



SPIRIT AND PLACE: THE PRESERVATION OF RELIGIOUS VALUES
THROUGH BUDDHA IMAGES AT WORLD HERITAGE SITES IN THAILAND

By
Poramet Boonnumsirikij

A Thesis Submitted in Partial Fulfillment of the Requirement for the Degree
DOCTOR OF PHILOSOPHY
Program of Architectural Heritage Management and Tourism
(International Program)
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In Thailand many of the most significant images of Buddha can be found at World Heritage Sites such as Sukhothai and Ayutthaya Historical Park. The values of the Buddhist image are not only artifacts or antiques but also the symbols of Buddhists' worship to Buddhism. The process of creating and upholding Buddha's image involves many steps, for example the utilization of craft arts and consecration ceremonies in order to produce a beautiful statue or monument that is highly respected for many centuries. Therefore, the history of Buddha image art was reviewed.

The deterioration of the Buddha image like other artifacts can occur for many reasons and restoration work has to be done. Meanwhile the preservation bodies of international organizations such as UNESCO and state parties like the Fine Arts Department of the Royal Thai Government have been issued and developed regulation. There are charters to follow, specifically the preservation of World Heritage sites. Most of them mention only the exterior values, while the spiritual value of the heritage is forgotten. From the re-examination of these criteria, they are totally separated to the tangible heritage which mostly cannot fit to the Asian context, including the Buddha image. This dissertation recommends the need to preserve the spirit value or intangible values inside the tangible heritage monuments and sites, and that the draft of the Thai Charter should be adopted and explored by the international bodies of preservation.

Moreover, the restoration and preservation of these icons currently uses the 'Cultural Process' from the Fine Art Department in Thailand. The process mainly starts with research from archeologists and arts historians. However, the knowledge management process is more effective and can reduce the steps in the 'Cultural Process'. It can utilize the international organizations' knowledge and use the local community to collaborate and figure out the proper management plan and process of restoration for the image of Buddha. The study's final goal is to create a new vision of 'Cultural Process' that will provide a better solution for the future preservation management of the Buddhist icon.

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Chapter 1

Introduction

Overview

The context

Buddhism has been a faith for more than 2,500 years. From the time of its foundation Buddhism now is the religion of quarter of the earth's population. Not surprising many Buddhist sites in Asia continues to be active religious pilgrimage destinations. Due to the circumstances of history, course of these are no longer religious sites. We all know of places such as Ankor or Siem Reap in Cambodia, Pagan in Burma (Myanmar), Ayutthaya and Sukhothai in Thailand all of which included shrines and temple, many of which no longer same their original function. Many of these long-abandoned sites have been designated by UNESCO as World Heritage Sites and are also celebrated attraction for the tourism industry (Collins 1997, p. 42).

While Buddhism is the most uniquely accepted religious in Thailand, There are over 95 percent of Thai citizen self-designate as Buddhists. Thailand is perhaps the only country in the world where the king is constitutionally stipulated to be a Buddhist and the upholder of the Faith. For many centuries Buddhism has been established in Thailand and has enriched the lives of the Thai people in all their aspects. Indeed, without Buddhism, Thailand would not be what it is today. (Kusalasaya 2005, p. 2).

The Buddhism of Southeast Asia, including Thailand, was disseminated from South Asia, and most Buddhists in Burma, Thailand, Sri Lanka, Laos, Cambodia, and in the hill tracts of Chittagong, Bangladesh following the Theravada (The Doctrine of

the Elders) Buddhism¹ (Salim 2008, p. 54). This is proved by various archaeological remains unearthed in the excavations at Nakon Pathom, such as the Dharía Chakra (Wheel of Law), the Buddha footprints and seats, and the inscriptions in the Pali language, man inscribed in stone. Such objects of Buddhistic veneration existed in India before the introduction of the Buddha image (Kusalasaya 2005, p. 4).

The Buddha image not only represents the Lord of Buddha, which reminds adherents of his struggles with temptation, as show in the varieties of postures in which the Buddha is represented, but also inspires Buddhist artists to create images of an art aesthetics value. The traditional Theravada Buddhist chronicles of Thailand, supplemented by archaeological evidence at Sukhothai² demonstrates that Thailand was under the influence of Hinduism and Buddhism at an early period (Swearer 2010, p. 49). Buddhism from the Sukhothai era demonstrates a continuing through to Ayutthaya, Thonburi and Rattanakosin eras respectively. The remaining monuments at Sukhothai and Ayutthaya are typically temple compounds or the temple-monasteries (*Wat*). Most of the temple and religious building included Buddha images but these were ruined due to many factors. However, the conservation and restoration methodology set out b UNESCO as an international organization focus primary on the physical characters of these places, not as what might be considered their more transcendent religious value. This dissertation aims to identify this separation of purpose and to appraise how religious value of historic images might more fully be consumed in the context of historic sites.

Rationale of the Study

This study focuses on the values of spiritual significance in the conservation and preservation of the cultural heritage sites specifically the Sukhothai and Ayutthaya historical parks. Both ancient cities are on the world heritage list, as established by UNESCO through World Heritage Convention of 1972. The Historic

¹ Buddhism varied forms reached Thailand at four different periods, namely:

1. Theraváda, Southern Buddhism, Hinayana or the Lesser Vehicle
2. Maháyána, Northern Buddhism or Greater Vehicle
3. Burma (Pagan) Buddhism
4. Ceylon (Lankavaísa) Buddhism

² Means “Dawn of Happiness”.

Town of Sukhothai and Associated Historic Towns and Historical city of Ayutthaya were joined by the World Heritage Committee to register as World Heritage in 1991 under the same criteria as

‘Criteria III: bear a unique or least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared’.

This study includes an overview of the process and methodologies of conservation, preservation and management of sites of architecture and artist circumstance. It also looks in values depth at ways that cultural and spiritual significance might be better understood and represented these ancient temple remains. Buddha images, the principal subject, of case, is themselves worshiped and respected by many visitors.

These works of art are not only tourists from around the world but also Thai tourists and by people local community, most of them adore to Buddhism (The National Committee for the Protection of World Cultural and Natural Heritage of Thailand 2000, p. 8). The protection and enhancement of physical features with associated religious value can be seen as an aspect of “intangible” value – a value that UNESCO itself is cause uncommonly to honor. This dissertation argues that it is high to recognize the value of Buddhist images in particular as part of both heritages and culture value.



Fig. 1 Map of Thailand presents the location of Sukhothai and Ayutthaya was adapted from original image. (The National Committee for the Protection of World Cultural and Natural Heritage of Thailand 2000, p.8)

This dissertation will focus on two important heritage sites in Thailand: Sukhothai and Ayutthaya. Both are significant to Thai history, as both their cultural and political significance. Both too, due to native of Thai politics in the years between around 1290 and 1767. They were many buildings commenced to both Thai rules and Buddhist religious. Religion was in fact a key aspect of the harmony of leadership during the Sukhothai and Ayutthaya periods; inherited, as such the king today, enshrined themselves as both leader Buddha's practices and devoted followers of the Buddha's precepts. Images of the Buddha higher with ritual performances, the honoring of significant religious holidays and daily, in the town of worship promise and offering (tambon), use all central to the state and to the resilient of some cities (as cities of ancient Thai settlements)

Sukhothai is generally called as the city of origin of the Thai language and as the first capital city of Thailand. It is located in the lower edge of the northern region part of Thailand in the valley of the Yom River, approximately 430 kilometers north from Bangkok. The heart of Sukhothai is called “Meungkao” (ancient city) sub-district. It is twelve kilometers from Sukhothai current city location. The area consists of seventy square meters, enrollment to ancient site and over 200 monuments. The site also includes the surrounding the city walls. For Thai people and officially narrative of the unclear stories, Sukhothai represents a high level of intellectual, cultural and political evolution. Sukhothai art and architecture is considered by many scholars to be the finest of Thai Buddhist art (Fine Arts Department 2005). Among the important Buddha images are a large sitting posture stucco Buddha image called Phra Acana located at Wat Si Chum and several standing stucco Buddha images located at Wat Mahathat in the central of the Sukhothai historical park. Over are at Wat Saphan Hin, notable of the Araṅṅavāsā school³.

Sukhothai historical town was the first kingdom in the history of Thailand (13th – 14th centuries). Founded according to Thai leader by King Pho Khun Si Indraditya a ruler and founder of the Sukhothai Dynasty, it was known as the Kingdom of Sukhothai and became one of the most important states in Southeast Asia for nearly two hundred year period (Fine Arts Department 2007). This kingdom gave evidence to the beginnings of Thai architecture, particularly Buddhist shrines and monuments. These constructions included numerous Buddha images, which are a remarkable testament to Thai artistic traditions and which comprise of all tradition of artistic perhaps know as to and one of the most beautiful art as known as the ‘*Sukhothai style*’ (Fine Arts Department 2005).

³ One who dwells in the forest; forest-dwelling monk; the forest order. (Arayankul 2002, p. 358)



Fig. 2 Perspective picture of Sukhothai ancient town.

Source: http://www.archae.go.th/website/htm/pdf/D1_S-3.pdf, accessed in January 12th, 2009

Sukhothai demonstrated profound respect for Buddhism and its rulers constructed numerous Buddha images throughout the town. The Ramkhamhaeng inscription, incised on a block of gray schist, was further evidence of Sukhothai's Buddhist enshrined. Famously discovered at Sukhothai in the inscription stone by the King Rama IV, Phrabat Somdet Phra Poramintharamaha Mongkut (1850 – 1868) of the Chakri Dynasty while he was ordinate as a Buddhist monk, this was inspires him combine fealty to Buddhist practice with the statement of an early Thai state. It was written in a unique Thai script, which King Pho Khun Ram Khamhaeng the Great (1239-1317) of Phra Ruang Dynasty claims he devised. The inscription has some sentences been inscribed the information about Buddha images in the Sukhothai area translated in English language as shown (Chulalongkorn University 1984) which can

be imply that the Kingdom of Sukhothai also was very faith with strongly respect and dedicated to the Buddhism:

Face 2nd: *“Inside this city of Sukhothai, there are Vihàras⁴, there are golden statues of the Buddha and Phra Attharos⁵ statues; there are big statues of the Buddha and medium-sized ones, there are senior monks – nissayamuttakas, theras and mahatheras”.*

Face 3rd: *“North of this city of Sukhothai there is a bazaar, there is Phra Acana⁶, there are prasadas, and there are groves of coconut and jackfruit, upland and lowland farms, homesteads, large and small villages”.*



Fig. 3 The first stone inscription Pho Khun Ram Khamhaeng the Great of Sukhothai.

Source: <http://www.info.ru.ac.th/province/Sukhotai/Luksila.jpg>, accessed in January 14th, 2009.

⁴ Can refer to a monastery of Sanctuary where Buddha image are placed.

⁵ A statue supposed to be eighteen cubit in height.

⁶ Name of a statue of the Buddha; the word Acana may have come from a Pali word that means to be worshiped.

Ayutthaya⁷ Empire became the second capital of Thailand (15th – 18th centuries) as a ruler of King Somdet Phra Chao Uthong or Somdet Phra Ramathibodi I (1350 – 1369) of the 1st U thong Dynasty after Kingdom of Sukhothai. Although during the early period of establishment of Ayutthaya Empire the Kingdom of Sukhothai has been existing power. However, it was annexed later because Ayutthaya Empire had expanded stronger army which made the Ayutthaya kingdom more powerful. Ayutthaya became one of the most important trade centers in Southeast Asia during 17th – 18th centuries (Fine Arts Department 2005).

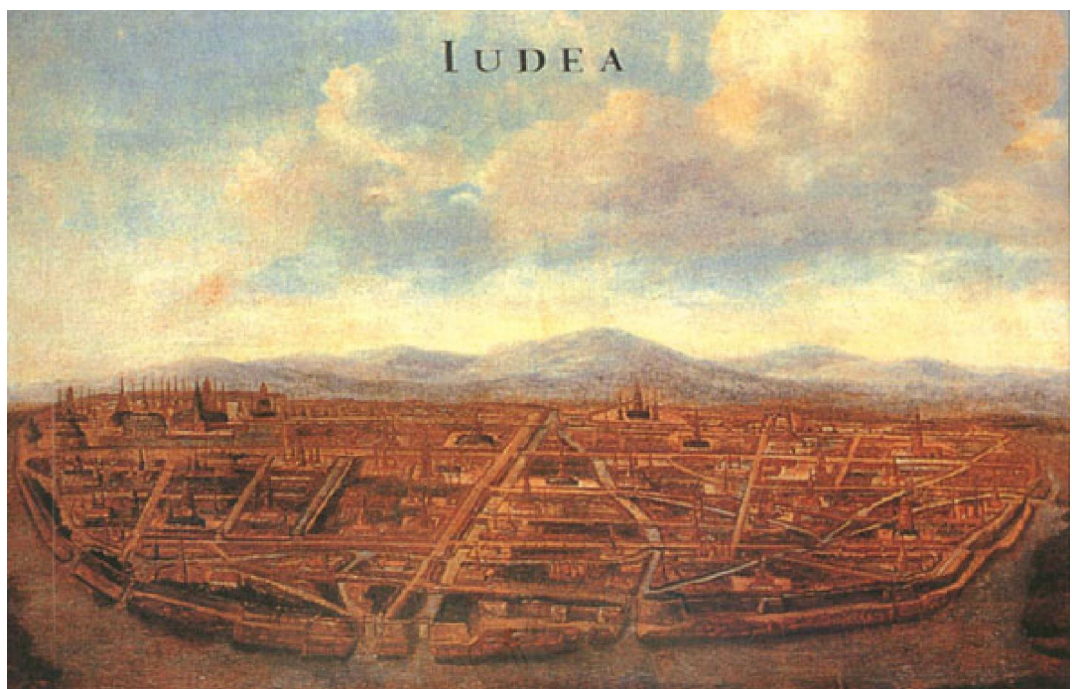


Fig. 4 Picture of Ayutthaya Historic city.

Source: <http://www.archae.go.th/Historical/Ayuthaya/html/map2-th.html>, accessed in January 12th, 2009.

The wealth Ayutthaya's economy was the main factor that enhanced the empire in creating and maintaining its art and culture as masterpiece in history of Thailand (The National Committee for Protection of World Cultural and National Heritages of Thailand 2000, p. 32). Ayutthaya had remained the royal kingdom of Thailand for 417 years before it was destroyed by Burmese troupe in the 18th century.

⁷ Also written in a different type as 'Ayudhya' or 'Ayuthia' that means never lose the war in any Battlefield.

Although Thailand could declare freedom itself in a short period later but the city of Ayutthaya was seriously damaged and collapsed from the war. This was migrated to Thonburi Kingdom under the leader as King Somdet Phra Chao Taksin the Great or Phra Chao Krung Thonburi (1767 - 1782). His majesty contributed the new Kingdom of Thonburi on the west side of Chaopraya River for 15 years. After that, the next King which his name is Phrabat Somdet Phra Buddha Yodfa Chulaloke the Great or King Rama I (1782 – 1809) established Kingdom Rattanakosin on the opposite side of Chaopraya river respectively and still remains as the royal kingdom of Thailand through the present over 200 years. (The National Committee for the Protection of World Cultural and Natural Heritage of Thailand 2000, p. 12)

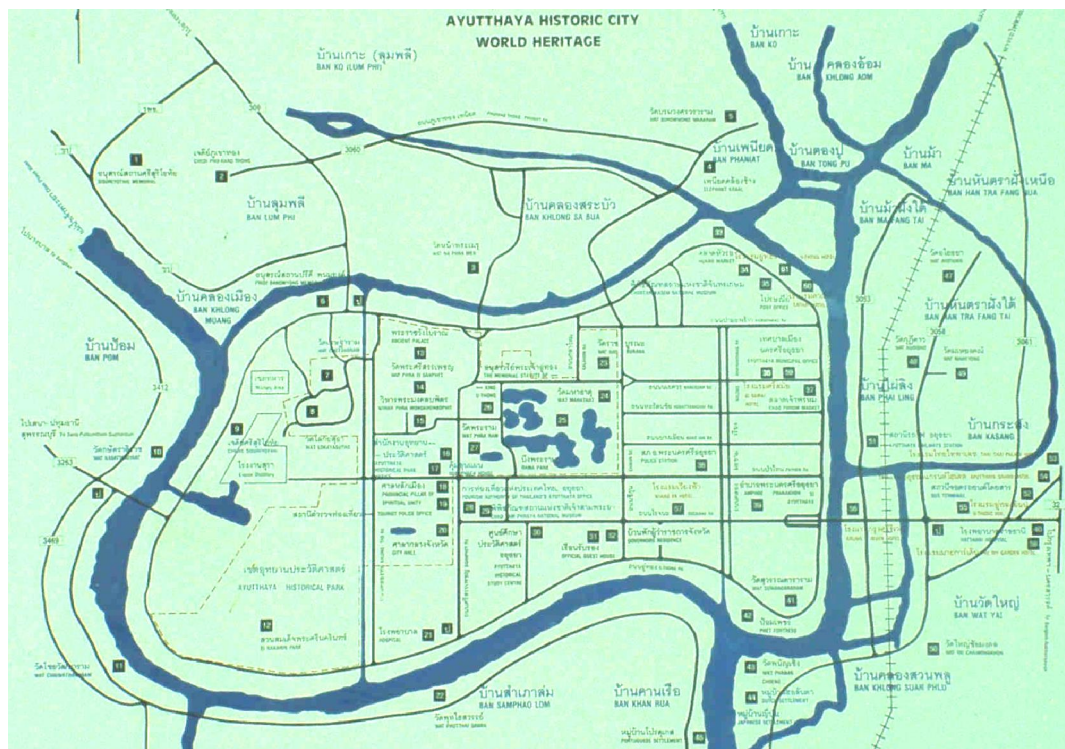


Fig. 5 Map of Ayutthaya Historic City.

Source: <http://static.panoramio.com/photos/original/1397787.jpg>, accessed in January 12th, 2009.

Kingdom of Ayutthaya is also called Phra Nakhon Si Ayutthaya which is located in the central part of Thailand in the bank on the Chao Phraya River or approximately 65 kilometers north from Bangkok. The archaeologists separated the

art of Ayutthaya as four major period of arts, at the beginning period (1350 – 1448) reflected the native style with extremely influences from Sukhothai art. The second period (1448 – 1628) was the period of warfare reflected of mixture diverse cultures. The third period (1638 – 1733) began the relationship with Westerners. The fourth period (1733 – 1767) was called decline period of the Kingdom including art (Fine Arts Department 2005). Some major Buddha images, one of the most well known Buddha images in Ayutthaya, is located in a Vihàra or Thai traditional style architecture chapel in the central heart of the city next to the ancient palace. The Buddha image has been called Phra Mongkhon Bophit, a huge bronze subduing Mara Buddha statue which Associated Professor Srisak Valipodom wrote in a book named ‘*Our Krung Si Ayutthaya*’ giving that:

“The civilization of Ayutthaya, in the reign of King Chi Rajatiraja, was reflected by construction a huge bronze Buddha image that may be the largest bronze Buddha statue in Thailand which is Phra Mongkhon Bophit. The art of this Buddha image was mixed between U-Thong and Sukhothai and has continuously restored since constructed”.

Another Buddha image is called Pra Buddha Tri Ratana Nayok (Luang Phor Tho) built in 1325 as a large subduing Mara stucco Buddha statue as a city landmark .In the past, this Buddha image was constructed in a wide open space. After that the construction of the Vihàras was built later on as seen in the present day. This Buddha image is located in the Wat Phananchoenng where located in south west beyond the city wall across the Pasak River of Ayutthaya. This Buddha image existed before the establishing Kingdom of Ayutthaya (Tourism Authority of Thailand 2006, p. 20)

The researcher focused on the cultural heritage which Thailand has two ancient cities or towns inscription in a World Heritage Lists since 1991 where were a lot of Buddhist temples which mostly constructed or supported by the Royal families and nobility in Sukhothai province and Ayutthaya province. However, the adoption of the management policies for preservation and restoration methodology from the Fine Arts Department to preserve on those cultural heritage sites had been established and followed by archaeologist, but the plans which adopted from the western knowledge,

theories, and methodologies sometimes did not fit perfectly in the context of eastern or Asia especially Thailand especially the preservation and restoration of the Buddha image. The Studying the positive and negative impacts of each the activities that allow doing in the cultural heritage sites by concluding the interview the stakeholders and some visitors as representatives in the site for their feel to about the suitable and appropriate to the cultural heritage site. The visitors' behavior about the behavior in the cultural heritage in the positive and negative points in the world heritage sites was observed especially in the religious places. For developing the suitable rules and regulations can remain the heritage significance especially cultural and spiritual value.

Objective of the Study

The objective of this dissertation study presenting the overall structure with an introduction in the chapters as following:

1. Review the components and postures of Buddha images in Thailand and review the history of sculpturing Buddha images in Thailand as eight major styles in a period of time from Dvāravatī art style, Srivijaya Style, Lopburi or Khmer style, Chiang Saen or Lanna style, Sukhothai style, U thong style, Ayutthaya style and Rattanakosin style.
2. Review the causes and reasons of deterioration, ruin, damage and loss of the Buddha images in the religious places in Sukhothai and Ayutthaya historical towns as world heritage sites.
3. Review the conceptual of preservation and restoration methodology, tangible and intangible values, one of the most significant Buddha images in Sukhothai and Ayutthaya historical parks as world heritage sites.
4. Study the preservation and restoration for the historical heritage and cultural heritage related to the Buddha images comparing to the local methodology and Buddhists believe of restoration Buddha images and the spiritual values of the Buddha image after preservation and restoration from community and tourists. The participation of the stakeholder such as communities surrounding the cultural heritage monuments and sites for the preservation and restoration in the area.

5. Conclusions and suggestions for the understanding of the concept of the preservation and restoration techniques being use by including to preserve the spiritual value to the Buddha image in Sukhothai and Ayutthaya historical park as world heritage as a model and also can be applied to other Buddha image religious place in Thailand.

Scope of the Study

The concept and methodology of preservation and restoration all the Buddha images emphasized large statues either constructed outdoor or in Vihàras and Uposathas⁸ with tangible cultural heritage significant from the point of view of western archeologists and arts historians may be right way when has done to ordinary statues or other situation. The remaining of Buddha images and statues sometimes without heads, hands, legs or bodies or some human or god statues which remain incompletely part of bodies which look authenticity, beautiful art appreciation and landscape, but for the Buddhists whenever see broken Buddha image or part of Buddha image in any place. Most of them will not appreciate with the authenticity or significant of the value because they believed that in the Buddha image has spirit inside and feel that Buddha image have been tortured or injured different from archeologists' opinion. Even in the 'Jakata'⁹ specifies that repairing the Buddha image in a perfect shape bring the victory over the enemy and bring wealthy with never endless. Therefore, in other place that found Buddha image people try to fund the restoration the Buddha image.

Research Methodology

This research is based on basic research as fundamental research mention by Magnus Gulbrandsen in *The Role of Basic Research in Innovation* (Ostreng 2008, p. 55). Though the content analysis by searching the information as a secondary sources related to the textbooks, e-books, related researches, dissertation, journals, newspapers, brochures, electronic document, government and non government documents and archives including maps, pictures, photos, video clips, voice clip.

⁸ The ordinary hall; consecrated assembly hall.

⁹ Stories of the former incarnations or related stories during his live of Lord Buddha.

They are mostly located in the libraries such as major university libraries in Bangkok, Thailand National Library including National Archives of Thailand. Moreover the digital libraries and the powerful search engine from the internet, Bangkok National Museums and National Museum in related provinces, private and public museums and interpretation centers in Bangkok and other provinces related to the topic of the dissertation has been visited. Those are the sources for writing summary and conclusion for many hours from reading, summarizing, analyzing, synthesizing, note taking, drafting the theories and concepts. Additional searching information of the processes especially the Buddha images art and craft in Sukhothai and Ayutthaya historical park as a world heritage sites.

The spiritual value is emphasized as one of the most important concerning in this study which has been dealing with the methodology of conservation, restoration and preservation techniques. Those have been used and concerned to related rules and regulations of the world heritage conservation criteria. The possibility plan has been drafted to improve and develop Buddha image in the world cultural heritage. The visiting sites in both Sukhothai and Ayutthaya have been done several times to get information. The observation of activities and behaviors of tourists and visitors in the historical places to understand the setting which were located of Buddha statues has been done for getting the data of reflection of tourists and visitors as a primary source for the dissertation. Some of the valuable information from interviewed key persons as primary sources. Those people related to the construction Buddha images, regulators of the historical heritages, and conservators of Buddha images. Moreover the representative numbers of visitors were interviewed to get the information and feedback of the conservation Buddha image methodology and the idea of spiritual value of Buddha image after restoration.

Chapter 2

Review Buddha Images and Art History

Concept of construction of Buddha image

The reason of making or constructing a Buddha image is to imitate or model of the Lord Buddha, therefore Buddhists have made the Buddha images repeatedly for making merit. The making of Buddha images is not strongly concern to period of time in the history but depends on Buddhists impression to imitate from faithful Buddha image. The first Buddhist statues in history were called '*Cetiya*' which means a Sepulchral Monument, Pagoda, Shrine, Dagoba, Bell-Shaped Stupa (with a slender spire), Tapering-Spired Stupa, Phrag, Cetiya. There are described '*Cetiya*' in four types following: '*Dhammacetiya*⁹', '*Dhātucetiya*¹⁰', '*Paribhogacetiya*¹¹', and '*Uddesikacetiya*¹²'. Buddha images were also describe as '*Uddesikacetiya*' therefore the imitate Buddha images cannot be categorized by the era it was constructed nor the style it imitates.

Western art normally describes and separates styles of art by period of time in history to the period of art styles. On the other hand, the objective of sculpturing the Buddha images is to keep as much of original characters (Krairerg 2008, p. 10) as quoted that '*The Buddha image is not himself brought into being our senses, but Buddha image presents all things to us in such images*' (Trismegistus, Scott and Hermetica cited in Coomaraswamy 2006, p. 3) because Buddha image, totally different from 'art' in a museum, similar to pilgrims come from some great distant to

⁹ A shrine in which sacred texts are housed; a shrine of the Doctrine; doctrinal monument.

¹⁰ A shrine over the Buddha's relic or dagoba.

¹¹ A tree, shrine, dwelling, bed, etc. used by the Buddha and consequently remindful of him and sacred or the monument of the Buddha's utility, shrine by use (or by association).

¹² Shrine by dedication; memorial object of worship referring to the Buddha, i.e. a Buddha image.

see Lord Buddha and communication from him (Commaraswamy 2006, p. 3). The sculpturing of Buddha image in Thailand from more than 1,300 years ago that casters or sculptors have constructed Buddha images with their faithful and sculpture more and more in several art period of time, until during the reign of King Rama III, it was decided that 40 different postures of the Buddha could be recognized (Smith, Nieminen and Win 2005, p. 47). In Thailand, the number of Buddha images are more than Thai population as mention from the book “Thai arts of the Buddha” written by Boribal, Luang, and Griswold in 1969. The Buddha images in Thailand should more than other countries in the world from tiny amulet¹³ or talisman and Phra Kring¹⁴ to huge statue from the faith in Lord Buddha and from many materials such as stone, mortar, clay, terracotta and bronze. The traditional construction of Buddha images in Thailand during the early age were made from bronze, a compound of copper and tin, or other metals such as silver or gold.

Sculpture definition and process

The definition of a sculpture is a three-dimensional artwork imitates natural and creativity of the artist created by shaping or combination hard materials such as marble, wood, glass, metal, etc., clay, softer materials, and/or found object which expanding all over the world in every civilization from historical art to a present time. Types of sculptures can be categorized in two major types; a) free-standing sculpture in the round relief which is surrounded on all sides except by the base, viewable from all angles which are the regularly found for the sculpture of Buddha image in Thailand and b) bass-relief which is built up from a base or back which was famous in the Dvaravati style and most of amulets in Thailand.

¹³ Possibly the oldest amulets which origin are traceable are the amulets from the Haripunchai (Chiang Saen or Lanna style) period (today the area of Lampun province, around 1,000 years ago) when there was a strong Mon-Burmese influence. First amulets where made and blessed from monks and given to warriors and fighters to enhance and strengthen the ability to fight as a spiritual protect against to be beaten, insured or killed in a fight (Thai Buddha Amulet Empire 2008)

¹⁴ Is an image representing a Mahayana Dhayani-Buddha named Akshobhya, commonly made and revered by Buddhists in China (Phinsri 2008, p. 32)

The traditional Thai crafts were called 'Chang Sip Mu' which means Thai crafts were separated to 10 divisions based on their knowledge and expertise as follows: (1) Drawing, (2) Sculpting (3) Carving (4) Engraving (5) Molding or Casting (6) Turning (7) Modeling (8) Lacquering (9) Metal Beating and (10) Plastering (Airport Authority of Thailand 1997, p. 145). All the traditional Thai crafts can be applied to make the Buddha image and many of the process of making Buddha image in Thailand also use more than one techniques mixing together and combine traditional Thai crafts to make a beautiful and respectful Buddha image.

The process of making Buddha image has several major techniques following drawing, sculpturing and carving. The process of making the Buddha image begins with the artist drawing the draft and extracting the access from a solid material to reach the desirable designed on wood or marble (modeling?). Another process of manipulating on a soft material, the artists would create the model from soft material such as plaster, beeswax or paper mache. The molding or casting techniques are also used as the next process for making Buddha image and finishing process with turning and lacquering crafts of the Buddha image to enshrining and make them look highly valuable (Fine Arts Department 2004, p. 321).

Anatomical of Buddha image

Before knowing the process of sculpturing or casting the Buddha image, the sculptor or caster needs to clearly understand and learn shape and form of the appropriate Buddha image and the anatomical of Buddha image which influences from the Sinhalese Pali commentaries, Thai sculptors created a supernatural anatomy as extraordinary human (Coomaraswamy 2006, p. 8 and Samapano 2003), which included elongated arms, projecting heels, and flat foot soles (with the same length of toes) as well as other characteristics. The projection is gilded to suggest the radiant, golden skin of the Buddha. According to the Pali inscriptions, the Buddha image should not show muscle, veins or bone. In Siamese style of art, the Buddha image's sex has never been indicated, no matter how subtly, beneath the drapery because the Buddha has evolved past sexual identification, the Siamese sculptors must therefore endeavor to represent sexual idealized being (Stratton 2004, p. 47). It is worth to

remember that the Buddha image is considered to be a hypostasis, endowed with supernatural powers and therefore the Buddha image has to be properly rendered. The Buddha image is traditionally regarded to have the thirty-two features of a great man and eighty secondary characters of the Buddha.

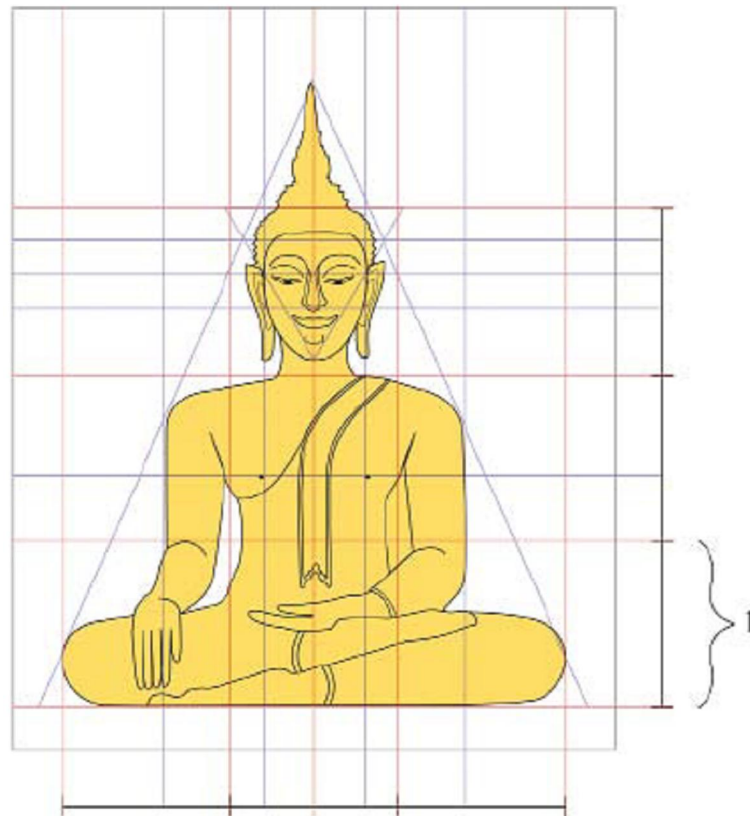


Fig. 6 The example of diagram of shape and form to sculpture the Buddha image from the sculpture Buddha image book written in the reign of King Rama III of Rattanakosin Dynasty (Krairerg 2008, p. 3)

The Process of Molding and Casting Buddha Image

The regular of molders and casters craft or artists process of mold and cast Buddha image is three major processes as known as 'Lost-Wax Technique'. The first step, the caster sculptures a clay mould. The technique of making Buddha image in ancient times, they used good quality clay, yellow color to build a clay mould. The sculptor pound the clay mixed with sifted sand and water in the appropriate ratio. Then, the caster sculptures a beeswax mould by using two different techniques called

‘Piece mould’ and Destroy mould’. The final process is called ‘pouring gold’ in Thai, the caster melts metal such as brass, copper, bronze or gold and casts it into the mould. After the metal has cooled down, the caster knocks the outer layers off to reveal the statue which looks similar to the wax replica. In the decoration and shining process, the lacquerer uses craft lacquer gliding with gold leaf in Thai called ‘Long Rak Pit Thong’ as coating and polishing of the Buddha image. (Achsacom and Charoensuk 2008)

The casting process of a Buddha image does not only consist of the casting and sculpturing process. To construct a Buddha image imitated from Lord Buddha, a ritual to mention his charismatic, miracle and supernatural power is also essential. The auspicious ceremony during casting a Buddha image from the beginning of constructing the Buddha image, the material is selected to be used for sculpturing the ‘Buddha Bhisek’¹⁵ ceremony. In the ceremony, the invited theras (senior monks) and monks meditate and chant to chant holy stanzas and sprinkle lustral (holy) water to the materials for constructing the Buddha image meanwhile the invited Brahmin¹⁶ priests also inform the ceremony by performing the preliminary rite of the metal pouring ceremony. The sculptors also perform a rite of worshipping the teachers. During melting of the metal into liquid and pouring into the mould of the Buddha image at the auspicious time, theras and monks meditate and chant all day and night during the process of sculpturing or casting and divinity ritual sacrifice. After forging and sculpting the Buddha image, the ceremony of Buddha Bhisek is held again in the Uposatha, called opening Buddha image’s eyes ceremony and ending of the ceremony with celebrating Buddha image ceremony.

