



**REDEFINING WANG NA RATTANOKOSIN: THE HISTORY, CONSERVATION AND
INTERPRETATION OF A ROYAL THAI PALACE**

By

M.L.Bussayamas Nandawan

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

Program of Architectural Heritage Management and Tourism

(International Program)

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PROF. WILLIAM CHAPMAN, D.Phil., 190 pp.

This dissertation researches ways to determine the proper physical characteristics of the area formerly referred to as Bhawornsathanmongkon or Wang Na. Located in Rattanakosin Island, Wang Na is occupied by historical buildings containing artistic and architectural material dating back to the beginning of the Rattanakosin era. Many of these ancient buildings were built more than 200 years ago. In 1926, King Rama VI gave all of the buildings in Wang Na to the authorities for the purpose of creating a museum for Bangkok area, the recognized capital and to manage the housing and preservation of antiques from all over the country. The use of the original area of Wang Na has undergone many changes. Today the area of Wang Na houses academic and government offices, which are the National Museum, the National Theatre, Bhanditpattanasin Institute, Thammasart University and northern Phramen ground.

The change of the Wang Na area from the former palace to be part of the academic section of Thammasat University has been carried out without any meaningful conservation plan or proper way to conserve the history of the area and as a result has been the cause of many problems. These problems have caused disadvantages to the buildings in the area of Rattanakosin in both direct and indirect ways. The government established the Rattanakosin Council to draw up and implement policies to conserve and develop the area. Unfortunately, these policies did not include any effort to conserve Wang Na's historical value.

Architectural Heritage Management and Tourism, Graduate School, Silpakorn University, Academic Year 2008

Student's signature.....

Thesis Advisor's signature.....

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Chapter 1

Introduction

Hypothesis of study:

In order to redefine Wang Na it is necessary to appreciate the many factors that have brought so much change to this ancient site. A principal factor has been the historic changes brought about by its governors and people but other important factors have made their impact. In recent years the population, trading, transportation, traffic, residency, public services and traveling in the immediate area of Wang Na have increased at unprecedented speed. This has put enormous pressure on an area that was not designed to meet these demands and requires special protection in the case of its historic buildings. This increase has created many environmental problems for Wang Na and a revision of planning procedures seems both appropriate and timely. It is proposed, therefore, to conduct research in order to determine the best possible ways to preserve this remarkable area for future generations.

Methodology:

- It is necessary to establish the original context of Wang Na and its people using historical, economic and social data and then to compare this to its current day appearance and state of preservation.
- Information has been collected from documentary sources and by doing a field study of the site. Other information has derived from interviewing local people.
- Parameters for the study are defined in time and space. The time is limited to the period when the ancient buildings were built (around 200 years ago). The spatial limits are those of the area once strictly known as Wang Na.

- The findings can be published in order to inform public of the need to conserve this historical area, particularly in terms of its national artwork and cultural heritage.

In this dissertation the author has divided the study into several distinct parts:

- A study of the importance of Wang Na.
- An examination of the role of its importance in Thai history.
- The overview of important works of architecture and art.
- A study of the general surroundings, those affect this historic site.
- The study and classification groups of historical sites.
- Study and classification all surroundings which affect the site.
- An overview of theories and ideas for the development in conservation work of the management historical sites, notably those of international significance, conveying those ideas of conservation to maintain sites in Thailand.

Outcomes:

- To determine Wang Na's current changed physical condition and that of its surroundings, which affect or undermine the historic site.
- Suggestions will be made for future interpretive planning of this site as a prototype for future projects.
- Information collected from the study data will enable proper conservation action to be taken to improve the severely degraded parts of this historic site.

Original context of Wang Na

In order to understand the original context of Wang Na and the extent of transformations that the site has undergone, it is necessary to study its initial formation and the people directly responsible.

Role of Viceroy

Wang Na in the official language of the city of Ayudhya means the royal palace where the viceroy resided. The king established the position of Viceroy to develop his power by enabling him to control other important cities. The Viceroy was governor of a kingdom and acted as the king's chief representative. The king himself would see this man as his successor to the throne.

In the Sukhothai period many kings in the Phra Ruang Dynasty would reside in the city of Sukhothai, while sending their son to take care of the city of Sri-Sachanarai. In the beginning, there was no specific evidence to prove that the prince was called "Uparaja", literally viceroy, but it first appeared during King Sri-Intraratit period.

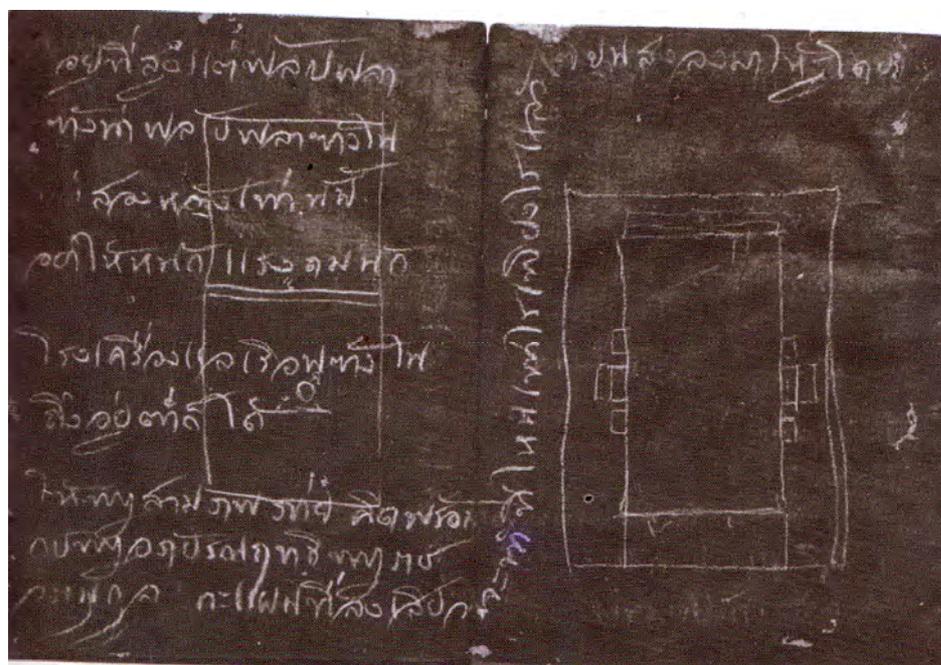
During that time, King Naresuan was the viceroy and ruled the city of Pitsanulok. He often visited his mother and built a new palace to be his residence when he came to Ayudhya.¹ In 1584, when King Naresuan succeeded in gathering people together in Ayudhya to be the center, he established his residence in the Chankasem Palace.

¹ Guide book , the Chankasem National Museum 2nd edition, Fine Art Department



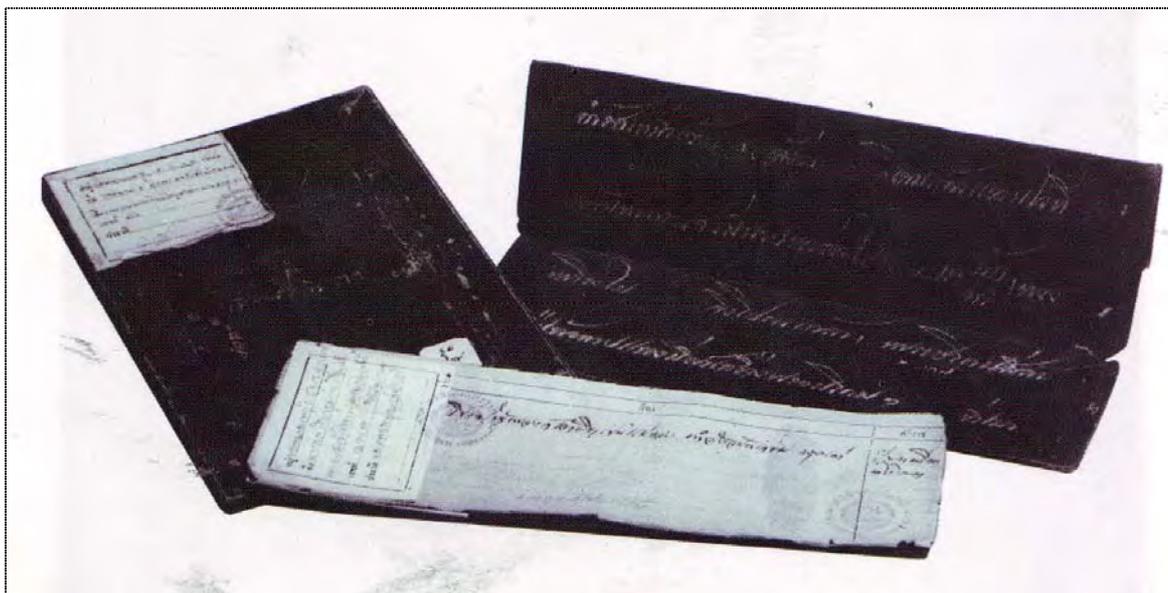
1. Chankasem Palace, the place where the viceroy of Ayudhya lived

Source: A Guidebook, *the Chankasem National Museum*, 2nd edition, Fine Art Department



2. Historical record number 164 of the reign of King Rama 4, written in 1860, showing the plans of Chankasem

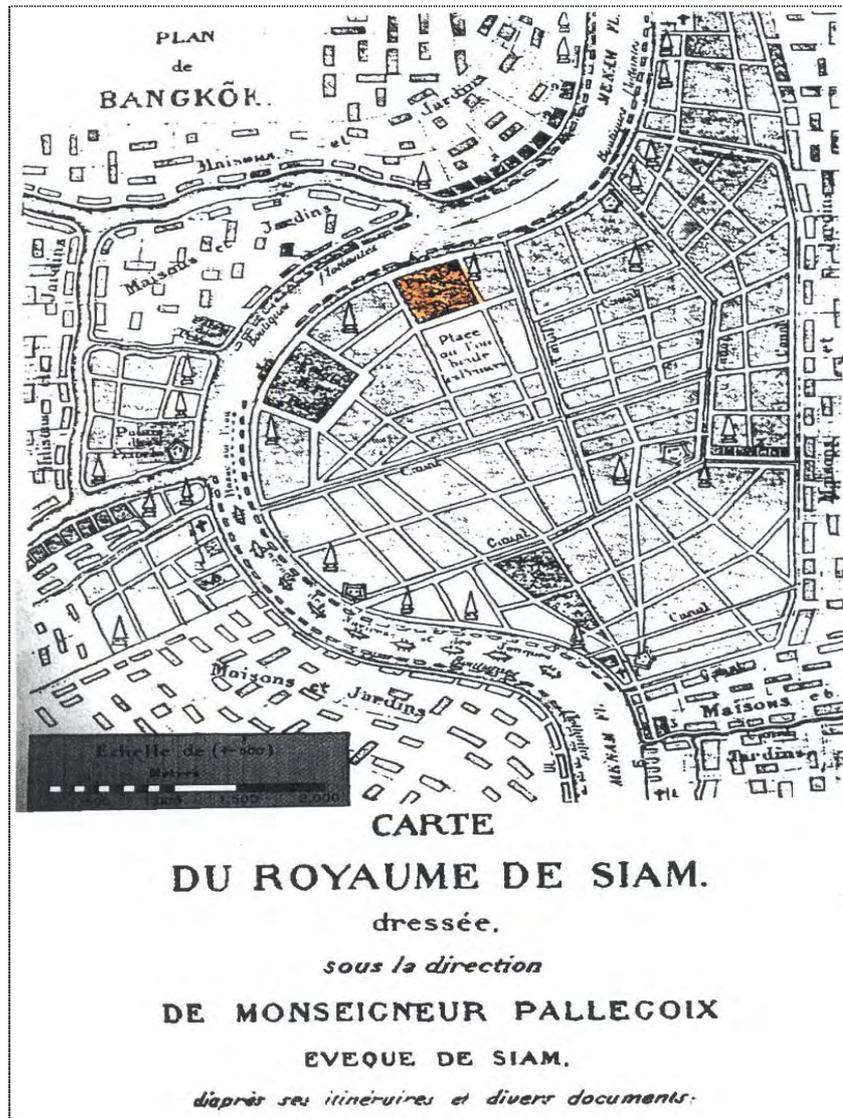
Source: A Guidebook, *the Chankasem National Museum*, 2nd edition, Fine Art Department



3. Plans of Chankasem.

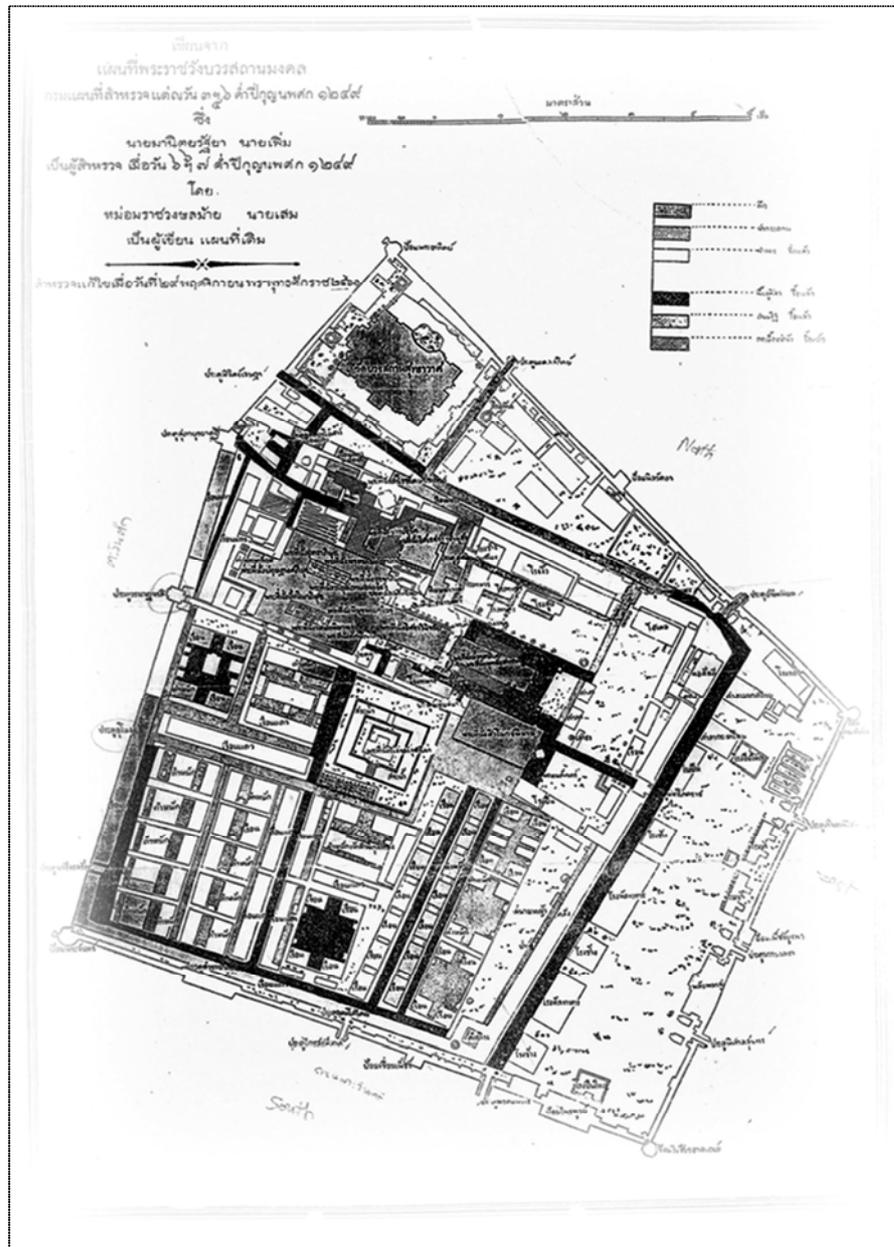
The palace in the study site was referred to as “Bhawornsathanmongkon Palace”² It was also often referred to by the name of “Wang Na.” Wang Na, itself, was called after the person who was residing in front of the Grande Palace. The viceroy, who was in second position to the king was who would also be in the vanguard. Whenever there was a war, he would be the one who supervised and lead the troops; while the rear-guard was the Rear Palace or Bhawornsatarnbhimook Palace in the official language. The buildings of the Royal Palace, Wang Na or the Rear Palace may in fact, imitate the form of arranging the troops.

