

Objectives	Design solutions
To create public awareness of Thai identity and culture, and the beauty of Thai traditional textiles, through research, exhibition, and interpretation.	The concept of designs came from the pattern in old traditional Thai textiles. The museum has many graphic identities, each inspired by a textile pattern.
To collect, display, preserve, and serve as a center for all who wish to learn about textiles, past and present, from Southeast Asia, South Asia, and East Asia.	The identity appears to be bilingual and the developed graphical patterns could be used as a flexible system.
To reach further and wider audiences.	Modernize the graphic identities to make it easy when applying to many products and design.

6.2 Suggestions

The most important finding from this study shows that the traditional Thai decorative ornament can be adjusted and modified over the time. Even the elements of modern decoration have been inserted by the power of new technology, even the attitude of people has being changed, the ornament can be transformed and adapted itself thru time. Therefore, the main subject is how to preserve the

particular one from vanishing in the near future.

Generally, there are two primary aspects to preserve the traditional ornaments. If that particular site or pattern is still being used and returns the direct value to the society by any means, it is quite obvious to continue the preservation process. On the other hand, one might argue that the way to preserve something should not be judged by its usage in the present time. How to preserve the Japanese temples in an example in this case. They return the indirect value to the society from their symbolic meaning.

6.2.1 International Agreement

Traditionally, people believed that the cultural heritage must be assigned to individual original nation. Nevertheless, after the Franco – Prussian War (1870-1871), one of the most important agreement had been proposed during the international meeting at Brussels on August 27, 1874. The Project of an International Declaration concerning the Laws and Customs of War stated that it is hard to rebuild the cultural heritage if it was destroyed. Therefore, the individual heritage should be the international heritage. Unfortunately, although this agreement could not save several of the historic sites, it is considered the starting point of the modern preservation process. Lately, the international symposium was held in Venice in 1964. The main participants from UNESCO⁷, ICCROM⁸, ICOM⁹ and Council of Europe agreed to set up “The Venice Charter for the Conservation and Restoration

⁷ The United Nations Educational, Scientific and Cultural Organization

⁸ The International Centre for the Study of the Preservation and Restoration of Cultural Property

⁹ The International Council of Museums

of Monuments and Sites” to provide principles to guide the preservation of the historic buildings. The idea to separate between the “dead monument” and “living monument” was no longer acceptable on this charter. Instead, it focuses on the integrity, authenticity, historical, and architectural authenticity. Until 2003, the UNESCO proposed the Convention for the Safeguarding of Intangible Cultural Heritage to extend the level of preservation to any place with innate cultural value. The Intangible cultural heritage refers to:

"traditions or living expressions inherited from our ancestors and passed on to our descendants, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge, and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts."

Almost 150 countries around the globe have joined the 2003 Convention, being ratified or passed in 28 countries within Latin America and the Caribbean (group III). Most of the countries agree to adopt a general policy aimed at highlighting the function of intangible cultural heritage in society (UNESCO, 2015).

6.2.2 National Agenda and Laws

- Government Body

To preserve the ornament and other historic architecture in the national level, The Department of Cultural Promotion,

Ministry of Culture has a responsibility to undertake the cultural research, conservation, promotion, dissemination, restoration, and development, particularly with regard to folk culture. Inevitably, this movement found momentum in its spread to South East Asia and eventually to Thailand. The Convention for the Safeguarding of Intangible Cultural Heritage has been adopted and applied in Thailand.

Since 2005, a numbers of work have been promoted on Intangible Cultural Heritage and its safeguarding. In addition, the inventory-making of Intangible Cultural Heritage at the provincial level has been raised as a pilot project in 2010 on 4 domains, including the Performing Arts, Traditional Craftsmanship, Folk Literature and Folk Games, and Sports. The establishment ensures adequate safeguarding. Safeguarding our own Intangible Cultural Heritage both at the local and national levels can make an essential contribution to knowledge, understanding, appreciation, and acceptance of cultural diversity and peaceful co-existence (Department of Cultural Promotion, 2015).

- Laws and Regulations

Presently, Thailand is only enacting Laws of Historical site, Historical Object, Artifact and National Museum 1961 and National Culture Decree 2010, supervised by National Culture Committees and some organizations (Sornwichai & U-naphrom, 2012). Regarding the Convention for the Safeguarding of Intangible Cultural Heritage as mentioned in 6.2.1, Thailand has not acknowledged such laws at the national level as of yet. Comparing between Asian countries, Thailand is among other three countries that

has not yet ratified or passed this convention as shown in Table 6-8.

Table 6-8 the Convention for the Safeguarding of Intangible Cultural Heritage in Asian Countries

No.	Country	Status
1	Vietnam	Ratified on September 20, 2005
2	Cambodia	Ratified on June 13, 2006
3	Philippines	Ratified on August 18, 2006
4	Laos PDR	Ratified on November 26, 2009
5	Brunei	Ratified on August 12, 2011
6	Indonesia	Acknowledged on October 15, 2007
7	Malaysia	N/A
8	Myanmar	N/A
9	Thai	N/A
10	Singapore	N/A

Nevertheless, the drafting of intangible cultural heritage act 2015 is being modified by the government of Thailand presently. The contents are mainly modified from the previous act in 2013 which has not been enacted yet. One of the most important change in the previous version is that the domain of the intangible cultural heritage is changed from six domains to eight domains, including;

1. Performing Arts
2. Traditional Craftsmanship
3. Folk Literature
4. Folk Games and Sports
5. Social Practices, Rituals and Festive Events
6. Knowledge and Practices Concerning Nature and the Universe
7. Language

8. Others

The ornament is categorized in the domain No.2. It is defined as;

“These are purely decorative elements for beauty. They are primarily made from locally available materials, and later, developed using valuable materials such as gems and precious stones.”

It is expected that after this law is enacted, it will safeguard the cultural values and enable the safe transmission of the cultural knowledge from generation to generation and constantly recreated by communities and groups in response to the environment, the interaction with nature, and the history. Moreover, it will provide a sense of identity and continuity and promote respect for cultural diversity and human creativity in the future (Department of Cultural Promotion, 2015).

6.2.3 Sustainable Cultural Heritage Tourism

Nowadays, there is a trend to introduce the cultural heritage into different types of businesses. One of the success story is called “the sustainable cultural heritage tourism.” It creates the economic and social development by balancing between the local or traditional heritage and modern business plan. The scheme can be the combination of historic sites visiting and traditional craftsmanship learning class. Likewise, it can design with specific group of need, i.e. the performing arts, folk games, or social practices.

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