The north of Thailand will conduct an additional ceremony for celebrating by ordinating a Buddha image called “Buddha image Ordination”. Therefore, there are many ceremonies contributed during constructing a Buddha image, most unlikely construct the other sculptures to do by the sculptors themselves. Their belief of Buddhism to the Buddha images not only represent Lord Buddha craftsmanship but also consists of significant spiritual value with charismatic holiness at the same time.

¹⁵ Buddhist consecration ceremony.

¹⁶ A Hindu priestly caste; one of the four varnas or social groups based on occupation in ancient Hindu society.

Thai people believe that the construction of a Buddha image is very large merit. If the ordinary people would like to construct the Buddha image especially the principal Buddha image of the temple, they cannot do that alone but they have to do it as a group or invite other Buddhists to make Buddha image together. Another choice of making merit for making the Buddha image by writing the name of person who would like to make merit on the horoscope card made from gold, silver or bronze. The molders will melt with the other metals during forging the Buddha image.

First Buddha image of the world

As the legend of the first Buddha image from the legend of King Udayana, which appeared in the Chinese version of the Anguttara Nikaya¹⁷, supports this view. This text of the Anguttara Nikaya, translated into Chinese language sometime during 1st – 3rd A.D. from a Korean translation of the scripture, obviously a work of an earlier date, contends that the Lord Buddha, after he was enlightened, wished to sermonize his mother Maya who, passed away, was in the Trayatrimsa heaven (Realm of the thirty-three gods).

The Lord Buddha hence left this world for three months and went there. To King Udayana his absence was unbearable. He thus commissioned to cast the Lord Buddha's image. After three months, Lord Buddha descended back from Trayatrimsa. According to the legend, King Udayana, on his return, showed the image to Lord Buddha who thereupon preached the great virtue of making the Buddha image. This story of king Udayana commissioning the Buddha image is said to have been recorded also by Fa-hsien and later by Hsuan Tsang in their travel accounts. One of the most sacred Buddha images in Japan is revered as being the replica of the above-mentioned king Udayana's Buddha image. This image was acclaimedly brought from China to Japan in 986 by a Japanese Buddhist monk Chonen (Cain 2004, p.2).

The first Buddha image was sculptured in red sandalwood. Adhering to tradition, the Japanese replica is worshipped by offering pouches of sandalwood powder. This legend of the origin of the Buddha image is yet prevalent and largely believed in Tibet, China and Japan (Jain and Daljeet, 2008)

¹⁷ Is a Buddhist scripture, the fourth of the five collections.

On the other hand, research study of the archeologist and arts historian scholars found that the evidence for the first Buddha image was sculptured in a bass-relief (figure 6) in 1st century under the supported of Kuṣāṇa dynasty in India and the King who was one of the most important faithful and supported name was King Kanishka which expanded the traditional of Buddha image construction



Fig. 7 Gold coin with image of Buddha, Kuṣāṇa dynasty. Kanishka found at Ahin Posh, Afghanistan.

Source: <http://www.bpmurphy.com/COTW/week2.htm>, accessed in August 4th, 2008

Characteristics and postures of the Buddha image

Since the reign of King Rama III, identification of the posture of Buddha image to 40 postures were proposed (Fine Arts Department 2005, p.10). However, the four major postures which are the main postures of the Buddha image which consists of sitting posture, standing posture, walking posture or reclining postures. The attire of the Buddha image is the monastic robe, draped over both shoulders, or with the right shoulder bare.

Sitting posture of Buddha image is one of the most common postures of the Buddha images in Thailand. There is the 'half-lotus' posture or 'hero' posture or 'virasana pose' (paryankasana). This is a sitting posture of the Buddha image, his right leg folding over the left leg. The soles of both feet are upward. Actually the sitting in this posture is for making meditation.

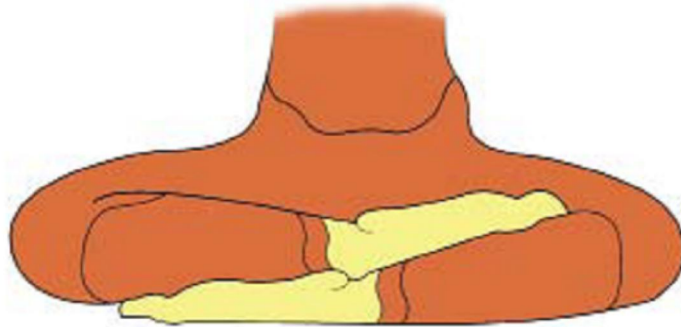


Fig. 8 Image of Visarana pose or half lotus posture. (Krairerg 2008, p. 28)

The posture of Buddha image when the Buddha sits in also called European style or western fashion which was first called by George Coedès. The legs simply hang down (similar sitting on a chair). Another named for this posture is called 'pralambapadasana pose' which is also regularly seen,



Fig. 9 Image of sitting in European style or Western fashion. (Krairerg 2008, p. 28)

The posture of Buddha image displays 'full-lotus' posture or also called the diamond posture. Other name has been used are 'adamantine pose' or 'vajrasana pose'. Each feet of the Buddha image rests on the opposite thigh, right leg crosses over the left leg and notice that the soles of both feet visible. This posture of Buddha image is somewhat rare in most parts of Thailand. Buddha image seated in this way is

more likely to be observed in the north part of Thailand or Lanna style, and it is commonly found in India.

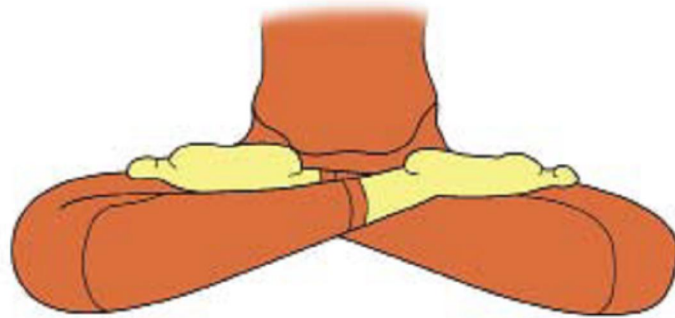


Fig. 10 Image of Vajrasana pose or full lotus posture. (Krairerg 2008, p. 28)

Standing posture of Buddha image acts of assuming or maintaining an erect upright position or does not moving or flowing. Another posture of Buddha image which are famous during Dvaraviti style is standing with weight shift or contrapposto¹⁸ posture.



Fig. 11 Image of Contrapposto posture. (Krairerg 2008, p. 28)

¹⁸ A posture or pose, originated by the ancient Greeks, in which the standing human figure is posed such that the weight rests on one leg (called the engaged leg), freeing the other leg, which is bent at the knee. With the weight shift, the hips, shoulders, and head tilt, suggest relaxation with the subtle movement that denotes life. (MacKay 2010)



Fig. 12 Image of regular standing Buddha image. (Krairerg 2008, p. 28)

Walking posture of Buddha image presents him moving forward and one foot step forward another foot firmly with the gesture of imparting fearlessness. The walking Buddha posture is an innovation in presenting the Buddha, originating construction during the Sukhothai era.

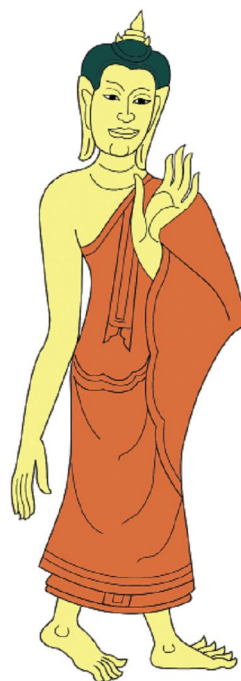


Fig. 13 Image of walking Buddha image posture. (Krairerg 2008, p. 28)

Reclining posture of Buddha image is an important posture, because the position of the hand can be interpreted differently. If the right hand holds and supports his head, the meaning of Buddha image denotes that the Lord Buddha is resting. When the right arm of the Buddha image lay down next to the body, the Buddha image denotes that the Lord Buddha has entered into Nirvana¹⁹. The Buddha image where the left foot is positioned right on top of the right foot and the robe of the Buddha image is exactly be when the Buddha image is in a stand up posture.

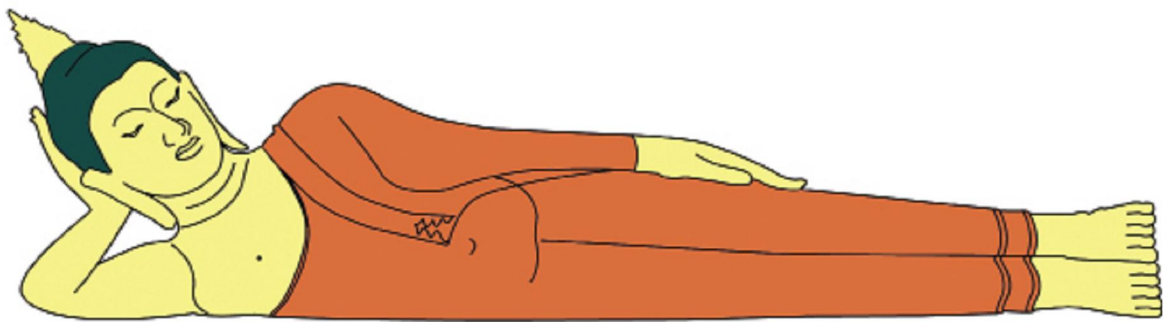


Fig. 14 Image of reclining Buddha image posture. (Krairerg 2008, p. 28)

Not only the postures describe Buddha images, but also the hand gestures of a Buddha image (Mudra²⁰) has specific meanings which can refer to event in his life or situation of the Lord Buddha or denote a special characteristic or Buddhist iconography. There are six main hand gestures of the Buddha in Thailand and in Asia. (Fine Arts Department 2005, p. 7)

Dhyana Mudra is Buddha image signifying meditation: Buddha puts both hands in the lap with palms upward. His right hand lies on top of his left hand. The Buddha images are mostly seen seated in the half-lotus posture. Some of Buddha images display is called adamantine (diamond, or full-lotus) posture with tightly crossed legs, so that the soles of both feet are visible. This gesture you can see the decoration of as the Buddha is sheltered by Naga which is one of the most popular Buddha images constructed in Thailand.

¹⁹ The lord Buddha passed away.

²⁰ Sanskrit means expression by hand and in India also means interpretation of dancing by hands.



Fig. 15 Buddha image in Dhyana Mudra. (Fine Arts Department 2005, p. 8)

Bhumisparsa Mudra, Subduing Mara or Calling the Earth to Witness: Buddha presents the left hand lie in the lap, palm upward. The right hand bends over the right knee, with fingers slightly touching the ground. This gesture relates to one of the most important epic when Lord Buddha was in meditation, Siddhartha was subjected to many temptations many posed by the evil Mara, who had bombarded himself with his demons, monsters, violent storms and his three seductive daughters. The Buddha remained steadfast. In order to testify to Mara of his meritorious past, he pointed his right hand to the earth for calling the Earth Goddess. Thorani, the Earth Goddess rose from the ground and wringed the water from her long black hair, by this action raising a torrential was flood and drowned Mara and his army of demons. This gesture symbolizes enlightenment, as well as steadfastness (imperturbability). It is easy to find this common Buddha image gesture in Thai temples.

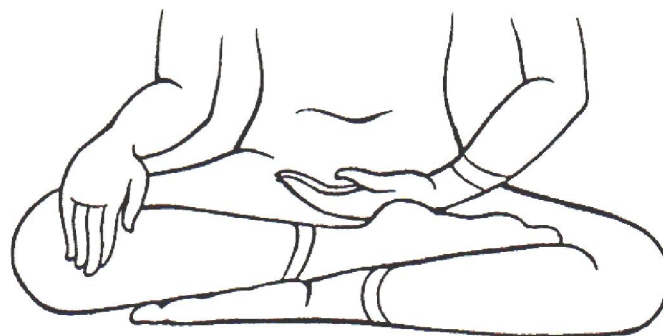


Fig. 16 Buddha image in Bhumisparsa Mudra. (Fine Arts Department 2005, p. 8)

Abhaya Mudra, Imparting Fearlessness or Reassurance gesture: Buddha raises his hand and his palm facing outwards, fingers extended pointing upward. His wrist bends at a right angle with the forearm. This gesture is sometimes made with both hands. Sometimes the Abhaya Mudra is made with one hand, while another Mudra such as Varuda Mudra is made with the other hand. The Buddha image in this gesture may be either standing, sitting or walking postures. The gesture in this position is called differently such as *'Forbidding the Relatives from Fighting'*, *'Imparting Fearlessness'* and *'Calming the Ocean'*,

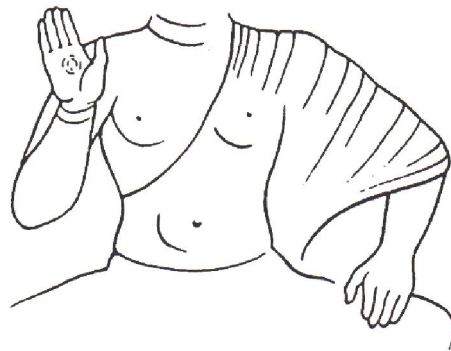


Fig. 17 Buddha image in Abhaya Mudra. (Fine Arts Department 2005, p. 8)

Vitarka Mudra, Teaching, Giving Instruction or Reason gesture: Buddha presents his hand held closer to his chest than in the Abhaya Mudra. His palm is facing outward. A circle is made with the index finger and thumb. The other three fingers point upward. Initially made with the right hand, later on the gesture is often portrayed with both hands. This is a common gesture found in Dvaravati Buddha images. Sometimes this Buddha image may also be substituted for the Dharmachakra Mudra. The Vitarka Mudra can be made either in sitting or standing position.



Fig. 18 Buddha image in Vitarka Mudra. (Fine Arts Department 2005, p. 8)

Varada Mudra, Blessing or Symbolizing Charity posture: Buddha put one of his hand lowered with the palm facing outward is the gesture of bestowing blessings of giving charity. His hand is extended downward and palm out. Mostly this hand posture would be seen with standing Buddha images, but sometimes this Buddha image posture also can be seen with the sitting position. This Buddha image is mostly found in Sri Lanka.

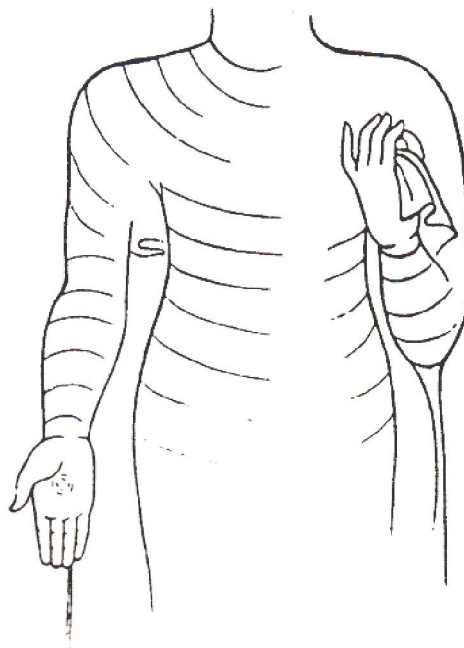


Fig. 19 Buddha image in Varada Mudra. (Fine Arts Department 2005, p. 8)

Historical period and art style of Buddha image in Thailand

The Culture of Thailand has two important sources of origin – indigenous and foreign. The indigenous source comes directly from the ideas and inspiration of the people while the foreign sources came through its cultural contact with other great civilization from both India and China. The customs, traditions, ceremonies and festivals in Thailand are derived from those sources. In the field of art, especially deals with Buddhism religion including cultural and artistic related to Indian art (Charoeonla 1981, p. 13)

Thai people in the past had never set price on Buddha images, the price setting of the Buddha image was influenced by the Westerners who set prices on all the antiques by the period of time for trading in the markets. Therefore, the study of the ages and styles of Buddha image in Thailand then occurred. The archeologists tried to separate art styles to Buddha images as written a book called “Sculpture in Siam” by Alfred Salmony in 1925. After that, the expanding of knowledge of Buddha image started from Prince Dulong Rachanuparp wrote “Legend of Buddha Pagoda in Siam” in 1926 and George Coedès wrote “Antiques in Museum for Bangkok” in 1928 which both of them are the most important references for studying the Thai art history and archeology. It was the starting point of separation of the Buddha image styles in different period in the history as follows: Dvaravati style, Srivijaya Style, Lopburi or Khmer style, Chiang Saen or Lanna style, Sukhothai style, Ayutthaya Style and Rattanakosin style.

Dvaravati style

Dvaravati refers to a kingdom situated in the Chao Phraya river basin during the 7th - 11th centuries. Though the exact origin of the Mon Kingdom of Dvaravati is unknown, its Buddhist character is well attested the oldest known Mon-Buddhist inscription, near the central province of Nakhon Pathom, is dated to the sixth century C.E. before those who would become the Thai people came to Thailand (Mishra 2010, p. 1) . Presently Dvaravati art, is included many Buddha images and sculptures. They can be found at National Museum in many provinces of Central Thailand, such as Phra Pathom Cetiya National Museum in Nakhon Pathom Province, U-Thong

National Museum in Suphan Buri province and Prachinburi National Museum in Prachinburi Province.

The Dvaravati style derived from Indian archetypes such as Amaravati and Gupta style, and was integrated with local art. Dvaravati art and Buddha images went roughly through three stages: In the initial stage, there was heavy Indian influence. Buddha image would look very similar to Indian images of the Gupta period, especially to those from Sarnath and the cave-temple of Ajanta²¹ (Charoelonla 1981, p. 43), later on the art became more independent locally, and still later influence of Khmer art is visible. Accordingly, initially the faces depicted would resemble Indian sculptures. Later on, influenced by local styles, the aureole would appear in a lotus bud shape or orb over the cranial protuberance. Large hair curls are visible, and the eyebrows would resemble a crow's wings curve, like a flying bird. Protruding eyes, with flat nose and thick lips are the distinctive features. Standing Buddha images performing the Vitarka (Preaching) posture, with robes hanging to mid shin level. In the sitting Buddha images posture, a short mantle is placed over the left shoulder. When Khmer influence became visible later on, the Buddha image became more square face and cleft chin. The Wheel of Law (Dharmachakra Wheel) is very typical in Dvaravati art. The wheel is likely positioned on large pillars at places of worship. The Wheel of Law symbolizes the Buddha's turning of the Wheel of Truth or Law. The Wheel of Law has eight spokes, symbolizing the eight-fold Noble Path. The Lord Buddha is known as the Wheel-Turner: the one who sets the cycle of teachings in motion and in consequence changes the course of destiny. In the early age of Buddhism, no sculptures of the Buddha images were made. The representative of Buddhist symbols were seen in various symbols such as the Wheel of Law, the Bodhi Tree²² or "tree of wisdom", the Buddha's footprints etc.

²¹ A horseshoe-shaped cliff, overlooking a bend of the Waghora River in northern Maharashtra, between the 2nd century B.C. and the 5th century A.D. (Charoelonla 1981, p. 43)

²² The name given to the tree at 'Bodhi Gaya' under which the Buddha sat on the night he attained enlightenment.

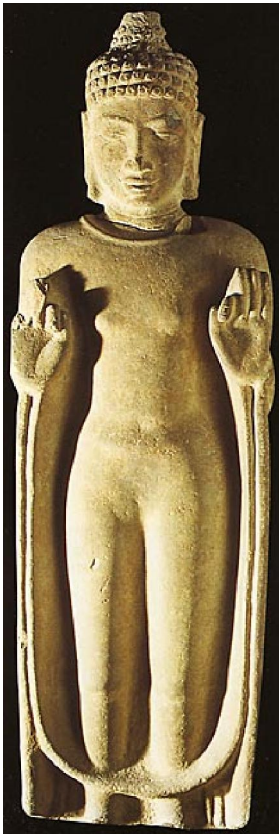


Fig. 20 Dvaravati standing Buddha image with two hands displaying Vitarka Mudra, 7th – 9th centuries found at Si Mahosot.

Source: http://www.buddhaimages.com/NMPrachin_buri/dharavati_buddha_2.jpg, accessed in January 12th, 2009

Srivijaya Style

The information of Srivijaya in history and the study of southern Thailand are not as extensive as studies in other areas of the country. However, recent studies and archaeological excavations have shed new light on the history, culture, and archaeology of the region. Situated between the Andaman Sea and the Gulf of Thailand, from southern Thailand to northern Malaysia, Srivijaya was situated in a strategic position Southeast Asia's regional trading Asia center. This location was the meeting point for people from China, India, Sri Lanka, and the neighboring local villages (Mishra 2010, p. 27). The brief history of Srivijaya was founded in the 6th – 7th centuries succeeded 'Funan' as the leading state in Southeast Asia.

The ruler was the overlord of the Malay Peninsula and western Java as well as Sumatra. Most of the early kingdoms in Southeast Asia looked similar. Srivijaya was influenced by Indian culture and administration, and Buddhism became firmly entrenched. The expansion of Srivijaya was resisted in eastern Java, where the powerful Buddhist Sailendra dynasty arose. From the 7th century onwards there were

great activities in temples building in eastern Java. The most impressive place of the ruins temple is the Borobudur Temple Compounds, which is one of the largest Buddhist temples in the world. Sailendra rule was spread to southern Sumatra and up to Malay Peninsula to Cambodia (where it was replaced by the Angkor kingdom). In the 9th century the Sailendras moved to Sumatra, and a union of Srivijaya with the Sailendras formed an empire which dominated much of Southeast Asia for the next five centuries.

In the 13th century the Kediri dynasty was overthrown by a revolution, and another kingdom arose in east Java. The domains of this new state expanded under the rule of its warrior-king Kartanagoro. He was killed by a prince of the previous Kediri dynasty, who then established the last great Hindu-Javanese kingdom, Majapahit. (Jameson 2008, p. 6)



Fig. 21 Srivijaya Buddha image fragment of a once complete statue, Bangkok National Museum

Source: http://ancientweb.org/images/explore/Indonesia_Srivijaya_Buddha.jpg, accessed in January 12th, 2009

Lopburi or Khmer style

Lopburi art goes back to the 8th - 10th centuries. Lopburi was a provincial capital during prosperous of the Khmer empire. Lopburi is also known as '*Lavo*'²³. At the time Lopburi experienced periods of independence, but its art form and Buddha images had Khmer art influence. The characteristics of the Buddha images of this school of art consist of two styles; the Early and Late Lopburi style. The early style of the Buddha image has the ushnisha or protuberance on the skull in the form of a low gland which is similar to Dvaravati ushnisha, but the shaped in different forms as the coil of a shell or shape of a small cone. The Late Lopburi Buddha image has the shape of a crown or a lotus flower surrounded with its petals.

There are two hair styles as the parallel fold hair and the curls of hair. Moreover the parting line around the top-knot of the Buddha image is regularly found. The head-dress and low crown of the Buddha head is famous. The face of the Buddha image is broad and square in shape with large, thick mouth and lip, prominent eyebrow, and prominent nose with a square chin. The Buddha's robe has two forms: the robe covering the whole body in the position of the standing and robe with bare right shoulder in the position of sitting. The end of the robe is hanging down up to the navel. The rim of a skirt-like is lower robe in prominent position. The ears are long which extends down to the shoulder. The decoration of Buddha image consists of pendant, arm-bracelet and necklace around the neck and the upper body of the Buddha image. The Buddha image pedestal is in the form of a lotus flower in both forms of up and down lotus-petal. The petal of a lotus is in the form of the rim line at the rim of each petal. On the other hand, the Late Lopburi art style of Buddha image consists of the following features. The head of Buddha image is not in the form of square but in oval shape. There is another line or rim attached to the mouth of the Buddha image.

The design of protuberance of the Buddha's skull is in the form of a long lotus petal and the small halo placed the middle of a lotus protuberance of the Buddha image skull and this halo is a cone-like shape. In the case of the Buddha image

²³ Derived from of '*Lava*', son of '*Rama*', the hero from epic of '*Ramayana*'.

sheltered with the Naga, the peculiar features are the eyes which are sunk in the face. The beard and moustache also can be seen. The skirt-like lower robe is illustrated by the prominent rim at the waist and ankle of the Buddha image. The edge of this robe is in the form of rectangular cloth appearing in front of a girdle. Often the Buddha image is displayed on a lotus petal base. Sheltered Naga protected Buddha images in the meditation posture are commonly found. Sometimes the Naga protected Buddha appears with royal ornaments, and has a more stern facial expression (Fine Arts Department 2005).



Fig. 22 Lopburi Standing Buddha image in the gesture of Calming the Ocean.

Source: http://www.buddha-images.com/Wat_Benchamabophit/WatBen_29.jpg, accessed in January 12th, 2009

Chiang Saen or Lanna²⁴ style

The Chiang Saen or Lanna civilization goes back to 11th - 18th centuries. It was influenced by the styles of the Khmer, Sukhothai, India, Burma and Sri Lanka. At that time Lopburi Kingdom was incorporated with the Khmer empire by Suryavarman I. Mon Princess Chamadevi had established another Mon Kingdom in the Lamphun province in the north of Thailand. Along with her majesty, the Buddhist monks moved to this new Kingdom of Hariphunchai as the capital city. Many of Buddhist relics have been found in Lamphun province. The two famous Buddhist temples were Wat Hariphunchai and Wat Chamadevi, built to protect the city of Lamphun where they had many outposts or wiangs such as Wiang Mano, Wiang Tho and Wiang Tha Kan.

The Chamadevivamsa and Jinakalamali chronicles mentioned that this Kingdom was attacked by the Khmer empire in the eleventh century. Finally it became a part of the Lanna Kingdom in 1292 after King Mengrai's domination. According to the Tamnan Hariphunchai (History of Kingdom of Hariphunchai), Yip was the last ruler of Hariphunchai (Mishra 2010, p. 25). The Lanna kingdom roughly bordered on what is now Laos and Vietnam to the east, the Yunnan province of present-day China to the north, the central of Thailand area to the south, and Burma (Myanmar) to the west (Stratton 2004, p. 3). The sculpture of Buddha images during this period can be divided into two styles according to the Buddha image characteristics: The early of Lanna and the late Chiengsaen or Chiangmai Style (Fine Arts Department 2005).

The early period shows the influence of Pala School of sculpture from India and the late period shows the strong influence of Sukhothai art on sculpture. The Buddha image flourished in north and central Thailand in contemporarily with the Chiang Saen style. The Buddha image of early Chiang Saen style has the sculptural features derived from the image of the Pala School (Charoeonla 1981, p. 122). The sculptural features of the Buddha image in early Chiang Saen style are as follows: The Buddha image body is rotund and round-shaped, along with a round-shaped head and

²⁴ Land of million rice fields.

round short face. The halo or protuberance on the head is in the form of a lotus-bud (ushnisha). The Buddha image eyes look rather bulging and half-closed, looking downwards, with rather prominent lips.

According to this period the Buddha image has a small sharply-defined mouth and a highly sensitive nose or hooked-nose, the knotted-chin, arched and prominent eyebrows springing from the bridge in two long upward curves. There is no parting line round the topknot on the head and the prominent chest. The pedestal of the Buddha image is in the form of a conventionalized lotus-pedestal. The petals of the lotus are large and flat, accompanied by small lotus petals among the main large petal. The robe is lightly defined, leaving the right nipple bare, the short upper fold of robe coming down over the left shoulder ending above the left nipple in a sharp-pointed fork. The Buddha image hair is composed of pronounced spire curls or shell-shaped, while the halo rises knob-like from the centre of the head, a lotus-bud covered with similar curls. The legs of the Buddha are crossed, with both soles of the feet upturned (Fine Arts Department 2005).

The late Chiang Saen style of Buddha images represents the influence of Sukhothai style and no longer influence from the Pala School as the early style. The late Chiang Saen style of sculpture is contemporary with the Sukhothai style during the latter part of the 13th century up to the middle of the 13th century (Charoeonla 1981, p. 124). This was the peak period of the late Chiang Saen style of sculpture, which was largely influenced by the Sukhothai style which is classical Thai art.

The Buddha image of the late Chian Saen style is characterized with smaller spiral curls of hair, with the parting line round the topknot. Other features on the body are similar to the early Chian Saen style, but the robe of the Buddha image, leaving the right nipple bare, comes down over the left shoulder and hangs down much lower than in the early Chian Saen style. Apart from this, the later Chiang Saen style is recognized by the posture of the legs, which are, in this case, not crossed like that of the early Chian Saen style. The right foreleg rests on the left one, which in Thai is called Samadhi lab, a clear influence of the Sukhothai style (Fine Arts Department 2005).



Fig. 23 Sitting Buddha image with the gesture of Subduing Mara. In the style of the Chiang Saen period found at Wat Sawang Arom, Muang Thung Yang, Uttaradit province.

Source: http://www.buddha-images.com/Wat_Benchamabophit/WatBen_42.jpg, accessed in January 12th, 2009

Schools of Lanna are following:

Chiang Saen School or Chiang Mai School: with rounded faces and short, strong, athletic, almost chubby bodies, very big hair curls, a short, rounded flame and a shoulder robe down to the nipple in 14th century and down to the navel in 15th century. In the 16th century the body becomes more elegant, the flame on the top of Buddha image gets longer and more detailed, pedestals become higher and more sophisticated.

Haripunchai School: with clear Mon Dvaravati influence, a style which continued even after Haripunchai became a part of the Lanna kingdom in 1292.

Phrae School and Lampang School: with the characteristic curved upper lip that resembles a flying bird. The face lines are more abstract and a good example of the “doctrine in human form”.

Fang School and Chaiprakan School: with characteristic rectangular ears with sharp corners (Fang) and the double hairline (Chaiprakan). Characteristic Chaiprakan patina is a mix of green, brown and red.

Nan School, Payao School or Thai Lue School.

Sukhothai style

While there were other Thai Kingdoms (like Lanna, Phayao and Chiang Saen) at the same time, the establishment of the Sukhothai Kingdom in 1238 is often considered the beginning of Thai history. Sukhothai gained independence from a declining Khmer Empire. Monuments in the city established influence from prior Khmer rule.

The history of Sukhothai as a kingdom lasted for about two centuries. King Pho Khun Sri Indraditya (1239 – 1279), is a ruler of Sukhothai and the founder of the Sukhothai Dynasty (Fine Arts Department 2005). Interestingly, there were only nine Kings during that period, suggesting some stability. Theravada Buddhism became the common religion. At the peak of its power, the Kingdom of Sukhothai exerted control and/or influence over the surrounding area that was actually greater than Thailand in the present. Control supposedly stretched to Martaban (now in Myanmar) in west, and east side to Luang Prabang (Laos) and south to the Malay Peninsula. Sukhothai's prosperity was greatest at the time of its third King Pho Khun Ram Khamhaeng the Great (1279 – 1298). Pho Khun Ram Khamhaeng the Great adopted Theravada Buddhism that at the time widespread in Nakhon Si Thammarat. Introducing a new religious faith to his people, King Pho Khun Ram Khamhaeng the Great initiated the preaching of Buddhism to the populace on the Buddhist Sabbath (Fine Arts Department 2007). King Pho Khun Ram Khamhaeng the Great is also credited with the invention of the Thai alphabets, although there is continuing debate about this issue.



Fig. 24 Sukhothai Standing Buddha image as called Phra Attharos at Wat Saphan Hin, west outside of the ancient town of Sukhothai.