² Legend of the Ancient Palace, 1862 – 1995, 9th edition.



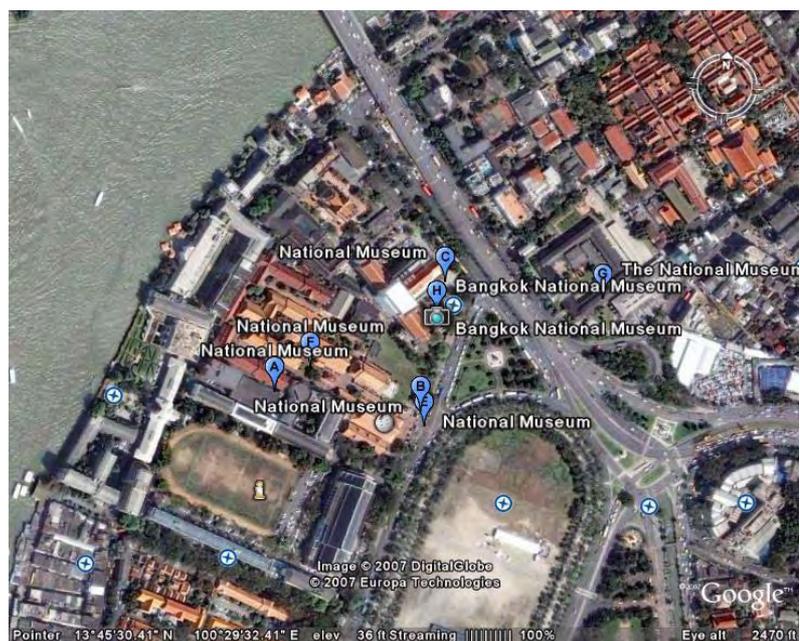
4. Map of Bangkok

Map published by B.Pallegoix, Paris, 1854. Source: Dr. Nid Hinshiranda



5. Map of Wang Na Surveyed by Mr. Manij and Mr. Perm and drawn by Mom Rajawong Lamai and Mr.Sem in 1917.

Source: The National Museum Phranakorn



6. Aerial view of the area of Wang Na

Source: Google Earth, 2007

Therefore, the position of Wang Na existed from ancient times until the Rattanakosin period and it is thought that Somdej Maha Surasinghanaj was the first person to hold this position. Construction of Wang Na reflected his glory. In addition to his ability in warfare, he supervised the creation of Wang Na in architectural terms; its distinctive forms and impressive artwork were to reflect his powerful image.

Following current ideals on beauty, the remarkable Wang Na³ was full of historical, art, archeological, architectural and traditional values. It was an important area of the city and is considered by Thai historians to be the center of the country starting with the rule of King Rama I.

³ The study is limited to the area which belonged to Wang Na, notably

North : The road approach to the King Pinklao Bridge

South : The Phra Chan Road

East : The road currently referred to as Na Phra Tad Road

West : The Chao Phraya River

Sources of information

I. The field data source is the physical data of Wang Na. This data is gathered from study at the actual place.

II. Documentary data which gives details of the history, work of art and architecture of the following:

- The National Museum, Bangkok
- The National Archives
- Silpakorn University, Sanamchandra Central Library
- The Library of the Siam Society under the Royal Patronage
- The Library of The Princess Maha Chakri Sirinthorn Anthropology Centre
- The National Museum Academic Section.

Chapter 2

The History of Wang Na during Ayudhya⁴ and Rattanakosin Period

One of the principle aspects of this study is to define the historical importance of the area particularly in relation to its viceroy and to understand the ranking and purpose of “viceroy” since the Ayudhya period (Kingdom of Ayudhya). This rank was first used in the thirteenth century. Angkor’s power over the Chao Phraya basin began to fade. The population began to increase in the lower Chao Phraya basin. There were many wars at that time for the king fought many battles in the hope of ensuring his successor more power and political control over the area.

At the death of King Ramkamhaeng of Sukhothai, Lopburi, the old Angkorian cultural and administrative center of the Chao Phraya plain, was independent of both Sukhothai and Angkor. Its culture represented both Mahayana and Hinayana Buddhism with Angkorian brahmanical religion and the Indian Arts. The population was predominantly Khmer in the long established towns dependent on Lopburi.

⁴ Ayudhya (full name Phra Nakhon Sri Ayudhya, also spelled "Ayudhya") city is the capital of Ayudhya province in Thailand. The city was founded in 1350 by King U-Thong and became capital of his kingdom. The king managed to escape the smallpox outbreak in Lop Buri. Often referred as the Ayudhya kingdom or Siam, Ayudhya was named after the city of Ayodhya in India, the birthplace of Rama in the *Ramayana* (Thai, *Ramakien*). In 1767 the city was destroyed by the Burmese army, and the ruins of the old city now form the Ayudhya historical park, which is recognized internationally as a UNESCO World Heritage Site.

Wikipedia contributors. Ayudhya (city). Wikipedia, The Free Encyclopedia. May 28, 2007, 04:10 UTC.

Available at: http://en.wikipedia.org/w/index.php?title=Ayudhya_%28city%29&oldid=134004386. Accessed May 30, 2007.

In 1340 AD, The Chao Phraya plain area still lacked the political focus and leadership that King Ramkamhaeng and Angkor had provided. Although Lopburi had been the center of power and influence, it was still a relatively small community. The future of political power and the development of economical trade opportunities were still in uncertain balance.

The leadership that changed the region in the middle of fourteenth century was provided by U-thong. He was born in 1314 AD to a powerful Chinese merchant family which may have been located in Phetburi. He married the daughter of the ruler of Suphanburi. This political marriage of two powerful families strengthened the commercial power of U Thong upon which he could base and develop his political needs.

One version of the Royal Chronicles of Ayudhya indicates that U Thong was the successor of the king of “Kampuchea” and that he resided in the area of Lopburi. The material also narrates his founding of the city of Ayudhya.

The king passed away and no member of the royal family could be found to succeed him. So all the people raised U- Thong, who was the son of Choduksethi (the leader of the Chinese merchant community, to be appointed as king and govern the kingdom. At that time, there was a severe outbreak of smallpox and much of the population succumbed to it. Therefore, the King left troops in charge of his capital and moving the population out of city at night time went to the south in order to flee the pestilence. His older brother took up temporary residence with his forces in the country of the city of Suphanburi. King U- Thong, however, marched his troops on a journey of several days until they came to a large river and saw a circular island, smooth, level, and apparently clean, standing in the center of the area. Then he had his troops cross over and establish themselves on Dong Sano Island....

In 712AD, a Year of Tiger, second of the decade, on Friday, the sixth day of the waxing moon of the fifth month, at three o'clock after dawn, the Capital of Ramathibodi, was first established (Friday, March 4, 1351, shortly after nine o'clock in the morning)⁵

U- Thong took the name of King Ramathibodi, He sent his queen's elder brother, Phanqua, to take charge of Suphanburi and his eldest son, Ramesuan, to mount the royal throne in Lopburi. Now King Ramathibodi I of Ayudhya and his successors were based upon Khmer prestige and statecraft from Lopburi and other provinces.

The mixture of forces and interests that combined to create Ayudhya strength through the first century is revealed in the changes of its internal policies. The community was directed by creative and forceful leadership and conflict passed with ease.

The main political conflict in Ayudhya centered on succession to the throne, which passed back and forth between influential families for several generations. For example, a succession crisis occurred in 1369 AD at the death of King Ramathibodi I. His son, Prince Ramesuan, came down from Lopburi to assume the throne. The next year the young king's uncle, Boromaracha, his mother's elder brother, who had been governing Suphanburi, arrived at the capital, presumably in force. Probably on the advice of his ministers, Ramesuan gave up the position of king and returned to govern Lopburi as he had during his father's reign.⁶

⁵ p 65 Richard D.Cushman, trans., "The Royal Chronicles of Ayudhya" unpublished ms., p. 22. All Western writers on Ayudhya history record the date of its foundation as A.D. 1350. The Siamese texts all say 712 of the Chulasakkarat era – a year that began on March 28, 1350. And ended on March 27, 1351. The year 712 began on the fourth day of the waning moon of the fifth month, so the sixth day of the waxing moon of the fifth month did not occur that year until March 4, 1351.

⁶ Jeremias van Viet, *The Short History of the King of Siam*, trans. Leonard Andaya (Bangkok, 1975), p.61.

Their confrontation may not have been quite as peaceful as the chronicles suggest. One source states “the land was blackened with civil war under King Boromaracha rule, but he settled everything with little bloodshed, bringing everyone under submission and under one head”⁷

King Naresuan was best known for his the dynamic leadership, personal courage and decisive character. Following the death of Maha Thammaracha in June 1590, King Naresuan became king of Ayudhya. He appointed his young brother, Ekathotsarot, as his co-ruler. King Naresuan was officially designated *Uparaja*, heir to the throne of Ayudhya. His actions and policies displayed a strong sense of confidence.

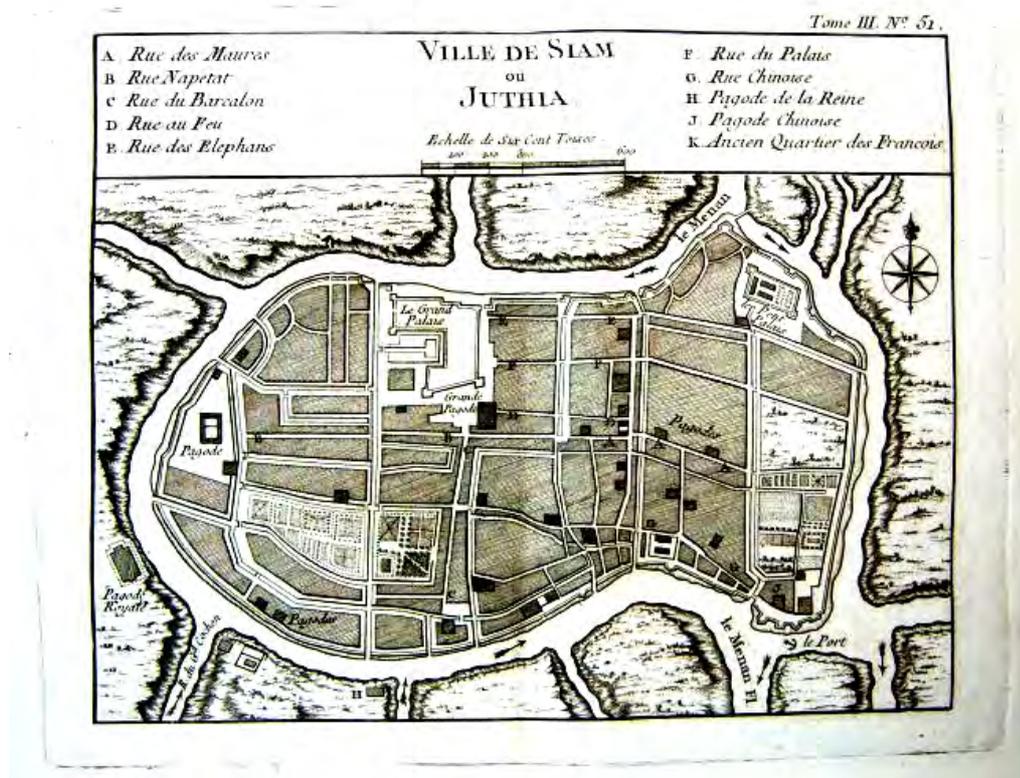
Many kings in the Ayudhya period designated a person who was to succeed them or were in line to succeed to a throne. The Uparaja was seen to work jointly with the ruling king in perfect harmony.

⁷Ibid



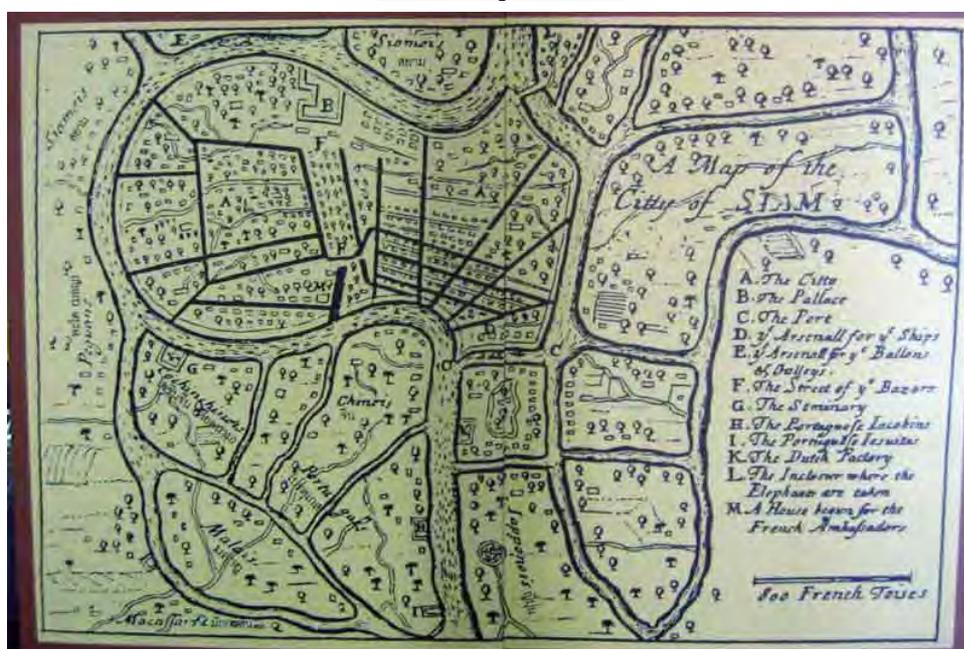
7. Map by Le Pere Placide de Sainte Helene, Paris, 1686, geographer of The Ambassador of French Louise XIV. He came to Ayutthaya when King Narai was a king in the Ayudhya Period in 1686

Source: www.std.cpu.ku.ac.th/delta



8. "Ville de Siam ou Juthia" drawn by Jacque Aicolas Bellin, Paris, 1751

Source: www.std.cpu.ku.ac.th/delta



9. Map by Simon de la Loubere, Paris 1691

Source: www.std.cpu.ku.ac.th/delta

List of the name of the Kings and Viceroys of Ayutthaya

The first position of viceroy was in 1572 during the reign of King Somdej Phra Maha Thammaraja. The name of the palace is Chankasem Palace. (Prachoom Pongsaowadarn Paak thi 13, reprint National Library issued 5, 1954:93).

- 1) Somdej Phra Maha Thammaraja is the King. Somdej Phra Naresuan is his viceroy. (Prachoom Pongsaowadarn Paak thi 13, reprint National Library issued 5, 1954:85)
- 2) Somdej Phra Maha Thammaraja passed away. Somdej Phra Naresuan became the next king. His viceroy was Somdej Phra Akatosroj.
- 3) Phra Sri Suthamraja became king. Somdej Phra Narai was his viceroy. (Prachoom Pongsaowadarn Paak thi 13, re print National Library issued 5, 1954:88). When Somdej Phra Narai took the throne he did not appoint a viceroy, as he had many groups or *Krom* of people to be his assistants. Then those people were divided into two sections. This is first time the King established the “Krom Phra Rajawang Bovorn” to be called assistants of the King. (Prachoom Pongsaowadarn Paak thi 13, re print National library issued 5, 1954:94)
- 4) King Narai passed away. Phra Pethraja became the next king. His viceroy is Laung Sorasakdi. (Prachoom Pongsaowadarn Paak thi 13, re print National library issued 5, 1954:90).
- 5) Phrajao Sua became the next king. His viceroy was his son, named Chaofa Peth. (Prachoom Pongsaowadarn Paak thi 13, re print National library issued 5, 1954:91).
- 6) Phrajao Sua passed away. Phrajao Taisara was the next king. Chaofa Porn was his viceroy. (Prachoom Pongsaowadarn Paak thi 13, re print National library issued 5, 1954:91).
- 7) Phrajao Taisara passed away. The next king was King Trailoknaj. His viceroy was Chaofa Thammathibej (Prachoom Pongsaowadarn Paak thi 13, re print National Library issued 5, 1954:93).

Viceroy of Wang Na during the Rattanakosin Period

The early Rattanakosin Period 1767-1851

Following the Burmese destruction of the Kingdom of Ayudhya in 1767 AD, the country was in a state of confusion and uncertainty.

King Taksin's⁸ reason for not retaining the capital at Ayudhya is still being debated. However, it was most likely due to a combination of symbolic, military strategic, economic and cultural reasons. First, the sacredness of the capital of Ayudhya had been defamed by the Burmese; therefore Siamese authority had to be symbolically reinstated if it was to be secure. This was however a process, which could probably have been more easily undertaken on a new rather than on the existing site. Second, the Thonburi/Bangkok location placed the half-Chinese, half-Thai King Tak Sin⁹ closer to the main centres of Chinese concentration in the country, such as the southeast corner and peninsula. This factor proved to be of immense importance, not only strategically to the king himself, but also to the subsequent cultural development of Siam. Third, since Tak Sin's military power base was in the eastern provinces, Thonburi or Bangkok was a location preferred over Ayutthaya. Finally, the southerly location was more preferable in terms of the emerging patterns of national and international trade, including the shipping technologies associated with it. King Tak Sin's reign encompassed a period of substantial instability. The country was drawn into conflicts amongst the various aspirants for the throne, resulting in constant internal and external conflict. Thus, it took fifteen years of famine and struggle before the polity could be revived. Hence, King Tak Sin's energies were directed mainly at preserving

⁸ Taksin the Great April (17, 1734 – April 7, 1782) was king of Siam from 1768 – 1782.

He was born in Ayudhya and given the name *Sin*. His father Hai-Hong was of Teochew Chinese heritage, and his mother Lady Nok – Eieng was Thai.

Wikipedia contributors. Taksin. Wikipedia: The Free Encyclopedia. May 11, 2007, 08:45 UTC. Available at : <http://en.wikipedia.org/w/index.php?title=Taksin&oldid=130049118>. Accessed May 30, 2007.

⁹ Although not of royal blood, therefore a usurper to the throne, King Tak Sin did originate from an influential Ayudhya family. His father was of Teochew Chinese background, his mother central Thai.

the Siamese nation and establishing a dynastic base, which would serve as the foundation of a new era.

The year 1782 marked a new era, that of Rattanakosin or Chakri, under King Tak Sin's general who was known as King Rama I (r. 1782-1809 AD). This initiated a dynasty, which has lasted to the present day (Dhani, 1955:21-47; Wenk, 1968). Upon being appointed king, Rama I transferred the capital of Siam to the present site of Bangkok, on the left bank, "carefully selecting a horoscope for the capital which would ensure a long life for the city and impregnability against enemies" (Cook, 1991:235). When King Tak Sin settled at Thonburi, he had the land immediately east of the Chao Phraya River opposite Thonburi drained, and leveled for rice growing, ensuring that his capital would be provided with available foodstuff if besieged. It is on part of this land that the new capital was established.

Following the conventional Siamese process, the founding of Bangkok as a capital or royal city included its ennoblement and the installation of a city pillar, considered to be the sacred heart of the state, on the astrologically determined auspicious date of 21 April 1782 (Cook, 1991; 243-5).¹⁰ The city was also given a long and auspicious title, Krung Sri Ratanakosindra (the Royal City of the Green Jewel), linking it with the important palladium of the state, the Emerald Buddha. Many other honorifics followed.¹¹

¹⁰ This concern for auspiciousness has been retained in Thai culture. For example, a new city pillar installed in the reign of King Rama IV is seen to have resulted in a number of beneficial consequences (see Cook, 1991:245).

¹¹ According to Sternstein (1982: 11), the full title at King Rama I's coronation ceremony was Krung Thep Pra-Maha-Nakorn, Boworn-Thawarawadi-Sri-Yudhya, Maha-Dilokpop, Noparatana-Radhani, Burirom, Udom-Rajnivet-Mahasatan, Amorn-Pimarn-Avatarn-Satit, Sakkatuttiya Vishnukarm-Prasit. The rough translation of the formal name of Bangkok has been: The City of Angels.



10. Somdej Phra Buddha Yodfa Chula Lok

Source: www.asia-discovery.com

The establishment of the Chakri Dynasty

As of today, the Chakri dynasty rules Bangkok without interruption. Some historians have suggested that the first king, Somdej Phra Buddha Yodfa Chula Lok, descended from Ayudhya. There are two interesting points to consider:

First, the king held the Phra Racha Piti Prabdapisek, and Phra Racha Piti Baromaraja Phisek ceremonies. These ceremonies were held on June 10-13, 1782 AD.¹²

*In 2328 B.E, after the completion of the city's foundation, King Rama I announced that although Phra Racha Piti Prabda Phisek was finished in 2325, it did not completely follow the old tradition. Then, he organized Phra Racha Piti Barom Raja Phisek, as written in the ancient book, for the sake of good fortune to the city and its people.*¹³

Second, the establishment of the Chakri dynasty, The king nominated all his family to be royalty as following the ancient tradition: Nominating his father Laung Phinij Aksorn (Thong Dee) to be Somdej Phra Pathom Barom Maha Chanoknat, nominating 19 people to be at *Chao Fa* or High Prince and High Princess with rank, two sisters or *Somdej Phra Pee Nang*, one brother *Somdej Phra Anuchathirat*, four of his children or *Somdej Phra Chao Lukya Thur* , eleven nephews and nieces as *Somdej Phra Chao Laan Thur*, one *Somdej Phra Chao Nong Ya Thur* as mentioned below, for example, Somdej Phra Pee Nang or sister.

-Somdej Chao Fa Ying Krom Phraya Thepsudawadee (Former name was Sa),

-Somdej Chao Fa Ying Krom Phra Sri Sudaluk (Former name was Keaw), and

-Somdej Phra Anuchathirat or brother, his name is Somdej Chao Fa Krom Phra Racha Wang Bovorn Maha Surasinghanaj (former name Boonma), this person was the first viceroy of Rattanakosin Era.

¹² National Library, Royal Chronicle of Krung Rattanakosin, the first and second reign, p.16-17.

¹³ Ibid p. 83-93.

So many family members having inherited power during King Thonburi reign lead to succession problems and there was no evidence of the election of a viceroy. Therefore, it was not clear who should succeed to the throne. This uncertainty of inherited power and succession severely affected political stability at that time.

Another observed problem was that the kingdom of King Thonburi was initially small. He was the leader and his subordinates were supposed to be in direct contact with him in order to work as he desired and reunite the kingdom after Ayudhya fell. After this mission was accomplished, subordinates were sent far away, and thus were deprived of direct contact with the king. In that manner, their enthusiasm and loyalty to the king weakened. By comparison King Rama I, chose to designate his relatives as governors, thus resolving some management problems within the dynasty during the early period of his reign. The advantages will be explained below.

First, King Thonburi he was born in Ayudhya and his relatives were from central Thailand. They were merchants, not rulers, and did not belong to the royal staff serving under the Ayudhya system. Some of them were serving in the government. Those with a Chinese blood-line often transferred themselves to remote areas in Tak province, at that time an unimportant province.

King Thonburi reign was characterized by slow changes to the old political process adhered to by Ayudhya. The major change was that the rulers in Ayudhya belonged to the aristocracy, but his reign was different. Moreover, he did not originate from a noble family in Ayudhya.

There is some possible evidence that would link King Thonburi to a relative of a high-ranking governor in the late of Ayudhya period before its fall. This evidence was written during the reign of King Rama IV of Rattanakosin. However, there is no concrete preliminary evidence that supports this point. Dr. Nithi Eawsrivong argues that this was understandable in view of the loss of the Ayudhya records. The possible manipulation of historical records should be viewed against the background of the Ayudhya Kingdom.

Power establishment, power usage and power seizing were all used in varying degrees to revitalize the new Ayudhya on the land along the banks of the Chao Phraya River in the area now referred to as Bangkok. Dr. Nithi Eawsrivong has concluded that King Rama I tried to base the colony on a code of historical ethics, which was viewed as the right of a Buddhist king. However, King Tak Sin himself crossed the lines of Thai tradition, for example by benefiting economically and personally during his reign, thus seriously affecting his claim to royal status. He also had no understanding of political management. Moreover, no large infrastructural projects were launched during his reign.

King Rama I, in 1782, initiated the founding of Bangkok as the capital city and established a new dynasty set apart from Thonburi. At that time Bangkok was a community at city level with unique old traditions, including nominating the brother of the King Rama I as viceroy. His name was Maha Surasinghanaj. Moreover, the King used the long established traditions of Ayudhya to promote his power. For example, he restored the coronation ceremony, a royal tradition, which confirmed the exclusive privileges of the ruler. This move could be interpreted politically as he insisted on ruling a colony, which was considered to be of a higher order than ruling a city. He ruled the nation using his relatives, but in close collaboration as mentioned earlier. He gave important power to the viceroy, his brother, who was quite capable and fought in several wars with him. It shows that, at that time, he was familiar with Ayudhya political traditions.

In fact, not only Rattanakosin existed during the early Rattanakosin period, there were also small cities founded after the fall of Ayudhya, which wished to be independent again. However, no city managed to recover and follow the old tradition of Ayudhya. To be independent would also run against tradition itself.

Even though, King Thonburi was not able to settle Thonburi before King Rama I came to power, the city he was ruling was a mix of city and colony. The politics in the country changed as time passed. The problem for King Tak Sin was how to connect Thonburi with the Ayudhya

tradition. An interesting point was his idea to present his power as “people’s power”, an ideal not prescribed by the traditions of the Ayudhya court.

King Rama I was able to solve the problem by connecting the areas where people had settled. The loss of Ayudhya was very undermining; therefore, people wanted to revitalize the colony as soon as possible. Unfortunately, the area was badly destroyed; necessitating the establishment of what later became known as Bangkok. The aim of establishing Rattanakosin was to almost perfectly imitate everything from Ayudhya. King Rama I formally established Bangkok as capital city right after he was placed on the throne and he reintroduced every policy used in the old city of Ayudhya. He ordered construction of the Grand Palace, Wat Phra Sri Rattana Sasdaram¹⁴ or *Wat Phra Kaew* as the large of temple of his reign, and Wang Na for his brother.

Through strong governance, King Rama I supported the claims of royal privilege in order to organize and discipline. His credo is summarized as follows:

- Only the King has the right to own the spiralled roof residence or the castle. The beauty of Wang Na buildings should be of lesser status.
- Performances of ancient traditional rites are to take place in the Grand Palace.
- The King shall be the supreme supporter of Buddhism as the religion of the land. Kings not adhering to this principle would court disaster for the country. Buddhist principles are the major foundation of governance.
- Only the King shall own white elephants, as these are very unique and rare animals.
- As for wisdom, the royal court shall be the meeting place of people who are considered to be very knowledgeable and the King shall be chairman. (As a result the early Rattanakosin period produced a great deal of literature).
- The King shall be a strong warrior.

The basic structure for the site of new Bangkok was established soon after the destruction of Ayudhya. Under King Tak Sin reign, a canal, now known as Klong Lot was dug to

¹⁴ Its official name is Wat Phra Sri Rattana Satsadaram (the 'Temple Containing the Beautiful Jewel of the Image of the Divine Teacher') (Seidenfaden, 1928:146).

the east of the Grand Palace completing a second distinct water canal circuit around the new site, which served also as a defensive moat.

Shortly afterwards a city wall with sixteen forts was built (Seidenfaden, 1928; 71). According to Wyatt (1982a; 146), as part of this construction process “thousands of boatloads of bricks were taken from the ruins of Ayudhya and used in constructing the city's walls and public buildings”. This almost certainly occurred through the use of the available local labor (see Terwiel, 1989:149). King Rama I first task in founding Bangkok was to build his own Grand Palace, the construction of which commenced on 6 May 1782 (Dhani, 1963). The 1900 meters of palace walls were built in 1783. The complex was subdivided into five separately walled main areas (see also Dumaeay, 1991; 30-1). At the northeast corner was the Royal Temple of Wat Phra Kaew, the equivalent to Wat Phra Sri Sanphet in Ayudhya (Seidenfaden, 1928:145-64; Subhadradis, 1986).

The outer court in the northwest corner was designated to house the offices of the administrative ministries, including the Ministry of the Interior, the Ministry of Defense, the Ministry of Justice, and the palace guard troop.

Building the new capital city reflected King Rama I hope and pride. This set in motion a revival of Ayudhya traditions, of which evidence is shown in the book “Lutthidhamniam Paak 19” (Traditionalism Part 19th), which studied and describes the court traditions during the Ayudhya period. The sentence below is a call for a meeting on traditions and rituals:

“Chao Phraya Chakri (author: King Rama I) has ordered that traditions and rituals nowadays should not be different. He then ordered Chao Phraya Sri Dhammathirad, Chao Phraya Rajaborirak and other dignitaries of the rank of Chao Phraya, four of Phra, One Laung, Four of Meun, five of Pan, a clerk, and 20 former governors of Ayudhya to have a meeting in order to gather information on traditions and rituals that were followed during the period of Ayudhya .”

Viceroy of the Rattanakosin Period

Viceroy were an important part of ruling strategy for King Rama I and continued to be so during the Rattanakosin period. Six men were designated as viceroy during this time:

1. Maha Surasinghanaj was viceroy from 1782 to 1803, and the founder of Wang Na. He was a son of Phra Phinijaksorn and Yok. He was a younger brother of King Rama I.



11. Prince Issarasoonthorn

Source: www.arts.kmutt.ac.th

2. Issarasoonthorn was viceroy from 1806 to 1809. He was the son of King Rama I and Queen Sri Amarindra. His reign as King of Siam (King Rama II) from 1809–1824.

3. Maha Senanurak was viceroy from 1809-1817. He was viceroy in the reign of King Rama II. He was the younger brother of King Rama II. Like King Rama II, he was also a son of King Rama I and Queen Sri Amarindra.
4. Maha Saktiponlasep was viceroy from 1824-1832. He was a seventeenth child of King Rama I and Choajom Marda Nui.