Photo: Poramet Boonnumsirikij

The Sukhothai Kingdom had important contact to Sri Lanka. Thai monks travelled to Sri Lanka for further religious instruction, and Sri Lankan monks settled in Sukhothai. Sukhothai religious art was thus influenced by Sri Lankan art. The Buddha images of the Sukhothai kingdom gained important distinguishing characteristics from the images during the Khmer empire and Mon era. A flame appeared on top of the head of the Buddha image. The head is covered with fine curled hair. The face is oval, with high curving eyebrows, a hooked nose, a downward gaze, and overall displays a gentle smiling expression (Fine Arts Department 2007). The sculptors of Sukhothai did solve this dilemma. Their creations seem to master the tumult of human passions, and the faint smile of the images implies of happiness and peace gained by subduing the earthly and primordial instincts. One may note, technically that the parallel, delicate, undulating lines of the mouth and the base of the nose and eyes emphasize this spirituality (Bhirasri 1968, p. 6) The body of the

Buddha images displays broad shoulders and a small waist. Overall it can be said that the Buddha images did not appear as human, but display idealistic or superhuman characteristics.

During the Sukhothai era, the four postures of the Buddha (sitting, standing, walking, reclining) were created. But one specialized posture of Buddha Image originated in this period for the first time in the history of Thai Buddhist art, which is one of the finest specimens. The walking Buddha called the 'Lila' (in Thai or 'Yatra' in Sanskrit). The posture is the masterpiece of Sukhothai sculpture. One heel of the Buddha is raised while the other foot is planted firmly on the ground, and one hand is lifted in the gesture of giving instruction to dispel fear, while the other arm swings naturally at the side of body (Buribthand 1968, p. 12). Buddha images of the Sukhothai era are subdivided in several groups. Sitting Buddha images of the Sukhothai period are most often made in meditation posture, or the gesture of Subduing Mara. Walking Buddha made in the gesture of dispelling fear (Abhaya Mudra), or giving instruction (Vitarka Mudra).

Sukhothai Buddha images came from three different schools and had distinctly different features in each school following:

Sukhothai-Sukothai School or Pure Sukhothai Style: To this style most of the Sukhothai Buddha images are the mostly admired style by Thai Buddhists. The Buddha image has a tall flickering flame, similar to motif of the halo on the ushnisha of the head, small hair curls or the size of hair curls well proportioned, an oval face with arched eyebrows, a hooked nose and a smiling expression, no parting line round the topknot of the head, pointed or tapered chin and prominent nipples. The shoulders are bare but the waist is small. The lobes of the ears are curved outward to break the angle formed by the attachment of the neck with the shoulders. The stretched right forearm is delicately bent outwards to harmonize with the contrasting mass of the trunk with that of the legs, while the lower line of the legs slightly curved serves to complete the flowing character of the whole unity. The hanging flap of the robe on the left shoulder is quite long, drawn up to the navel and terminating in a notched design.

Or the edges of the robe are in two pieces in the form of a centipede fang (Charoeonla 1981, p. 138).

Sukhothai-Khampheng Phet School: The Sukhothai Buddha image which belongs to this style is characterized by a long face, broad forehead and a pointed Chin (Charoeonla 1981, p. 141).

Sukhothai-Pitsanulok School: also called Buddha image of Phra Puttha Chinarat School. This style is attributed to the reign period of King Phaya Lithai (1347–1368) and later. The sculptural features of the Buddha images in this period are characterized by the round face (unlike the oval shape of the first group) like the form of fruit of the bel tree or a duplicated of the Gupta face of Buddha image, having round, plumb cheeks, a corpulent body and four equal fingers (Fine Arts Department 1957, p. 127).

U-Thong style

U-Thong art flourished in central Thailand during the 12th – 15th centuries in the period when Khmer influence was diminishing or disappearing and before and during the early stages of the Ayutthaya Kingdom. U-Thong style was influenced by previous and contemporary styles in the region. Depending on prevailing influences and the time frame, U-Thong Buddha images are often subdivided into three groups. Typical of U-Thong Buddha images has a small band between the hairline and the forehead. The head features small curls. The face of the Buddha image is rather square as Mon and Khmer characteristics.

During the early period the ushnisha²⁵ is topped by a lotus bud. In later period (Sukhothai influence), this is replaced by an elongated flame. The face becomes more oval later on, and the body more elongate under the influence of the Sukhothai style. The eyes are cast (not inlaid as often the case with images of the Ayutthaya period). The robe is draped in the open mode with a long flap over the left shoulder (see image below) ending above the navel. U-Thong style Buddha images mostly displays the

²⁵ Prominent halo on the top of Buddha's head.

gesture of Subduing Mara in the sitting position, and the gesture of Dispelling Fear (Abhaya Mudra) in the standing position (Fine Arts Department 2005).



Fig. 25 Bronze Buddha image in Subduing Mara posture, U-Thong Style from 15th Century.

Source: http://www.buddha-images.com/Sukhothai/Buddha_UThong.jpg, accessed in January 12th, 2009

Ayutthaya

Ayutthaya had consecutively been a prosperous kingdom for 417 years. There had been 33 kings who ruled the kingdom over that period, beginning with King U-Thong in 1350. The kingdom's glorious time ended when it succumbed to Burmese troops on April 7th, 1767, concluding five dynasties that used to rule the kingdom of Ayutthaya, namely U Tong dynasty, Suphannapoom dynasty, Pra Ruang dynasty, Prasat Tong dynasty, and Ban Plu Luang dynasty. Ayutthaya's prosperity and beauty from foreigners' point of view, José Van Santen, a Dutch trader who came to trade in Ayutthaya had written to describe as

“Pra Nakorn Sri Ayutthaya is the capital city in which the Kings live, and so do the nobles, officials, and all administrators. The capital city is situated on a small island in Chao Praya River. Its surrounding area is a flat field. The stone wall was constructed to surround the city with two Dutch miles circumference. So it is a very large capital city. Its vicinity consists of many immediate Buddhist monasteries. The population is dense in the capital. There are long, wide and straight aligned roads. There are canals that are converted from Chao Praya River to the capital. So it is very convenient for people to transport from place to place by either, roads or canals, there are also small ditches and alleyways. So, in the rainy season, people can easily travel to houses. The houses are built in Indian styles but roofed with tiles. Ayutthaya is a luxurious city packed with over three hundred Buddhist monasteries exquisitely built. There are many pagodas, topped and, molded figures, and Buddha images that are coated with gold brightening the whole area. The capital city situates on the riverbank and the city plan was orderly planned, so it is a very beautiful city. Its location is magnificent city, its population was dense, and it is a good trading area both domestic and foreign trade. As far as I am aware, there has not been any king in this region has ever reigned the beautiful and prosperous city as Ayutthaya. The city is on a very good location, regarding the military strategies, so it is very difficult for the enemy to impregnate because the surrounding area will be flooded for six months annually in the rainy season. The enemy cannot stay for a long time, so they will eventually retreat” (Saipradist 2005, p. 158).

Buddha images of the Ayutthaya period made more different gestures than the other previous styles. The Buddha image is influenced by Lopburi, U-Thong and Sukhothai styles. Initially the face is more square shape, and a band (influenced by U-Thong) is presented between the hairline and the forehead. Late on the Ayutthaya period (influenced by Sukhothai) the Buddha image face became more oval, with a

Sukhothai type of flame on top of the ushnisha (prominent bump on the top of Buddha's head).

Typical of some images are small lines carved above the upper lip and above the eyes. Moreover, the facial expression became sterner look, sometimes without any smile at all. In the later period, the Buddha image became also common to present wearing a lot of ornaments. One type of the Buddha image is made as an Emperor's attire (the Thai language term refers to 'big ornamentation') or with a somewhat more modest attire ('small ornamentation') featuring a crown or diadem. Buddha images of this period present many gestures and postures. Standing images often display the gesture of Dispelling Fear (Abhaya Mudra). Sitting images often display the gesture of Subduing Mara. Some giant reclining Buddha images were constructed during this period (Fine Arts Department 2005).

Ayutthaya periods of Buddha image art are following:

Early Ayutthaya period:

U-Thong I: (1350 – 1448) corresponds to the period when King Somdet Phra Chao U- Tong (1350 – 1369) who founded the capital of Ayutthaya as an independent kingdom (Charoelona 1981, p. 164) and through the end of the reign of King Somdet Phra Boromma Trailokanat. The most desirable of Buddha images were strong and awe-inspiring faces, well defined bodies but not as muscular looking as Sukhothai style. Mostly the posture of Buddha image sitting and almost exclusively in Subduing Mala poses. Occasionally Buddha images have been found in standing posture and extremely rare walking image posture. The sculpture characteristics of the Buddha image in this period are as follows: The halo on the skull protuberance or ushnisha in the form of lotus bud or flame like motif influenced by the second group of U-Thong Buddha images; the small spiral curls hair on the head; the Raiprasok or parting line round the topknot; the square chin in the shape of human chin; the long end of robe falling down from the left shoulder, square shaped folded legs and a pedestal with concave outline (Fine Arts Department 2005).



Fig. 26 Bronze Buddha image constructed early Ayutthaya U-Thong I style in 1422 currently located at Wat Prachatuphon, Bangkok (Krairerg 2008, p. 234)

U-Thong II: (1449 – 1529) corresponds to the reign of King Somdet Phra Ramathibodi II or Phra Chettathiraj I (1491 – 1529) down to end in the reign of King Somdet Phra Borommarachathirat IV or Somdet Phra Borommaracha Nor Buddhankoon or Phra Athitawongse (1529 – 1533). The art in this period Buddha image's noble appearance, more elegant than U-Thong I and softer face. Regarding poses refer to U-Thong I. Although in 1458 a great transformation of sculpture production took place in Ayutthaya. King Somdet Phra Boromma Trailokanat (1448 – 1488) had a set of bronze Buddha images cast, representing various previous lives of the Lord Buddha (in Thai, called Phra Bodhisattva Haroi Prachat of 500 Incarnations). All these bronze Buddha images exemplify the transition from the U-tong style to that of typical Ayutthaya sculpture (Charoeonla 1981, p. 167).



Fig. 27 Head of bronze Buddha image “Phra Thammikarat” early Ayutthaya U-Thong II style currently located at Chao Sam Phraya Museum, Ayutthaya province.

Source: <http://image.ohozaa.com/show.php?id=91ba3fb24e6e5819a7a3419c18a354c2>, accessed in March 14th, 2009.

Middle of Ayutthaya period

Ayutthaya-Suphannapoom: (1530 – 1569) corresponds to the reign of King Phra Ratsadathirat (1533) down to the end of the reign King Somdet Phra Mahinthrathirat (1568 – 1569). The Buddha image style is made standing Buddha images posture, sitting Buddha images pose in “Meditation” and “European style” poses, but “Subduing Mala” clearly dominates. Crowned images appear, decoration still limited to crown and sometimes one necklace or bracelet. Still beautiful faces, but lack a little bit the serenity and elegance of Early Ayutthaya period.

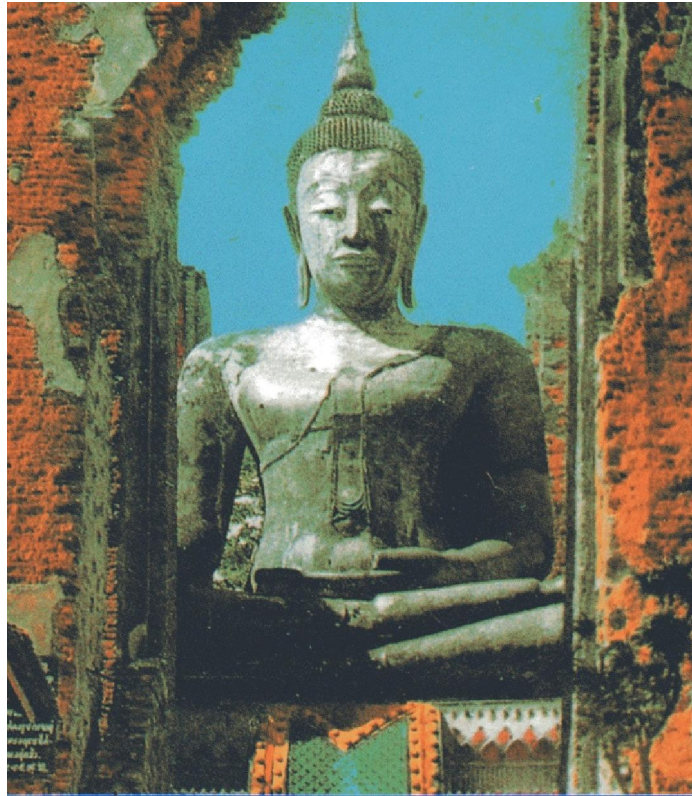


Fig. 28 Buddha image “Phra Mongkhon Bophit” Middle Ayutthaya-Suphannapoom period constructed in 1538 located in Vihàra Mongkhon Bophit, Ayutthaya province (Mongkhon Bophit foundation 2001, front cover page).

Ayutthaya-Sukhothai: (1569 – 1629) corresponds to the reign of King Somdet Phra Naresuan the Great or Somdet Phra Sanphet II or Phra Naret (1590 – 1605) down to the end of reign King Phra Athittayawong (1629). The Buddha image style is more varieties, beginning of decoration of pedestals; ensembles become popular (Buddha image with adoring disciples, Mara’s army). Crowned images largely like Ayutthaya-Suphannapoom.

The sculpture characteristics of the Buddha Image were influenced by the Sukhothai style as regards the halo and outline of Buddha’s face. There is a small parting line round the topknot on the head, the big end of the robe falling down front the left shoulder. The end of the robe does not terminate in a centipede fang line like that of Sukhothai style, but in the form of a straight line or falling as two pointed ends of the robe. Other features followed the style of Sukhothai Buddha image, but most of them cannot be compared to real Sukhothai Buddha images. The facial expression is

usually lifeless, though the pedestal of the image is much more decorative (Fine Arts Department 2005).

Late Ayutthaya

Ayutthaya-Prassattong: (1630 – 1688) corresponds to the reign of King Somdet Phra Chao Prasat Thong or Somdet Phra Sanphet V (1629 – 1656) down to the end of reign King Somdet Phra Phetracha (1688 – 1703). At the early age of this period the sandstone Buddha image became more fashionable. When Cambodia or Kambuja became once more a vassal state of Thailand in the reign of King Prasat Tong, the Thai artists tried to imitate the Khmer works of art and these sandstone images became even more popular. It is said that during this period the red sandstone Buddha images were also made in the middle and southern parts of Thailand (Charoeonla 1981, p. 179).

It is said that towards the end of the 16th century, the crowned Buddha images were very popular. The Buddha image style is heavily decorated pedestals, robes and bodies. Mostly crowned Buddha images, having evolved from preceding styles, were much higher and more elaborate. Crowned images that resemble preceding periods still exist. Sometimes plain Buddha images sit on overly decorated pedestals. It seems the more attention artists gave to the decoration, the less attention was given to the faces, unfortunately also for the few remaining plain images. Beautiful faces of Buddha image in this period become rare (Fine Arts Department 2005).



Fig. 29 Late Ayutthaya-Prassattong Buddha image²⁶ in Subduing Mara posture in the king ornamentations signify the power of the king.

Photo: Poramet Boonnumsirikij

Ayutthaya-Banpuluang (1688 – 1767) corresponds to the reign of King Somdet Phra Suriyenthathibodi or Somdet Phra Sanphet VIII or Phra Chao Suea (1703 – 1708) down to the reign of King Somdet Phra Chao Ekkathat or Somdet Phra Chao Yu Hua Phra Thinang Suriyat Amarin or Somdet Phra Borommaracha III (1758 – 1767). The Buddha image is heavy decoration. The Buddha images gets even more opulent, sometimes so overloaded that the Buddha image is hard to make out under all

²⁶ The name of Buddha image is “Phra Buddha Nimitr Vichit Maramoli Sisanpeth Boromtrailoknat” 4.50 meters width across the lab and 6 meters high.

the decoration. Otherwise like Ayutthaya-Prassattong. Simple images, even on relatively plain pedestals still exist.

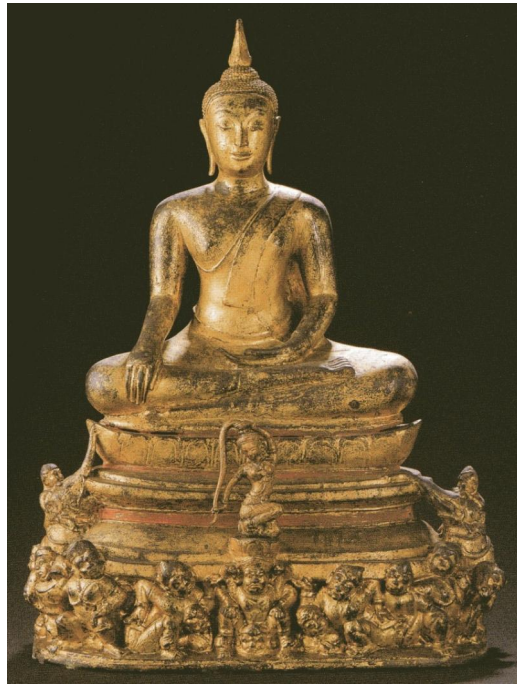


Fig. 30 Buddha image late Ayutthaya style Ayutthaya-Banpuluang located in Temple of the Emerald Buddha, Bangkok (Fine Arts Department 2005, p. 29)

Rattanakosin Style

After the destruction of Ayutthaya in 1767, Thonburi and then in 1782 Bangkok became the kingdom as new capital. Even there was a new capital at that time, the kingdom continued to exist and so did his artists and sculptors. Unlike Sukhothai and Lanna styles, which vanished, Rattanakosin style is the continuation of Ayutthaya style in a new place. The Rattanakosin sculptors continued what had started in Ayutthaya; the creation of new styles and themes. Choice of material was usually bronze, wood became less important than it had been during the Ayutthaya period, but still played a role (Charoeonla 1981, p. 196). Many other figures besides the Buddha became popular, including scenes from the Buddhist mythology and Thai history. Rattanakosin has been described in four periods that are identified by the name of the kings:



Fig. 31 Phra Nirantarai Rattanakosin style. (Krairerg 2008, p. 116)

King Rama I or Phrabat Somdet Phra Buddha Yodfa Chulaloke the Great and King Rama II or Phrabat Somdet Phra Buddha Loetla Nabhalai (1782 – 1824): Continuation of Ayutthaya clearly visible, beautiful wooden images on decorated pedestals. Buddha image sheltered by Naga became popular again. Bronze Buddha images, especially standing ones are still heavily decorated.

King Rama III or Phrabat Somdet Phra Poramintharamaha Jessadabodindra Phra Nangklao Chao Yu Hua (1824 – 1851): Many other sculptures than Buddha images appeared, Beautiful faces of Buddha image mostly found in plain, undecorated Buddha images.

King Rama IV or Phrabat Somdet Phra Poramintharamaha Mongkut Phra Chom Klao Chao Yu Hua (1851 – 1868): King Rama IV brought new rationalism to Thailand, in politics as well as the Arts. The heavy decoration is partly replaced by Buddha images clad in a beautiful robe with flowery design, but no crown or jewelry decorated. Most of the beautiful faces of Buddha image in Rattanakosin period were found from this period.

King Rama V or Phrabat Somdet Phra Poramintharamaha Chulalongkorn the Great or Phra Chunla Chom Klao Chao Yu Hua to King Rama VIII or Phrabat

Somdet Phra Poramintharamaha Ananda Mahidol Phra Atthama Ramathibodindhorn (1868- 1946) and King Rama IX Phrabat Somdet Phra Poramintharamaha Bhumibol Adulyadej the Great or Somdet Phra Pathara Maharat (1946 - present): This period had two important developments. First, industrialization brought mass production of Buddha images to produce many pieces at one time (except for the big important ones commissioned by the palace or temples) were not individual pieces of art any more, but had been produced as mass production. Second, it became popular in the beginning and middle of the 20th century to imitate the beauty of old Buddha images of Sukhothai, Lanna and early Ayutthaya styles. This style is called “Rachakan” and most of them called “Sukhothai style”. Buddha images have been presented in galleries in Thailand and elsewhere mostly from this period. Since they are approximately 100 years old, many people are often misleading. Similarly, it became popular to mix different styles (Fine Arts Department 2005).



Fig. 32 Sitting Buddha image with the gesture of Subduing Mara “Rachakan” style.
Source: http://www.larnpho.com/admin_prachiangsan//upload_image/thumb/thumb_6340177282252725441.jpg, accessed in May 15th, 2011

Summary

In Chapter 2 the researcher examined the conceptual of casting and sculpturing the Buddha image. Anatomical of Buddha image of thirty two major characters as the great man including not only four major characteristics and postures of the Buddha image such as sitting, standing, walking and reclining but also the 'Mudra' which is the presenting the action that implies the intangible meaning that the sculptors communication to the Buddhists when see the Buddha images in each posture. Then the reviewed the Buddha image history from the early age in India which are from the legend and from archeology research information with the additional history of the Buddha image in Thailand. The influence idea of describing the period of Buddha image as the Western theories for pricing as antiques collection to trade in the market or black market. The following period of Buddha image in the history: Dvaravati style, Srivijaya Style, Lopburi or Khmer style, Chiang Saen or Lanna style, Sukhothai style, Ayutthaya Style and Rattanakosin style. The reviewing art history of Buddha image based on the tangible heritage that mentioned in the various textbooks. The intangible values of the Buddha image especially spiritual value mostly look over which trend of cultural heritage has become more discussion on intangible heritage within tangible heritage.

The classification of the Buddha image in Thailand adopted the concept of the arts classification from the Western knowledge in order to separate the period of time as a reference for trading as antiques products rather than Buddha's grace or virtue of the Lord Buddha. According to classification of the Buddha image, the Buddha image education in Thailand emphasize only the period and age of the Buddha image more than the value and reason of the making Buddha image which is studied only tangible significant values.

Chapter 3

Review the Conceptual of Preservation

Preface

From the past the definition of “Culture” was given widely and differently over 300 meanings even in Thailand the meaning of “Culture” had been given more than 26 different meanings. Therefore the United Nations Educational, Scientific and Cultural Organization (UNESCO) conference at Mexico City in 1982 consensus the definition of the culture as a guidelines because of the different definitions in each country unable to develop the system and manage the suitable operation (Fine Arts Departments 2004, p. 39). The definition of culture was given by UNESCO is following:

“Culture should be regarded as the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs,

Noting that culture is at the heart of contemporary debates about identity, social cohesion, and the development of a knowledge-based economy,

Affirming that respect for the diversity of cultures, tolerance, dialogue and cooperation, in a climate of mutual trust and understanding are among the best guarantees of international peace and security,

Aspiring to greater solidarity on the basis of recognition of cultural diversity, of awareness of the unity of humankind, and of the development of intercultural exchanges” (UNESCO 1982).

Moreover UNESCO adopted four major principles to convenience the consolidation among state parties as (1) Cultural Heritage (2) Tribal Identity (3) Intellectual – Wisdom and Technology and (4) Human right – Democracy (Fine Arts Department 2004, p. 40) which the Fine Arts Department of the Royal Thai Government adopted and developed those principles as a national cultural. Meanwhile one of the major concerns is cultural heritage that is one of the inspirations to the specialists and scholar in Thailand aware to the international principles and methodology of cultural heritage management.

Conceptual of the preservation for the Heritage Monument and Sites

Conceptual of the preservation for the heritage monuments and sites is a role of charter and principles in assessing the assigned values as fundamental of the process to notion the significant because the culture heritage management is invariably dealing with concealed meaning. The fundamental role of charters is offer statement(s) or principle(s) and guideline(s) for the preservation and management of the places of cultural significance where preservation is regarded as an integral part of the management of these places. Therefore charters and principles are seemed to have professional ethics and roles for guiding the conduct of cultural heritage preservation practices. It can be assumed that the charters occurred from Athens Charter and then Venice Charter as an international charter with the adaptation and development which was drafted and adopted mainly by international organizations following UNESCO and ICOMOS. According to those charters are having mainly objective to protect cultural properties, which include historical monuments, buildings, groups of buildings, sites and towns around the globe, against various threats. (Ahmad 2006, p. 292)

At the beginning of history preservation the heritage sites and monuments which were mostly well-known as the foundation of the preservation since the International Charter for the Conservation and Restoration of Monuments and Sites or ‘Venice Charter’ was announced in 1964. The ‘Venice Charter’ was claimed that the originally basic principle from the first time was the ‘Athens Charter’ of 1931 at the first international congress on restoration of historic buildings were organized by the

Architects and Technicians of Historic Monuments, as a international standard of preserving and restoring the historic sites for all over the world. The ‘Venice Charter’ was noted that:

“the historic monuments of generations of people remain to the present day as living witnesses of their age-old traditions. People are becoming more and more conscious of the unity of human values and regard ancient monuments as a common heritage. The common responsibility to safeguard them for future generations is recognized. It is our duty to hand them on in the full richness of their authenticity”.
(International ICOMOS 1964)

The above sentence was accepted clearly to the conservation and related scholars had tried to conserve all heritage sites from our generation as they remained as the word ‘authenticity’ to the next generation. However in the ‘Venice Charter’ the heritage properties were emphasized as monuments and sites. Moreover a group of specialists of conservation and restoration had the ‘Second Congress of Architects and Specialists of Historic Buildings’ not only established the ‘Venice Charter’ but also founded the ‘International Council on Monuments and Sites (ICOMOS)’ to work in counseling with United Nations Educational, Scientific and Cultural Organization (UNESCO) was founded under the United Nations Organization to create embodied of The World Heritage.

The UNESCO World Heritage

In 1972 UNESCO seek to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity. This is embodied in an international treaty called the *Convention concerning the Protection of the World Cultural²⁷ and Natural²⁸ Heritage* (UNESCO World Heritage 2008, p.3), or know as “the World Heritage Convention

²⁷ Refer to monuments, groups of buildings and sites with historical, aesthetic, archaeological, scientific, ethnological or anthropological value.

²⁸ Refer to outstanding physical, biological and geological formations, habitats of threatened species of animals and plants and areas with scientific, conservation or aesthetic value.

(WHC)”. The Convention has mission to promote cooperation among nations to protect heritage from around the world with outstanding universal value. It was the keyword of the world heritage lists and met at least one out of ten selection criteria as ‘*our legacy from the past, what we live with today, and what we pass on to future generations*’ (UNESCO World Heritage 2008, p.3).

One of the intentions to encourage the State Parties nominates their own site within their national territory for inclusion on the ‘World Heritage List’, to ensure that State Parties recognize in order to establish management plans and safeguarding of those heritage properties as their own responsibility. On the other hand, the convention concerned to merge of two separate types of heritages, in both of the preservation of cultural sites and dealing with the conservation of natural sites. In which previously World heritage sites were selected on the basis of six cultural criteria and four natural criteria but at the end of 2004 the adoption of the revised *Operation Guidelines for Implementation of the World Heritage Conversation* setting one set of ten criteria as following:

- (i) *represent a masterpiece of human creative genius;*
- (ii) *exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, townplanning or landscape design;*
- (iii) *bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;*
- (iv) *be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;*
- (v) *be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;*
- (vi) *be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding*

universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);

- (vii) contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;*
- (viii) be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;*
- (ix) be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;*
- (x) contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.*

Process of nomination to world heritage list is for the countries that have signed the World Heritage Convention can submit nomination proposals for properties on their territory by the national government of States Parties. The first step of being in the world heritage list has to propose the properties into 'Tentative list'. After that preparation the essential documents including maps and management plan as a nomination document and management plan representation by state party in files for presenting to World Heritage Centre and WHC send to appropriate advisory body either (1) the International Council on Monuments and Sites (ICOMOS) or (2) the International Union for Conservation of Nature (IUCN) or (3) the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) for evaluation and recommendation. Finally depending on the judgment of 'World Heritage Committee' to make the final decision on its inscription which sites will be inscribed on the 'World Heritage List'. Actually the meeting have been set annually while many nominations have been withdrawn or rejected because of failing the assessment process.

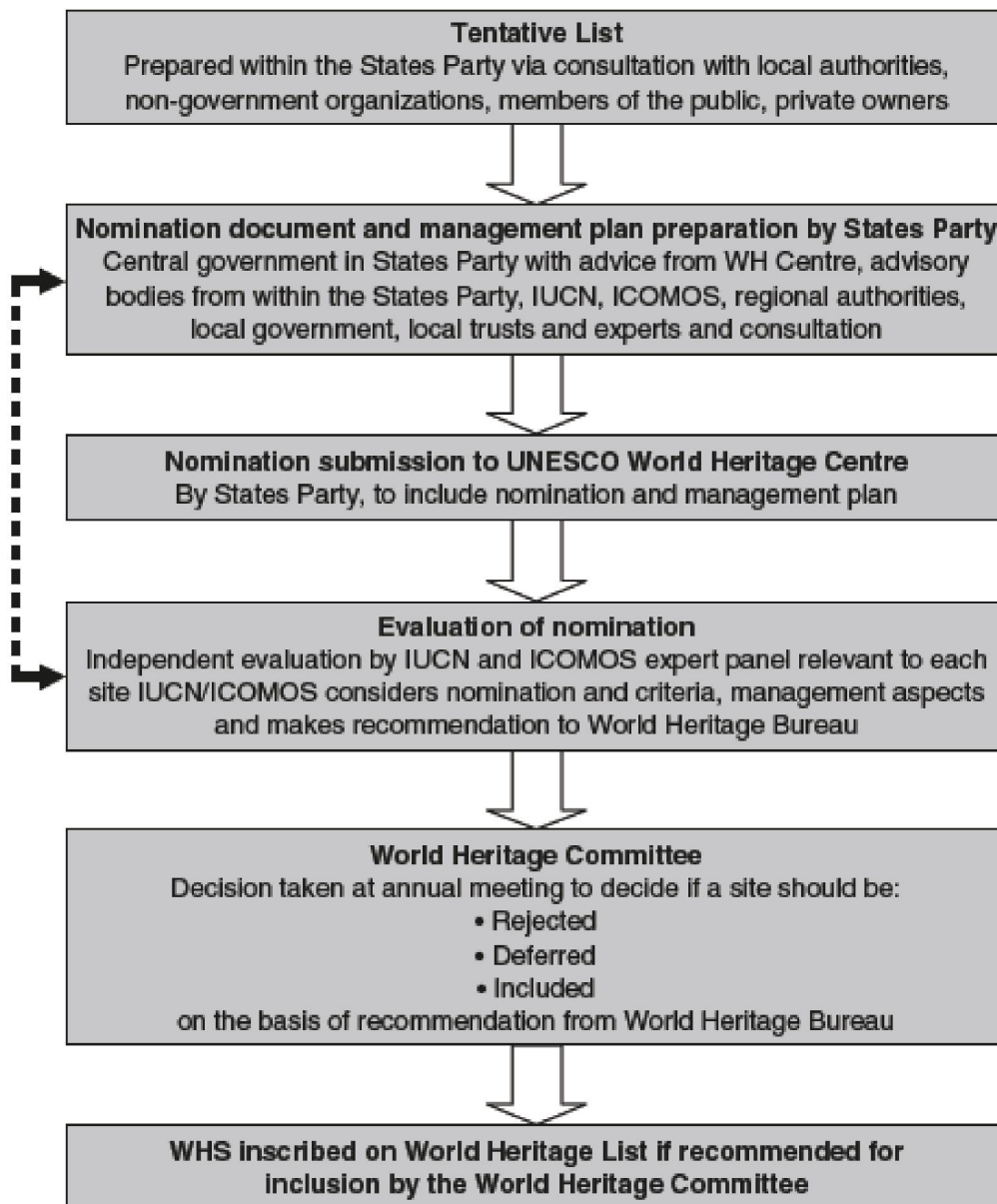


Fig. 33 The World Heritage Site inscription process (Leask and Fyall 2006, p. 9)

When the properties are inscribed in the World Heritage List and the site represents the universal values, the World Heritage emblem is allowed to use for indentifying the site as protected of the world's natural and cultural diversity by the World Heritage Convention. The World Heritage emblem was designed by Michel Olyff, Belgian artist and was adopted by world Heritage Convention in 1978. The emblem has central square symbol means the results of human skill and inspiration

and circle means to celebrates the gifts of nature or imitate of world refer to global protection for the heritage of all humankind.



Fig. 34 World Heritage Emblem

Source: http://whc.unesco.org/uploads/thumbs/page_114-125-125-20090514174808.jpg, accessed in June 22th, 2009

Reviewing Other Preservation or Conservation Charters and Principles as National and Regional Levels

From focusing of international charters, recommendations and resolutions was more towards the refinement of principles at national and regional levels. The need to formulate specific national principles to be able to develop and adopt that was quoted in Venice Charter as

“It is essential that the principles guiding the preservation and restoration of ancient buildings should be agreed and be laid down on an international basis, with each country being responsible for applying the plan within the framework of its own culture and traditions”.

Notably, it does acknowledge that the concept of structures embraces the setting of architectural works as an evidence of a particular civilization, significant development or cultural event. Hence, there is an attempt to acknowledge cultural development or cultural context and there is reference to more modest works of the past as well as works of art. There are guidelines on restoration and the extent to

which conservation works may extend. Emphasis is on physical fabric rather than social meanings (Taylor 2004, p. 424).