12. King Pinklao

Source: www.phkku.com



13. Portrait as depicted in a newspaper

Source: www.mod.go.th

5. King Pinklao, Chaofa Krommakhun Isaret, Prince Chutamani (September 4, 1808 - January 7, 1866) was a younger brother and the viceroy of King Mongkut of Siam. He was a child of King Rama II and Queen Srisuriyendra.

He took the title Phra Pinklao on his accession in 1851. King Mongkut promoted King Pinklao as the second king in his reign. Wyatt¹⁵ considers his appointment a device of King Mongkut to prevent King Pinklao from challenging his own position. Both before and after his elevation, King Pinklao controlled his own private army. He was interested in western culture, speaking English, drilling his troops in European style.

¹⁵ Wyatt, David. *Thailand: A Short History*. Yale University Press, 1984. ISBN 0-300-03582-9. (p. 167)

6. Bavorn Vichaicharn, a son of King Pinklao served as viceroy from 1868-1885.



14. Viceroy Bavorn Vichaicharn

Source: www.uursiam.net

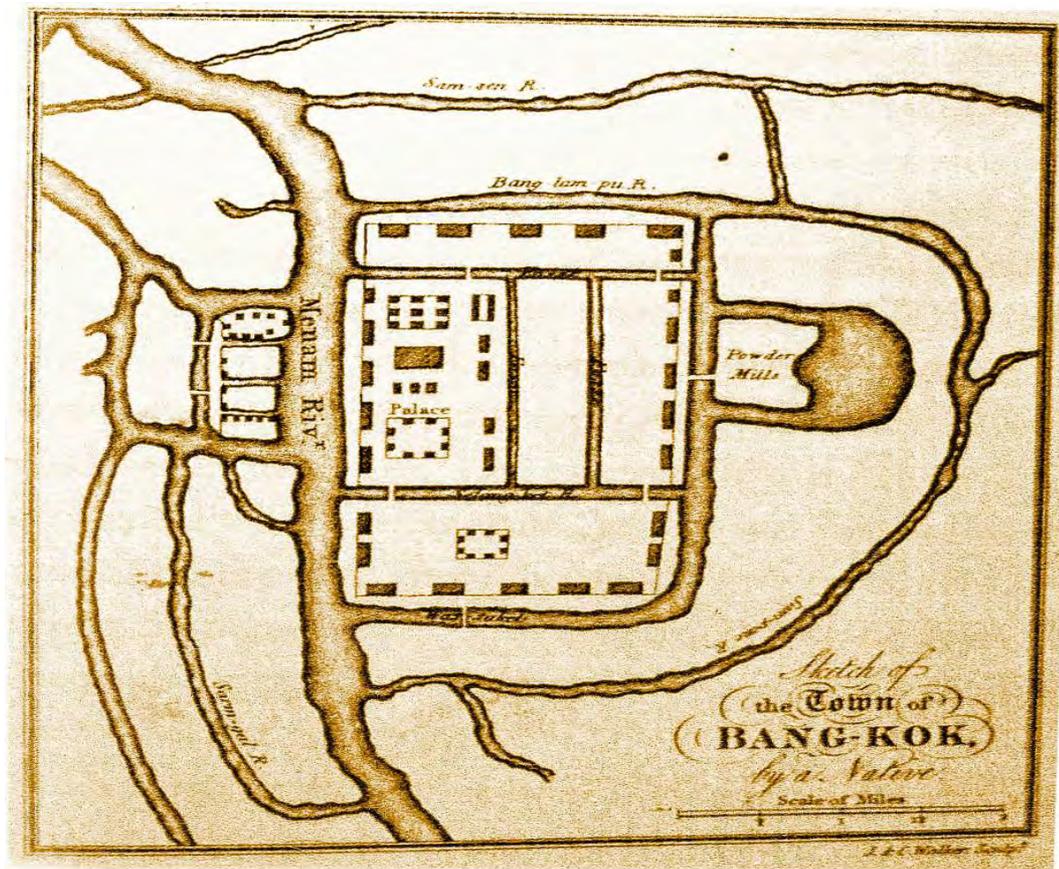


15. Viceroy Baworn Vichaicharn

Source: www.uursiam.net

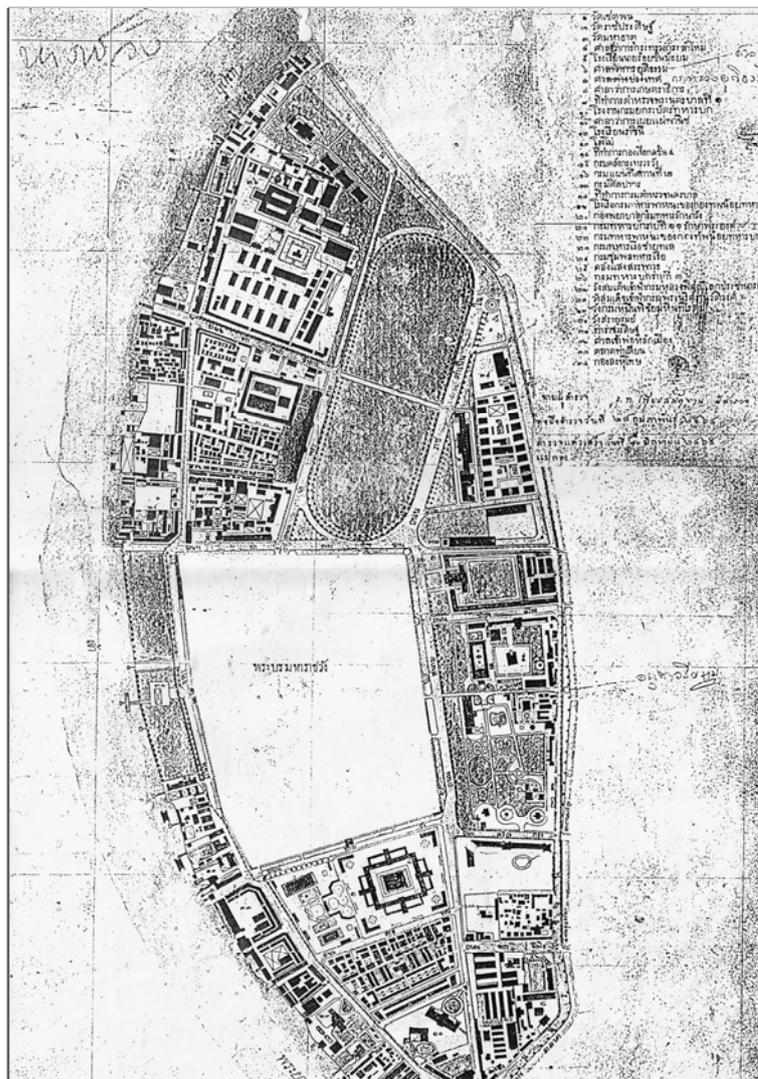
Chapter 3

Wang Na's Historical Location, Territory and Important Buildings during the Rattanakosin Reign, 1782-1900 AD.



16. A map by J. + C. Walker, London, 1828 showing the layout of early Bangkok with the Grand Palace and Wang Na in the centre and the Chao Phraya River to the left

Source: www.std.cpu.ku.ac.th/delta



18. Map in 1922

Source: Dr. Nid Hinshirananda

3.1 History of the Area before the Construction of the Rattanakosin Kingdom

In the period from 1767 AD to 1851 AD, which spans the reigns of King Tak Sin to King Rama III, the people concentrated on founding and establishing a new capital to defensively and politically securing the country (Dhani, 1955: 21-47; Wyatt, 1982b: 13-14). At the forefront of these processes was General Phraya Tak, later to become King Tak Sin, (r.1767-82), in Thonburi. Instead of reconstructing the totally ruined Ayudhya, the seat of government was

moved in 1767 to the right bank of the Chao Phraya River at Thonburi. Adjacent to it were busy markets and well attended monasteries, one of which was Wat Makok, now called Wat Mahatat Yuwarajarangsarit Rajaworamahavihara.

Upon completing construction of Bangkok's core center and of his own large palace in 1785 AD, King Rama I ordered an auspicious ceremony to celebrate his coronation as well as to formally acknowledge the foundation of the new capital. Immediately to the north of the palace complex is the Phra Men Ground, the historic centre and principal square of Bangkok. The Phra Men, which refers to the celestial Mount Meru and home of the gods, is the location where the spirits of the departed members of the royal house were committed to the divine realm in solemn and elaborate cremation ceremonies. Every year in May, the festival of the "First Ploughing", in part an agricultural fertility ritual of Brahmin origin, was also held at this site. (Gerson, 1996:21-5).

Another important early Bangkok institution was the residence of the Viceroy located to the north of the Grand Palace complex (see also Damrong Rajanubhab, 1964, Fickle, 1972). The king ordered the *Wang Na*¹⁶ to be built by King Rama I for his brother at the same time that the Grand Palace was being constructed. Almost as large as the Grand Palace complex, it contained not only the palace for the viceroy but also his audience halls, various palaces for his associated royalty, accommodation for his retainers, areas for a vast military presence, stables, the viceroy's private temple and other facilities. In its elegance and public presence, it was second only to the Grand Palace.

Dr. Nid Hinshirananda, a fellow of the Royal Institute (in Thai: Rajabanditayasapha) has analyzed the similarities between Ayudhya and Rattanakosin:

¹⁶ According to Nengnoi (1984: 2), the locations of the Grand, Front and Rear Palaces 'were stationed in accordance with the Book of Royal Martial Art, which concerns various types of the army defensive formation. This particular pattern was called *naga-nam*, or naga-like shape...' The Palace to the Rear was located on the west bank of the Chaophraya River in the city of Thonburi, at the mouth of the Klong Bang Ko Knoi and on the grounds of what later became the Siriraj Hospital.

- 1) The new capital was established on prime land on the left bank of the Chao Phraya River; moreover, it was surrounded by a moat to give it an island aspect, helpful when protecting the city from an enemy.
- 2) The location of the Grand Palace and the Wang Na emphasize not only the architectural hierarchy, but also enables defense from an enemy.
- 3) The training ground for war preparation, horses, elephants and soldiers was located next to the Grand Palace. This area was called “Sanam Chai” and is comparable with the “Sanam Na Chakrawat” in Ayudhya.
- 4) A big courtyard to perform the funerals for the King and members of the Royal Family was built on the north side of the Grand Palace.
- 5) A temple without monks, called Wat Phra Sri Rattana Satsadaram, was built inside the Grand Palace to perform Buddhist rites for the king and the royal family. This temple is comparable with Wat Phra Srisanpet in Ayudhya.

The above factors exemplify how the image of the former Ayudhya period was projected to Rattanakosin through many architectural structures. In addition, the names of the structures, which reflect the pride of the Ayudhya buildings, were similar. It was the intention of the king and his people that ultimately the Ayudhya way of living was to be revived in Bangkok.



19. The aerial view of Wang Na, take in 1946

Source: the National Archive, Bangkok



20. Photos taken in 1946

Source: The National Archive, Bangkok



21. Photos taken in 1946

Source: National Archive, Bangkok

3.2. Territorial boundaries of greater Wang Na during the early period of Rattanakosin in 1782:

- Ku Meung Derm (name of an old canal in the city) was the border to the north. It started at the Phra Arthit Fort and extended to Mukda Pisarn Fort (today this is the approach to the Phra Pinklao Bridge).
- Na Wang Road and the surrounding empty ground is the border to the east. Later the Wang Na Grounds were created here, with palaces for the sons of viceroy, which was called Wang Rim Sanam Wang Na. This area started at Mukda Pisarn Fort and extended to Wichian Arkanæ Fort.
- Phra Jan Road, Wichian Arkanæ Fort and Phra Jan Fort constitute the southern boundary.

- Chao Phraya River is the western boundary. The city wall of Rattanakosin was the wall of outer Wang Na.

The area of Wang Na was under royal rule. It was divided into three zones: outer, center and inner:

Wang Na is different from Post-Renaissance European palaces because it is not made up of only one building. Instead, Wang Na is a huge area surrounded by one or more walls and moats and containing large separated halls for ceremonies and official business, as well as smaller buildings, temples, fortresses, residences, galleries, courtyards, gardens, and outbuildings, more like the style used by the Romans.

1. The outer zone of Wang Na was:

- The area from Pijit Jessada Gate to Pra Arthit Fort and the area between Opas Pimarn Gate up to Ampai Pimon Gate.
- The area of Ampai Pimon Gate and Mukda Pisarn Fort to the area between Maha Pokaraat Gate and Sakda Pichai Gate to Wichian Arkanae Fort to the Brahma Tawarn Gate.

2. Central zone of Wang Na:

This began from Maha Pokaraat Gate and O-part Pimarn and extended to the five inner gates. This zone was surrounded by another wall, which had 5 gates: The Brahma Pak Gate in the east, the Jakri Mahima Gate in the north, the Sontaya Gate in the south of Phra Thinang Issara Winijaya, the Sakol Sivalai Gate and the Satan Montian Gate.

3. Inner zone of Wang Na:

- Apart from the main palace, where the wife, daughters and sons, or other members of the viceroys family dwelled.
- This started at the line of the five gates to the southern end and west of Wang Na.

How Wang Na area has been modified?

In recent times the territory of Wang Na has been totally changed. The entire area from Thammasart University up to the national theatre used to be Wang Na.

The western side facing the Chao Phraya River was the back side of Wang Na because the eastern side of Wang Na was facing Sanam Laung.

Since the rear side was next to the river, the city wall was used as the outer wall of Wang Na as well.

The wall on the front side, during the reign of King Rama I was taken up by the land of the current Sanam Laung. There were moats around Wang Na outside the wall. There was also Na Wang Street near the current Rachadumnern Boulevard, which means the palace extended very far. On this side, there was once a gate called Promtawarn Gate going which enclosed the street called Nar Phatard Street in current time. In the space that took up the land of the current Sanam Laung, and in between the outer wall and the second wall, stood civilian and military pavilions.

The northern zone around the National Theatre was the zone that enclosed the old moats. There were also city walls here. The end of the street led to Ta Chang pier of Wang Na, which is still called Ta Chang Wang Na.

During the reign of King Rama I, there was the Wang Na wall on the side that enclosed Phra Jan Street. What was called “street” at that time was only a narrow road that was barely wide enough for the royal vehicle’s procession to pass through. Past the street around Wang Na to the south was the area next to Mahatat temple. In the past it was called Maha Surasinghanaj temple. This temple was renovated at the same time as Wang Na in 1795 and when Maha Surasinghanaj passed away, it was renamed again as Mahatat.

Sanam Laung at that time was smaller than the current one and was used for growing rice. Known as called Phra Men Ground, it was also used as the crematory for royal funeral ceremonies. Standing as it was between the center of the Wang Na and Grand Palace, at funerals the crematory would always be in the center.

3.2.1 The fortresses and the gates in Wang Na

There were three rows of city walls in Wang Na, similar to the layout of the Grand Palace. There were also about 10 fortresses around the outer wall. The most famous ones were Phra Jan fortress and Phra Atid fortress. It is interesting that the field inside Wang Na was bigger than the one inside both the outer and the second walls of the royal palace. It is assumed to be like this since it was the traditional place on palace ground for training elephants, horses and soldiers. The Wang Na outer area around the fortress row that appeared on the map was maintained as it was first built in King Rama I reign.

Over time the outer walls were demolished, as well as the fortresses. There were 15 gates. All the names rhymed with each other. However, it was presumed that all the gates were not built in King Rama I's reign. Some might have been rebuilt later. The consistent names might have been given in King Rama IV's reign since the king converted and gave names to many things to make them sound more beautiful and meaningful.