However, the development of preservation or conservation of the heritage was adapted from The World Heritage Committee which has been claimed such as Byrne 1991, Pocock 1997, Cleere 2001 and Sullivan 2004 etc. The World Heritage was criticized for legitimizing a particular Western – if not Western European – perception of heritage in terms of both policy and practice, while the further opinions from Arizpe 2000, Cleere 2001 and Yoshida 2004 that The World Heritage List has been shown to be not only Eurocentric in composition, but also dominated by monumentally grand and aesthetic sites and places (Smith and Akagawa 2009, p. 1). While another supported idea that the Asia context it was critical that Western conservation canons that inform various charters were not imposed imperiously on these cultures.

The invariably address for heritage values, preservation, significance and the steps involved in the heritage preservation planning process as quoted in the Principle for the Conservation of Heritage Sites in China that “*every country now has national legislation to protect its heritage, but not all have a guiding methodology for effective implementation of conservation practice*’ suggests that there is scope for more countries to design charters (Taylor 2004, p.424). Therefore, the development of the preservation or conservation has been adopted in all part of the world even at the beginning from western part of the world expanding and encouraging to the countries in Asia, Africa and South America and indigenous heritage practices.

In Europe itself Amsterdam Declarations in 1975 to expanding the scope including historic gardens, landscapes and environment. They adopted as Florence Charter on Historic Gardens by the International Committee for Historic Gardens of ICOMOS. In article 6 of the charter considered historic garden as being both small and large parks, whether formal or landscaped, and whether or not associated with building which classified as living monuments that required special rules of protection (Ahmad 2006, p. 296)

In America Continent, Washington Charter in 1987 by the United States of America which was emphasized the need to preserve the historic character of towns, including natural and man-made environment and the various functions that the towns have acquired over time (Ahmad 2006, p. 296). While in Canada was adopted as national charter due to threat from modernization and the pursuit of new lifestyles, which was called The Charter for the Preservation of Quebec's Heritage (Deschambault Declaration) in 1982. In this charter define heritage as

“the combined creations and products of nature and man, in their entirety, that make up the environment in which we live in space and time. Heritage is a reality, a possession of the community, and a rich inheritance that may be passed on, which invites our recognition and our participation” (Quebec Association for the Interpretation of the National Heritage, Committee on Terminology, July 1980).

Heritage is a very comprehensive term that includes three major entities: material culture (cultural properties), the geographic and human environments.

In another part of the world such as Australia and New Zealand, In Australia, The Australian National Committee of ICOMOS (Australia ICOMOS Inc.) was first adopted the Burra Charter in 1979 at the historic South Australian mining town of Burra and minor revisions in 1981, 1988 and the final version was adopted in 1999 (Australia ICOMOS Inc, 1999). The Burra Charter focuses of three aspects: conservation principles, conservation process and conservation practice, beside introduces three new terms: place²⁹, cultural significance³⁰ and fabric³¹ which concerned the cultural heritage not only tangible³² value but also intangible³³ value.

²⁹ Means site, area, land landscape, building or other work, group of building or other works, and may include components, contents, spaces and views.

³⁰ Means aesthetic, historic, scientific or social value for past, present or future generations.

³¹ Means all the physical material of the place including components, fixtures, contents and objects.

³² Such as buildings, monuments, landscapes, books, works of art, and artifacts.

³³ Such as folklores, traditions, languages, and knowledge.

While the New Zealand National Committee of the ICOMOS adopted the Charter for the Conservation of Places of Cultural Heritage Value in 1992 which broadened the 'place' from Burra Charter, found in Article 22 definition in the charter following:

“including land covered by water, and the airspace forming the spatial context to such land, including any landscape, traditional site or sacred place, and anything fixed to the land including any archaeological site, garden, building or structure, and any body of water, whether fresh or seawater, that forms part of the historical and cultural heritage”.

An important aspect of the Burra Charter is 'place' to define cultural heritage resources underpinning the concept of place as a cornerstone of Australian heritage practice. Place means sites, area, land, landscape, building or other work, group of buildings or other works and may include components, contents, spaces and views. The Burra Charter is guidelines to present a philosophy and methodology for preservation with link management of places of cultural significance to the assessment of cultural values. The preparation of a statement and assessment process has been geared to address living sites where a sense of continuity, interrelationships and layering are recognizable. Therefore, it recognizes and embraces the meaning of places as well as physical components and structures (Taylor 2004, p. 425).

In Africa continent held the conference of African Ministers of Culture and adopt the Charter for African Cultural Renaissance in 2005, replaced and revised from the 1976 Cultural Charter for Africa convinced that

“to preserve and promote tangible and intangible cultural heritage, in particular in the spheres of History, Traditions, Arts and Handicraft, Knowledge and Know-how”.

In Asia exclude Thailand, in 1994 the Nara Conference on Authenticity in Relation to the World Heritage Convention held in Nara, Japan from the invitation of Agency for Cultural Affairs and the Nara Prefecture cooperation with UNESCO,

ICCROM and ICOMOS adopted the Nara Document on Authenticity. The Document acknowledged the need to respect cultural diversity and all aspects of belief systems including form and design, material and substance, use and function, traditions and techniques, location and setting, and spirit and feeling. The Document points out that use of these sources permits elaboration of specific artistic, historic, social and scientific dimensions of a cultural heritage place (Taylor 2004, p. 430).

In China as the national government (People's Republic of China) adopted the Principles for the Conservation of Heritage Sites in China in 2000 which was draft by the collaboration with the Getty Conservation Institute and the Australian Heritage Commission to provide professional guidelines within the existing framework of laws and regulation relating to the conservation of heritage sites which defined heritage sites can be found in Article 1 as

“the immovable physical remains that were created during the history of humankind and that have significance; they include archaeological sites and ruins, tombs, traditional architecture, cave temples, stone carvings, sculpture, inscriptions, stele, and petroglyphs, as well as modern and contemporary places and commemorative buildings and those historic precincts, together with their original heritage components, that are official declared protected sites” (Agnew and Demas 2002, p. 60).

Nevertheless there are explicit guidelines in the China principles on maintenance, major and minor restoration, and reconstruction.

Another county which contain extraordinary civilization and heritages better known as India, In 1862 Sir Alexander Cunningham established the Archaeological Survey of India (ASI) to protect monuments of national importance under the Ancient Monuments Preservation Act. It consolidated architectural heritage consisted only of exemplary buildings and that its protection was primarily the responsibility of the government. However, many of the heritages and sites were not included in the act, the Indian National Trust for Art and Cultural Heritage (INTACH) was founded in 1984 to practice of preservation and also established the Charter for the Conservation

of Unprotected Architectural Heritage and Sites in India in 2004. The scope of selection criteria of this charter refer in Article 5 emphasized an inventor of built heritage in India which includes notable buildings constructed more than 50 years as: historic significance, historic integrity and historic context including precincts or properties with multiple owners. Those properties are deemed as architectural, historical, archaeological or aesthetic importance.

Countries in Southeast Asia still without region Charter of the heritage also has an organization was called Association of Southeast Asian Nation³⁴ adopted the ASEAN Declaration on Cultural Heritage in the meeting of Foreign Ministers meeting in 2000 which defined the meaning of '*cultural heritage*' as quoted in the Declaration that

“significant cultural values and concepts, structures and artifacts, sites and human habitats, oral or folk heritage, the written heritage and popular cultural heritage”.

As this Declaration adopted and agree to cover both intangible heritage values as well as tangible heritage to preserve. However, the degree of refinement of the scope and definitions at national levels in Southeast Asia varies. For example Vietnam heritage is defined as tangible and intangible cultural heritages, and in the Philippines, heritage is now defined as cultural properties, both movable and immovable (Ahmad 2006, p. 292). In Vietnam regarding above sentence from 'the Hoi An Protocol for the Best Practice Conservation in Asia' consider as

“the congruence between the material and immaterial dimensions of authenticity lies in their continuity. In the best conservation practice, the practitioner’s objective should be to provide the form of stewardship for the resource that best ensures the continuity and long-term sustainability of all authentic attributes of the resource, be they material or immaterial”.

³⁴ Consists of Brunei Darussalam, the Kingdom of Cambodia, the Republic of Indonesia, the Lao People’s Democratic Republic, Malaysia, the Union of Myanmar, the Republic of the Philippines, the Republic of Singapore, the Kingdom of Thailand, and the Socialist Republic of Viet Nam.

Therefore as the conclusion that the Nara Document on Authenticity and Hoi An Protocols lead to a concluding discussion of relevance in the Asian context. All of them refer to the need to determine authenticity in a way that respects diverse cultures and encourages cultures to develop analytical processes and tools specific to their nature and needs (Taylor 2004, p. 431).

Principle of preservation in cultural heritage in Thailand

The responsibility of the preservation, restoration and prevention of Thai arts and culture and under the king to assign but in 1911, in the reign of King Rama IV who regarded art and culture as the root of the Thai people and their Kingdom, the Fine Arts Department since was founded then one of the given role as

“to preserve, restore and prevent all of the arts, tradition and culture including royal and state ceremony as a national identity as a foundation of country development” (Fine Arts Department 2005).

The preservation, restoration and prevention of the heritage sites in Thailand was defined and regulated as the Act on Ancient Monuments, Antiques, Objects of Art and National Museums. It was established in 1961 and revised in 1992. According to this Act the preservation, restoration and prevention emphasized on the object as a tangible heritage such as ancient monuments or immovable properties with the age over 100 years which are archaeological sites, historic sites and historic park and antiques or archaic movable properties (Government Gazette 1992). The Act was developed from the Venice Charter and not supported to the concept of the World heritage from UNESCO even revised in 1992 because of mentioned to the cultural and natural preservation and prevention (Aunsomsri and Taraswang). Therefore in order to eliminate the problem of preservation, restoration and preservation, the Fine Arts Department develop the procedure of cultural management in the Fine Arts Department adaptation the TQM of Professor Dr. Edwards Deming to ‘R and D Cultural Procedure which was a good practice procedure.

Finally the Fine Arts Department adopted and develop ‘R & D Cultural Management’ from Dr. Endo into circle of six steps as: (1) Research (2) Diffusion (3)

Cultural Treatment; protection, preservation, restoration and renovation (4) Education and Transmission Program (5) Creation's and Adapted Culture and (6) Sustainable Development as five achievement goals; Live, Word, Deed, Arts and Human Right which is called 'Cultural Process' as a diagram (Fine Arts Department 2004, p. 74).

However, the 'Cultural Process' is run and managed from the government officials including specialists and scholars who follow the state policies and government budget. The need and priority of the preservation, restoration and prevention mostly depends on the politic issue and the top down management and the research in the first step people and local community just only a sample or variable in the research tools. People and local community are unable to claim their right and respect their local wisdoms. Therefore in many cases people and local community did not except the process of preservation from Fine Arts Department.

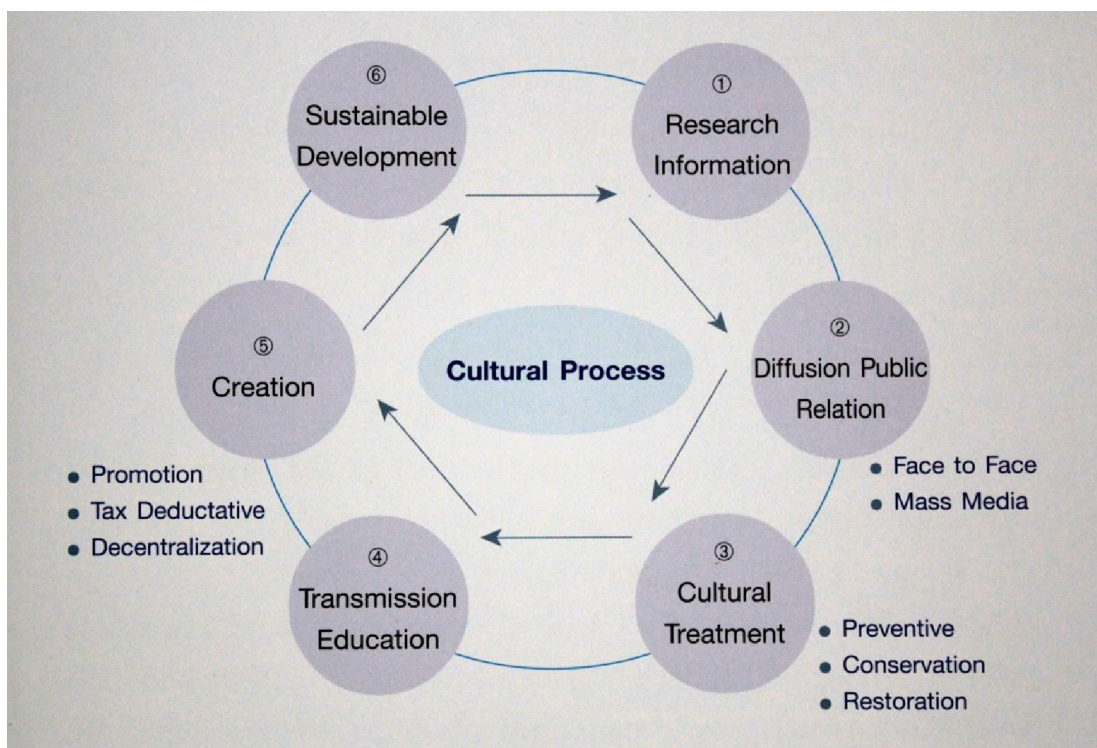


Fig. 35 The diagram of the cultural process on preserve, protect and prevent for Thai Cultural Heritage Monuments and Sites (Fine Arts Department 2004, p. 87)

While the ICOMOS Thailand, founded in 1985 as a national committee as Thailand representative in the international ICOMOS Advisor Committee and also as

a state advisory to the preservation, restoration and prevention of the cultural heritage in Thailand (ICOMOS Thailand Association 2011), The ICOMOS Thailand has been drafting the Thailand Charter since 2005 as a first draft. The charter was revised as the second draft in 2007 and lastly revised again in 2011 called as ‘Thailand Charter on Culture Heritage Management’ which is emphasized and separated in both tangible and intangible cultural heritage definition and added the participation from communities especially local community to preserve, restore and revitalize the heritage monuments and sites, the charter is still on process of adoption.

The preservation of the Intangible Heritage

The intangible heritage was defined succinctly by William Logan in 2007 as *“heritage that is embodied in people rather than in inanimate objects”* (Ruggles and Silverman 2009, p. 1). Since the development and adoption of Charter on the national and regional ICOMOS and specialists from the Venice Charter which have extended the significant from tangible cultural heritage to intangible cultural heritage such as: Burra Charter, the Nara Document of Authenticity, the ASEAN Declaration on Cultural Heritage and the Charter for African Cultural Renaissance. While UNESCO between during late 20st to the early of 21st Century also understood the trend of adding intangible heritage, some as a counterpoint to the World Heritage Convention has characterized and considering from the recommendation on the following bodies: the Safeguarding of Traditional Culture and Folklore of 1989, the UNESCO Universal Declaration on Cultural Diversity of 2001, and in the Istanbul Declaration of 2002. According to those, the idea of intangible heritage brought to the Convention for the Safeguarding of the Intangible Cultural Heritage (Intangible Cultural Heritage Convention) in 2003 (Smith and Akagawa 2009, p.1). The purpose and definition of the ‘intangible cultural heritage’ refer to the Article 1 and 2. The four purposes of the convention given as

“(1) to safeguard the intangible cultural heritage, (2) to ensure respect for the intangible cultural heritage of the communities, groups and individuals concerned, (3) to raise awareness at the local, national

and of ensuring mutual appreciation thereof and (4) to provide for international cooperation and assistance”

Moreover in the convention also described five domains of definition in Article 2 as

“(1) oral traditions and expressions including language as a vehicle of the intangible cultural heritage, (2) performing arts, (3) social practices, rituals and festive events, (4) knowledge and practices concerning nature and the universe, and (5) traditional craftsmanship”.

However, the intangible heritage was launched in 2003 has not been combined in the criteria of the WHC. While the spiritual value of the monuments and sites in both cultural and natural from the definition did not appear in the domains of definition intangible heritage, the preliminary assumption that the tangible and intangible heritage values separated criteria. Especially Asia context of the tangible heritage combined with the intangible values which beyond knowledge, practices and traditional craftsmanship concerned in the domains.

Authenticity with spiritual value

The context of preservation reviewed since noted in Venice Charter in 1964 and developed and adopted as regional and national charters and principles. As Huntington was noted for his argument published as “The Clash of Civilizations?”, in 1993 that the world is divided into eight major civilizations or “cultural zones” based on cultural different that have persisted for centuries. These zones were shaped by religious traditions that are still powerful today, despite the forces of modernization (Inglehart and Baker 2000, p. 22). One of the major concerned from specialists and related scholars especially in Asia context is spiritual value or spirit of place which conveys the cultural essence of a site. In historic sites it encompasses the meanings of a place accrued through time and through the time from the past to present uses. Expressed through the tangible as heritage building, these intangible values give the place its distinctive character, an aura that draws people to the place that speaks to them, engages their emotions and, often, gives them a sublime experience of their

surroundings (Loh 2007, p. 50). The spiritual value was added in charters and principles in the period at the end of 20th century to the beginning of 21st century.

One of the first principles that mentioned to the spiritual value for the heritage sites is presented as ‘the Nara Document on Authenticity’ in 1994 aimed to challenge conventional thinking in the conservation field. The Nara Document is a tacit acknowledgment of the plurality of approaches to the issue of authenticity that it does not reside primarily in Western notions of intact fabric (Taylor 2004, p. 430). The Nara Document described the spiritual value is the source of bringing cultural and heritage diversity as

“The diversity of cultures and heritage in our world is an irreplaceable source of spiritual and intellectual richness for all humankind”.

Moreover the Nara Document on Authenticity also explained the authenticity not only on the cultural heritage but also including to the spiritual value as

“Depending on the nature of the cultural heritage, its cultural context, and its evolution through time, authenticity judgments may be linked to the worth of a great variety of sources of information. Aspects of the sources may include form and design, materials and substance, use and function, traditions and techniques, location and setting, and spirit and feeling, and other internal and external factors. The use of these sources permits elaboration of the specific artistic, historic, social, and scientific dimensions of the cultural heritage being examined”.

Therefore, The Nara Document on Authenticity is the first initiated and explored the significant idea of spirit value of the places and cultural significance.

The development the revision in 1999 of the Burra Charter by the Australian ICOMOS revised the cultural significance by adding the spiritual value in Article 1 as

“cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations”.

Although 'place' in Burra Charter was not exactly added the spiritual value in the definition Article but in the 'Explanatory Notes' expanded the definition of the 'place' that

“may include memorials, tress, gardens, parks, places of historical events, urban areas, towns industrial places, archaeological sites and spiritual and religious places”

The spiritual values include the special connection between people and a place with responsibilities. The Burra Charter is notable as a conservation policy argument because it states that spiritual values may take precedence over physical preservation (Clavir 2002, p. 59). The Burra Charter is a departure from conservation practices that did not explicitly address culturally potent objects (Clavir 2002, p.59)

Another principle that was adopted the spiritual values and also expanding the idea clearly of the preservation of the context heritage in Asia, the Hoi An Protocols for Best Conservation Practice in Asia notion of cultural diversity to enshrine in the Universal Declaration in the Article 3 as

“Cultural diversity widens the range of options open to everyone; it is one of the roots of development, understood not simply in terms of economic growth, but also as a means to achieve a more satisfactory intellectual, emotional, moral and spiritual existence” (Engelhardt and Rogers 2009, p. 2).

Moreover, in the protocols also explained the compromising the spirit of the place which is one of the most important concept to preserve the heritage monuments and sites as

“All too often our conservation and adaptive reuse projects compromise aspects of authenticity of a heritage property, such as its original use (e.g. the conversion of a religious building into pubs and restaurants), spatial layout (e.g. the construction of high-rise buildings inside a low-rise historic precinct) or traditional materials (e.g. replacing traditional lime-based with cement-based renders). These

interventions usually have negative impacts on the spirit of place. Spirit of place conveys the cultural essence of a site encompassing the meanings of a place accrued through time and through its past and present uses. Expressed through the tangible built heritage, these intangible heritage values give the place its distinctive character. The spirit of a place resides in its authenticity, retention of which, as mentioned earlier, is an essential condition of heritage conservation. It is therefore imperative to first identify the authentic elements that define the character of a place and convey its spirit, and, second, to ensure that through the conservation process these elements are maintained, safeguarded and celebrated” (Engelhardt and Rogers 2009, p. 14).

The preservation of the heritage monuments and sites has to concern the usage of those constructions for appropriating purpose with respect to the authenticity purpose of the heritage in the past. The protocols recognition the impact to tourism in Asia and effects on restoration and presentation of heritage places for tourism purposes and the protocols are an attempt to underscore the inter-relatedness of practices for the conservation of the physical heritage sites, the intangible heritage and cultural landscapes (Taylor 2004, p. 430).

Eventually the context and environment surrounding of the sites have changed, but the usage of heritage monuments and sites remain tangible value as the original purpose. A notable and timely example is Borobudur Temple Compounds is a ninth century, inscription as World Heritage List in 1991, approximately 40 kilometers northwest from Yogyakarta, Indonesia. The monument comprises six square platforms topped by three circular platforms, and is decorated with 2,672 relief panels and 504 Buddha images. A main dome, located at the center of the top platform, is surrounded by 72 Buddha images seated inside perforated Stupas.

The structure itself evoking for most visitors sheer awe, sits in a cultural landscape of stunning character and one can feel the palpable relationship between the monument and its setting as part of a Buddhist cosmology. However is not necessarily a signal of incompatibility between the Javanese and the Muslim components but

could be traced to the return to spiritual values for strength, comfort and rudder in a consumer-driven world. Not an expression of religious extremism as some might be quick to conclude or retreat to impractical isolationism, a sense of cultural disenchantment with globalization is a global phenomenon and in this sense, Yogyakarta is reflecting a worldwide expression (Isnail, Shaw and Ling 2009, p. 119).

Moreover refer to the cited from Lowenthal in ‘the Past is a Foreign Country’ that however faithfully we preserve, however authentically we restore, however deeply we immerse ourselves in bygone times, life back then was based on ways of being and believing incommensurable with our own. The past's difference is, indeed, one of its charms: no-one would earn for it if it merely replicated the present. But we cannot help but view it and celebrate it through present-day lenses (Taylor 2004, p. 420).



Fig. 36 Borobudur Temple Compounds marvel of stone standing in the garden landscape near Yogyakarta, Indonesia the Buddhist heritage site in predominantly Muslim context.

Source: http://www.buddhanet.net/images/boro_v.jpg, accessed in July 30th, 2009

Another example that similar case to the Borobudur in Indonesia that local people who are predominantly not faith at the same religious as the heritage site located in the present world is Lumbini³⁵ Garden. Lumbini is situated in central Tarai plain of Nepal, approximately 300 kilometers west of Kathmandu. Although its elevation is 105 meters above sea level, Himalayan foothills are only 24 kilometers away, inscription as World Heritage Lists in 1997, described by Buddhist literature as 'Pradimoksha-vana' (sin-free forest) blessed with blooming full of green and shady sal trees³⁶, beautiful flowers, birds and natural scenery, in south of Nepal which population surrounding site, population statistic data from Central Bureau of Statistic in 2005, mainly predominantly in Hindus (67%) and Muslims (32%) of the population Buddhists (1%). There are more Hindu temples and Muslim mosques than Buddhist stupas in the area.

Lumbini garden has no religious significant as spiritual value to the locals. It can see that the local patrimony concern to the site as an economic resource than spiritual one. The government uses the site for national pride building, garnering international support and promoting to tourists despite its potential for attracting Western, regional and domestic tourists and growing trend in arrivals of the tourism statistic by Nepal Tourism Board with approximately 71,000 international tourists in 2007. At the present day the Lumbini is one of the major tourist destinations of Nepal.

Although most of the visitors visited to Lumbini are majority of the pilgrims from South Asia and Southeast Asia tend to travel in a larger group (Nyaupane 2009, p 157) because as the pilgrimage of the Buddhists must visit to places which have significance to the events in the life of Gautama Buddha. For example: travelling to the birthplace of Lord Buddha, Lumbini, at the foothills of Nepal, Budh Gaya where Siddhartha received enlightenment and became Lord Buddha the 'Tathagata' (thus come and thus gone), to Sarnath where Lord Budhha delivered his first sermon and to Kushinagar where the Lord Buddha had his Mahaparinirvana where he has entered into Nirvana. In the Mahaparinirvana, Sutra/Sutta, the Tathagata are recommended to

³⁵ The birthplace of Lord Buddha, Siddhartha Gautama or as known in enlightened one as Gautama Buddha.

³⁶ Queen Māyā of Kapilavstu belonged to the Shakya clan, gave birth to Gautama Buddha under a sal tree or an asoka tree in a Lumbini garden.

his devotees to make pilgrimage in order to cultivate detachment and refresh their spirituality (Salim 2008, p. 58).



Fig. 37 Lumbini at the present day, houses the pond where Buddha was bathed after he was born and a temple which has images of young Buddha with his mother.

Source: <http://www.muktinathyatra.com/wp-content/uploads/2011/08/1-birth-place-lumbini.jpg>, accessed in July 30th, 2009

On the other hand the great stone sculptures of Buddha images of Bamiyan in Afghanistan; two large standing Buddha statues, were carved out of the sedimentary stone of the region during the 2nd – 4th centuries. The larger statue was 53 meters height while the smaller Buddha measured 35 meters height. The two colossal statues were demolished in March 2001 by the military and para-military forces of the Taleban Government of Afghanistan, using mortars, dynamite and rockets (Gruen, Remondino and Zhang 2003, p. 11).

The discriminatory intent, reflected in the sheer will to eradicate any cultural manifestation foreign to the Taliban ideology, and the deliberate defiance of the United Nations and international public opinion make this destruction a very dangerous precedent and to identify gaps as well as relevant principles and rules

applicable in the context of the deliberate destruction of cultural heritage. They conclude that extreme and discriminatory forms of intentional destruction of cultural heritage of significant value for humankind (Francioni and Lenzerini 2003, p. 619).

However, as the perspective of Ahmed Skounti that destroying the Buddha statues as a tangible heritage values, intangible heritage survives longer. It outlives by far the span of the lives of those who carry it. Even in the *longue durée*³⁷, transcending the generations of individuals who transmit this heritage from one to the other, it never simply disappears. On the contrary, it is transformed, adapted, hidden (sometimes to reappear with more vigor), it retracts or expands depending on circumstances, or it scatters the micro-elements that make up this heritage to be incorporated into new, emerging cultural traits, and so forth (Smith and Akagawa 2009, p. 77).

The mentions of remaining of the spiritual value even the tangible heritage was destroyed which implied that people are more concern about the spiritual value as a soul of the cultural heritage than the shape and form with related to the Dhamma (the teaching) of Lord Buddha as known as the “Three Characteristics of Existence” which make with the faculty of wisdom the Buddha directly perceived that all sentient being (everything in the phenomenology of psychology) consists of “*Anicca*”³⁸, “*Dukkha*”³⁹ and “*Anatta*”⁴⁰ (Amstrong 2001).

³⁷ The English meaning is ‘long term’.

³⁸ Refer to the fact that all conditioned things are in a constant state of flux. In reality there is nothing that ultimately ceases to exist; only the appearance of a thing ceases as it changes from one form to another.

³⁹ “Awry, flawed, unsatisfactory”; often simply translated as “suffering”

⁴⁰ “No-Soul”; the doctrine that denies the existence of a constant, stable and discrete personality.

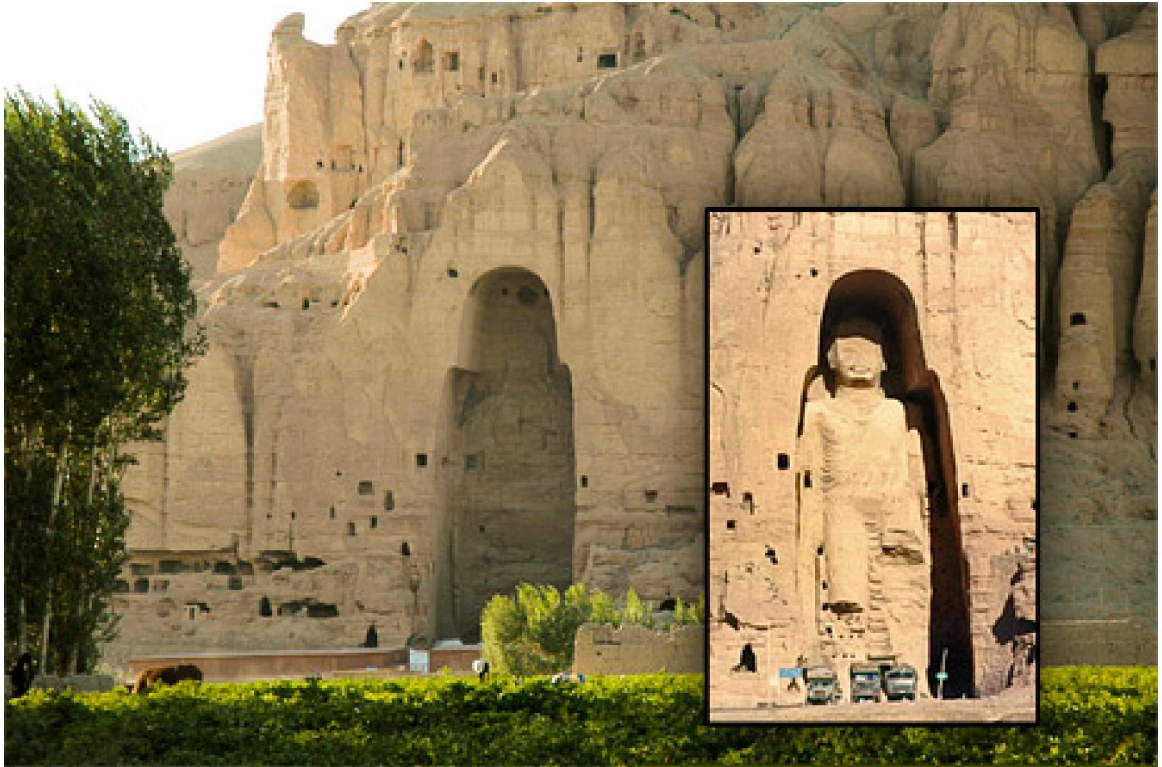


Fig. 38 An empty niche (left) remains where a 53-meter Buddha sandstone cliffs and pictured in inserted overlooked Bamiyan Buddha image.

Source: http://news.nationalgeographic.com/news/2009/06/photogalleries/bamiyan-buddhas-pictures-missions/images/primary/090609-07-ancient-buddhas-destroyed_big.jpg, accessed in July 30th, 2009

Moreover in the protocols giving more detail in Annex C in the First Principles for Conserving Historic Built Heritage on first Principle noted that collective mapping of cultural space, its hierarchies, symbolic language and association is a pre-requisite for appropriate and successful conservation:

“Conservation professionals and students are taught that conservation work should begin with a thorough investigation of the building. By studying historical documentary evidence and in situ physical evidence in the building fabric itself, it is possible to come to an understanding of the evolved significance of the place and to identify character-defining elements of the site which must be conserved in the ensuing work”.

“Developing an understanding of the true spirit of place, and reflecting this understanding in the conservation process and product, is central to the mission of reanimating the heritage through conservation work. Only a truly participatory process, which is predicated on a broad-based cultural mapping exercise, can ensure a full understanding of a place. The mapping process reveals “which heritage is important”, “to whom” and “why”. It may identify heritage which was heretofore overlooked, or it may uncover other aspects or alternative readings of already-identified heritage. This sociocultural mapping process brings to light the heritage values which are inherent and often unspoken in a community, notably, social and spiritual values. On this basis, conservation work can be undertaken in an appropriate manner, with full cognizance of the issues at hand, adding a “how” dimension to the mapping exercise” (Engelhardt and Rogers 2009, p. 48).

The protocols are an attempt to ‘underscore the inter-relatedness of practices for the conservation of the physical heritage sites, the intangible heritage sites and cultural landscapes’. Whilst they have potential to be a valuable guideline, the separation of cultural landscapes from archaeological sites; historic urban sites/heritage groups; and monuments, buildings and structures in the section ‘Site Specific Methodologies for Asia’ is confusing. Indeed, it seems misleading in that cultural landscapes are the overall umbrella under which everything else sits (Taylor 2004, p. 431).

Summary

This Chapter examined the concepts of the preservation from the beginning history of preservation the monuments and sites as the ‘Venice Charter’ in 1964 and the concept of the World Heritage Committee as a part of UNESCO working with the specialists and scholars bodies such as ICOMOS and IUCN. The introduced the ‘World Heritage Lists’ as the uniqueness of the human kind or special one in the world which necessities to protect and prevention as the quoted following ‘*our legacy from the past, what we live with today, and what we pass on to future generations*’.