There were eight gates in the second wall in Wang Na with all the names consistent. There were Maha Phokasaj, Opaspimas, Alongkarn Olan, Sudayurayard, Nardjalalee, Narijonjaran, Sawanyaphirom and Udompokai.

There were gates called Pratu Din and Pratu Phee in both the Grand Palace and Wang Na.

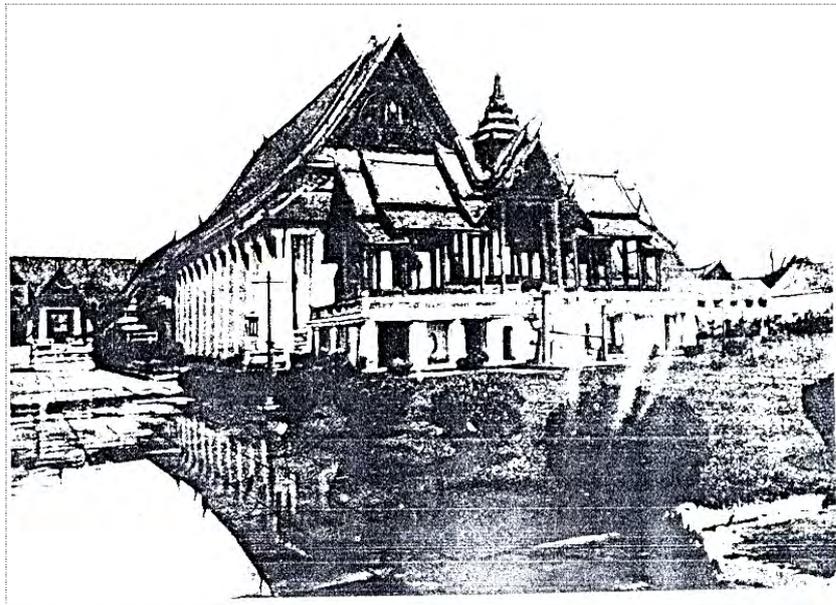
Pratu Din of Wang Na was Narijonjaran Gate.

Pratu Phee of Wang Na was Sawanyaphirom Gate.

Pratu Din of Grand Palace was the Srisudawong Gate, which was the gate for ladies of the court who were not royalty thereby allowing them to pass through to the street between the outer wall and the second wall. This area was the place where palace people gathered together when leaving for "the tunnel" or "Srisumran", as described in M.R. Kukrit Pramoj's "Four Reigns". All men and young government officers often came to look at women and woo them here.

3.2.2 The archaeological sites and antique buildings of Wang Na

The architectural style of Wang Na follows royal provisions, that is the buildings were built in accordance to rank and honor and thus not at the same level as buildings designated for the King. Even though the designated functions of these buildings were similar, the details are not. There is significance to the design and construction of the structures within the Wang Na, including the central zone and the religious buildings. The following photos show two views of the building called Phra Thinang Kochakam in the front of Phutthaisawan Chapel



22. The building called Phra Thinang Kochakam in the front of Phutthaisawan

Source: the National Archive, Bangkok



23. The building called Phra Thinang Kochakam in the front of Phutthaisawan Chapel

Source: the National Archive, Bangkok



24. Phutthaisawan Chapel in 1960

Source: The National Archive

1. Phutthaisawan Chapel

Era: Early Rattanakosin Period, built in 1782

Style of Architecture: Ayudhya Style. The hall measures 32.70 x 10.10 meters. Throughout the past two centuries, the chapel has been renovated and elevated in status by many Thai kings and royalties. This Phutthaisawan Chapel is the most sacred part of this palace.

The Phutthaisawan Chapel stands in the front part of former site of Wang Na to the north of the Sivamokhaphimaan Hall and Mangkhalaphisek. The Isarawinijaya and another group of throne halls are situated to the west of the Phutthaisawan Chapel.

When Maha Surasinghanaj came back from Chiang Mai in 1759 he brought the Phra Buddha Sihing along with him. The Phra Buddha Sihing was an important statue of the kingdom of Lanna in the north. This Buddha image is made of bronze and covered with gold leaf. The statue is rendered in the gesture of meditation with folded legs. A double row of upright lotus petals can be seen on the base.

Among the Phra Buddha Sihing on the platform, two standing figures are particularly worthy of mention. These two images are canopied with five-tiered umbrellas, and stand on either side of the Phra Buddha Sihing. They are performing with both hands the gesture of calming the ocean. The image on the proper left of the Phra Buddha Sihing is covered with silver and coated with gold leaf. The base on which the image stands is made of wood and is studded with glass mosaic. The figure is standing against a stylized niche, which is surmounted with a five-tiered umbrella or canopy. This particular image stands 1.72 meters high.

A mural painting at Phutthaisawan Chapel depicts angels or *Teppanom*. These images were located above the window level. The angels, who salute the figure, are painted in four rows. The artistic line is called *Sin Tao* and used to differentiate between the different ranks of Brahmins and scholars holding flowers in their hands to worship the Lord Buddha. There are also *Tawarabarn* or guards on the door panels. The *Tawarabarn* consists of two, painted standing angels.

The chapel contains three cabinets decorated with black lacquer and gilded or painted. They depicted episodes from the Thai version of the Indian epic, Ramayana. They are used as room dividers and they are placed behind the group of Buddha images towards the back of the hall. Maha Sakdiponlasep, the viceroy of King Rama III, had these cabinets made to hold the *Tripitaka*¹⁷ and he himself selected the artists. The name of one of the artists appears as Chao Krom On.

Silver and gold votive trees, which came as a tribute from Chiang Mai, stand in a glass case on either side of the group of Buddha images.

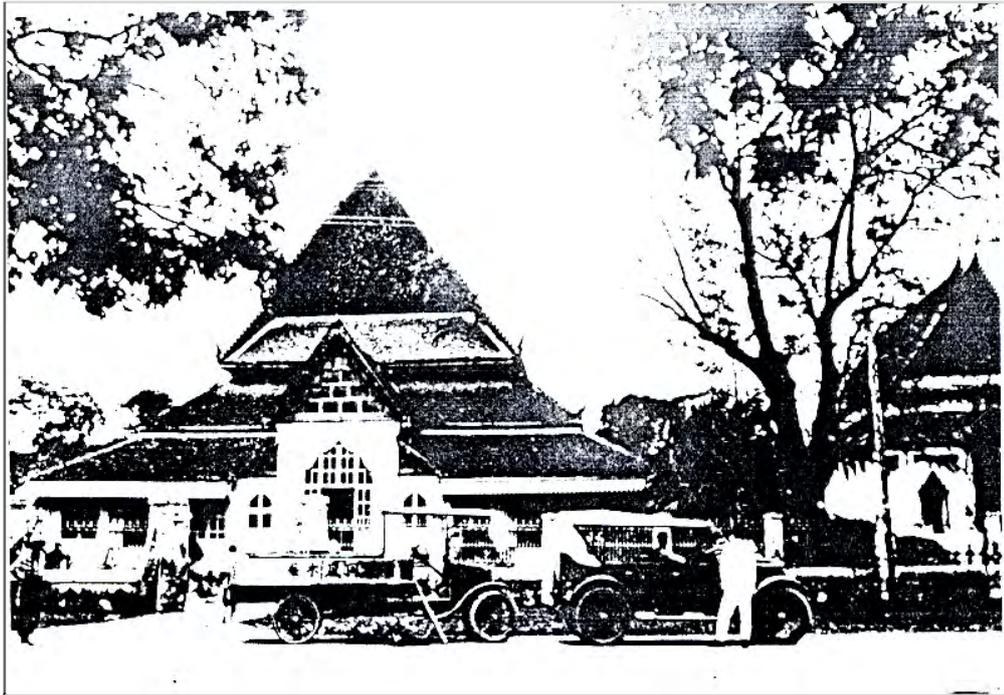
There are eleven windows in each sidewall. The outer surface of the door and window panels are black, they are lacquered and gilded and also depict votive trees. The inner surfaces of the door panels portray door-guardians, one on each panel.

All the elements of the roof decorations, such as the; Chofa, Bairaka and Hang Hong are made of wood. The roof of the chapel is adorned with carvings of mythical figures of Brahma in their celestial palace buildings surrounded with flame-like tendril decoration. On both sides of the pediment and on its lower edges, are eight Brahma images in the gesture of adoration.

¹⁷The Tripitaka is the formal term for a Buddhist canon of scriptures. Many different versions of the canon have existed throughout the Buddhist world, containing an enormous variety of texts. The oldest and most widely-known version is the Pali Canon of the Theravada school.

Wikipedia contributors. Tripitaka. Wikipedia, The Free Encyclopedia. May 18, 2007, 09:55 UTC.

Available at: <http://en.wikipedia.org/w/index.php?title=Tripitaka&oldid=131743581>. Accessed May 30, 2007.



25. Photo of Phra Thinang Sivamok Phiman

Source: The Department of Fine Art

2. Phra Thinang Sivamok Phiman

Era: Early Rattanakosin Period, built in 1782

Style of architecture: Similar to the Phra Thinang Song Peun at Ayutthaya. Presently, this building serves as the exhibition room for the History of Thailand. The gable ends of this historic building are treated with typical Wang Na style decoration.

3. Tamnak Dang

Era: Early Rattanakosin Period.

Style of architecture: this wooden house was built in the typical Ayudhya style¹⁸.

This structure is painted red. It was originally built as a residence for Queen Srisuriyendra, the queen of King Rama II. This house was removed from the Thonburi Palace.

4. Mangkhala Phisek Pavilion

Era: Rattanakosin Period, built in the reign of King Rama IV

Style of architecture: A wooden building of similar construction to the one that was built in the Grand Palace. This pavilion, ordered by King Rama IV was built on a high concrete base, which was used as a palanquin. By this gesture he intended to equate the monarchy of King Rama IV to that of King Pinklao.

5. Wall of the palace

At the west side is the Chao Phraya River. Hence, the wall of Rattanakosin City is the same wall as the one of Wang Na.

Era: Early Rattanakosin Period

Style of structure: Ayudhya style, with *Bai Sema* on top of a brick wall. At the time it was built, it was meant to be the boundary of Wang Na. Now it is one side of the walls of the Thammasat University.

¹⁸ I compare Tamnak Dang to the house, which is located in Samutsongkam, Thailand. This house is built by the father of the Queen of King Rama I. He built this house before the Rattanakosin. Date is unknown.

Wat Pummarin, Tourism Authority of Thailand, accessed March 25, 2008 available at http://www.tat.or.th/travelplacdet.asp?prov_id=75&id=1644



26. Photo of the mansion of the viceroy

Source: The National Archive, Bangkok

6. The mansion of viceroy, known before as Mhu Phra Wimaan

Era: Rattanakosin Period, built during the reign of King Rama I. Maha Surasinghanaj ordered the construction of the living quarters only for himself.

Style: The configuration of the grand mansion of viceroy conformed to contemporary conventions in palace design.

The roof has two slopes. The arts and architecture is unique. The form and material of this building is under design of The Royal Hierarchy, therefore, these mansions are not of high sharp roof building form. These building consisted of big rooms. They connect with the same roofs. The original names of the rooms were:

1. Phra Thinang Wasanta Wimaan
2. Phra Thinang Wayu Sataan Amares
3. Phra Thinang Brahmes Thada
4. Phra Thinang Pimook Montian
5. Phra Thinang Burapha Bhimook
6. Phra Thinang Taksina Bhimook
7. Phra Thinang Patchima Bhimook
8. Phra Thinang Prisdang Bhimook.
9. Phra Thinang Utara Bhimook.

The Ramayana epic inspires the design of the decoration.¹⁹ The doors and windows in the Viceroy's living quarters are decorated with splendid mother-of-pearl inlay work. This type of multi-colored iridescent shell and other inlay materials were a traditional decorative technique used during Ayudhya. This technology achieved its highest fruition at this time and continued during the early Rattanakosin period. Examples of these traditions are seen at the Grand Palace, Wat Phra Sri Ratanasasdam, Wang Na and at various buildings and monasteries throughout the Thonburi-Bangkok-Area²⁰.

8. Phra Thinang Isarawinijaya

Era: The building was built base on a design from the Rattanakosin Period and juxtaposed to the viceroy mansion. Between 1824 and 1832, Viceroy Maha Sakdiponlasep ordered a significant change to the building of Phra Thinang Isarawinijaya as the throne hall for him.

¹⁹ The *Ramayana* is an ancient Sanskrit epic attributed to the poet Valmiki and is an important part of the Hindu canon. Ramayana is one of the most important literary works on India, the Ramayana has had a profound impact on art and culture in the Indian subcontinent and Southeast Asia. The story of Rama also inspired a large amount of latter-day literature in various languages, notable among which are the works of the sixteenth century Hindi poet Tulsidas and the Tamil poet Kambar of the 13th century.

Wikipedia contributors. Ramayana. Wikipedia, The Free Encyclopedia. May 27, 2007, 09:13 UTC. Available at: <http://en.wikipedia.org/w/index.php?title=Ramayana&oldid=133819087>. Accessed May 30 , 2007.

²⁰ *Introduction to the Thai temple by, K.I. Matics ,White Lotus*

Style of architecture: The structure is a load-bearing wall²¹ with bay windows around the building.



27. Aerial view of Wat Bawornsatan Suttawas taken in 1946

Source: The National Archive, Bangkok

²¹ A load-bearing wall is one in which a wall of a structure bears the weight and force resting upon it, as opposed to a curtain wall, which uses the strength of a sub-wall and superstructure to carry the weight. The materials most often used to construct load-bearing walls in large buildings are concrete, block, or brick.

Load-bearing walls are one of the earliest forms of construction. With the advent of Gothic architecture, and its vast expanses of windows and high vaulted ceilings, flying buttresses were employed to keep the weight of the building properly distributed. Notre Dame Cathedral has a load-bearing wall structure with flying buttresses.

The birth of the skyscraper era, the concurrent rise of steel as a more suitable framing system, and the limitations of load-bearing construction in large buildings led to a decline in the use of load-bearing walls in large-scale, commercial structures.

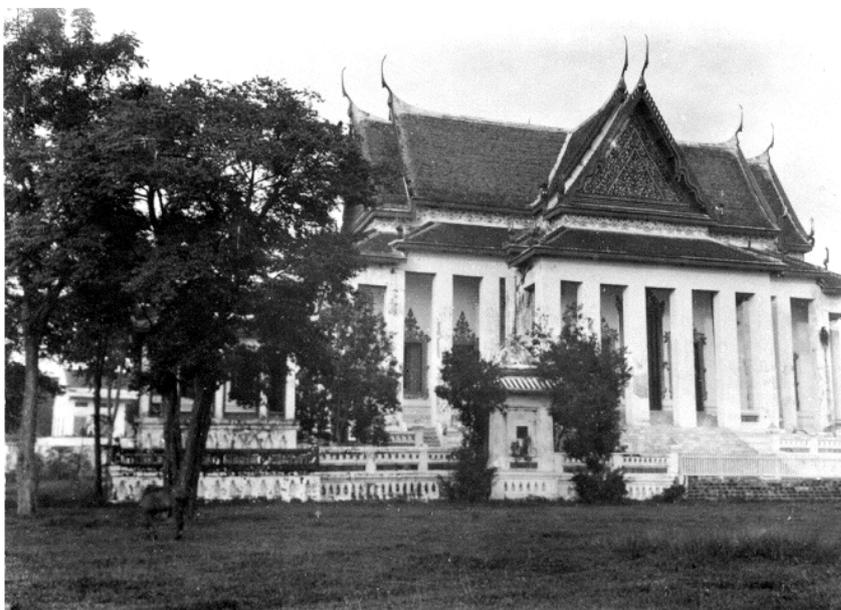
Depending on the type of building and the number of stories, load-bearing walls are gauged to the appropriate thickness to carry the weight above it. Without doing so, it is possible that an outer wall could become unstable if the load exceeds the strength of the material used, potentially leading to the collapse of the structure.