The development and adaptation of the local and region principles and charter from the 'Western' such as Europe and United States to the Eastern such as Asia and Oceania for the specific purpose. The principles and charters were emphasized in Asia context which related to the research topic. The development and contributed the intangible value and diversity from the UNESCO bodies as the Convention for the Safeguarding of the Intangible Cultural Heritage (Intangible Cultural Heritage Convention) in 2003 which adopted the criteria of the intangible values meanwhile the examined the intangible heritage. The charters were not fitted in the criteria of the Asia context that the cultural heritage sites and monument have been combined both tangible value and intangible value emphasized the 'spiritual value' and 'sprit of the place' or 'spirit of the heritage'. The cultural heritage monuments and sites especially within Asia which are 'root' or 'core' of the cultural heritage contributed including the example of the tangible cultural heritage sites that were preserved and destroyed from the changing of social context in a different form of the original cultural heritage used to be appear.

The concept of preservation, restoration and prevention beyond the tangible heritage significant as the scholars, specialists and archaeologists concerned, moreover the intangible values inside the tangible values such as spiritual values and spirit of the places as important and mention as the concept of preservation, restoration and prevention from the present day. Therefore, the process of preservation, restoration and prevention has to study both of tangible and intangible values of the monuments and sites in a management plan of preservation before the process of restoration begin.

Chapter 4

Deterioration the Cultural Heritage Sites

Deterioration of Cultural Heritage Sites

Destruction of cultural property affects not only the people in that culture, but also serves to decrease the cultural diversity of the world. Such heritage sites are very important values because they represent masterpieces of the human creative genius, bearing testimony to cultural traditions of past civilization and illustrating prominent states in human history with artistic work of outstanding universal significance (DeLony 1996). In the history has been witnessed that fate of many nations and people have done the brutally and intensive cultural mutilation. Some of them have ceased to exist while others have had their identity deeply and irreversibly altered (Thomas 2007).

According to the information of the deterioration monuments and sites of the ruin heritages from Fine Arts Department of the Royal Government of Thailand that was examined from research documents, textbooks, internet websites and additional interview with some archeologists in the heritage sites. The causes of deteriorating, decaying and collapsing the ruin of cultural heritage buildings and antiques including Buddha images have been analyzed. The example opinion of King Rama IV that either new or ancient heritages in the tropical area are highly affect to the deterioration of the monuments and sites in a cold area (Phrabat Somdet Phra Poramintharamaha Vajiravudh 1907, p.4).

Moreover, one of the major concerns due to the deterioration of the cultural heritage is from the climate change which identified as the greatest threat to cultural heritage (Cassar and Pender 2005, p. 612). Sometimes the heritage monuments and sites can collapse by themselves because of the construction material or the construction techniques which use unstable material or the weight of the building is

over capacity. However, the ruins heritage monuments and sites have been occurred from other reasons and more seriously to those heritages. The descriptive types of deterioration of cultural heritage monuments and sites are following as:

1. From Nature

During past 40 years, the awareness of threats from the natural environment and the need to preserve the world resources has been accepted. The understanding of risks from environmental impact including the climate change has been affected to the historic manuscripts, building, monuments and archeological sites. They are the cultural analogs of the biosphere as described in several reasons but some of them related to the risks from the human activities indirectly.

1.1 Weather: The deterioration of the heritage sites have been occurred continuously as a result of physical environment, chemical and biological processes, depending on e.g.: air constituents, relative humidity, temperature, wind velocity, solar radiation, frequency and intensity of rain, sea spray, deicing salts, composition of the soil, living organisms (Grieken, Delalieux and Gysels 1998, p. 2327).

- Heating from the Sun's Ray: heating of the Sun during daytime make the material constructed expanding and shrinking during night time which may cause the fraction on the surface of heritage material such as Buddha image which is made from bronze or stucco. The most harmful part of the Sun's light is the invisible spectrum known as ultra-violet (UV) portion, as well as the bluer end of the visible spectrum. Because the energy level of this part of the spectrum is stronger in comparison. The elimination or reduction of this band of the light spectrum will greatly slow down deterioration in artifacts (Heritage Conservation Centre 2001, p. 2). Moreover, the solar radiation drives moisture and salts inside the coating material leading to damp and the risk of efflorescence on internal surfaces (Cassar and Pender 2005, p. 612)

- **Moisture or Humidity:** The monuments and buildings have absorbed the humid from environment such as air and soil surrounding which cause the deterioration to the heritage building including the Buddha image such as changing of the coated material color or decaying material of the construction. The presence of moisture in the atmosphere is a prevalent phenomenon. It is constantly exchanged in a cycle of absorption and desorption. Materials made from organic materials – such as wooden panels, plant fibers in natural textiles, wood pulp in paper, and leather – retain a high capacity to take in and release moisture. The constant cycle of absorbing and releasing moisture from materials can also set up continuous physical stresses which can build-up to become irreversible damage. The different materials react to the amount of moisture in the surrounding air by absorbing or releasing moisture differently. This cycle of change can damage the structure of materials by introducing physical stresses and tensions. This is especially obvious in the network of cracks in wood and ivory, as well as the planar distortion (or warping) observed in some wooden panels (Heritage Conservation Centre 2001, p. 2).

- **Rain and Snow:** The large Buddha image that constructed in an open space or some of them have the buildings cover but the roofs were collapsed from the period of construction time. Heavy rain and long rain may scour the erosion of brick, stone, or other materials. The inability of heritage monuments and sites which lack of rainwater disposal system to handle torrential. The wind-driven rain is the problem as a contributory factor in the wetting (Cassar and Pender 2005, p. 612). Moreover, the heavy rain and long rain may cause the flood during or after the rain. However, the problem of snow has never been occurred in Thailand but in some part of the world such as Europe, North America, China and Japan may affect from snow during the winter time. The heritage monument and sites have to be strengthened those construction from snow.

- **Temperature:** Heritage monuments and sites in some areas have the high level of temperature differentiates between day and night causes of

velocities. Moreover, climate change scenarios suggest that the Earth mean surface temperature will be warmer from 1.4 up to 5.8 °C by the end of the 21st century (Saiz-Jimenez 2004, p. 88).

- Salt or Sodium Chloride (NaCl) in the Air: The damage from salt is largely attributable to two mechanisms: crystallization of salt from solution and hydration of salt that can exist in more than one hydration state. Thermal expansion of the salt is a third reason but it is less important factor. The growth of salt crystals within pores can cause stresses, which are sufficient to overcome the stone's tensile strength. When the migration of salt to the surface of the material is faster than the rate of drying, the crystals deposit on the top of the external surface and form visible efflorescence. It does not damage the material directly. When the migration is slower than the drying rate, the solute crystallizes within the pores, at varying depth, causing crumbling and powdering of the material (Grieken, Delalieux and Gysels 1998, p. 2329).

1.2 From Disaster: The disaster was noted in Hoi An Protocols that the risk from disaster in Asian Issues following as:

“The Asia region is vulnerable to a range of potential natural and man-made disasters which can impact severely on all forms of cultural heritage, including living or intangible heritage. In addition, experience has shown that post-disaster recovery can pose just as great a threat to heritage. Many post-disaster reconstruction measures have irretrievably compromised the authenticity of cultural heritage”. (Engelhardt and Roger 2009, p. 18)

- Earthquake and Volcano Eruption: Natural disasters are the cause loss of human's life and an effect to the economic crisis. Moreover, it cause of the loss of irreplaceable cultural heritage. Earthquakes can harm instantaneous destruction without warning, causing extensive and often irreparable damage to cultural heritage (Ertuk 2003, p. 243). Similarly destructive

heritage monuments and sites have been damaged as same as the non weather-related natural disasters. In recent years earthquakes have caused destruction and claimed thousands of human's lives throughout the world. The percentage of earthquakes causing more than thousand fatalities has increased by approximately 10 percent or causing approximately 1.4 million deaths since 1910 (Pararas-Carayannis 2000).

Thailand has been extinct volcano which is no longer active. However, the well known examples are the two flourishing Roman towns of Pompeii and Herculaneum (Ercolano) in Italy, buried by the eruption of Vesuvius in AD 79 and Borobudur temple compounds in Indonesia that was collapsed by earthquakes. Moreover the temple was buried for centuries from the explosion of the volcano and covered with volcanic ash. Excavations began process in the early 20th century. The acid rain after volcano eruption also can make the damage directly to the heritage building.

Thailand has earthquake frequently especially in the north and in the west. Sometimes it caused the damage to the heritage building as regarding news from TTR Weekly (March 29, 2011, p.1):

“The tremor damaged an ancient pagoda in Wat Phra That Chedi Luang, Chiang Saen, a famous temple on the tour circuit tour groups follow when visiting the Golden Triangle and meter high pagoda spire toppled over during the aftershocks and there was structural damage such as cracks and holes on other parts of the Phra That Chedi Luang”

On that day that earthquake caused more than 10 heritage sites including Buddha image partially collapsed, damaged and cracked. Another disasters effected from earthquake is Tsunami which cause direct impact seriously damaged to the heritage buildings. The located sites in the

coast area such as Japan and southern of Thailand have the risk of damage from Tsunami.



Fig. 39 Top of Chedi, heritage site in the northern of Thailand was collapsed from the earthquake on March 29th, 2011 reported by TTRWeekly newspaper

- Fire or forest fire including fire from lightening: Many of heritage monuments and sites currently surrounding with forest and trees because the social changing is cause to the relocation or move their cities. In the past the moving cities were from many reasons such as the contagious diseases, civil wars, inconvenience of transportation and trading which people leave their old cities, contained the built of heritage monuments and sites.

Those cities may have been covered by tree created the forest which fire can be occurred from dry weather and cause the damage and deteriorate from heat and smoke. Moreover, the Buddhists always pray their worship to and Buddha image inside the temple with lighted incense sticks and candles. Those are cause of the fire in the temples and it occurred many times in the history that Uposatha, Vihàra, and other building in the temples were burned. It is the main reason of the lost of the cultural heritages in Thailand.

Another cause of the fire is from the lightening from thunder storm because most of the Thai heritage buildings in the temple including Buddha images mostly were topped or covered the roof with valuable metal such as bronze, brass and gold which is lighting conductor.

- Storm: Heavy storms such as typhoons, cyclones, hurricanes or tornados including heavy thunders, storms, flooding, mud/rock slides are directly radical damage with immediate and drastic effects (Grattan 2004). The cultural and natural heritage monuments and sites such as buildings, landscapes and forests passed through the area. The example of heritage site that was damaged by typhoon was the main Chedi of Wat Hadsadaward (Wat Chang) deserted monastery built in 1549. It was located on the east side of Wat Na Phramen and next to Sa Bua canal. However the typhoon did not passed through directly at center of the storm, The Chedi was collapsed from Typhoon 'Gay' in October, 1980. (Pinyowanichaka 1994),
- Flooding: Another negative impact to the cultural and natural heritage monuments and sites. The flood is mostly damaged heritage materials during the period of inundation which may last for few weeks (Silva 2003, p.224).

Flood can be separated in three types. First type of the flood is standing water a common form of flooding that usually occurs at historic sites. Standing water will cause entire buildings to be soaked filled with silt and subjected to fungal growth. Moreover the standing water from the flooding can scour the foundation of the building when the flood in a long period of time.

Second type of flood is flowing water through the heritage monuments and sites which can cause the damage to heritage sites as same as standing water. In addition, structures can be subjected to soil erosion, scouring, lateral displacement, and sometime the building moved off its foundation.

The flowing water may bring the timbers or logs directly crush to the heritage monuments and sites.

The third type of the flood is the water seepage. It is one of the most common forms of damage experienced within cultural properties. With this type of flooding, the high level of water in the soil rises though actual standing water never reaches the structure of the heritage sites. The consequence of water seepage is flooded into the basement, rising damp, and problems with hydrostatic pressure on foundation through the wall (Kelley 1994, p. 6).

Moreover, the problem of the overflow water from river bank and flood the heritage sites. The necessitating extensive restores due to the flood to those sites and the risk of damage from the flood to the archaeological sites. Hence improvements to drainage systems to cope with flood risks were emphasized (Cassar and Pender 2005, p. 612).

In October 2011 the World Heritage property of Ayutthaya, which occupies the half of the west side of the inner island of Ayutthaya such as the Ayutthaya Ancient Palace, Wat Phra Si Sanphet and Vihàra Mongkhon Bophit, has been flooded 1 – 2 meters height from the ground for longer than half of a month. Monuments and temples located on the outside perimeter of the area (technically not part of the World Heritage property), such as Wat Chaiwattanaram located on the opposite bank of the Loburi river, which had been inundated. The mission to recover Ayutthaya, which was included relevant national authorities and experts, It has to be arranged shortly by Thailand's Office of the Prime Minister. Thailand also prepared to request for Emergency Assistance founded by the World Heritage Fund. Under the terms of the fund, assistance may be requested to undertake emergency measures or to draw up an emergency plan for the safeguarding of the property. (UNESCO Bangkok 2011)



Fig. 40 Level of the flooding comparing to the inserted photo (on the top right) at the regular time, Buddha Head in Banyan Roots as a highlight tourists attraction at Wat Mahathat, Ayutthaya.

Source background photos http://photo.greenpeace.org/GPIDoc/GPI/Media/TR3_UNWATERMARKED/b/8/e/b/GP02L70.jpg, accessed in November 14th, 2011

Insert photos http://2.bp.blogspot.com/_mNLogi28DnU/S1snQqxSORI/AAAAAAAAACE/t0nCcw95PXU/s400/scan0031.jpg, accessed in November 14th, 2011

2. From Biology

2.1 From Plants and Micro-organic

- Plants and Weeds: Most of the deserted temples and monuments or the cultural heritage monuments and site without the good management. Plant

may grow from bird droppings and left the proper case semi digested seeds on the cultural heritage sites. Wind and flood which seed and spore may blow and grow in the cultural heritage sites. The root of the plant thread from the surface inside the building to grip itself and the weight of plant increasing when tree grow larger on the heritage sites their weight also cause the heritage building to collapse. While wind blows the large tree to sway and sometime heavy wind can pull the cultural heritage to collapse. Although cutting the large tree grow on the heritage site may cause the heritage site collapse too.

The example of the cultural heritage building threatened by trees is Ta Prohm⁴¹ temple or “Old Brahma”. This temple was initially named “Rajavihara”⁴² or also known as the ‘Temple of the Jungle’ which located near Angkor in Siem Reap Province in Cambodia. It was built in the Bayon style in the late 12th and early 13th centuries during the reign of Jayavarman VII, a great king who reconquered the Khmer empire from Cham invaders during the years 1177-1181. A lot of silk-cotton trees (*Ceiba pentandra*), thitpok (*Tetrameles nudiflora*), strangler fig (*Ficus gibbosa*) and gold apple (*Diospyros decandra*) have been grown all cover the entire ruined temple.

⁴¹ A lone sandstone tower within a single ruined laterite enclosure. The stele discovered at Ta Prohm in 1928 gives details of 102 hospitals established by Jayavarman VII. This building is probably the chapel of one of these. One stands outside each of the cardinal gates to Angkor Thom (Tremmel 1994, p.2).

⁴² Meaning “royal monastery” (APSARA Authority 2004)



Fig. 41 The deterioration of the cultural heritage Prang as Buddhist Sanctuary Ta Prohm temple from root fig tree and lichen at the surface of the stone.

Source [http://vietkhmerexperience.files.wordpress.com/2008/09/ta-prohm-tree.jpg?w=500 &h=428](http://vietkhmerexperience.files.wordpress.com/2008/09/ta-prohm-tree.jpg?w=500&h=428), accessed in April 22th, 2009

- Microbiology: Various bacteria, cyanobacteria, algae, fungi, lichen etc. cause deterioration to cultural heritage material monuments and sites. Many micro-organisms are in fact capable, through a range of etching and chelating processes, to bore and burrow their way into mineral surfaces, producing pits and channels (Grieken, Delalieux and Gysels 1998, p. 2329).

The different microbiological species decay the different materials such as wood, paint or stone. For example, described by Blanchette that the microbial decay processes of historic wood in detail. Terrestrial decay occurs primarily through the action of fungal growth. There is three mechanisms of deteriorations. White rot fungi, a heterogeneous group within the Basidiomycota, degrade cell wall components and cause the characteristic bleaching of wood. Brown rot fungi cause rapid

depolymerization of cellulose and degradation of cell wall carbohydrates, leaving behind a lignin-rich brown-colored wood. The most destructive brown rot fungus is *Serpula lacrymans*. A third type of terrestrial degradation, soft rot, is caused by fungi within the Ascomycota and Deuteromycota and is characterized by degradation of the secondary cell wall of the wood cells.

In contrast, wood in aquatic environments is attacked primarily by bacteria. Three different patterns of bacterial attack have been characterized: erosion of the secondary wall, formation of pits (cavitations) in the secondary wall, and tunneling through the secondary wall and middle lamellae. Microbial growth interacts with environmental factors in the degradation of wood. In terrestrial environments, temperature and relative humidity regulate microbial growth and deterioration (Mitchell and Gu 2010, p. 143).

Moreover, for a long time people believed that storing wood in water or keeping the wood under the ground water table prevents wood from biological degradation. Wooden foundations have traditionally been used in areas with weak soils to support buildings, many of which are of historic importance. However, in the 90's more and more wooden foundations were found where piles were seriously damaged by biological attack. This shows that bacterial wood degradation should be regarded as a serious problem when dealing with wooden constructions under the water and those even wooden objects other than foundations could be affected. If this process of bacterial degradation can continue over decades many monumental buildings standing on wooden piles might need expensive foundation repair or even be severely damaged. (Klaassen 2005, p. 9).

In some instances, the presence of microbial growth on stone is a purely aesthetic issue, because visible growth of pigmented microorganisms can alter the appearance of buildings and statues. However, in many cases microorganisms are one of the main causes of

deteriorated stone quoted by Warscheid and Braams. Microbial bio-deterioration of stone is widely thought to occur through the action of organic and inorganic acids produced as metabolic by products explained by Sand and Bock. Moreover, Algae and Cyanobacteria are commonly found on stone in cultural heritage materials. In addition to causing deterioration of the stone, growth of these microorganisms is visibly obvious and results from green-to-black staining of the stone. A large number of different algal and cyanobacterial species have been found on historic stone buildings and monuments described extensively in Ortega-Calvo (Mitchell and Gu 2010, p. 145)

2.2 From Animals

- Large Animals: Elephants, horses and cattle walk over the heritage monument and site. They look for feed such as weeds, grains and tubers which may grow on the deserted heritage monuments and sites. These animals' activities may take risk of damages to the heritage sites.
- Small Animals: Termite, mouse, moles and pest usually dig or gnaw the foundation of the heritage monument and sites. It is the cause of unsteady to the foundation of the heritage sites and it may collapse. Other kind of small flying animals such as pigeons and bats. They have a chance to make the nests inside the building of the heritage sites which it can bring bacteria, acid from their dung. Moreover in their dung may have seeds of plant from semi digestion which those can germinate inside the heritage sites.

3. From Human

Human activities can harm the cultural heritage monuments and sites. The rapid growth of population continuously has been disturbed balance of the ecosystems on our planet. The more population is cause the more pollution to the air, the water and the soil. The example of human's activities cause the harm to natural and cultural heritage sites is following as: the destruction of the rain forests, fires burning in the

forest with unable to control, alterations of sensitive ecosystems, destruction of the ozone layer, climate changes with not fully comprehended. Chemical spills have polluted rivers, watersheds and toxic material emissions.

Disaster occurred through armed and conflict of the human. Those are occurred on different scales; confliction as civil war through war among countries. The terrorism and need of survive of human is a new kind of human confliction. The fear to loss of life and mental distress is currently the greater dangers for mankind. Since 1945, civil wars occurred all over the world. People were killed more than 20 million people in 150 countries. The Research Group of the National Defense Council Foundation cited that there were 70 armed conflicts in 1994, up from 62 armed conflicts in 1993. The trend is clearly that armed conflicts and complex human disasters. There are increase of frequency and severity of the conflict in in various parts of the world (Pararas-Carayannis 2000). It is hard to have pre-planned strategies; actions must be intelligent and situation based (Silva 2003, p. 225). While in the developing countries such as Thailand, the government and communities emphasize on economics and living comfortably of the people in the country which is easily cause the conflict within and among countries. They less emphasized on the preservation and prevention the aesthetic value and spiritual of the cultural heritage places.

3.1 Not from Human Intention

- Construction the buildings and infrastructures close or in the heritage monuments and sites: The rapidly growth of population is cause the expanding of the urban area (Pararas-Carayannis 2000). The development of the city from the state government have expanded the road for transportation, built more schools, colleges and hospitals. Sometime those constructions are close to heritage monuments and sites which cause the damage to those sites. Meanwhile people need more homes for living and commercial buildings which they did not know that those construction built on area used to be heritage site. Because some of the heritage sites were hidden underground and coved by the soil for long time.

Moreover, the high rise and modern buildings built obstructed the landscape of the heritage sites. Mostly of urban development plans, affected to the cultural heritage sites, have never been commented by the Fine Arts Department before launching those plans. Moreover, communities in the past were strongly concern to the benefit from schools or hospitals than the value of cultural heritage sites.

- Conservation or preservation without the exact knowledge and lack of conservation knowledge of the local people: There are several cases that caused ruined of the cultural heritage temples. The changing style of constructions has easily occurred in the deserted temple because the new coming monks may not understand the value of those constructions in the past. The modernization with developer monks desired to restore with revitalization the heritage temples including Buddha images. Mostly the heritage monuments and sits is no longer shire and in a perfect condition, but the restoration process with lack of knowledge of preservation methodology.

The process of restoration in the past, they demolished and rebuilt on the heritage sites. Unfortunately the new construction may lose authenticity of art and archaeological evidence in the history (Pinyowanichaka 1994). However, even the preservation and restoration process of the heritage sites have been done by archaeologists which are the expert in the cultural heritage. They can make the mistake to restore the heritage sites because of lack of right information and limitation of time to process. Those mistakes can be found in some of the cultural heritage sites.

The example of the impropriated restoration process that caused the problem to force to halt the construction is the Uposatha of Wat Yai Chaimongkhon⁴³ or Wat Chao Phraya Thai which was claimed that

⁴³ This temple constructed in the reign of King U-Thong is located outside the city to the southeast (Tourism Authority of Thailand 2006, p. 17)

designed by architecture from Fine Arts Department (Wat Yai Chaimongkhon 2010). This construction was the evidence of not only the lack of preservation knowledge but also misunderstand the authenticity of cultural heritage both of tangible and intangible values as know as exhibited in Chapter 3. In this case monks including the temple management committee who were in charge of the temple misunderstand the heritage values clearly. The process of restoration had done without asking for the permission as the restoration plan of the Uposatha to the local government of Ayutthaya. The process was taken without the public hearing from community.



Fig. 42 The unfinished reconstruction Uposatha process on the original hall ordinary heritage monument east of Main Chedi, Wat Yai Chaimongkhon.

Source http://www.klongdigital.com/images_webboard3/id_31464.jpg, accessed in January 22th, 2010

The one of duties state parties such as Fine Art Department has to transfer the knowledge of preservation and restoration of cultural heritage monuments and sites to stakeholders i.e.: monks, temple management

committee and local communities. Moreover, the operation of state parties has been working poorly because inadequate of annual budget. On the other hand the local community had the right to know the management and development plan which due to the preservation and restoration process of cultural heritage monuments and sites. They can either accept or reject those plans to the cultural heritage sites. The cultural heritage site is not belonging to one's property therefore the public hearing and participation from stakeholders should be done as important processes in the preservation plan before restoration process begin in the cultural heritage sites.

- Lose of construction know-how of previous generations: Thai craft is an art with aesthetics, exquisiteness, delicacy and beauty. The Thai craftsman has been trained from previous generation to current and future generation since an ancient time. There are ten of divisions called 'Chang Sip Mu' (10 craftsmanship), in the past used to be a large organization called 'Department of Chang Sip Mu' or 'Department of ten crafts division' reported directly to the King closely. Moreover all Thai kings in the past recognized the important of those art and crafts (Airport Authority of Thailand 1997, p. 140).

The most of the craftsman has learned and trained directly within family members. The first process to be craftsman in the past, he or she (mostly he) had to ask the permission to be trainee which called in Thai 'Luk Sid' (or student) to the professional craftsman in Thai called 'Khru' (or instructor) which can either accept or reject the request. The instructor mostly made the decision from trainee's talent and attitude. When instructor accepted request from trainee. The trainee has to pass the ceremony called the 'Wai Khru Ceremony' or gratitude teacher ceremony before starting process of teaching or learning.

The process of learning or training would be one on one training process. The process of training is emphasizing on practicing not theory.

During training or teaching process is without textbooks or handbooks to study the knowledge and wisdom. The ability of trainee or student to learn and adopt the knowledge from trainer depends on his or her talent and understanding the techniques from trainer (on the job training). Therefore, the teaching and training with non systematic and without time frame which may take years or decades up to Khru and Luk Sid. The teaching and learning style can get to the high efficiency through the outcome may be rare and difficult to transfer from generation to generation.

The lost of knowledge and wisdoms because family members do not interest to inherit while sometimes the craftsman does not desire to transfer his knowledge because uniqueness and to keep secret as masterpiece. In some case the craftsman not only of keep the wisdom secret but also destroy all tools after finishing the masterpiece. It is the main reason of the lost of knowledge and wisdom.

- Tourism Activities: Most of cultural heritage sites and old cities represent exceptional values as unique religious and cultural significance for humanity. These sites are threatened in serious dangers and specific destruction of religious properties due to urban development plans. Deterioration of cultural heritage monuments and sites due to without properly maintenance and responsible management, as well as by the disastrous impact of tourism on the protection of the monuments (Pararas-Carayannis 2000).

Moreover, there are several reasons that the tourism activities are the causes of deterioration as mention in the ‘Sustainable Tourism: A Non-Governmental Organization Perspective’ prepared by the UNCSD NGO Steering Committee in New York that

“(1) Tourism is not a clean and non-polluting industry, the environmental problems evolving from tourism manifold. The tourism sector is often in conflict with local

resource and land use practices” (UNCSD NGO Steering Committee 1999, p. 1).

Tourism investors mostly foreigners come with highly capital investment to buy and develop land use and encroach to the cultural heritage sites.

“(2) Tourist activities imply an intensified utilization of vulnerable habitats because tourism is also major generator of wastes, sewage, wastewater and solid waste disposal are not properly managed and tourism is also responsible for a considerable proportion of increased volumes and mileage in global transport” (UNCSD NGO Steering Committee 1999, p. 1).

The impact from the coaches and buses drive in the cultural heritage sites cause the vibration to the foundation of the cultural heritage sites.

“(3) Tourism is a powerful agent of change. International tourism acts as a catalyst for the transition from traditional ways of life to so-called modern, Western forms of society. Accordingly, tourism often brings with it the introduction of new behavior trends and norms” (UNCSD NGO Steering Committee 1999, p. 2).

3.2 From Human Intention

- Pollutions: Almost two centuries of conservation, restoration and adaptation make a complex and technically daunting mix of interpretation and conservation problems. Pollution is also a major problem (Sullivan 1996, p. 31). The effects of air pollution can have a significant influence on the weathering of monuments and on deterioration cultural heritage objects (Grieken, Delalieux and Gysels 1998, p. 2327) which cause the most problem.

Monuments and archeological sites are being discolored and degraded because of air pollution (Figure 43). The burning of fossil fuels for energy production and for transportation is an important source of destructive chemicals, Sulfur dioxide (SO_2), hydrocarbons, and particulates function together in the formation of gypsum crusts. Sulfur dioxide (SO_2) emitted from fossil fuels into the atmosphere is oxidized to Sulfuric acid (H_2SO_4) which attacks limestone, marble, sandstone and mortar to form Calcium sulfate (CaSO_4) or gypsum.

There are two mechanisms of deterioration resulting from gypsum formation. In a process called exfoliation, deterioration of the stone behind the gypsum causes the crusts to fall off, exposing the fresh stone to deposition of additional pollutants. Gypsum crusts can be substantial, and exfoliation poses a severe threat to historic stone. Additionally, during formation, hydrocarbons and particulates are incorporated into the gypsum, giving the crust its characteristic black color. The incorporation of these sources of organic matter influence the microbial community found on the stone. Air pollution also contains significant quantities of Nitrogen oxides (NO). Nitrogen oxides (NO) on stone are converted by nitrifiers to nitric acid, which is extremely damaging to stone (Mitchell and Gu 2010, p. 146).



Fig. 43 Effect of pollution caused deterioration on the statue of an angel at the cathedral of Cologne, Germany: (a) picture taken in 1880, (b) the same statue in 1993. From Warscheid and Braams photos (Mitchell and Gu 2010, p. 138)

While the indoor materials and antiques can chemical damage or soiling onto surface of painting, frescoes, sculptures etc., by deposition of particulate material or absorption of present gases (Grieken, Delalieux and Gysels 1998, p. 2327). Antique objects environments also are affected by the micro-climate and air pollution which can have a significant values influence on the works of art exhibited in the indoor environment area. Daily temperature and relative humidity cycles are induced by forced heating and air-conditioning, cause mechanical stress.

Moreover, crystallization of salt in the micropores of the painting can cause further damage. Gaseous and particulate pollutants can also play an important role in the deterioration of heritage objects. The main deteriorating effect of Sulfur dioxide (SO_2) arises from oxidation to Sulfuric acid (H_2SO_4). It leads to fading of pigments, paper and textile can be damaged, and the corrosion of metals is accelerated. Hydrogen sulfide (H_2S) causes tarnishing of silver objects, and like other reduced sulfur gases (mercaptans, sulfides, disulfides, carbonyl sulfide, carbon disulfide).

It can contribute indirectly to the fading of colors when it is oxidized to Sulfur dioxide (SO_2). Ozone (O_3) is also responsible for fading of dye and it can cause damage to varnish. Pigment fading, as well as degradation of textile and paper, and metal corrosion can also be induced by Nitrogen dioxide (NO_2). The deterioration mechanism can be attributed to oxidation to Nitric acid (HNO_3). Another type of pollution that should be taken into account is Formaldehyde (HCHO). It can be released by construction materials and can cause deterioration of metal objects (Grieken, Delalieux and Gysels 1998, p. 2330). Air pollution decays the metal in the presence of high relative humidity with the metal oxidation for and oxidant and a catalyst such as metal rust.

- War: Throughout history, destruction and loss of cultural heritage have constantly occurred as a consequence of fanatic iconoclasm or as 'collateral' effects of armed conflicts. Extensive looting and forced transfer of cultural objects have accompanied almost every war.

The traditional war causes the damage to cultural heritage which affects the enemy's properties. Aerial bombardments during the World War II and in the more than one hundred armed conflicts have plagued humanity since 1945. That war has contributed to the destruction and disappearance of many cultural heritage monuments and sites of great importance for the countries of origin and for humanity as a whole. Therefore, the founded of UNESCO attempt to protect cultural heritages

monuments and sites as a Convention for the Protection of Cultural Property in the Event of Armed Conflict, Etc in May 14th, 1954 (Fine Arts Department 2004, p. 62). Unfortunately, conflict of people in the different religious, political issues, and economic policy also cause to the danger of cultural heritage monuments and sites.

The example of demolition of the cultural heritage in war with an intention of the troops as the violent destruction of the great rock sculptures of Buddha images of Bamiyan in Afghanistan (refer to figure 38 in Chapter 3) by military and paramilitary force of the Taliban government of Afghanistan in March 2001. The purpose of the destruction was not linked in any objective to a military, but it was inspired by the sheer. It eradicated any cultural manifestation of religious or spiritual creativity that did not correspond to the Taliban view of religion and culture (Hoffman 2006, p. 28). Another point of view of this demolition was to against the believed of the preservation of cultural heritage sites. It came from school of thought from the Western and UNESCO and UN which located in Europe and United States. The destruction of the cultural heritage may discredit the Western dominated.

In Thailand history one of the worst inscription was the lost of the Buddha images when the war occurred between Thai (Siamese) and Burmese in Ayutthaya which was sacked in 1767. Gold and decorations were looted including Phra Si Sanphet, the standing bronzed Buddha image 16 meters height, covered with gold. Phra Si Sanphet and Wat Phra Si Sanphet was built in 1448 by the donation the original palace and ground for the building of a royal monastery from King Somdet Phra Boromma Trailokanat. Wat Phra Si Sanphet a large temple compound was used for royal ceremonies and rituals, and to house the burial remains of the kings and members of the royal family in the three tall bell-shaped Chedis. Those Chedis which have become widely identifiable with the Ayutthaya style have been standing prominently today (Tourism Authority of Thailand 2006, p. 11).

Phra Si Sanphet after looted of gold and decoration which left only the core of the ruin Buddha image. King Rama I of Ratanakosin Dynasty brought back to Bangkok and built huge Chedi⁴⁴ to cover the core of ruined statue at Wat Phra Chetuphon Vimolmangklararm Rajwaramahaviharn.

- Terrorism: In fact, there is no universally accepted definition of terrorism which remains the subject of continuing debate in international bodies, but the useful definition of terrorism from “the Prevention of Terrorism (Temporary Provisions) Act 1989” that

“... the use of violence for political ends, and includes any use of violence for the purpose of putting the public or any section of the public in fear”.

And another definition from the Federal Bureau of Investigation (FBI.) that

“The use of serious violence against persons or property, or threat to use such violence, to intimidate or coerce a government, the public or any section of the public, in order to promote political, social or ideological objectives”.

It had major drawbacks through its excluded threats of violation. Otherwise it was very broad so far as actions were concerned. Notably, it did not require a serious level of violation, serious damage or risk to health and safety or electronic disruption. Conversely, it was restricted in terms of intention/design, in that it excluded violation for end of religious, or for a non-political ideological end (Carlile 2007, p. 3). One of the targets that terrorists aim to in a present day is the cultural heritage monuments and sites because the harm of the cultural heritage sites affected not only to the

⁴⁴ The height of Chedi is 42 meters surrounded by white wall with Thai-Chinese style sheltered gates decorated with color-glazed tiles and Chinese rockeries guardians.

local people in the area but also stream out to the world publication especially the cultural heritage inscription as World Heritage List.

For example Tamil terrorists bombed the Temple of the Sacred Tooth Relic⁴⁵ or The Sri Dalada Maligawa, the supreme monument of the World Heritage City of Kandy in Sri Lanka; it was a disastrous experience with loss of life and destruction of buildings and museums (Silva 2003, p. 225).

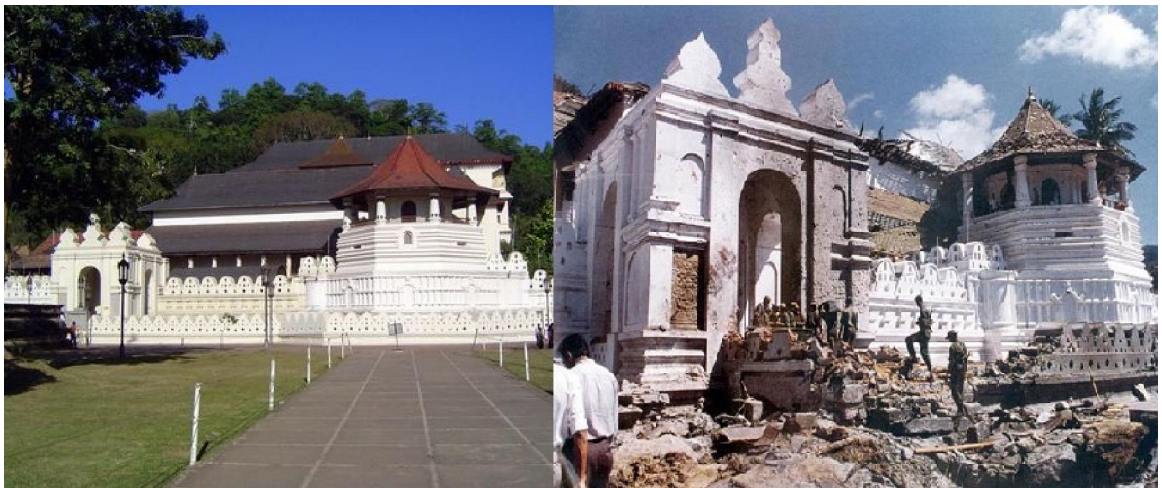


Fig. 44 Temple of the Sacred Tooth Relic, the supreme monument of the World Heritage City of Kandy in Sri Lanka which was bombed by Tamil terrorists.

Source Left photo http://2.bp.blogspot.com/_okQ04ViaA70/STU39_OHJKI/AAAAAAAK/NjG11QHSVas/s1600/Temple_of_tooth.jpg, accessed in March 5th, 2010

Right photo http://4.bp.blogspot.com/_okQ04ViaA70/STU7EzOJs-I/AAAAAAA8/dnT_-SxbQbw/s1600/SCN014.JPG, accessed in March 5th, 2010

- Theft and Greed: UNESCO adopted the consensus on the Convention of the Means of Prohibition and Prevention the Illicit Import Export and Transfer of Ownership of Cultural Property in November 14th, 1972 (Fine

⁴⁵ It was built within the royal palace complex which houses the only surviving relic of Buddha, a tooth, which is venerated by Buddhists. The relic has played an important role in the local politics since ancient times; it is believed that whoever holds the relic holds the governance of the country, which caused the ancient kings to protect it with great effort.

Arts Departments 2004, p. 62). However, cultural objects become rarer and rare objects become more difficult to find or collect and high-priced investments for everyone, including thieves (Liston 1993, p. 273). While the mention of King Rama IV that

“It is because of greed and obsessed that make people about to lose their mind the entire ethics of nationality and respectful of religion. As is customary in Thailand when construction the valuable sites for the religion people or royal family donate their treasures as a merit and amulets are put inside the pagoda or under foundation of the principal Buddha image in the Uposatha or Vihàra in the temple Whenever the building was abandoned or left as a deserted temple, thieves start digging to find the treasures and amulets” (Phrabat Somdet Phra Poramintharamaha Vajiravudh 1907, p. 11).

According to Act on Ancient Monuments, Antiques, Object of Art and National Museums that exporting Buddha images and other religious images allow only reproduction to export or dispatch, whether as a whole or parts of them. The export purpose is for only education and cultural exchange. Buddha and other religious images or parts of them, with unfinished or ruined conditions are forbidden to export or dispatch from Thailand.

“So that means if it is a head or part of a Buddha statue or any modern artists impression of a Buddha, it is a Buddha decorative item. Therefore may not be shipped out of Thailand as it is illegal to export out of Thailand no matter the age, as it not a religious item, but ‘objects of art’ of the Buddha” (Somchit 2011).

It can imply that the thieves careless the values of cultural heritage and spiritual value. The Mechanism of artifact smuggling in Southeast Asia is

comparing to the market theories for economics, consisting of two major factors: supply and demand. 'Demand' in this case refers to instance antique dealers, auction houses, private antique and cooperated collectors who purchase cultural properties greatly driven up the prices. While 'supply' refers to smuggling gangs who steal artifacts from temples and ruins heritage sites and sell them to market through antique traders (Nagashima 2002, p. 174).

Mostly the antiques including Buddha images usually display or exhibit in museums, but in worst case those antiques including Buddha image are decorated in a night club, bar or in a living room as decoration for hanging clothes, hats or shoes.

Major international criminal acts against cultural property are reported by newspapers, governments, and Interpol, the International Police (Liston 1993, p. 273). From the interview the chief police and officer from Fine Arts Department said that most of the antiques demanded and costly in the black market by the antique collector. While the owner of antique shop seem to be more interested in profits produced by illegal trafficking of artifacts than in preserving the heritage of country's cultural and history. When the dealer was arrested for illegal artifact, the trading simply paid a relatively small fine and released them free to return to his business. Currently the existing law has the penalty of seven years imprisonment or a 700,000 Baht fine. Moreover, there is a shortage of personnel at the Fine Arts Department which has only 200 qualified experts who can distinguish original artifacts from duplicates said by chief of Royal Thai Police (RTP) Nikhom (Nagashima 2002, p. 179).

There are several type of thieving in the cultural heritage sites and valuable antiques including Buddha images. In the past, thieves drilled into the foundation of heritage structures such as Chedi, Pagoda, Prang, and even large Buddha images to find the treasures, antiques and amulets inside. Moreover, the professional thieves smuggled not only in the

heritage sites but also thief in the private collections, museums, libraries, and interpretation center. Even those places had the security system installment because of those collection very high price (Manacorda and Chappell 2011, p.55). While, thieves arrested mostly uneducated and poor. Most of the thieves confessed after arrested. They received less amount of money for doing those but their need the money for many silly reasons such as buying drugs or alcohol. They did not realize about thing they have done comparing to the values of the cultural heritage and the damage that had been made.

From the theft cases, most people think that those thieves are uneducated. However, the process for smuggling the head of Buddha image and whole of Buddha image can be implied answer. They were smart to pass the security locking system and cutting the Buddha image head or hand silently and dark because it may awake monks who live in the monks' cells nearby or closely to cultural heritage site. It is an indicator that the people in community careless of the preserving and they do not realize the values of the cultural heritage sites to let go the thieves. While the participating intra community is very poor, they cannot figure out the management plan for protect the cultural heritage sites and antiques located in their community.



Fig. 45 The press release announcement from Provincial Police Region 3 on March 9th, 2011, according to the arrest of Royal Thai Police has been coordinated by the Fine Arts Department to pursue the lost of bronze Buddha subduing Mara image Chiang Saen style which the age more than 500 years old addition with other 45 Buddha images.

Source: http://www.chaibadancrime.com/images/sub_1311818179/554000003721102.JPG, accessed in April 20th, 2011



Fig. 46 The recent thieves the cultural heritage as Buddha statue heads and images from temples in Ayutthaya.

Source Left photo <http://www.komchadluek.net/media/img/size1/2009/11/25/c976fj8j6ke9k j6dbbbb.jpg>, accessed in March 5th, 2010

Right photo <http://www.komchadluek.net/media/img/size1/2009/11/25/b6h97dahk5 diaacek9f9j.jpg>, accessed in March 5th, 2010

Another example one of the most notorious cases of thieves in Thai history inspired by some clever thieves believed that the Prang tower of Wat Ratchaburana might hold such a treasure. In 1957, they managed to penetrate the vault hidden below the public chamber and made off with a small fortune in gold and gems were founded in that place. Fortunately the burglars were arrested before they could dispose of most of the loot, and the stolen items. Moreover the beneath of chapel was a sealed chamber decorated with mural painting in Traditional Thai influence with Chinese art. There was yet another tiny chamber below this, decorated with more elaborate murals and holding a stone casket containing many small amulets and other items, mostly made of gold. These items surrounding with a small reliquary holding a Buddha relic along with more grave items recovered from the pit. The left treasures can now see at the Chao Sam Phraya National Museum. The museum houses antique bronze Buddha images, carved panels and other objects of art with the age over 500 years old, and exhibited local artifacts in Ayutthaya province near Wat Phra Ram (Tourism Authority of Thailand 2006, p. 10).

- Need of space for changing to other purpose, urbanization or modernization: The cultural heritage of townscapes is often threatened by lack of respect for its specific character, as when a new building is out of scale or out of context. Although in the world with largely driven by economic forces, cultural issues do not always prevail.

For the example of the changing the cultural heritage sites in the master plan of Historical town of Ayutthaya quoted in the plan that they allowed Department of Religious Affairs of the Royal Thai Government to auction the bricks from the deserted temples in Ayutthaya province to the local people. It one of the major causes of totally destroyed the number of temples in Ayutthaya (Fine Arts Department 1990, p. 14).

Another example of changing cultural heritage sites to the modernization quoted from the World Heritage in Danger that the outstanding archaeological and historical heritage site of Zabid in Yemen. It was seriously deteriorated in recent years. Indeed, 40 percent of its original houses have been replaced by concrete buildings. In 2000, at the request of the State Party, the Historic Town of Zabid in Yemen was inscribed on the List of World Heritage in Danger. UNESCO is helping the local authorities to develop an urban conservation plan and to adopt a strategic approach for the preservation of this World Heritage site (UNESCO World Heritage Centre 2011).

The next example which preserve only the tangible values and left the spiritual value behind, from mention in the press statement from Prime Minister's office of Singapore on October 3rd, 1987

“It is not possible to have a temple for temple, a mosque for mosque, a church for church substitution. This is uneconomic, impractical and, in the limited land space” (Kong 2004, p. 6).

The transformation of the former Methodist Church in Westbourne, Bournemouth in United Kingdom into convinces store, Tesco Express which was instructed in 2009 and the store opened in November 2010. Even it was claimed

that the fabric of the church remains intact, blending into its quirky surroundings. The ornate stained glass windows depicting Biblical Characters, stonework and the marble columns have been preserved with the signage design being sympathetic to the architecture to the architecture of the church (Inspire Design 2011). All tangible values have been preserved but the spiritual value and spirit of the place was not mention and concerned. The product has been sole in a former church such as liquors, cigarettes and lottery ticket available that feel the upset from some members of the community (White 2010).



Fig. 47 The current exterior and interior of Tesco Express which is the former Methodist Church in Westbourne.

Source Left photo http://i.dailymail.co.uk/i/pix/2010/11/11/article-1328629-0BFF8CA9000005DC-685_634x419.jpg, accessed in November 22th, 2011

Right photo http://i.dailymail.co.uk/i/pix/2010/11/11/article-1328629-0BFF8AAF00005DC-256_306x423.jpg, accessed in November 22th, 2011

Summary

Natural and human hazards not only cause the loss of hundreds of thousands of human lives but have also adversely affected many important cultural heritage sites around the world by causing deterioration, partial damage, total destruction or the loss of cultural value. Natural and human disasters represent a real potential threat for those cultural heritage sites in the future. However, the climate change also reached the consensus and almost all heritage managers had already noticed progressive changes in the climate patterns of their sites and associated increases in deterioration (Cassar and Pender 2005, p. 612). On the other hand, cultural heritage sites and monuments have been preserved but transformed to other purposes of usage which are more economic or urbanization especially the authoritarian states instrumentalise as public space to legitimize their domination (Kürten 2008, p. 70). The Buddha images also in the same threat from the above causes of deterioration and destroyed similar to other cultural heritage monuments and sites.

The deterioration of the historical and cultural heritage sites and places are more radical but most of the deterioration has been occurred with the objective. Meanwhile the ruin cultural heritage sites in the spiritual values also more harmful with unsightly. However, The Hoi An Protocol was mentioned to the preservation and adaptive reuse the heritage property with aspect of authenticity as its original use is one of the point to concern for the preservation process because of changing the purpose of the site may psychological harm to the local community.

Chapter 5

The Preservation and Restoration Buddha Image in Thailand World Heritage Sites

Buddha image restoration in the Thailand World Heritage Sites

There are several Buddha images that went through the preservation and restoration process in the past from the archeologists and specialists from Fine Arts Department who responsibility and expert in the preservation the cultural heritage in Thailand. Three large Buddha images, located in the World Heritage Sites, were selected for examining the process of restoration and excavation by Fine Arts Department. Those World Heritage Sites is located in both Sukhothai Historical Park and Ayutthaya Historical Park. Those Buddha images are very well known and publication as a tourist attraction and landmark of those ancient towns. First, Phra Acana from the Sukhothai Historical Park located in Wat Si Chum at the north and close to the city wall. Second, Phra Mongkol Bophit in Vihàra Mongkhon Bophit the central of the Ayutthaya Historical Park next to the ancient palace of the historic town of Ayutthaya and Phra Kantararaj⁴⁵ at small Vihàra in Wat Na Phra Men in the west side across the Lop Buri river the opposite side closed to the ancient palace of Ayutthaya.

Those selected Buddha image from two World Heritage Sites in Thailand which were built three different styles of art which are Davaravati style, Sukhothai style and Ayutthaya style. Those three Buddha image had three different types of materials of sculpture Buddha images which are stucco Buddha image, stone Buddha image and metal Buddha image. The restoration process of those Buddha images had been done by Fine Arts Department because they were registered as national artifacts.

⁴⁵ Named after the state Gandhara which is the name of an ancient province and kingdom in classical times was limited to a small region in ancient India.

Moreover, other process and methodology of preservation including the process of the restoration by monk was reviewed. He has known from the publication on television as a person who is interested in restoration and revitalization the Buddha image. His techniques for restoration process from his faith to the Lord Buddha. He has never taken any course from school or any craftsman.

Phra Acana⁴⁶ at Wat Si Chum

Phra Acana Buddha image in the square pavilion currently without roof of the Wat Si Chum is located outside the city wall at the northwest corner which is very well known for a large sitting Buddha image in Sukhothai Historical Park. It was registered as a National Historic Site with the Fine Arts Department on February 25, 1935 (Ministry of Culture 2010, p. 83).

The name of Wat Si Chum was assumed by Archaeologists that the word ‘Si’ derives from ‘Sali’, an indigenous word which means a bodhi tree. Therefore, the name Si Chum signifies a bodhi grove (Office of Archaeology 2004, p. 54), but currently there is not quite number of bodhi grove in the area. While another assuming from royal chronicle Krung Si Ayutthaya written in the late Ayutthaya period refer to a place where King Somdet Phra Naresuan the Great (1590 – 1605) and his troops assembled and holds a ceremony for prosperity before marching on Sawankhalok in this area which was called “Rue Sri Chum”⁴⁷ (Phrabat Somdet Phra Poramintharamaha Vajiravudh 1907, p. 82). However, at present, there exists no hermit in the area as well.

⁴⁶ Other English names as ‘Phra Achana’ or ‘Phra Ajana’ which are written from the Thai language pronunciation.

⁴⁷ As a Thai language word which mean “a lot of hermits”.

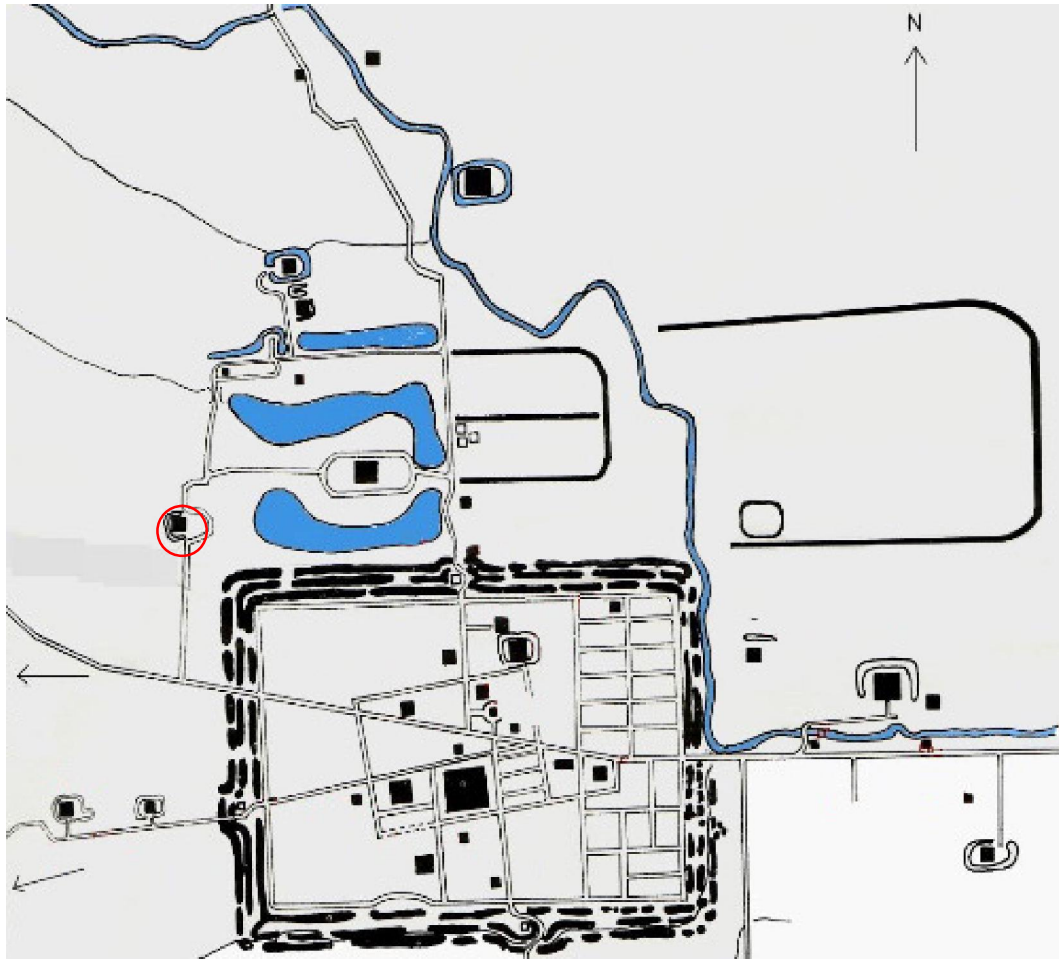


Fig. 48 Map of Sukhothai Ancient Town and Wat Si Chum is in the red circle.

Source http://www.thailandsworld.com/sites/thailandsworld_com/images/Thailand_maps/Sukothai.jpg, access accessed in August 20th, 2011

The Phra Acana's pavilion or 'mondop' or 'maṇḍapa' in Sanskrit language was constructed with brick and mortar in a square shape with 32 meters width and 15 meters height with double walls with 3 meters thickness which the originally built pavilion wall regularly but the King Phra Maha Thammaracha I or Phaya Lithai (1347 – 1368). He is grandson of the King Pho Khun Ram Khamhaeng the Great (1279 – 1298) ordered to construct the additional wall of the pavilion to double walls as currently see. He also commanded to construct small and narrow tunnel with stairs. It can be able to walk leading around the back of the Buddha statue to the top of the pavilion. In the tunnel walls had the mural painting which is deteriorated and unable to read. On the ceiling are drawings on more than 50 slate stone plates narrating the

tales of the former births of Buddha or Jātaka (Phrabat Somdet Phra Poramintharamaha Vajiravudh 1907, p. 92 and Excavation Committee of Preservation and Restoration Archaeological sites Sukhothai Province and Kamphaeng Phet Province 1969, p. 49). At present, the tunnel on the eastern side of the door has been closed for the tourist by the Fine Arts Department for safety and security reason.

The assumption of the Archaeologists in the excavation meeting that the top of the pavilion should be covered with the tile roof and wooden beams deteriorated from time. The photos were taken during trip as pioneering survey to Sukhothai of King Rama IV when he was the crown prince with his uncle Prince Durong Rachanuparp. The crown prince wrote a book title “the Travel to King Rhra Ruang’s Cities” that mentioned about finding the broken terracotta roof tiles on the lap of Phra Acana Buddha image. Addition information from the excavation reported mentioning about the four large holes. They were assumed as holes of wood pillar to the structure of the roof in the past and the assumption of the roof’s shape should be in a upside down bowl (Phrabat Somdet Phra Poramintharamaha Vajiravudh 1907, p. 94, Excavation Committee of Preservation and Restoration Archaeological sites Sukhothai Province and Kamphaeng Phet Province 1969, p. 53, Disakul 1981, p. 47 and Koaksantiea 1972, p. 68). While another archaeologist mentioned about the roof of the pavilion that would be topped with Chedi style because of the thick wall (Jeachunphong 1971, p. 92). However, few archeologists agreed to this idea because of the foundation unsupportable and did not find the evidence of the ruined Chedi surrounding the pavilion. Moreover, in the tunnel the archeologists found the 2nd inscription of Sukhothai generally known as Wat Si Chum inscription. The inscription explained to Sukhothai in the period before King Pho Khun Sri Indraditya (1239 – 1279) the first king of Sukhothai and Pho Khun Ram Khamhaeng the Great and valuable evidence telling the story of “Mahāthera named Srīsaddhārājacūlāmūnī Wrīrattanalavkādīpa Mahāsāmpencau...” (Fine Arts Department 2005).

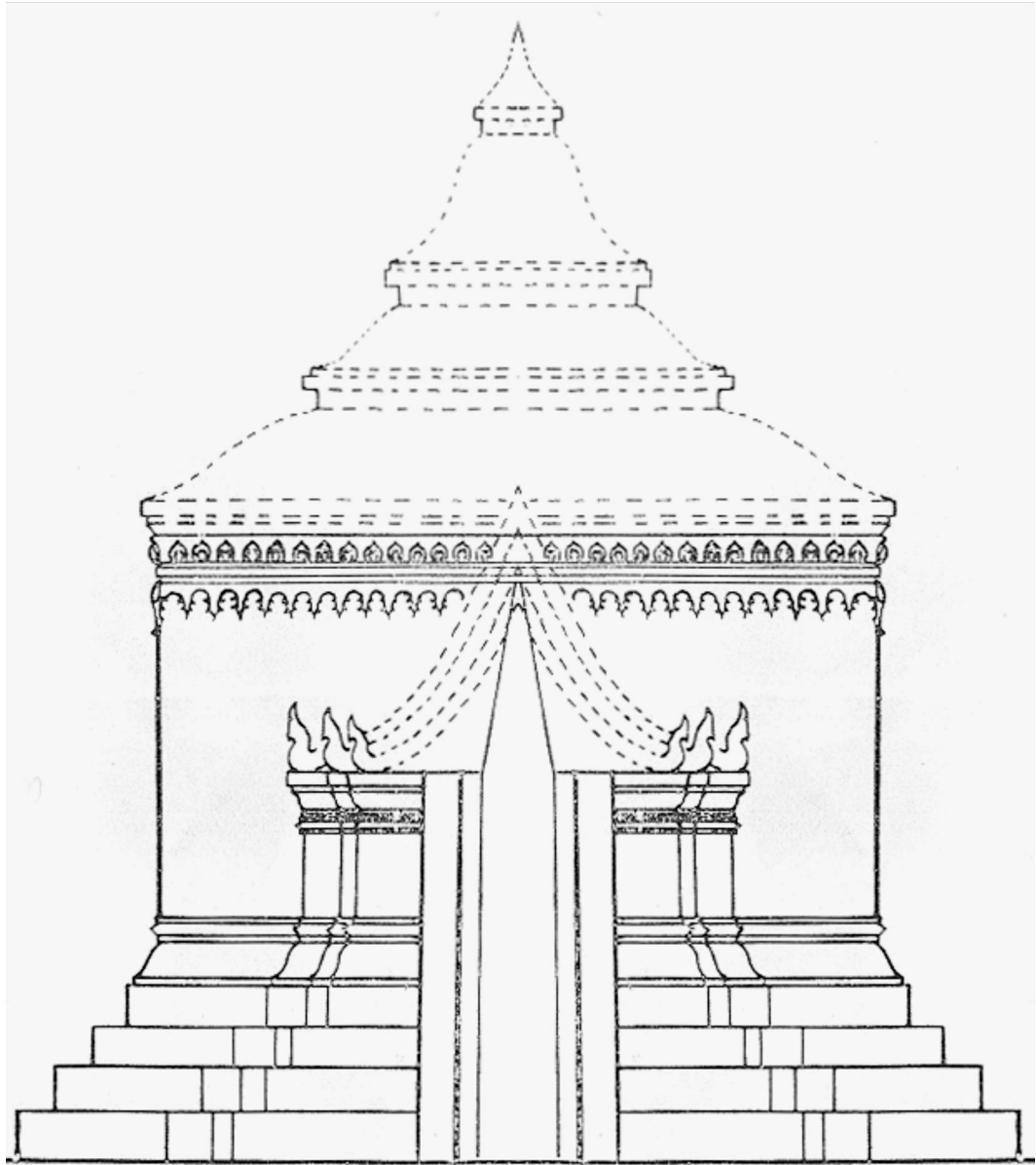


Fig. 49 The assumption of the pavilion roof of Wat Si Chum (Fine Arts Department 1983)

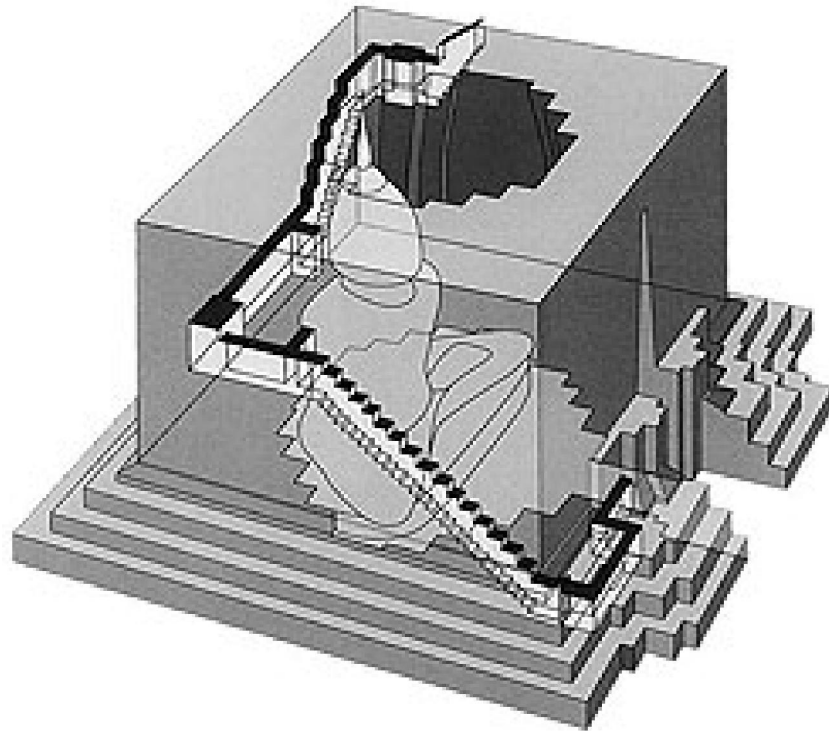


Fig. 50 Perspective plan of the Pha Acana's pavilion in Wat Si Chum (Skilling and Assavavirulhakarn 2008)

Phra Acana has been called “Speaking Buddha image” or “Blessing Buddha image” regarding from story of royal chronicle *Krung Si Ayutthaya* written in the late Ayutthaya period refer to a place where King Somdet Phra Naresuan the Great and his troops assembled and holds a ceremony for prosperity before marching on Sawankhalok in 1584 (Phrabat Somdet Phra Poramintharamaha Vajiravudh 1907, p. 82 and Cushman and Wyatt 2006, p. 193). King Somdet Phra Naresuan the Great know that his troops feel fear and panic, so the King want to encourage his troops by ordered one of his soldier to climb into the tunnel at the back of the Phra Acana. He said from the tunnel behind the Buddha image to his troops by giving the bless to win the war which made Phra Acana as a “Speaking Buddha image”.

Phra Acana is made from laterite and covered with stucco sitting in half lotus Buddha image in a posture of subduing Mara or *Bhumisparsa Mudra*. The length of his lap 11.30 meters width and 15 meters height occupies the total space of the pavilion. The name of huge Buddha image was called Phra Acana and it was assumed

by George Coedès. The meaning of Phra Acana is ‘immovable’ or ‘unshaken’ which implies to one is ‘not frightened’. The name Phra Acana related to the 1st inscription found by King Rama IV in the Sukhothai Ancient town on the 3rd face. It has the word of “Phra Acana” as mentioned in Chapter 1. However, some Archaeologists have doubted that the 1st inscription is authentically made by King Pho Khun Ram Khamhaeng the Great. Because the evidences were found against to the style of art before restoration that this Buddha image was made similarly to the late Ayutthaya style. The restoration was changed Phra Acana to a Sukhothai style related to the 1st inscription of King Pho Khun Ram Khamhaeng the Great as a present day (figure 51 and 52). (Krairerg 2008, p. 229)



Fig. 51 Phra Acana Buddha image sitting in the pavilion photo taken from the Vihàra in front of the pavilion on August 2009.

Source <http://www.fotocoffees.com/board/attachment.php?attachmentid=4600&stc=1&d=1250826872>, accessed in May 20th, 2010



Fig. 52 Phra Acana Buddha image sitting posture of Bhumisparsa Mudra at present, the date of photo taken on August 2009.

Source <http://www.fotocoffees.com/board/attachment.php?attachmentid=4601&stc=1&d=1250827252>, accessed in May 20th, 2010

The condition of Phra Acana in the past was major damaged as a ruined Buddha statue as quoted and exhibited with photos taken during the tripped of King Rama VI to Sukhothai (figure 53 - 56) (Phrabat Somdet Phra Poramintharamaha Vajiravudh 1907, p. 82). It was written and recorded during the trip to Wat Si Chum for more than hundred years ago by Prince Krom Phra Narissara Nuvattivongse. In ‘letters distance to Phitsanulok province’ book was published in 1963 that

“in the pavilion has a brick construct to Buddha image with approximately 10 meters wide but not such a beautiful because his face deteriorate and able to see the old stucco eyes inside with difference about five layers” (cited by Krairerg 2008, p. 229).

Another condition of Phra Acana damaged was found in the report of ‘the Restoration Historical Sites Committee’ quoted that found three holes at his knee, navel, and head of the Buddha statue. Those damaged holes of the Buddha statue head

was able to see the former lotus halo sculptured previously but unable to know the exactly age and period of time of sculpturing.

There are several restoration processes for the Phra Acana including surrounding of Wat Si Chum and other Cultural Heritage sites within Sukhothai History Town and Associated Historic Towns. The first restoration in Ratanakosin Dynasty of the Phra Acana process had been recorded in the National Archive Library which had been done during 1953 – 1956 (Fine Arts Department 2005). The starting restoration process was authorized in 1953 by the Royal Thai Government, Prime Minister Piboonsongkarm from the budget of the income by The Government Lottery Office. The restoration objective is to restore the deterioration Phra Acana Buddha image, its pavilion at Wat Si Chum and the Main Chedi of Wat Mahathat Sukhothai.

In the report of the inspection to the Fine Arts Department and Prime Minister can be found in the National Achieve Library, Bangkok. It mentioned that the Phra Acana was in a worsen condition of three exploratory holes were digged in the head, knee and navel of the Buddha image. The suggestion in the document quoted that should be restoration as soon as possible because it was unacceptable to Buddhists visiting at Wat Si Chum. One of the major problems of the restoration process was very rare the evidences and information, most of the final result came from hard discussion of archaeologists and historical arts scholars which found in the report of the committee for preservation and restoration set from Fine Arts Department.



Fig. 53 Vihàra of Wat Si Chum which remained the wooden beams on top of mortar pillars and the Acana Buddha image's pavilion in the background.