Load-bearing wall. (2007, December 12). In *Wikipedia, The Free Encyclopedia*. Retrieved 06:01, March 25, 2008, from http://en.wikipedia.org/w/index.php?title=Load-bearing_wall&oldid=177507047



28. Aerial view of Wat Bawornsatan Suttawas taken in 1946

Source: The National Archive, Bangkok



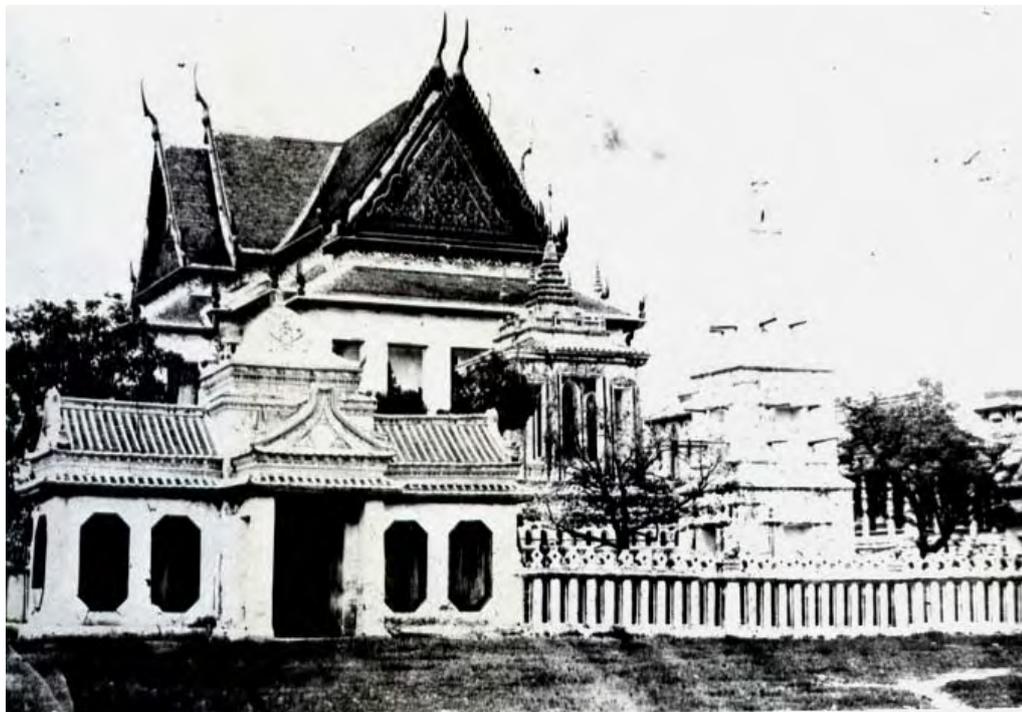
29. Wat Bavornsathan Suttawas, unknown year

Source: The Department of Fine Arts.



30. Wat Bavornsataan Suttawas, unknown year

Source: The Department of Fine Arts.



31. Photo taken in the period of King Rama V. This photo shows a small Chinese building, demolished many years ago.

Source: The Department of Fine Arts

9. Wat Bawornsatan Suttawas

Era: Early Rattanakosin

During the reign of King Rama III, Maha Sakdiponlasep ordered the construction of this monastery for devotion to Buddhism. The viceroy passed away before its completion but the monastery was continued to the time of King Rama V's viceroy.

Style of architecture: Unlike other temples, it does not contain living quarters for monks; rather it has only the highly decorated holy buildings and statues. The wall surrounding the monastery area outside is painted plain white. The inside is painted with scenes from the Thai version of the life of Lord Buddha.

10. Kheng Nukij Rajaborihaan

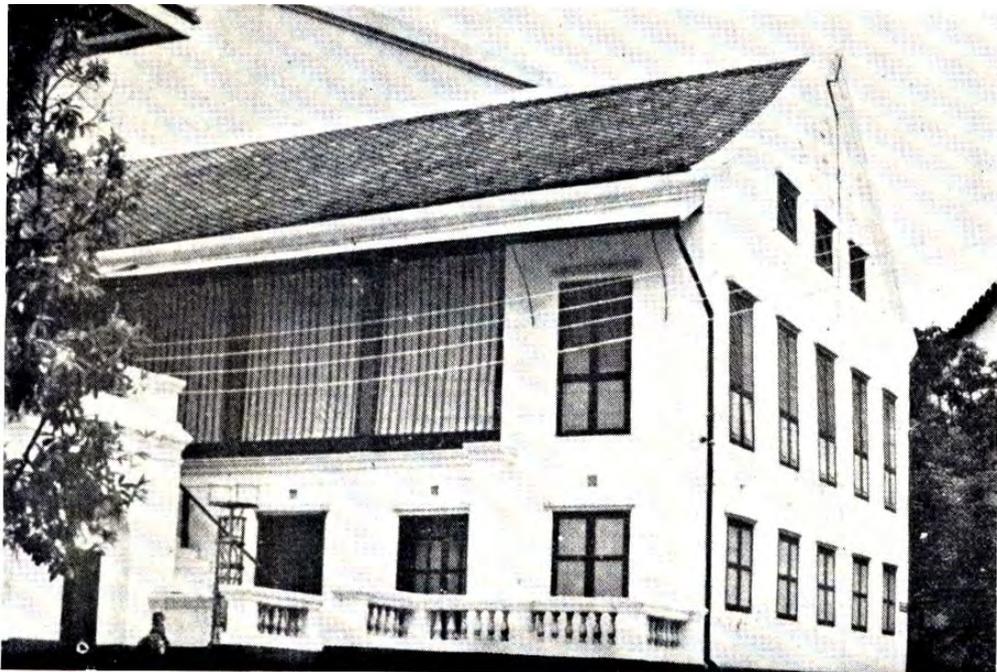
Era: During the reign of King Rama IV

Style of Architecture: The building was King Rama IV's attempt to follow 18th century Chinese building style, when it was first introduced in Siam. It is a one storey Chinese style house covered with Chinese roof tiles; pediments depict the *Pudtan* flower and pheasant.



32. Photos taken in 1974

Source: National Archive, Bangkok



33. Photos taken in 1974

Source: National Archive, Bangkok

11. Phra Thinang Issares Rajanusorn

Era: In the time of King Pinklao dates: 1808-1865²²

Style of architecture: It follows the European style of architecture.

Phra Thinang Issares Rajanusorn was built as the residence for King Pinklao. The former name of this building is *Phra Thinang Wongjandra*. The building, which is situated at the north of Wang Na, has two floors with a patio and interior western style decoration. The building is currently near a spirit house on an artificial mountain, called “*Kao Mo*.”

3.3 Comparison between the Grand Palace and Wang Na

King Rama I as the seat of his government and royal residence built the Grand Palace. It covered an area of 52.8 acres. Later, his son, King Rama II, had it expanded toward the south, encompassing another eight acres, making the total area of the Grand Palace 61 acres.

The construction of the Grand Palace started on 6 May 1782. At first it was just a temporary royal residence made of wood completed on 13 June 1782. In 1783, King Rama I had the buildings and walls rebuilt with masonry and added forts and gates around the walls, throne halls (Phra Maha Prasat), royal residences (Phra Maha Montian), and the palace chapel, like Wat Phra Sri Sanphet in the old royal palace in Ayudhya , to house the Emerald Buddha. After completion of the palace, a full traditional coronation ceremony was held in 1785.

²²King Pinklao, Wikipedia, (accessed March 25, 2008, 22). 05:59, no.25.



34. Photo of the Grand Palace

Source: www.th4u.com

3.3.1 The Grand Palace

- **Names**

The common English name “The Grand Palace,” is a translation of the Thai name, Phra Borom Maha Raja Wang which literally means “Excellent and big palace”

- **History and Construction**

The site of the Grand Palace was part of the Rattanakosin city. King Rama I of the Chakri Dynasty moved the city from Thonburi to the opposite side of the Chao Phraya River and in 1782 ordered that the Grand Palace be constructed.

The principal axis of the palace sits to the north, which is based on the plan of Grand Palace of Ayudhya. Thus it was situated on the river-bank facing north, with the river to the west and a road to the east.

- **Chakri Dynasty**

After the structure was completed, King Rama I moved to Grand Palace after which time the administrative centre of the country was gradually shifted from Thonburi to Bangkok. When the palace was completed, Rattanakosin City officially became the primary capital of the kingdom.

From 1782 onward the Grand Palace was recognized as the seat and power center of the Chakri Dynasty.

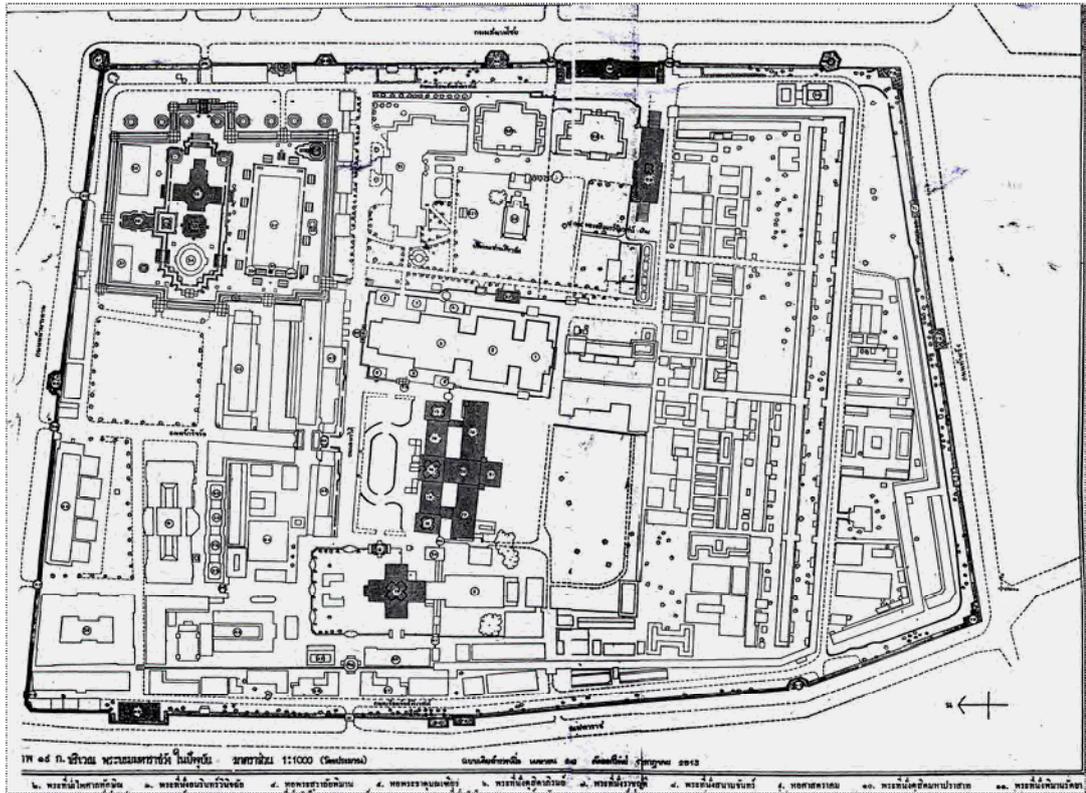
Following the death of King Ananda Mahidol (1935-1946)²³ or King Rama VIII, in the Barom Phiman Palace inside the Grand Palace, King Bhumibol Adulyadej or King Rama IX, moved the official royal residence to Chitralada Palace²⁴ situated in Bangkok.

²³ Rama (King of Thailand). (2008, February 25). In *Wikipedia, The Free Encyclopedia*. Retrieved 06:24, March 25, 2008, from

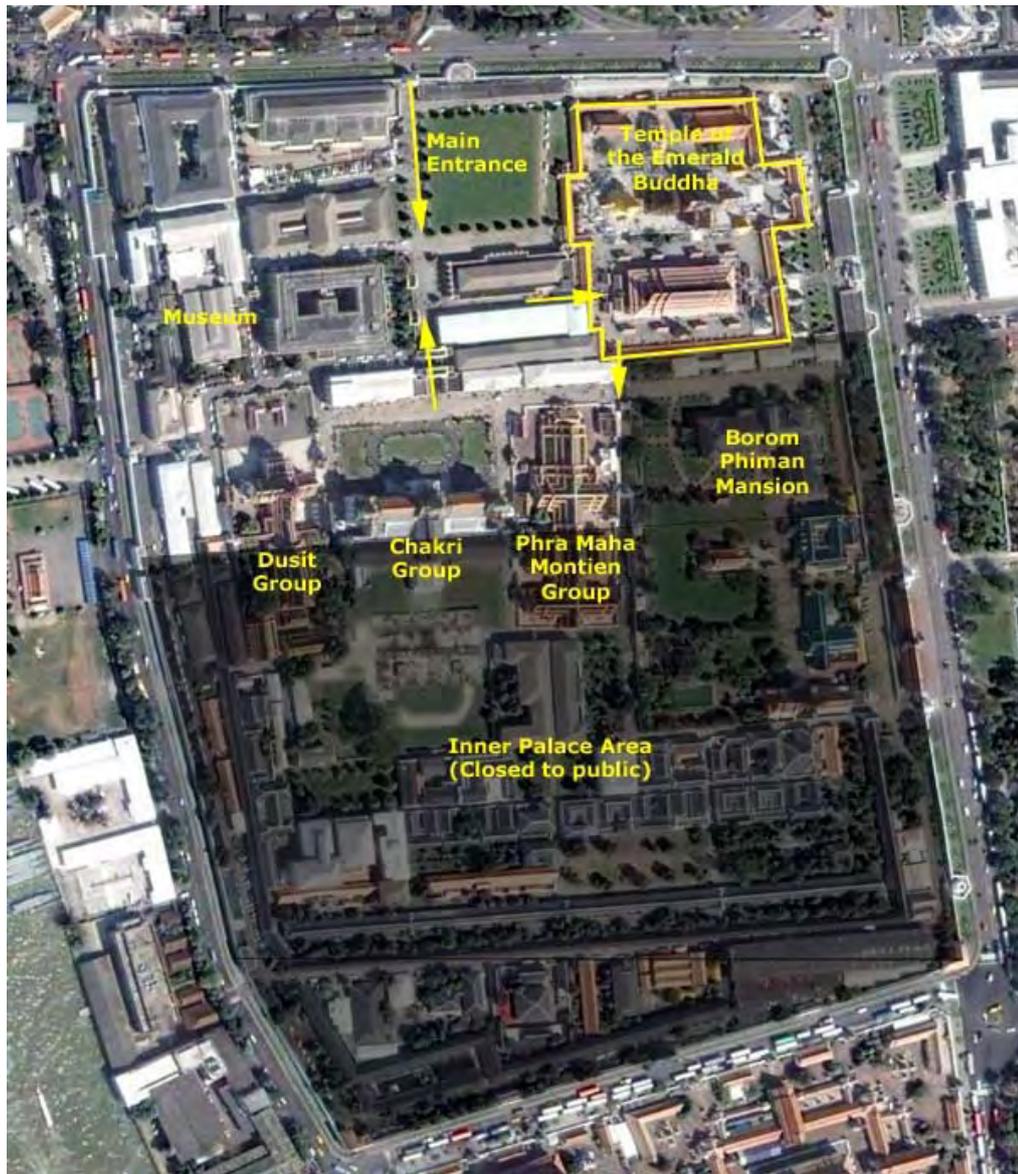
http://en.wikipedia.org/w/index.php?title=Rama_%28King_of_Thailand%29&oldid=193851274

²⁴ Chitralada Palace (Thai: Phra Tamnak Chitralada Rahatan) is the Bangkok residence of King Bhumibol Adulyadej (Rama IX) and Queen Sirikit. King Bhumibol was the first king in the Chakri dynasty to live in the Chitralada Palace.

Chitralada Palace. (2008, January 1). In *Wikipedia, The Free Encyclopedia*. Retrieved 06:30, March 25, 2008, from http://en.wikipedia.org/w/index.php?title=Chitralada_Palace&oldid=181476694



35. Plan of the Grand Palace in 1970



36. Source: www.thailandforvisitors.com

- **Plan of the Grand Palace**

The palace complex sits on the east bank of the Chao Phraya River. A defensive wall protects the other approaches to the palace, 1,900 meters in length, which encloses an area of 218,400 square meters. Further out from the wall is a canal, which was also created for defensive purposes, making the area surrounding the palace an island, known as Rattanakosin City .

- **Walls and gates**

These walls serve both as defensive walls and retaining walls for the palace. They were constructed with a rammed earth core, and surfaced with layers of specially baked bricks on both sides. The interstices are filled with mortar.

A gate on each side pierces the wall. At the north is the main Gate. All gates in the Grand Palace are decorated with a spire roof and wooden door panels. The city walls by the river function as palace walls. Wat Phra Kaew or Wat Phra Sri Rattana Satsadaram as it is officially named became the royal chapel. The architecture, size, plan and location of the throne halls and royal residences correspond to those of the royal palace of Ayudhya, as do the forts and gates around the walls of the palace and the house on piles on the river bank that serve as a landing stage for the King when he travel by barge.

The compound of the Grand Palace is divided into four parts: the outer court, the middle court, the inner court and, each clearly defined Wat Phra Sri Rattana Satsadaram with respect to function and the people who work and live here. Areas that both males and females are allowed to enter are bounded by buildings or walls and have doors for access.

- **The outer court**

The outer court is situated in the front part of the Grand Palace. Originally the plan for area was to house the government departments in whose duties the king was directly involved, such as the head quarter of ministers of civil and military affairs, who were responsible for national security; here too was the Royal Treasury, the headquarters of palace guards and other offices.

The middle court was the most important part of the Grand Palace as this was the location of throne halls (Phra Maha Prasat) and for the king's significant ceremonies (Phra Maha Montian). This is where he met his officials and carried out ceremonial functions.

The inner court was the residence of the King and his families. This area, which was behind the throne halls, housed the royal residences, including a mansion for females only.

- **Religious buildings**

Religion was an important part of life and power of the kings in the Chakri Dynasty. This area housed Wat Phra Sri Rattana Satsadaram, a place for Buddhist ceremonies.

The Buddhist iconography also proliferated in the interior decorations of many buildings in the palace. The Emerald Buddha is the most important. The wall surrounding the temple area is painted with scenes from the Thai version of the Ramayana mythology.

The temple of the Emerald Buddha, situated in the east of the Grand Palace, is a royal chapel hence there are no living quarters for monks.

- **Surroundings**

To the north of Grand Palace there was a path leading to Wang Na. In the eastern wall of the Grand Palace, there was small ground called Sanam Chai. Toward the southern end of the eastern walls of the Grand Palace, there was a pavilion named Sudhasawan Prasat, which served as a royal viewing stand. Once again, there had been such a field and an elevated pavilion in Ayudhya.

To the south were located the houses of ministers and trusted government officials of high rank who worked in the Grand Palace. In the west, near the river, was located the Tamnak Nam, which the king used when traveling in a barge.

How Monarchy and Buddhist beliefs shaped architecture of the Grand Palace

Thai concepts regarding the monarchy and the divine position of the King date back over many centuries, being derived from a mixture of Brahmanism and Mahayana Buddhism. The Brahman belief of the monarch as a god-king, a reincarnation of Vishnu, born to save people from suffering, has long been integral to the Thai beliefs about their monarchy. Similarly in Mahayana Buddhism, the King has divine status as the righteous emperor who rules according to Buddhist

principles and fulfils the ten obligations of a good king as set down by King Thammikkarat²⁵ in his work, the Traiphum or *the three worlds* 1063 AD. Before the foundation of Sukhothai in the thirteenth century, the Khmer empire had extended over much of present day Thailand and the influence of the Mahayana Buddhist King, Jayavarman VII, was widely felt. Although the Thais adopted the Sri Lankan Theravada Buddhism during the time of Sukhothai, many Khmer concepts were integrated into their beliefs.

Symbolism of divine kingship

The concept of divine kingship is portrayed in concrete form in the architecture and decoration of the royal palace, throne halls and architecture details. The king was believed to also represent Indra, the supreme god who resides on Mount Meru, the centre of the universe. For this reason, some throne halls such as the Phra Thinang Inthraphisek and Phra Thinang Amarin Winichai incorporate the name of Indra. The architectural details themselves reinforce such beliefs. The multi-tiered roofs symbolize Mount Meru, as does the throne and both were decorated with mythical animals of the Himalayan Forest, such as the *Garuda*, or a half-man, half-bird, the *naga* or a water serpent and the *Singh* or lion.

Each king of the Chakri Dynasty, except King Rama II, had a throne hall built to celebrate his kingly glory, in keeping with Ayudhya tradition, King Rama IV; son of King Rama II built a throne hall to glorify his father. This tradition of building a throne hall continued through the reign of King Rama V. During the course of this long reign, western ideas were adopted and social, economic and political conditions changed, and the tradition of construction of a throne hall fell into desuetude in the reign of King Rama VI.

Architectural symbolism and terminology

Phra Maha Prasat, or throne halls are buildings with a Greek cross floor plan, constructed to glorify the king with every feature symbolizing his divinity.

²⁵ Haripunchai is a small ancient kingdom in north Thailand. It does no longer exist.

The superstructure of throne hall can be divided into three parts. The first is a five - tiered spire with each succeeding layer being smaller than the one below. Each tier is ornately decorated with artificial gables or *Banthalang*, and a wooden *naga* at each of the corners. The middle section is shaped like an angular bell, and is called *Horakang*. The top, called the *hem*, is like the spire of a pagoda and gradually tapers to the summit.

Each part has its own significance. The tiered part represents Mount Meru, with its hierarchical heavens. The bell-shape is a replica of the pagoda, which is believed to contain a relic of the Buddha. Between this and the spire are lotus designs, which represent the enlightened mind, while the spire signifies serenity of mind, the primary stage of enlightenment. The glass ball higher up represents another stage of enlightenment or means of enlightenment.

The throne is a replica of the universe it is placed directly under the spire and surmounted by a nine-tiered umbrella. The throne like the spire is decorated with mythical animals and *deva* or deities, the latter occupying the higher tier.

The roof of the throne hall itself is multi-tiered, the greater the number of tiers the higher the rank. Roofs were originally covered with tin tiles because tin was considered a precious metal; latter these were changed to glazed ceramic tiles.

The spire has mythical animals supporting it and serves as the symbolic guardians of the king. In the Ayudhya period, there were *hong* or swans. The *Hong* was a mount of the god Brahma, who protects the Buddha together with the god Indra, who has the elephant *Erawan* as his mount.

The gable ends depict a *Garuda* holding a *Naga*. There is a long iconographic tradition in Thailand of Garuda and Naga guarding sacred buildings. The *chofa*, the finial that rises from apex of the gable, is believed to represent the Garuda head.

The wood carving on the pediment usually depicts the god Vishnu on Garuda, thereby signifying the abode of a god. The Naga is depicted with its head down, thus signifying the moment in Buddhist mythology when the Naga protected the meditating Buddha. Brahma may

also be represented on occasion. The doors and windows are protected by the guardian angels of the royal residence. The base of the building is protected by a *singh*, which in Indian culture was a symbol of honor and bravery.

Phra Maha Montian means royal residences, which in the early period were similar to an ordinary Thai-style house, but larger because they needed to serve several functions. The multi-layered roof signified the king's honor, as did the differing floor levels within. The hall at the highest elevation served as the royal bedchamber, the second highest was for the royal consort and daughters, and the lowest was used as an audience hall where the king met aristocrats who belonged to lower rank.

- **Construction of royal residences**

When King Rama I established the Grand Palace, he ordered a throne hall and two groups of royal residences to be built. These were the Phra Thinang Intraphisek and Phra Thinang Chakraphat Phiman. The plan was based on that of the Grand Palace in Ayudhya. The Phra Thinang Intraphisek corresponds to the Phra Thinang Sanphet Prasat in Ayudhya, a huge building, which served as both the audience hall and the royal residence. There were annexes on the right and left and one in the rear, which served as the living quarters of the attendants. When construction was completed, a second grand coronation ceremony according to Brahman and Ayudhya traditions was held in 1785. After this, the temporary royal residence, inhabited by the king since coming to the throne as the first king of Chakri Dynasty, was demolished, and construction of the royal residences was begun at the new residence. This was composed of three large structures; the Phra Thinang Chakraphat Phiman, the main building or the Phra Thinang Phaisarn Thaksin and the Phra Thinang Amarin Winichai, as well as annexes on the right and left and many other halls.

The king ordered the construction of gardens to the right and left of the two throne halls, of which the most important were the right hand garden called *Suan Khwa* for the king, and the left hand garden called *Suan Sai* for female royalty. The doors and windows have depictions of a standing *deva* guarding the king. The decoration of this throne hall is a masterpiece of the Rattanakosin Period.

Inside the throne hall there is a wooden throne inlaid with mother of pearl designs and sheltered by a nine-tiered white umbrella and a bed also inlaid with mother of pearl.

Conclusions about the Grand Palace

To summarize, the design of the Grand Palace, from its overall layout to the smallest detail, was meticulously planned to reflect the royal philosophical and religious principles and, above all, to symbolize the majesty of King.

The design architecture of Wang Na is derived from the same original institution, which means “governance”. At the same time King Rama and the viceroy are consciously returning to the Ayudhya style, which is expressed in the palaces.

3.4 Conclusions regarding the historic site of Wang Na

Wang Na is a location, which represented the cultural, naval, military, political and historical heritage of Thailand. The name Wang Na has two meanings:

1. It is the location of the viceroy who is a key position commander in the warrior group. This rank was first used in the Ayudhya period.
2. It is the way people called the man who was the viceroy of the king. The formal title is Krom Phra Raja Wang Bawornsatan Mongkon or informally called Wang Na.

Wang Na has existed since the Ayudhya Period. *Wang* means palace. *Na* is a standard reference to the leader of the army in the frontline. It imitates the actual position of the palace where he will live as the commanding officer and residence. It is in the north or situated in front of the Grand Palace providing security for the king or guards for the king. In ancient times when a battle began, the king would go to lead the fight and the viceroy’s troops would go forward to the front of the King’s troops. There is one another man who protected the king’s troops at the rear,

Wang Lang, *Lang* means Rear. This rank was also used in Burma, in Burmese language, “*In Sae Min*”. It means palace, *Sae* means front and *Min* means master.

- **Location of the site of a significant historic event.**

From the 17th until the 19th century, Wang Na was both the residence and the commanding office for the viceroy who represented the monarchy at Rattanakosin City.

- **Wang Na represents the cultural, naval and military, political and historical heritage of Thailand.**

The architecture of Wang Na reflects the cultural and political factors in building form. It is important to understand the ways in which the arts and architecture as well as the cultural landscape of this palace provides a record of the political, social and cultural processes that make Thai history.

The year of 1767 marks the establishment of Early Rattanakosin City and the incentive to create a powerful symbol of independence from all enemies. Wang Na expresses that independence in architectural and artistic form. After 1767, Wang Na’s arts and architecture show victory after wars with Burma. Identifying the arts and architecture of the time provides an important insight into the thoughts and motivation of such figures as Maha Surasinghanaj. Hence, this early age of Wang Na art and architecture symbolizes the quest for political independence and cultural freedom, starting from the Early Rattanakosin Era to the present day.

3.5 Important dates in the construction of Wang Na from 1448 to 2002

After research the following dates have been selected by the author as crucial to the formation of Wang Na as it is today:

- 1448:** The viceroy's ranking document existed in Ayudhya for the first time.²⁶
- 1569:** King Maha Thammaraja document was found. This showed that a viceroy owned the Chankasem Palace in the Ayudhya Era.
- 1656:** King Narai document was found. This evidence shows that the name of this Wang Na was "Phra Raja Wang Bovorn Sataan Mongkon."
- 1688:** The people who worked only for the viceroy were the civilians of "Krom Phra Raja Wang Bovorn Sataan Mongkon." The title of the person who owned this palace was *Somdej Krom Phra Raja Wang Bovorn Satann Mongkon*.
- 1743:** The first viceroy of Rattanakosin era was born. His name was Boonma.
- 1782:** Viceroy Maha Surasinghanaj or Boonma built Wang Na in Bangkok.
- 1785:** Ten forts and some buildings of Wang Na were completed.
- 1787:** Phra Thinang Sudhasawan, the house of Chao Rojjana, and the house of Chao Fa Pikulthong (For the wife and daughter of Viceroy Maha Surasinghanaj) and Laung She Monastery (later, the name was changed to Bovorn Sataan Suttawas) were completed.
- 1787:** The three rooms called Wasanta Phiman, Wayu Sataan Amares and Bhommes Rangsan are finished. Another name used was Mhu Phra Wimaan. These mansions were a group of beautiful houses. Their roofs were designed to connect to each other.
- 1795:** The year was estimated by the Thai historians. The important seated Buddha statue, so called Phra Buddha Sihing, came from Chiang Mai. This precious Buddha statue was situated at the Phutthaisawan Chapel. Two new artifacts were made for enshrining the Phra Buddha Sihing. The first artifact built at that time, was *Busabok Yod Prang* to be placed with the Phra Buddha Sihing. The second was a precious mural painting, which was painted on the whole walls of the chapel.

²⁶ This appears on the document written by King Rama V, King Chula. The document is called "Critique to the Tradition of Viceroy", Bangkok, 1973. See page 54.

1803: Viceroy Maha Surasinghanaj died at Mhu Phra Wimaan in a room named Vayusataan Amares. Viceroy Maha Surasinghanaj's funeral was held at Sivamok Phiman Hall.

1806: Prince Issarasoonthorn, a son of King Rama I, was appointed as Viceroy.²⁷

Viceroy Issarasoonthorn ordered the construction of many buildings, namely:

A beautiful pavilion at a pond, which has been demolished. This pavilion's name was Dusita. Later, this building was allocated to a temple in Bangkok. This temple is called Wat Chanasongkham.²⁸

- The artificial mountain called *Krailat*, which was demolished. This mountain used for the area of *Sokan* or Topknot Cut Ceremony of boys and girls who are born in the blood-line of viceroy.
- The spirit house in the north of the palace land, later demolished. A new playhouse was replaced there.
- The small bathroom of Maha Surasinghanaj at the back of Mhu Phra Vimann, later demolished.

1817: Senanurak, the third viceroy, died at Mhu Phra Wimaan in the house called Wayu Sataan Amares, still standing today.