Source http://www.oknation.net/blog/home/blog_data/192/7192/images/Sukothai/Os12.jpg, accessed in May 20th, 2011

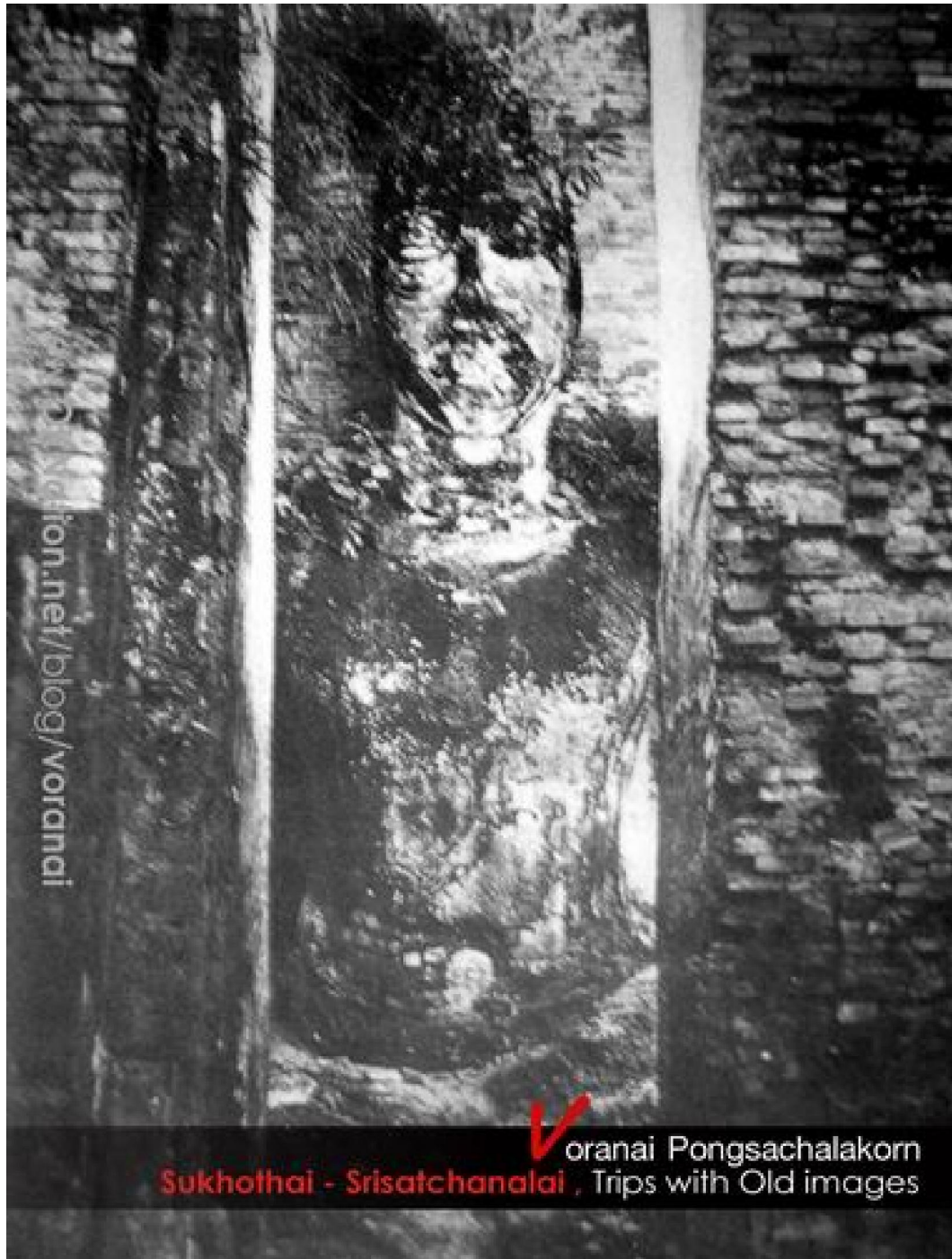


Fig. 54 The condition of the deterioration of Phra Acana Buddha image.

Source http://www.oknation.net/blog/home/blog_data/192/7192/images/Sukothai/Os13.jpg, accessed in May 20th, 2011



Fig. 55 Phra Acana Buddha image photo taken in 1891 by Fournereau, *Le Siam ancien* book publication in 1908 (Krairerg 2008, p. 228)



Fig. 56 Phra Acana Buddha image photo taken before starting the restoration process (National Archives of Thailand).

The restoration process of Phra Acana, the Fine Arts Department assigned the two specialists, Professor Silpa Bhirasri⁴⁸ (1892 – 1962) the famous sculpture artist with many masterpieces and Arjarn Kean Yimsiri (1953 – 1971). He was a specialist in the archaeologist and fine art and very close to Professor Silpa Bhirasri as project manager of the restoration of Phra Acana. The restoration process took years for the operation.

⁴⁸ Was born in Florence, Italian, a sculptor Artist. His former name was Professor Corrado Feroci who was invited to Thailand to teach Western sculpture at the Fine Arts Department of the Ministry of Palace Affairs in 1923, founding what would become Silpakorn University.



Fig. 57 Face of Phra Acana Buddha image photo taken during the restoration process (National Archives of Thailand).

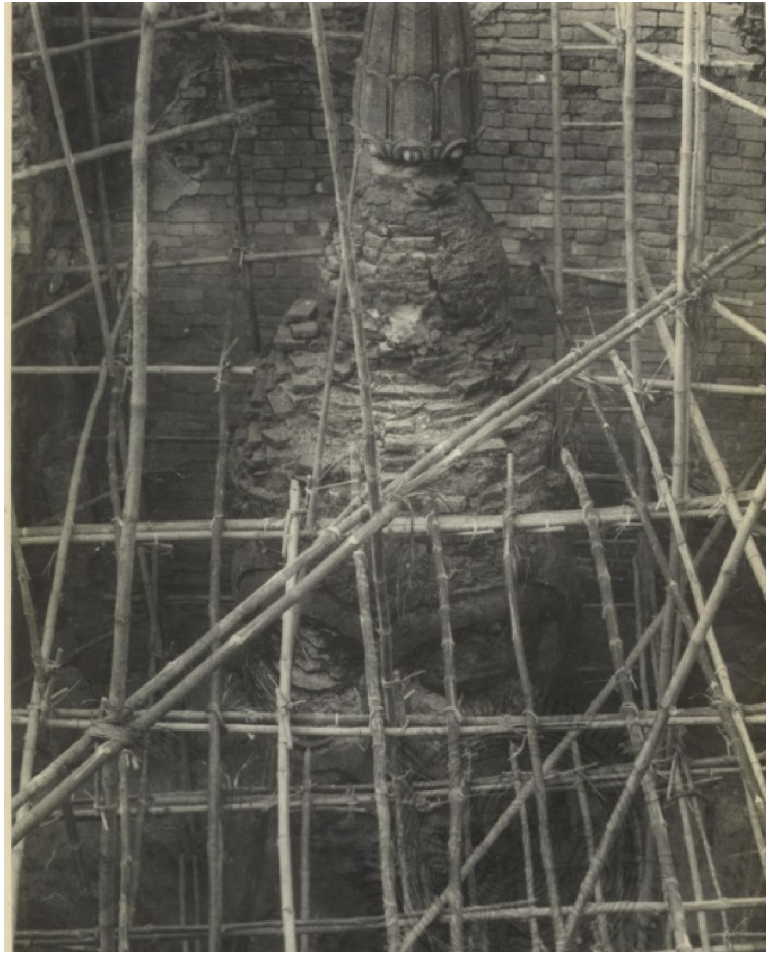


Fig. 58 Head and face of Phra Acana Buddha image photo taken during the restoration process (National Archives of Thailand).

The restoration of the Professor Silpa Bhirasri and Arjarn Kean Yimsiri restored by imitate from the much smaller bronze Buddha image found nearby Wat Si Chum as a model because the deterioration of Phra Acana was unable to know the authentically face (Koaksantiea 1972, p. 68 and Skilling and Assavavirulhakarn 2008). The restoration of the Buddha image was decided to sculpture the Buddha image style as Sukothai style or Pure Sukhothai style. It was mention by Professor Silpa Bhirasri that the sculptors of Sukhothai did solve this dilemma. Their creations seem to master the tumult of human passions, and the faint smile of the image would like to tell us of happiness and peace gained by subduing the earthly and primordial instincts. One may note that technically parallel, delicate, undulating lines of the

mouth and the base of the nose and his eyes emphasize this spirituality (Bhirasri 1968, p.6).

After finishing the restoration project of Phra Acana by Professor Silpa Bhirasri implied in his worked that the restoration not only returned the better condition of the Buddha image but also returned the spiritual value of the Buddha image and place. It can be found in his mention that the Sukhothai art is spirituality. The restoration to Sukothai style has an additionally related support to the 1st inscription of King Pho Khun Ram Khamhaeng the Great on face 3 that mentioned about Phra Acana that “*North of this city of Sukhothai there is a bazaar, there is Phra Acana...*”. However the photo of restoration the Buddh image finial, with high flame in a Sukhothai Khampheng Phet style of the restoration at that time (Figure 58). It is different from the present, flame finial as pure Sukhothai style. However, it cannot find the support document mentioned about the changing of the finial which might be changed in that time or in the short period of time later. The later photos the finial of Phra Acana was changed as appear at the present (figure 51).

Moreover the latest restoration operation was the cleaning and put the anti lichen and biological organic chemical to protect Phra Acana’s surface from the lichen and other biological organic on the surface. The mortar pavilion lost of the roof for a long time and stucco covered Phra Acana Buddha image itself very good material for absorbing the humidity which may deteriorate and cause of the ruin of the Phra Acana in the future as mentioned in a previous chapter.



Fig. 59 Phra Acana Buddha image with lichen and biological organic on the surface (Krairerg 2008, p. 229)

Wat Si Chum had been deserted temple, the construction and building in the temple is lost and damaged and it was no longer to function as temple. Monks who live in the southwest beside the area as a new temple which also borrowed the name as called 'Wat Si Chum'. However, it is not a part of or relates to the authentic of Wat Si Chum. The temple is a historical site which is operated including preserve, restore and prevent this historical temple by the Regional Office of Fine Arts (FAD) as the 6th Arts Regional Office of the Fine Arts Department, Sukhothai in the office of Sukhothai Historical Park (Fine Arts Department 2005).

Phra Mongkhon Bophit at Vihàra Mongkhon Bophit

Vihàra Mongkhon Bophit is situated next to the ancient royal palace of Ayutthaya on the east side. It is located on Wasukree District, Ayutthaya Province. It was registered as a National Historic Site from the Fine Arts Department on February 25, 1935 (Ministry of Culture 2010, p. 49)

Phra Mongkhon Bophit, a large casted bronze Buddha image, measures 9.55 meters at the widest point across the lap, and 12.45 meters height not including the pedestal base. The Buddha image seated in the posture half lotus in Bhumisparsa Mudra was originally enshrined outside the Grand Palace to the east. After its construction it was moved to the west and housing. In 1767 Ayutthaya was sacked of, both of housing building and the image was badly damaged from fire; the renovation ensemble was not as finely crafted as the original. The open area on the east side of the Vihàra was formerly 'Sanam Luang' as a place of the royal cremation ceremonies took place (Tourism Authority of Thailand 2006, p. 11).



Fig. 60 Vihàra of Phra Mongkhon Bophit at the present day photo taken on January 2010

Source <http://www.mountainsoftravelphotos.com/Thailand%20-%20Bangkok/2005-07%20Bangkok/Ayutthaya/slides/Bangkok%2005%2001%20Ayutthaya%20Viharn%20Phra%20Mongkol%20Bophit%20Outside.JPG>, accessed in May 20th, 2010



Fig. 61 Phra Mongkhon Bophit inside the Vihàra at the present day photo taken on September 2011.

Photo: Poramet Boonnumsirikij.

Phra Mongkhon Bophit or the “Buddha of the Holy and Supremely Auspicious Reverence” was sculptured in the reign of King Somdet Phra Chairacha or Somdet Phra Chairacha Thirat (1533 – 1546) at Wat Chi Chiang Sai in 1538. It was generally accepted as the year that the Buddha image was built, based on the information from Luang Prasoet in a version of the Royal Chronicles of Ayutthaya (Cushman and Wyatt 2006, p. 20). The methodology of sculptured the Phra Mongkhon Bophit mentioned by Prince Krom Phra Narissara Nuvattivongse in the letter to Prince Durong Rachanuparp that Phra Monkxon Bophit is large Buddha image. The technology of sculpturing the Buddha image was not casted as the whole, but they had

to sculpture in approximately 20 parts. According to his assumption, the Buddha image was putting together with pins (Mongkhon Bophit Foundation 2001, p. 24). As at the beginning of the reign of King Somdet Phra Songtham or Somdet Phra Borommaracha I (1611 – 1628), Wat Chi Chiang laid in ruins because it was strike of lightning. His majesty ordered to move westwards the large bronze cast Buddha image and constructed a pavilion or in Thai called mondop or square roofed structure. It was built over the Buddha image as a house (Baker, Pomberja, Kraan and Wyatt 2005, p. 224).

By the time of moving the Buddha image Phra Mongkhon Bophit from ‘The Royal Chronicles of Ayutthaya’ which was mentioned the exact year of the moving the Buddha image statue in 1603, but the mentioned of the exactly date falls in the reign of King Somdet Phra Naresuan the Great (Baker, Pomberja, Kraan and Wyatt 2005, p. 224). While in Jeremias Van Vliet, a Dutch merchant wrote in his ‘Description of the Kingdom of Siam’ in 1638 that a few months ago, the ruling king demolished the temple to its very base and had a large copper heathen image. It should be located in the current position. Therefore, it was pulled back several rods so that another temple like the last could be built to cover the image” (Cushman and Wyatt 2006, p. 209).

Taken all the versions above in account, the most plausible was present from Van Vliet and the moved of the Buddha image had to be situated around 1637. On the other hand, the assumption of Prince Krom Phra Narissara Nuvattivongse that the moving of Phra Mongkhon Bophit possibly by remove pins and separated the Buddha in parts and install them together (Mongkhon Bophit Foundation 2001, p. 24).

Later the open space, in front of the pavilion (the vicinity of the present location of Vihàra Klaeb) was leveled and reserved for royal cremation ceremonies, called Sanam Na Chakkrawat. (The Royal Chronicles of Ayutthaya mentioned as date of the reservation 1606). Moreover, it was also the date of falled in the reign of King Somdet Phra Naresuan the Great) (Cushman and Wyatt 2006, p. 209).

During the reign of King Somdet Phra Suriyenthathibodi or Somdet Phra Sanphet VIII or Phra Chao Suea (1703 – 1708) a strike of lightning on the top of spire

of the pavilion. The building caught fire and it was burned the roof collapsed down to the Buddha image. The neck of the Buddha image was broken and the head was fallen down. King Phra Chao Suea not only ordered to demolish the rest of the deterioration of the pavilion but also ordered to construct a new tall preaching King Phra Chao Suea. It took the Siamese artisans two years to build the Vihàra. The finalization of its construction was followed by a three days of festival ceremony. (The Royal Chronicles of Ayutthaya was mentioned 1700 as year of the fire incident, which is in fact during the reign of King Somdet Phra Phetracha) (Cushman and Wyatt 2006, p. 381).

The Royal Chronicles of Ayutthaya was mentioned that in the reign of King Somdet Phra Chao Yu Hua Boromakot (1732 – 1758) in the year 1742, another restoration process was took place (Cushman and Wyatt 2006, p 435). When looking closely to the quoted in the Royal Chronicles, it seems described the same incident that was occurred during in the reign of King Phra Chao Suea i.e. the restoration of the Buddha's head and the construction of a Vihàra instead of a pavilion. Twice of the same incident had occurred within 40 years lead. It was made the writer believed that the fact of only one restoration was taken place, and the latter was in the reign of King Somdet Phra Chao Yu Hua Boromakot.

The Vihàra and the Buddha image were badly damaged from the fire during the sacked of Ayutthaya in April 1767. The roof of the Vihàra was damaged and the head and the right arm of the image were broken.

“...Now they lit fires in every vicinity and burned down buildings, houses, hermitages and the Holy Royal Palace Enclosure, including the palaces and royal domicile. The light of the conflagration was as bright as the middle of the day...”



Fig. 62 The photo of Phra Mongkhon Bophit without the right arm and topknot of Buddha image deteriorate before restoration process can be seen at the wall inside Vihàra Phra Mongkhon Bophit.

Restoration of the Buddha image as the broken of the topknot including the Buddha image head and right arm were repaired by Phraya Boran Rachathanin in 1920 in the reign of King Rama VI (1911 – 1925). In 1931 another restoration was occurred with the financial support of Khunying Amares Sombat from the information of Ayutthaya: a World Heritage. During restoration worked on the Buddha image in 1955, quantity of Buddha amulets were found on the left shoulder of Phra Mongkhon Bophit. Those amulets can now be seen at the Chao Sam Phraya National museum and the restoration of the base of the Phra Mongkhon Bophit which the restoration deteriorated the authentic and aesthetic stucco (Mongkhon Bophit Foundation 2001, p. 16)



Fig. 63 Phra Mongkhon Bophit was restored the right arm and topknot but the entrance of Vihàra Phra Mongkhon Bophit was not restored, photo exhibited at wall of Vihàra Phra Mongkhon Bophit.

Photo: took from original photo in Vihàra Phra Mongkhon Bophit by Poramet Boonnumsirikij.

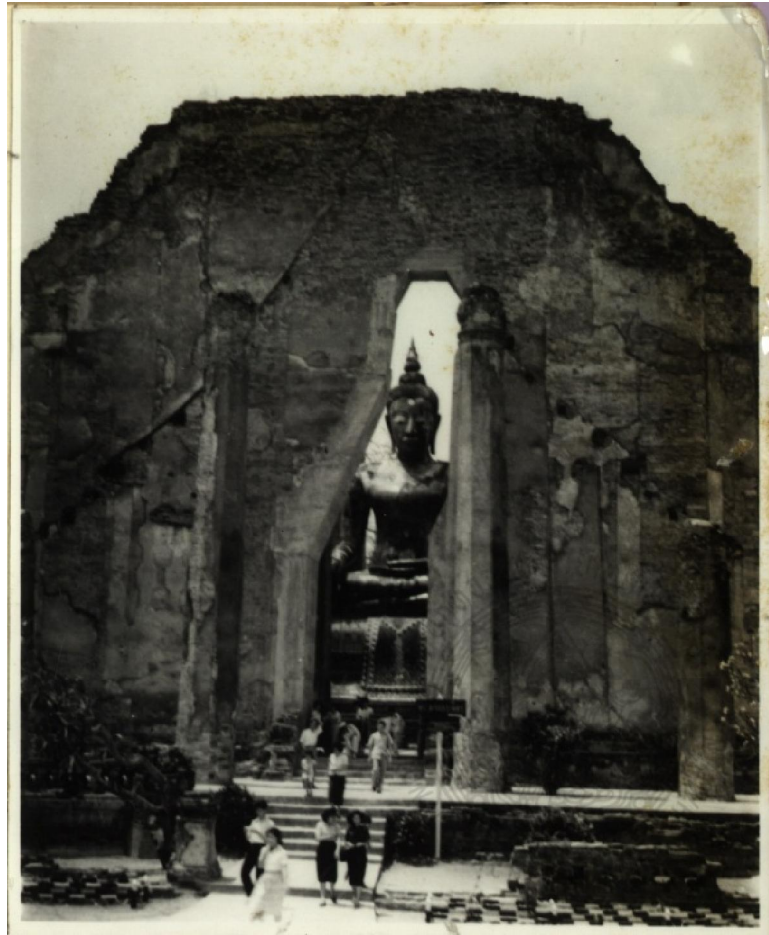


Fig. 64 Vihàra Phra Mongkhon Bophit in the past that without roof in deteriorate and ruined condition the entrance and platform in front of the Vihàra Phra Mongkhon Bophit (National Archives of Thailand).

The Prime Minister of Burma, His Excellency Unu on his official visited to Ayutthaya in 1956 donated 200,000 Baht to the Royal Thai Government and the latter also authorized additional 250,000 Baht to the Fine Arts Department for the restoration Vihàra including the roof. The Vihàra was finalized in 1957. However, it did not as beautiful as of the former craftsmanship.

After reconstruction process the Vihàra, Municipal Department of Public Works painted the Phra Mongkhon Bophit in black color. In 1959 the cooperation between government and private sectors in Ayutthaya founded the ‘Mongkhon Bophit Foundation’ in order to preserve the Buddha image and the Vihàra. In 1990,

Sangharaja⁴⁹ Somdet Phra Nyanasamvara Suvaddhana Mahathera mentioned that the Phra Mongkhon Bophit should be glided with gold leaf. In 1992 Her Majesty Queen Sirikit visited Phra Mongkhon Bophit and made merit. Her majesty the Queen donated money in the amount of 70,000 Baht as initial fund for the Project of ‘Gliding with Gold Leaf Phra Mongkhon Bophit to Celebration of the 60th Birthday Her Majesty the Queen’ which started the process on 1991 and finished in 1992 (Mongkhon Bophit Foundation 2001, p. 20).



Fig. 65 Vihàra Phra Mongkhon Bophit was restored and able to see the wall and ceiling in the back ground photo exhibited at wall of Vihàra Phra Mongkhon Bophit.

Photo: took from original photo in Vihàra Phra Mongkhon Bophit by Poramet Boonnumsirikij.

The operation of management and prevention the Vihàra Phra Mongkhon Bophit has been done under the Mongkhon Bophit Foundation which is operated under the group of Ayutthaya people. However as the information of the Treasury

⁴⁹ Buddhist supreme patriarch of the Buddhist priests.

Department of the Regional Treasury Office at Ayutthaya Province, the location of Vihàra Phra Mongkhon Bophit has belonged to crown property and under the supervision of Regional Office of Fine Arts (FAD) as the 3rd Regional Office of Fine Arts, Phra Nakhon Sri Ayutthaya in the office of Phra Nakhon Sri Ayutthaya Historical Park (Fine Arts Department 2005).

Phra Kantararaj at Wat Na Phra Men⁵⁰

Wat Na Phra Men is situated on the right side of the Lup Buri River, opposite the ancient royal palace of Ayutthaya in Wasukree District, Ayutthaya Province. It was registered as a National Historic Site with the Fine Arts Department on February 25, 1935 (Ministry of Culture 2010, p. 49)

There was mentioned in the royal chronicle of Ayutthaya that Phra Ong In (Prince Indra), the son of King Somdet Phra Ramathibodi II or Phra Chetthathirat I (1491 – 1529). He is the tenth king of Ayutthaya, established Wat Na Phra Men in 1504 and giving the name of ‘Wat Phra Men Rachikaram’. It was changed the name to ‘Wat Na Phra Men’⁵¹ until at the present. As the name of this temple normally could be assumed that the purpose of construction the temple was built upon probably used as a crematorium for one of the monarchs. Although perhaps the name of the temple was taken from ‘Wat Phra Men’ that currently is a deserted temple in Nakorn Pathom Province. It was cited in the History of Wat Na Phra Men as the Royal Temple by Chalerm Sukkasem that Wat Na Phra Men was renovated once during the reign of King Somdet Phra Chao Yu Hua Boromakot (1732 – 1758). When Ayutthaya was sacked by the Burmese troops, Wat Na Phra Men was not destroyed by the Burmese invader. It was left without attended as a deserted temple more than half century until Phraya Chivichit (Phuek). He was the city mayor in the reign of King Rama III or Phrabat Somdet Phra Poramintharamaha Jessadabodindra Phra Nangklao Chao Yu Hua (1824 – 1851) ordered to restore the temple during 1835-1838. The traditional Ayutthaya style was maintained without changed in the temple.

⁵⁰ Also written in Wat NaPhrameru

⁵¹ Meaning that the temple located in front of the royal pyre.

Moreover, Phraya Chivichit gathered the left-over antiques, which were scattered around the ancient town to keep in this Wat (Saipradist 2005, p. 138).

Phra Kantararaj located in Vihàra Noi which means a small hall in Thai language. It was also called Vihàra Kien which means hall of painting imply to the mural painting inside the hall. The painting is the story about the depicts a sampan and trading activity of Ayutthaya to China. It provided great wealth to Thailand (Siam) and the monarchy during the reign of King Rama III and other mural painting depict the stories of the 'Jataka' but It is very deteriorated and erased by seeping of rain. However the official name of the hall is Vihàra Sanphet which many people have called Vihàra Kantararaj.

Vihàra Noi was constructed in 1838 by the ordered of Phraya Chaivichit during the reign of King Rama III as a house of Phra Kanthararaj. The dimension of the building is 11.50 meters width and 25 meters length with front and back porches. In front of the Vihàra Noi has two staircases ascending from both sides. The roof of Vihàra Noi is covered with terracotta tiles as traditional Thai style architecture as regularly constructed for the temple. The gable board was adorned with green and blue mirrors with flowers and bird motives which was famous style in the reign of King Rama III. During construction Phraya Chaivichit moved the Phra Khantharaj from Wat Mahathat which was located in front of the ancient palace to the east and inscribed in the stone attaching at the wall of Vihàra Noi (Tourism Authority of Thailand 2006, p. 15). There is quoted in the stone inscription that Phra Kantararaj was brought from Sri Lanka by U-Pali monk who lived in Wat Thammaram when he was sent as Samana ambassador with other monks to bring Siamese Buddhism to Sri Lanka.

Phra Khantharaj has been called in another name as Phra Sri Ariyameetrai. It was sculptured in green stone in the Gupta style⁵² in Dvaravati period which the sculpture of the Gupta period presents a characteristic of beautiful figure, full of charm and dignity, a graceful pose and a radiant (Paknam 1997, p. 22). The

⁵² The style of India art represent the golden age with height of classical art of Buddhism in India

assumption from archeologists that was sculptured approximately in the 5th century, Phra Khantharaj is 5.20 meters height or three times larger than regular human. The Buddha image is the largest sculpture of a seated in European style Buddha image with his feet placed on the ground in the manner of the western style. However, The Buddha image hands were later fixed to put both hand on his knees. The proper posture of the Buddha image should be Abhaya mudra (Krairerg 2002, p. 365) as described more detail in chapter 2. This style of Buddha image can be found only 6 location in Southeast Asia as (1) in Mendut county, Indonesia (2) Wat Phra Pathomchedi, Nakornpathom province (3) Wat Na Phra Men, Ayutthaya Province (4) Chao Sam Phraya National Museum in Ayutthaya Province (5) and (6) Fine Arts Department, Royal Thai Government. There are reassembling parts gathered from an ancient Wat in Nakorn Pathom Province was mentioned by Chalerm Sukkasem from history of Wat Nar Phra Men the Royal Temple (cited in Saipradist 2005, p. 143).



Fig. 66 Phra Kantararaj inside the small Vihara of Wat Na Phra Men at the present day photo taken on January 2010

Source <https://lh4.googleusercontent.com/-cfrIO8T4-g/S1fu9zTBZgI/AAAAAAAAA-B1Y/6sKyO-JHhpo/s720/P1000937.JPG>, accessed in May 20th, 2010

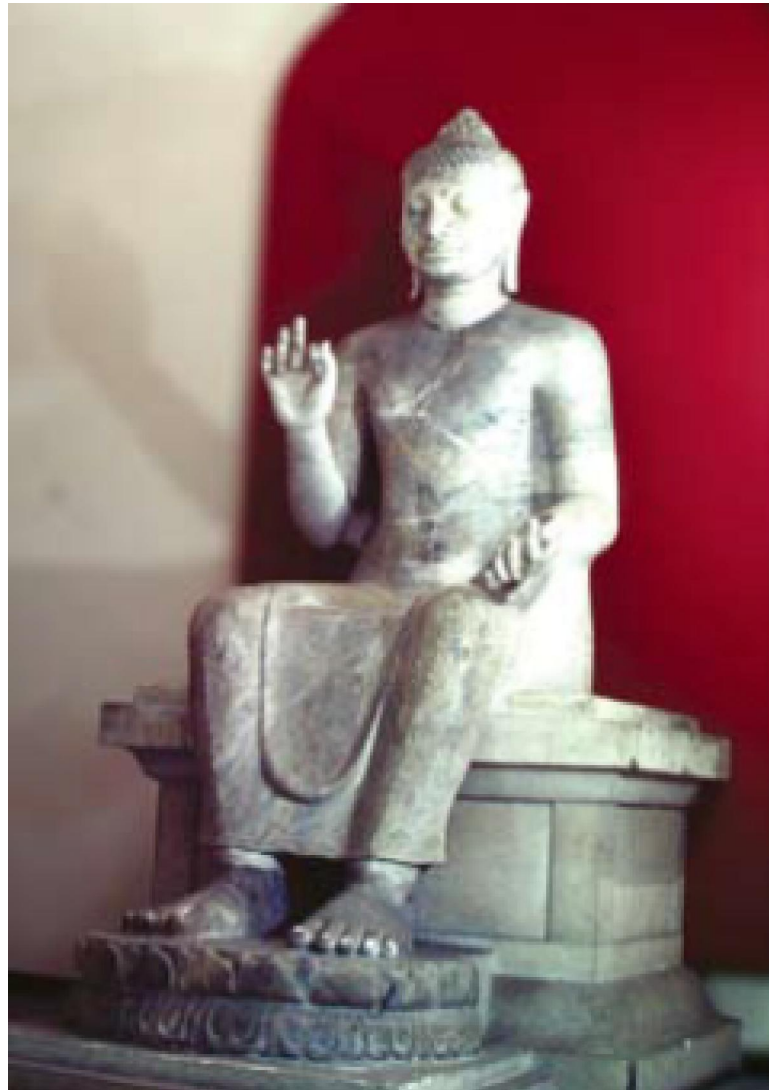


Fig. 67 The regular posture of sitting in a European style with the Abhaya mudra comparing to the Phra Kantararaj that both hands on the lap (Krairerg 2002, p. 373).

Buddha image has several remarkable features was written by Kasetsiri and Wright. The halo around the image's head has tongue flames indicating Chinese influence. The short hemline exposing the left knee looks differently from those of other images located in Thailand but this is similar to the images of Maitreya created during the Tang dynasty in China. Both hands of the image rest on the knees, which

are different from other of the postures in Thailand, but apparently it was arranged at a later stage (Kasetsiri and Wright 2007, p. 100).

The operation of Wat Na Phra Men had been done by the monks and temple committee under the supervision of the of Regional Office of Fine Arts (FAD) as the 3rd Regional Office of Fine Arts, Phra Nakhon Sri Ayutthaya in the office of Phra Nakhon Sri Ayutthaya Historical Park (Fine Arts Department 2005).

Summary of the restoration the heritage Buddha images

The restoration process for those Buddha images can conclude that Phra Acana is one of the most difficult to restore because of not only the most damaged Buddha image but also rare and hardly to find in the evidences from the inscription and other sources. The archaeologists and art historians had many debated and discussed as present in the report of the restoration committee. Those three Buddha images were restored in very good condition which all Thais and Buddhists take a journey to pay respect and celebrate to them. However, those restoration processes were not mentioned the preservation the spiritual value, those Buddha images have been returned the spiritual value because the faith and admiring of Lord Buddha and Dhamma have been expressed by the Buddhists when seeing those Buddha image.

The private sector of restoration of Buddha image

The restoration the cultural heritage sites including Buddha image which registered as the historical site from Fine Arts Department. It usually allows only preliminary impromptu restore such as brace the historical site for stability or restoration the minor deterioration which is not effect to the heritage significance (Rungrujee and Fukjumrune 2009, p. 231). Other heritage sites which are not registered as the historical site by the Fine Arts Department, the restoration process can be managed freely. Therefore, there are associations and foundations as NGOs process in the restoration of Buddha image such as ‘Phra (Monk) Restore Phra (Buddha Image). Provost Wichuta Intawaso founded ‘Specialists Restoration under the First Buddha Image Foundation’ is the restoration organizations. Both of organizations have similar objective to restore Buddha images in Wats all over

Thailand and received the budget for the restoration by the donation from Buddhists who are interested in the restoration the Buddha images in Thailand.

“Phra (Monk) Restore Phra (Buddha Image) Project” by Provost Wichuta Intawaso was founded in 2001 in the Srakeaw province. It was moved to Kanchana Buri Province since 2006 to restore the Buddha image by request from Wats or Monks which has the ruin Buddha image. Mostly the restoration process has been done by the Provost himself. The most interesting of the restoration by the Provost that he has not been trained the restoration Buddha image in any school or intuition. The ability of restoration the Buddha image, he claimed that from the learning by practicing hardly from all the Buddha images from his work. The restoration Buddha images were installed as principle Buddha image in Vihàra or Uposatha all over Thailand (W Intawaso 2010, pers. Interview, October 17 and Khon Khon Khon 2006). His restoration works such as the principle and other Buddha images in Uposatha of Wat Preang, Pechaburi province in 2010. Another Buddha image restored in a standing posture Buddha image from Wat Kalapapruk, Kamphaeng Phet province, in 2010 and many more (Krajaisri 2011). Moreover, he mentioned that the restoration from the possibility and remaining of the ruin Buddha images which did not much be concerned to the period of art style of the Buddha image (W Intawaso 2010, pers. Interview, October 17). The assumption of the restoration that he considered of the objective of his work emphasized on the spiritual value of the Buddha image rather than concerned to the authenticity on the Buddha image. It should be occurred in the process of restoration Buddha image since after Thai people predominated or sculptured the first Buddha image.

The preservation of the Buddha images in both Sukhothai and Ayutthaya historical heritage sites may concern to the objective of World Heritage as tourists destination of Thais and foreigners. However the spiritual of the places and spiritual values of the Buddha images after preservation has to be remained and not allow changing to other purpose which occurred in other places as mention previously. If it can be happened in Thailand, it will be hurt the predominantly to their religion and local community.

Chapter 6

Developing the Framework of Preservation of Buddha Image through the Use of Knowledge Management

Preface

Regarding to the cultural process of the Fine Arts Department has been processed by the governor officers. Most of archaeologists and scholars works on the process of the preservation, restoration and prevention cultural heritage which “*they refer from the policy and notice to local people that for the majority without concerning to the effect to the local and community*” mention by M.R. Dr. Akin Rapheepat (quoted Wongkorawut 2011) who is chairman of the board of Chumchon⁵³ Thai Foundation founded in 1992. While the linkage and the knowledge of the community have been developed from working on research, they have been done in the sites. The awareness of cultural heritage values for the people especially people in the community very rare.

On the other hand, the participation of the people from the community especially in Thailand have been very limited as “*Thais always do when having personal interest rather than public interest*” said M.R. Dr. Akin (quoted Wongkorawut 2011). Most Thai people concern and pay attention or participation only those have direct affects to their lives. For the example, from the huge flood in Thailand last October, 2011, most of the people tried to protect and took care of their belonging place with restoration or renovation. There were only few people asked or mentioned about the cultural heritage in Ayutthaya province which was sank from the flood for a month. Moreover, there were less people thinking to help recovering cultural heritage sites rather than industrial estates.

⁵³ In Thai means community

Although the cultural heritages monuments and sites have been preserved by expertise, knowledge the methodology of preservation cultural and restoration of those heritages have never been expand widely. Mostly understanding the methodology clearly is limited only for archaeologists, historian arts and scholars who are interested in preserving the cultural heritage. There are very difficult to understand the management and preservation of the cultural heritage monuments and sites because those have been dealing with multi disciplinary. Moreover, the cultural heritage has to deal with the emotional and feeling of the people because the significant values especially ascetic and spiritual values of those heritages are indicated as abstract values.

The management plan of the preservation, restoration and prevention usually has been written by the specialists and scholars and adopt by the government as a cultural heritage site management plan with rigid application as top down regulations (the Siam Society 2011, p. 43). Mostly of the plans were not concerned to community and people surrounding the site as mention in the cultural process from Fine Arts Departments.

Most of researchers currently have applied the participatory action research methodology for collecting the research data and information from the stakeholders including local people. However most the people in community are targeted of researcher as data collection not relevant or part of designing research methodology. Management and development of the preservation to restore and prevent plan for the deterioration and ruin of the cultural heritage monuments and sites have been dealing with facts information not feelings from people as mention following.

In many cases problem solving from the feeling without based information and data on fact this may cause the worse problem as mention by former Prime Minister Anan Panyarachun (Answer the Question: "King Bhumibol Adulyadej: A Life's Work" 2011)

This mention was also quoted by Surapol Svetasreni, when he was the Deputy Governor of Tourism Authority of Thailand in the research meeting of the topic of information database marketing for TAT meeting in 2008. He gave his opinion that

the support information for decision making has to come from the fact rather than feeling.

On the other hand the scholar usually uses difficult terms and hardly techniques to understand to local community. It would be the reason that people unable to proceed and finally reject or deny the process of the research. Meanwhile the scholar mostly pays less attention to the local wisdom as valuable data to collect.

Moreover, King Rama IX (1946 – Present), Phrabat Somdet Phra Poramintharamaha Bhumibol Adulyadej has suggested, from his majesty observations over many years that the development needs to be deliberate grassroots development. His majesty has described this as an “*explosion from within*”⁵⁴ which means a type of sustainable development beginning with the development of the inside individually and progresses through their family, community, the region and the nation (Nowakowski 2007, p.4-5). This process has been called decentralization that community can be able to think and make decision by themselves which can participate to the community development. This process would not be against the change from outside but the community has a choice to accept or adopt whenever community has stronger knowledge.

Therefore, dealing with the facts is the right information, with reasonable analysis and possible implementation or utilization. It need to be communicated and participation by the people or stakeholders especially community which the methodology of creating the management and preservation plan has been processed following as knowledge management. Therefore, knowledge management has recently emerged as a means of improving performance (Spender 1994 p. 353 and Grant 1996, p. 109).

⁵⁴ “Self-Sufficiency Economy” philosophy leads people to a balanced way of life and to be the main sustainable development theory for the country. The theory is based upon a Middle Path between society at the local level and the market in the global context. By highlighting a balanced approach, the philosophy allows the nation to modernize without resisting globalization, but provides a means to counteract negative outcomes from rapid economic and cultural transitions initiated by King Rama IX, Phrabat Somdet Phra Poramintharamaha Bhumibol Adulyadej

The definition of knowledge management

The definition of the knowledge management is the collecting, contributing, ordering, exchanging and adapting the knowledge systematically. It has been developed from data to information, from information to knowledge, and from knowledge to wisdom as highest benefit as learning organization (Panich 2008). The knowledge management was described following as:

“the knowledge management is the process through which generate value from their intellectual and knowledge-based asset”
(Levinson 2007).

Knowledge management system (KMS) is the key to future success for on-going process persistent interaction among agents within its system. The system would empower to access a repository of “best of breed” document, course materials and external knowledge sources (Villegas 2000). The produces, maintains and enhances the system’s knowledge base which is the set of remembered data as validated, refuted propositions and models or metamodels including manipulated software (Firestone 1998, p. 1).

The core of knowledge management involves acquisition, explication, and communication of mission-specific professional expertise in a manner. It is focused and relevant to an organizational participant who receives the communication (King 1999, p. 70). While the knowledge management process (KMP) is an on-going process persistent interaction among human-based agents. They aim at integrating all of the various agents, components, and activities of the knowledge management system into a planned. The direct process from the knowledge management increases the productivity, maintaining and enhancement the knowledge base of the KMS (Firestone 1998, p. 3).

Moreover the knowledge management can be explained from the basic thought made by Neil Fleming, Lincoln University in New Zealand, mentioned in the *Coping with a Revolution: Will the internet Change Learning* that:

A collection of data is not information

A collection of information is not knowledge

A collection of knowledge is not wisdom

A collection of wisdom is not truth

The knowledge management definition can be simply concluded that is the transferring the knowledge from one person to another. It may involve with the identification and analysis of the available knowledge required assets and processes. The result of the knowledge management is enable to the recipient of benefit from the collected wisdom to have more experienced members of an organization or group (Villegas 2000).

The different between data, information, knowledge and wisdom

A datum is the value of an observable, measurable or calculable attribute. Data is usually more than one such attribute value. Data is always specified in some conceptual context. At a minimum, the context must include the class of the attribute. The object is a part of that class which brings some ideas about object of operations or behavior, and relationships to other objects and class. Rather, the information, in general term, means to data plus conceptual commitments and interpretations. Information is extracted data, filtered or formatted in some way (Firestone 1998, p. 10). The information relates to description, definition or perspective.

Knowledge is a subset of information, but it is a subset that has been extracted, filtered or formatted in a very special process. More specifically, the information can be called knowledge that can be described as: The information has been subjected to and passed tests of validation. It is validated by the rules and tests applied by scientific community (Firestone 1998, p. 11). However, Information is not totally mean knowledge. It is realized clearly that the Information Age in organizations which is found themselves drowning in huge in-house stores of unusable data (Villegas 2000).

Knowledge comprises of strategy, practice, method or approach and wisdom embodies principle, insight, moral or archetype. Lastly wisdom has more active

component than data, information or knowledge. The application of knowledge expressed as principles to arrive at prudent, sagacious decisions about conflictful situation mention by Gene Bellinger (quoted Firestone 1998, p. 11). Then Gene Bellinger adopted the thought and developed to the diagram in figure 67 as follow:

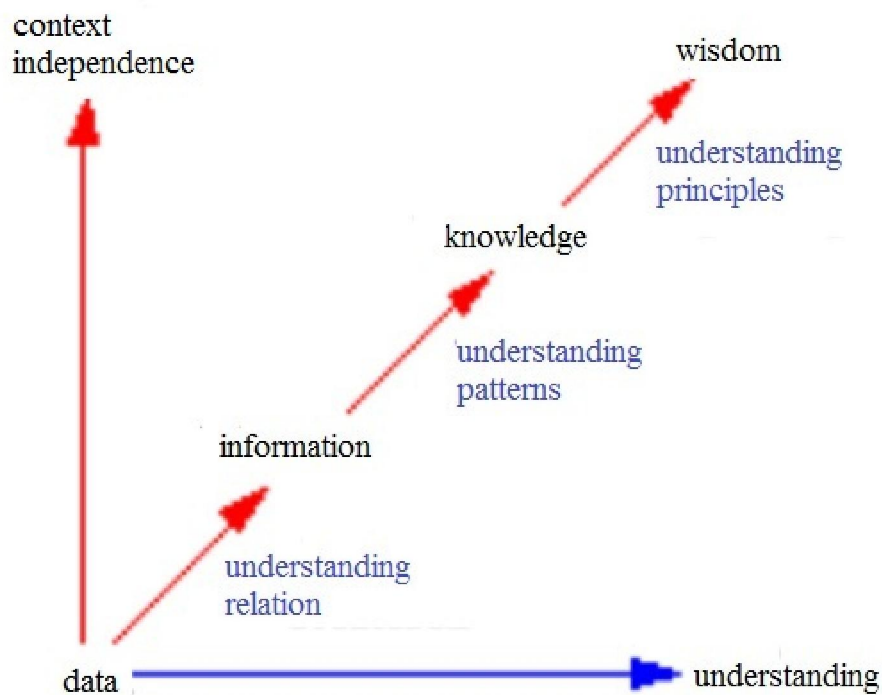


Fig. 68 Diagram of the idea of step from information, knowledge, and wisdom (Bellinger 2004)

The knowledge management process directed to the goals and objectives which is driven by a variety of knowledge management sub-processes. The sub-process consists of planning, acting, monitoring and evaluating. Planning in the knowledge management means setting goals, objectives and priorities. The knowledge management can make the forecasts, prospective analysis, performing assessments, and revising or reengineering a business process. Acting means performing the process or any of its components. Monitoring means retrospectively tracking and describing the process. Meanwhile, the evaluation of the knowledge management has been given the meaning as retrospectively assessing the performance of the process as a value steam (Firestone 1998, p. 6).

While the knowledge management from the Knowledge Management Institute of Thailand. The knowledge management emphasizes learning from operation to the successful story and exchange. The motivation of the learning has been exchanged from compliment respect to the value from each other with optimistic opinion to the organization with good relation. The knowledge sharing and learning has been collected from other experience through those activities mostly in the workplace (Panich 2008).

Moreover, the knowledge is able to describe in two types as 'Explicit Knowledge' which is the knowledge from document, textbook or systematic (Panich 2008). According to 'Explicit Knowledge' management emphasizes as accessible, verify, and interpret the knowledge. This knowledge has been used to create the new knowledge as references and it is possibly access by others people (Knowledge Management Institute 2005).

Meanwhile, 'Tacit Knowledge' which is the type knowledge comes from inner personal such as experience and wisdom (Panich 2008) and the 'Tacit Knowledge' management emphasizes on the sharing the knowledge within the people especially the practices or operation worker as on the job training or meeting discussion. The process of knowledge sharing has brought to create new knowledge. The 'Tacit Knowledge' is able to bring the knowledge from development in their workplaces individually (Knowledge Management Institute 2005).

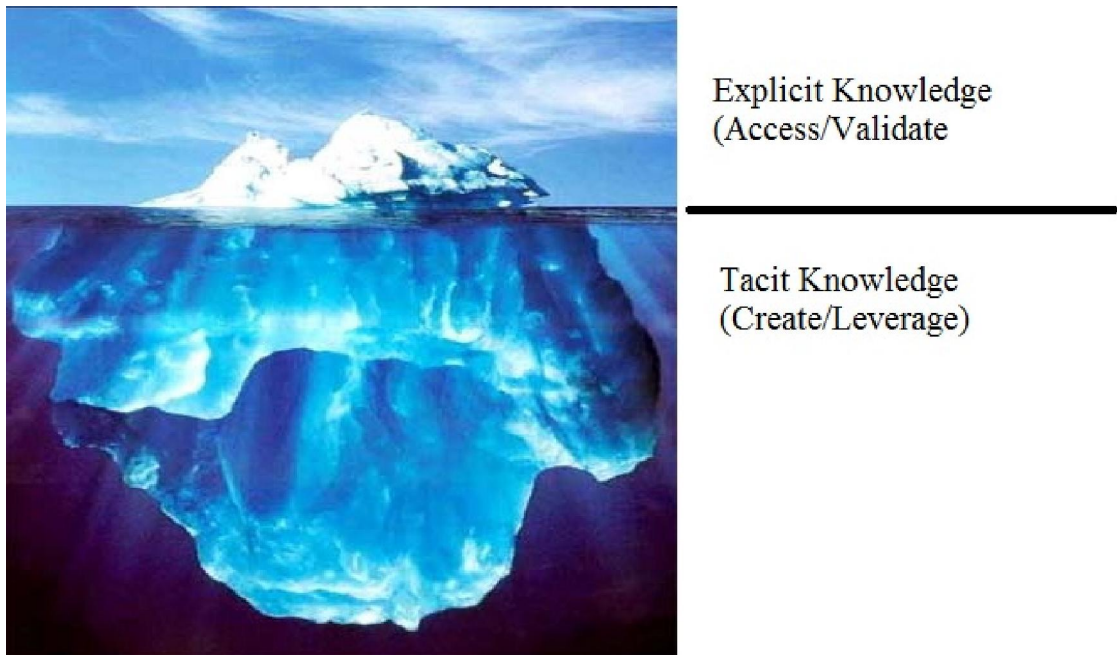


Fig. 69 Knowledge Management concept comparing to ice mountain (Panich 2008).

Key factors of knowledge management

The key success factor of the knowledge management is the way to change from tacit knowledge to explicit knowledge. The most important is the development techniques to manage and motivate people who have ‘Tacit Knowledge’ transfer their knowledge to ‘Explicit Knowledge’ with systematically approach. The output of transferring the knowledge is written or distributing as manual or handbook document or in other media forms. The outcome of transferring the knowledge is developed training system as trainer or mentor possibly achieved the goal of exchange knowledge or knowledge sharing. The knowledge sharing is not only learning from the best practice which are the highest achievement or highest efficiency or highest quality, but also from the community of practice (Panich 2008).

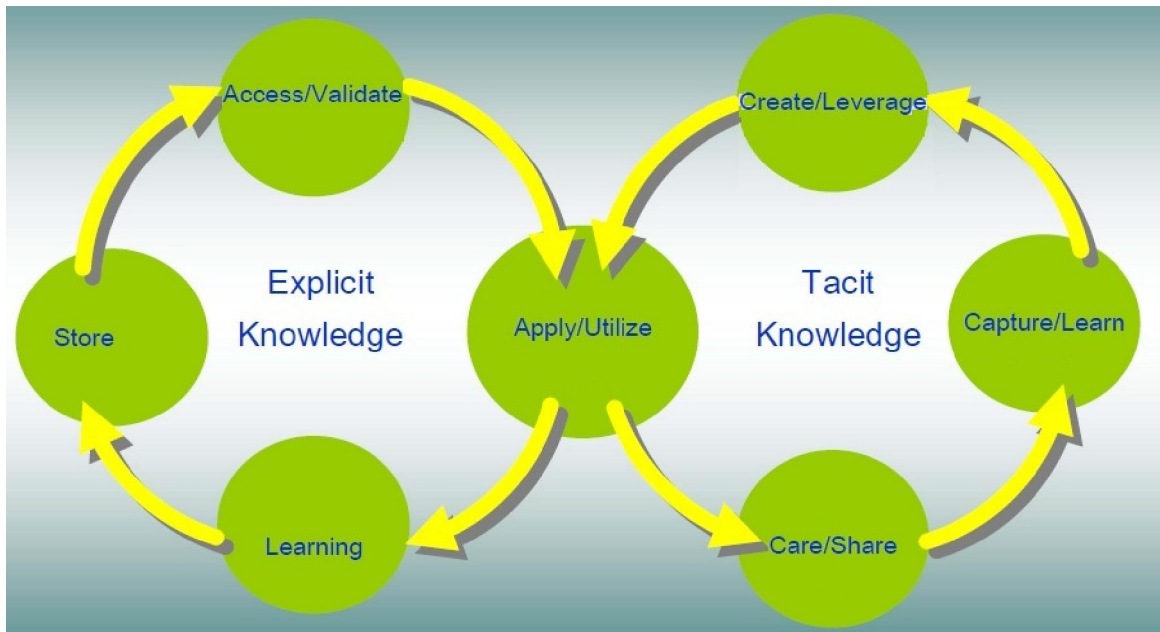


Fig. 70 Concept of merging for utilize of Explicit and Tacit Knowledge (Panich 2008).

Another key success factor of the knowledge management is changing the behavior of the people in stakeholders participating in the knowledge management process between sender or giver and taker or receiver to share knowledge (Panich 2008). Mostly the specialists or scholars who have explicit knowledge hardly accept tacit knowledge from the local community and to extract the knowledge from local community take longer time because the tacit knowledge are difficult, rough and scatter. Meanwhile the specialists or scholars mostly high selves esteem always use the difficult vocabulary and a lot of terminologies to explain their expression which local community unable to understand clearly or miss understanding the idea. Therefore, the specialists or scholars need to use the easy words and skip the terminologies or explain the knowledge by using the media techniques to interpret such as diagrams, photos, video clips or mixed method integrate for knowledge explanation. On the other hand, the local community also find it hard to explore their knowledge because of nervous or lack of selves confidence when facing with the specialists or scholars, the knowledge sharing should be occurred in the relax ambiance. The specialists and scholars need breaking the ice or eliminate the barrier

of the stakeholder from local community by create the friendly and warm atmosphere during the knowledge sharing process in both of explicit and tacit knowledge.

The outcome of knowledge management

The outcomes of knowledge management are several indicators such as better achievement or having the new innovation. People in both local community and specialists can develop learning model of knowledge in order to contribute knowledge community and all the knowledge allocate systematically preparing the knowledge ready to use. Finally the community or organization is the learning organization ability for competitiveness. The outcome of the knowledge management has four aspects which are following:

- The achievement of goals includes founding innovation such as intellectual property assets.
- The stakeholders can develop and learn all together to create more adaptive, responsive, dynamic, and flexible with better collaboration and coordination within intra and inter the organization or community.
- The knowledge of community, organization and the people have increased and lift their productivity and efficiency and ready to use.
- The organization and community have been changed to the learning organization or learning community. The community can be able to compete with other organization or community.

The benefit of knowledge management

Most of the knowledge management is currently explored to use mostly in the organization and firm. Knowing 'why' represents having a basic understanding of the reasons for facts, conditions, job responsibilities, client requirements, etc. Knowing 'what' means knowing the cause of a problem or condition. Knowing 'where' provides a spatial reference to understanding. Knowing 'how' provides the critical element for problem solving, the knowledge of how to get something done. Knowing 'when' provides a temporal reference and is closely tied to timing and opportunity development (Villegas 2000).

The benefit of knowledge management has used the information technology perspective that the knowledge has been recorded systematically. It is easily to access for analysis which one supports or helps the decision maker to make right decision. It can solve the problem faster and more effective, and manage the situation under control.

The challenge of using knowledge management in the cultural heritage sites and properties is the method of development the preservation and restoration plan. It is a tool for leaning from stakeholder such as archeologists, scholars and communities. Those stakeholders who participated in the cultural heritage sites have to understand the knowledge equally. Moreover the knowledge management also changes idea of management from the top down or vertical culture to horizon culture which means everyone has the right to learn equally. The outcomes of knowledge management are the development management plan and support plan for the suitable preservation, restoration and prevention methodology by integrating as document manual or handbook.

Chapter 7

Conclusion and Recommendation

Preface

The methodology of the preservation Buddha image was reviewed in previous Chapters in this dissertation that needs to be developed and adjusted in the principles and regulation law of the preservation. Thailand charter and Act on Ancient Monuments, Antiques, Objects of Arts and National Museums revision in 1992, and lastly was developed the methodology of preservation of Buddha image. According to the development of the 'Cultural Process' from Fine Arts Department to the 'Process of Preservation of Buddha Image' as one of the preservation process for the Fine Arts Departments. The process mainly to preserve, restore and prevent the Buddha image as cultural heritage. Additional with the recommendation for the further study which are available for the next researchers, the research topics are useful for the preservation the cultural heritage monuments and sites.

The principle and regulation of cultural preservation

Draft of Thailand Charter is currently on process of drafting as the principle of cultural heritage preservation for the cultural heritage monuments and sites in Thailand. It should add and adopt the spiritual values and spiritual value of the place in order to aware of the changing the cultural heritage sites and monument to other purpose. The good example of the charter founded in Hoi An protocol in Compromising the Sprit of Place of the Systematic Threats to Authenticity awareness the changing propose of usage the cultural heritage to other functions (Engelhardt and Rogers 2009, p. 14).

Therefore the Thailand Charter should add the usage of the cultural heritage monuments and sites that not totally or restrict allow of changing purpose of the cultural heritage monuments and sites especially religious places and Buddha images

to commercial places such as restaurant, pub, convenient store or shopping area or as decoration in those places will be prohibited. The severe penalties and serious law enforcement have to use for these violation.

While, the changing purpose of the cultural heritage sites and monuments such as museum, interpretation centre or learning centre has to acknowledge by public hearing from all stakeholders especially local community. According to Mr. Wasu Posayanan an expert architecture of Preservation Historical Site Section of Fine Arts Department mention in his interviewed that

“We cannot restore the historical sites to the museum but when preserve those sites also have the answer what we are preserve for, but not keep the ancient building or broken bricks which do not know what it is” (quoted Edknovate 2011).

The preservation process of the cultural heritage monument and sites have to mention both of tangible and intangible values. The preservation of any cultural heritage including Buddha image should concern to the authenticity purpose as the significant of the place and identity of Buddha image as well.

Act on Ancient Monuments, Antiques, Objects of Arts and National Museums in 1992 should be revised. The historical sites and places have the significant of the culture and people including local community. The addition with the context of the local community have been changed and included. The tangible values of those sites and places also were emerged with the intangible values. The more separation of tangible and intangible significances, the more lost of the values in cultural heritage.

The regulation of preservation only objects and fabrics should be changed by adding the authenticity of the creation by the local wisdoms into the preservation process and methodology. Moreover, the management policy of preservation, restoration, and prevention the cultural heritage sites and monuments including Buddha image should be reverse from top down management to wide spread management. The knowledge management process should be used to all the needs and requests of preservation, restoration and prevention of the cultural heritage. The

process should come from the local community and managed by local community for local community. The government officials are only commentator and supporter to follow the laws, state regulation, budget and evaluation.

Implementation of the process of preservation of Buddha image should be introduced. Even most of people in the local community are poor and lack of education because of the problem of distribution of education from the government policy and budget. The knowledge and awareness of those people will be less and unconcerned to the cultural heritage because they need of the economic and surviving in the capitalist society. However, the happiness of people in the local community is not to be rich or economic prosperity. The doubt of the local community in the ability to preserve, restore and prevent the cultural heritage including Buddha image especially rural area should be eliminated. Consistent to Mr. Wasu mention that

“the community do not understand why Fine Arts Department transfer the prevention duty to them in which the prevention process is the most important core of the preservation” (quoted Edknovate 2011).

The development of the process of preservation of Buddha image is not only making people to understand the importance of the significant values of the cultural heritage monuments and sites but also reducing the conflict between state and community and among people in community. There are different ideas, knowledge, and perspective in the social.

The Process of Preservation of Buddha Image

The adaptation of the ‘Cultural Process’ of the Fine Arts Department as exhibited in Chapter 3 (figure 35) that have six steps of the cultural process (1) Research (2) Diffusion (3) Cultural Treatment (4) Education and Transmission Program (5) Creation (6) Sustainable Development (Fine Arts Department 2004, p. 74). According to the ‘Cultural Process’ researcher develop the ‘Buddha Image Preservation Process’ for preservation the Buddha image in Thailand as four steps in the cycle follows; (1) Knowledge Management (2) Preservation Plan & Policy (3) Treatment & Implementation (4) Sustainable Development and Review.

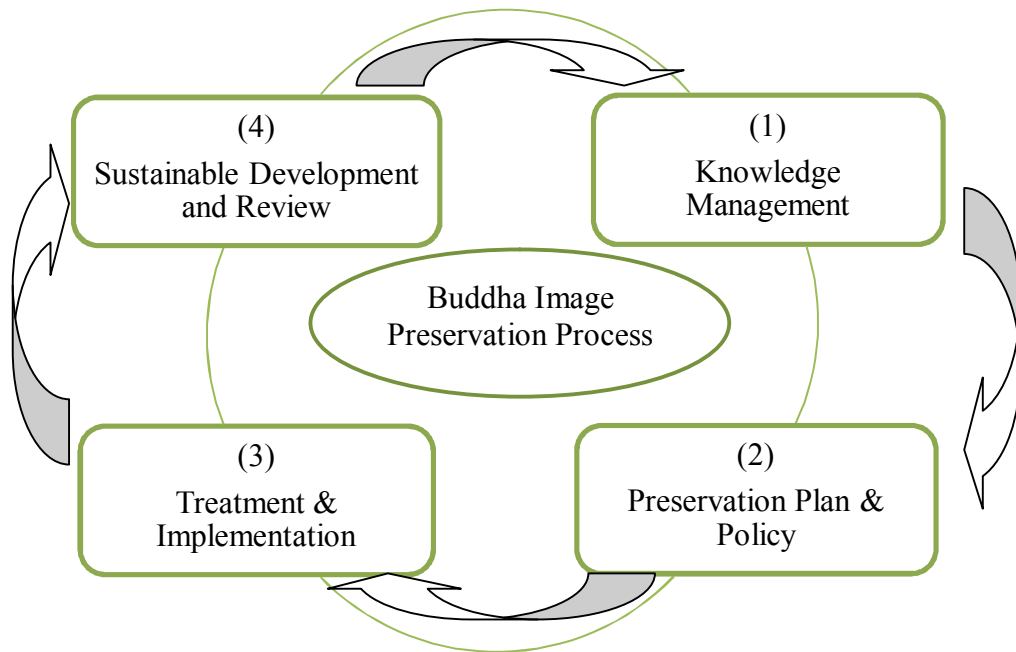


Fig. 71 Introduce the new diagram of the cultural process for Buddha images preserve, restore, and prevent.

Source: Poramet Boonnumsirikij.

Knowledge Management Methodology as the first step in the preservation process of the Buddha image as the cultural heritages monument. The exchanging and sharing knowledge and ideas of cultural heritage from all stakeholders between specialists and local community in order to extract the tacit knowledge from the local wisdoms mixed with the explicit knowledge from the specialists in archaeologists and scholars. Finally, this process can receive the outcome of the knowledge in the context of tangible and intangible significant values from Knowledge Management process. The outcome has been done from all stakeholders in order to create the preservation plan and policy for preserving the Buddha image.

The outgrowth of the exchange and share the knowledge also develop the awareness of the preservation including restoration and prevention which is suitable and proper to each local community. However, the knowledge management may take more time but the using of knowledge management is higher benefit because the outcome of participation in knowledge management will be several things such as

manual or handbook including preservation plan and policy for the local community by the local community. Full fill of knowledge to the communities that do not need to be trained or promoted the significant of preservation and prevention program managed and arranged by local community.

Preservation Plan and Policy for the Buddha Image is second step of the Buddha image preservation process. When extract the local wisdom by using the methodology of the knowledge management. The preservation plan and policy could be adopted from the commitment from all stakeholders' agreement occurring from knowledge management committee. According to the process of knowledge management would be add in the cultural process. Moreover, it may adopt by the Thai Charter or Fine Arts Department as a preservation, restoration and prevention in both tangible and intangible of the cultural heritage.

Cultural Treatment and Implementation as the third step after launch the preservation plan and policy. The selection treatment to the cultural heritage and sites in the knowledge management will find out the suitable process and archeologists. They are the specialists in the restoration the cultural heritage monuments and sites with the cooperation and transfer knowledge of restoration to the community. The understanding of process, material, resource of the restoration would be recorded as database in every process.

Sustainable Development and Review is the final step of the cultural process after applies the treatment to the cultural heritages and sites. The community manages the cultural heritage and sites by themselves with the support of the state government or local government. However, there is hardly to have a perfect management plan and policy at once because the management plan and policy may be good in a period of time. Therefore, the time change, people, and updated evidences may affect to the management plan and policy to review and adapt into the current situation and future.

Recommendations for further research

As the limitation of time of the study, the intangible heritage charter is under the development from UNESCO. Moreover, the Thai Charter for the cultural heritage

also has not been adopted from the archeologist and Fine Arts Department yet. Therefore the further research could be conducted into the following areas:

- (i) The study of the intangible cultural heritage in different or similar between Western and Asia countries context.

The context of the cultural heritage in Western and Asia have been accepted that there are several context and significant, but the need of in-depth study in the cultural heritage and site in the intangible heritage are rare in the comparing study

- (ii) The use of the knowledge management to develop the stakeholder for the cultural process of preservation, restoration, and prevention.

The in-depth study could be made for the level of participate and process of methodology to use knowledge management for all stakeholder participation by observation and interview the strength and weakness points when use the knowledge management and implementation.

- (iii) The context of the different of believed, local tradition, and religious affect to preservation of cultural heritage in Thailand.

The preservation, restoration, and prevention may conflict to the believed, local tradition, and religious that has the rules and limitation when deals with the process of the preservation which may make community uncomfortable to accept those processes.

- (iv) The manage inappropriate behavior of tourist when travel to the cultural heritage in Asia counties.

Tourists usually approach to the cultural heritage without proper knowledge and respect to the sites may affect the feeling of the community. The study should develop the process for management for the appropriate tourists' behavior when visit the cultural heritage sites.

- (v) The adaptation of the cultural process to other religious sites.

The cultural process from this study may be able to apply to preservation and restoration to other religious sites not only Buddhist sites but also other religious sites. However the further study should need to appropriate methodology with concerning to all stakeholders in both of tangible and intangible values.

Literary Review

The textbook and other sources have been had been read for the analyzed and compared in this dissertation. However, there are some books that were recognized as inspired the idea and go further in deeper and wider information. The first book that brought the idea of the Buddha image history in Thailand is '*Thai Character: Buddha image – Thai Buddhism Identity*'. This book is written by Piriya Kraireg in 2008. The book is just not only present the history of the Buddha image but also bring the arguments of the history. It is hardly to find in other history book especially the history of the Buddha image. There are few examples that inspire into writing this dissertation such as the argument of the 1st inscription stone of Sukhothai. Authenticity made in Sukhothai era or in later around 500 years later in Rattanakosin era.

Another example that found in this book is about the argument of the philosophy of art style and age of the artifacts. It is the western idea to know the artifacts values as price in the market. As mention in this book, the Buddha image in Thailand was defined by George Coedès, very well known French archeologist and South East Asia Historian. This idea is totally different idea from Thai people to define the value of the Buddha image. The Buddha image is the imitate sculpture of the Lord Buddha which the Buddhists always worship and respected without concerning much of the art style. It is the intangible heritage values as the spiritual value of the Buddha image which inspired directly to this dissertation.

The second book is the '*Intangible Heritage*' was written by varieties of authors and edited by Natsuko Akagawa and Laurajane Smith in 2009. This book in one of the books in the series as Key Issue in Cultural Heritage edited series by Laurajane Smith and William Logan. This book mentions to the intangible values in a different approach. Most of the intangible heritage mostly set by UNESCO and other charter. It is separated from tangible heritage. However, this book has the argument of the intangible value within the tangible value. Moreover, explaining of the lost of the tangible culture heritage monuments and sites may not lose the intangible values of

the sites and places at the same time. The remaining of the intangible values still remain and recording the different form. People still worship to the site that used to have huge stone of the Buddha image of Bamiyan in Afghanistan, even it was totally collapsed.

Lastly the book is one of the most important to explore the idea of preservation and restoration the cultural heritage monument and sites. The book name is *'Hoi An Protocols for Best Conservation Practice in Asia; Professional Guidelines for Assuring and Preserving the Authenticity of Heritage Sites in the Context of the Cultures of Asia'*. This book was written by Richard A Engelhardt and Pamela Rumball Rogers in 2009 to prepare for UNESCO. It was adopted by the Asia-Oceania Region at the ICOMOS General Assembly in Xi'an, China in 2005. This book mentioned to the spiritual values and spirit of the place which has been remained in the cultural heritage monuments and sites. The argument of not allow changing the propose of usage the heritage sites to other such as changing the ancient temple to restaurants, shopping centre, and etc.

Those are the books that inspire to find the further information to have the proper solution in the dissertation. However, all the rest of books and other sources that was put in this dissertation are very relevant and useful to read for understanding clearly of the process of preservation, restoration and prevention the cultural heritage monument and site in both of tangible and intangible values.

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