(1803-1832?) The year is unknown, but during the reign of King Rama III:

Viceroy Maha Sakdiponlasep was appointed as viceroy. He was the manager of a project to repair a building called Sudhasawan. His role was to maintain the whole antique content, artifacts and elements of this building. He repaired the damaged buildings and replaced the missing parts of the Sudhasawan roof structure. He added the three precious cabinets into the hall. These cabinets are of gold and lacquer on wood. It portrayed the story of *Ramayana* importantly, these cabinets used

²⁷ Evidence of this fact can be found in the Chronicle of Royal Bloodline of Rattanakosin, Issue 1, Bangkok, Fine Arts Department Printing, 2545, p 10 -11 and 17. in 1814

²⁸ Evidence of this fact can be found in a book titled "The History of Chanasongkam Temple," printed in Bangkok by the Fine Arts Department Printing in 1963 page 6-7

for keeping the *Tripitaka* or Buddhist text.

Viceroy Maha Sakdiponlasep changed the utility of Phra Thinang Isarawinijaya when using it as his official hall. This hall was used for military soldiers or civilians when they came to present their works to the viceroy. He also ordered the construction of many buildings. Those were:

1. Two Chinese style houses. One house at the north of the palace land was used for keeping the ash of members of the viceroy's bloodline. Another one located to the south was used to enshrine the Lord Buddha's ashes and religious objects.²⁹

2. A new monastery was built on the location of Wat *Laung She* temple for nuns. This new monastery called Wat Bovorn Sataan Suttawas. Later, a Standing Buddha Statue was put at center of the chapel of Wat Bovorn Sataan Suttawas.

Viceroy Maha Sakdiponlasep was also assigned to restore or modify the following buildings:

1. Mhu Phra Wimaan was repaired.
2. Mhu Phra Wimaan was expanded to include six new rooms. The names of these rooms were:

- Prisadang Pimook
- Pimook Montian
- Burapha Pimook
- Taksina Pimook
- Utara Pimook
- Passhima Pimook

(Burapha Pimook and Taksina Pimook were rooms, which had two floors and bathrooms).

²⁹The source of this information from the book called, "Custom and Tradition", Bangkok, Fine Arts Department of Printing, 1963, pg 153-154 and 561.

3. The small room at the east called Tim Mahavongse has been demolished when a big new building called Phra Thinang Isarawinijaya was built on this site.

4. Phra Thinang Sudhasawan was repaired but only on the damaged parts such as the roof structure. The height of the floor was raised up. The Phutthaisawan Chapel is the new name of it.

5. The aged Sivamok Phiman was demolished. The new hall was rebuilt to a larger size.

6. The building called Rangsan Chulalok was built at the center of the old pond where before there had been a small pavilion called Dusita.

7. A new Chinese style house was built to the east of the palace. It is used for keeping the ashes of the viceroy's family.

1832: Viceroy Maha Sakdiponlasep died.

1851-1865: Prince Chutamani was appointed as the next viceroy. This viceroy was special

because King Rama VI elevated the authority of viceroy to that of Second King.

The new name of Prince Chutamani is King Pinklao.

From this point in time, many buildings were built on the land of Wang Na. Unfortunately; the years of constructions were not properly recorded. The structures built were as follows:

1. Kochakam Praves building built at the front of Phutthaisawan Chapel.
2. Mangkhala Phisek, a concrete platform with a roof for getting on the horse and elephant was built at the north of Isarawinijaya building.
3. Eke R- Longkoj, a concrete platform with a roof used for mounting an elephant was constructed to the south of the Phra Thinang Isarawinijaya.
4. Four floating pavilions were built on the bank of the Chao Phraya River on the side of the palace's borderline. Phraya Pichaiyat was the manager of this construction project. The names of floating pavilion mean water and river.

These names were Mahanop Bhimaan, Cholataan Tippha-ard, Prapas Kongka, and Natee Tassanaphiromya.

5. A big gate called Maha Phokaraj was built.
6. A nursery for elephants and horses was built on the east side.
7. The aged buildings of “*Sala Look Khun*” or civilians and military pavilions were repaired.
8. The fort and gate, which were made of wood, were fixed. Masonry brick replaced the wood structure.
9. The houses of the consort ladies were restored.
10. A new house was built for a son of King Pinklao. His son, Prince Yodyingyod, was appointed viceroy. The new name is Viceroy Bovorn Vichaicharn.
11. The house called Tamnak Dang or Red House was reassembled on the land of the Wang Na.
12. The playhouse was demolished. A new Chinese house was located on same area.
13. A new European style house was built on the east side of the land of palace. This house consists of nine rooms. There were two floors in the house. It is called Isaret Rajanusorn.
14. A cannon foundry, barracks and arsenal were constructed.
15. A new small Chinese style house was built at the front of the Isaret Rajanusorn building. This house had five rooms with two floors. But King Pinklao passed away before it was completed. King Rama IV continued building it and named it “Bovorn Bariwat”.

7 January 1865: King Pinklao died in the building called “Isaret Rajanusorn”.

: Viceroy Bovorn Vichaicharn was appointed as the next viceroy.

1874: King Rama V decreased the power of the military of the viceroy. (The reference appears in the book called “King Rama V’s Laws Issued 1”, printed in Bangkok by Amarin Printing and Publishing Public Company).

1876: The white elephant ceremony was held at the front of Phutthaisawan Chapel.

1880: A factory of ceramic and earthenware from China was established at Wang Na.

1887: Viceroy Bavorn Vichaicharn died.

1887: King Rama V ended the position and authority of the viceroy.

1890: The palace boundary was changed. Some areas were used for government functions and the following changes were made:

1. The outer zone of the palace was used for new military barracks and became one part of the Sanam Laung.
2. The area of Isarawinijaya, Phutthaisawan Chapel and Sivamok Bhimaan were utilized as storage of antiques from all over the Thailand.
3. The daughter of King Pinkloa, Phra Ong Chao Daungprapa, She lived in and was in charge of the inner zone of the palace.
4. A new building for the Education Ministry was built near Wat Bavorn Sataan Suttawas.
5. The new command offices and barracks of the 11th Military army base were built to the west of the palace, close to the bank of Chao Phraya River.
6. New armories and arsenals were built to the south of the palace.
7. A new gate was built at the corner of Phra Chan Road.
8. Kochakam Paves was demolished.
9. The floating pavilions were demolished.

1900: Rama V changed the utility of Wat Bovorn Sataan Suttawas. The hall inside the monastery was used to hold the cremation of his grandmother, his younger brother and his children's funerals. The latter died young in age. This funeral event area was normally connected to the land of Sanam Laung Ground.

1911: Phra Ong Chao Vongchan died (she was a daughter of King Pinklao). She had a role to manage the inner zone of the palace after Daungprapa death.

1917: The ashes of four viceroys were enshrined to the Wat Phra Sri Ratanasassadaram, which is located inside the Grand Palace.

1926: King Rama VI established a Museum.

1928: Tamnak Dang was neglected until Queen Sri Saovarindara, Queen of King Rama V, visited Wang Na. She saw the deterioration of this house. She donated her money for restoration and came to open Tamnak Dang on 9 September 1928 on the auspicious occasion of her 66th birthday.

-A small pavilion, called “Tim” in Thai, was demolished in 1929. A new Chariot Hall or Rong Racharoj was built in that area.

1933: The Fine Arts Department was established.

1934: The Museum for Bangkok was raised to The National Museum, Bangkok.

1934: Land totaling 11,599 square meters of the former Wang Na was given to Thammasat University.

1935: Land totaling 28,529 square meters of former Wang Na was given to the authority of Thammasat University.

1962: Many modern and concrete buildings were constructed for the related activities. The plain buildings of the palace were demolished. More modern buildings were built on the land of the former palace.

1963: The restoration of Tamnak Dang was completed.

1967: There were many changes at Wang Na. These were:

1. Two large concrete buildings were built. One building was named after Maha Surasinghanaj. It was on the south of Mhu Phra Wimaan. Another called Prapart Pipitapan was on the north of Mhu Phra Wimaan.
2. The Tamnak Dang was moved to its on present location.
3. Three beautiful new pavilions were assembled at the National Museum site.

These were:

- Samran Mookamas pavilion, which was originally built in the reign of King Rama V. It originated from Dusit Palace.
- Patihaan Tassanai pavilion was located near Issares Rajanusorn. It was built in

the reign of King Rama VI.

- Sala Longsong was originally located in Sanamchandra Palace, Nakhonpatom Province. It was built in the reign of King Rama VI.

1963: Tamnak Dang was restored again.

1982: Phra Thinang Sivamok Phiman was repaired.

1997: An archeological excavation at Thammasat University revealed numerous antiques.

1998: Establishment of the Memorial Signage to display the background of Wang Na. The display was located near a canteen on the Thammasat University campus.

21 October 2001: Sivamok Phiman Hall was repaired by Pran Construction Company. The items repaired include the roof structure, the exterior wall, and new paint for the interior covering an area of 512 square meters.

The company also built new small rooms on the location near Sivamok Phiman Hall.

The lists of new structures are as follows:

- 1) Visitors rest rooms and a guard room.
- 2) Visitors ticket room and clerk room on 9 August 2001 AD.
- 3) A sloping path for disabled people entering the Sivamok Phiman Hall.

2002: The roof structures of Mhu Phra Wimaan were changed by the Sivakorn Company.

3.6 Chronological order of events during Viceroy Rule:

This volume is concerned with the history of the viceroys and the events connected to their lives during the period from 1782 until 1887. King Rama V cancelled the ranking and authority of the viceroy who owned the mansion called Wang Na, which has since 1934 been known as The National Museum, Bangkok.

1743: Boonma, the younger brother of King Rama I, was born in Ayudhya.³⁰

1767: Prince Issarasoonthorn, later King Rama II, was born at a town called Ampawa. Now it is in Samutsongkam province.³¹

1773: Senanurak was born.³²

1782: King Rama I built the Grand Palace and Rattanakosin city.³³

1782: Two months later, King Rama I held the Throne Ceremony and Royal Barge Ceremony.

He established a new dynasty called the Chakri Dynasty. Later, he appointed his children as high rank.³⁴

1782: King Rama I bestowed upon his younger brother, Boonma, the position of viceroy with title Krom Phra Rajawang Bovorn Maha Surasinghanaj. The viceroy built Wang Na to the north of the Grand Palace.³⁵

1783: Two intruders had entered to Wang Na. They killed viceroy's staff by sword. Immediately the viceroy's other staff arrested the intruders. Later, those intruders were sentenced to death.³⁶

- The viceroy added new buildings to Wang Na's grounds.³⁷

³⁰ The historical records of the reign of King Rama I, Chao Phraya Tipakornwongsa

³¹ The historical records from the reign of King Rama II, Krom Damrongrachanupap. p.3

³² Ibid. p.26

³³ "The historical records of the reign of King Rama I, Chao Phraya Tipakornwongsa" p.1

³⁴ Ibid. p.2

³⁵ Ibid.

³⁶ Ibid p.20

³⁷ Ibid p.22

- King Rama I ordered new structures on the grounds of at the Grand Palace. For example, The Wat Phra Sri Ratanasasdam.³⁸
- The viceroy renovated Wat Salak, later called Wat Mahatat.³⁹

1785: Bangkok and Burma fought a war on 20 November 1785. Burma sent their large troop to invade Bangkok and then returned. The viceroy led the troops to force the Burmese back in Kanchanaburi province.⁴⁰

1786: The viceroy went to the war at Kanchanaburi.⁴¹

- The viceroy led the troops to Malaya, Kerlantan, and Terengganu, to the south of Thailand.⁴²
- Bangkok and Burma fought a second war.⁴³

1787: Chiang Mai was still independent under the protection of the Chakri Dynasty. King Rama I ordered the viceroy to build the Chiang Mai City.⁴⁴

1794: The son of King Rama I, called Maha Senanurak, went to be a monk, as he was 22 years old at that time.⁴⁵

1795: Bangkok and Burma fought a third war.⁴⁶

³⁸ Ibid.

³⁹ Ibid p.26

⁴⁰ Ibid p.33

⁴¹ Ibid p.34

⁴² Ibid p.37

⁴³ Ibid p.45

⁴⁴ Ibid p.48

⁴⁵ Ibid p.54

⁴⁶ Ibid p.74

- Burmese attacked Chiang Mai City. The viceroy went to protect the city. After the war was over, the viceroy took the Phra Buddha Sihing back to Bangkok.⁴⁷
- The viceroy went into the monkhood for 7 days.⁴⁸

1802: Bangkok and Burma had the fourth war.⁴⁹

1803: Viceroy Maha Surasinghanaj fell sick and died at the age of 60. He had been a viceroy for 21 years.⁵⁰

Maha Surasinghanaj built many buildings and structures. These were:

1. Wang Na. The buildings, gates and fortress.
2. Four houses for his sons near to Wang Na's land
3. A factory for ships near Wat Dusitaram.
4. Bridges made of brick and wooden.
5. Pavilions near Wat Mahatat.
6. Wat Chanasongkam and Wat Mahatat were renovated.
7. Wat Bot.
8. Wat Samorkrang.
9. Wat Phratumkongka.
10. Wat Suwannakrilee.
11. Wat Kruta.
12. Wat Suwandararam.
13. A hall at Wat Phra Sri Ratanasasaram.
14. Wat Suwanararam.
15. The *Mondop* or a building with a spire roof to house the Lord Buddha's footprint in Saraburi province.

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Ibid p.87

⁵⁰ Ibid p.91

1806: King Rama I appointed his son as next viceroy. The new viceroy's name was

Issarasoonthorn. He lived at Thonburi Palace, not at Wang Na.⁵¹

1809: King Rama I fell sick and appointed his son, Issarasoonthorn as the next king.⁵²

-King Rama I died at the age of 74.⁵³

-King Rama II appointed his younger brother, Maha Senanurak, as a viceroy. The ceremony was held at Bhaminpak and Phutthaisawan Chapel.⁵⁴

-Viceroy Senanurak led the troops to Petchburi Province to attack the Burmese troops.⁵⁵

1810: Viceroy Senanurak went into the monkhood at Wat Mahatat for 7 days.⁵⁶

-A daughter of Viceroy Maha Surasinghanaj called Chaofa Pikulthong died.⁵⁷

1814: Viceroy Maha Senanurak built the town called Nakhon Keunkan. Now it is called Phra

Pradang.⁵⁸ He renovated the buildings at Wang Na and many temples. For instance, Wat

Lingkob, Wat Sao Phrakon, Wat Bovorn Mongkon and Wat Dusitaram.

1817: Viceroy Senanurak was sick and died at Wayu Sataan Amares, aged 37. The funeral

ceremony was held at Phutthaisawan Chapel.⁵⁹

1818: The funeral of Viceroy Senanurak was held at Sanam Laung Ground. The ashes were kept

at The Grand Palace.⁶⁰

⁵¹ Ibid p.100

⁵² Ibid p. 107

⁵³ Ibid.

⁵⁴ The historical records of the reign of King Rama II, Prince Damrong Rajanupap. p. 23.

⁵⁵ Ibid p. 40

⁵⁶ Ibid p. 57

⁵⁷ Ibid p.209

⁵⁸ Ibid p. 97

⁵⁹ Ibid p.124

1824: King Rama II died on July 21, 1824.⁶¹

- Chaofa Jessadabodin, The oldest son of King Rama II succeeded to the throne on July 29, 1824.⁶²
- King Rama III appointed Sakdiponlasep, his uncle, as a new viceroy. Viceroy Sakdiponlasep was a son of King Rama I.⁶³
- Viceroy Sakdiponlasep began to live at Wang Na on September -9, 1824. He lived at Wasanta Wimaan, Wayu Sataan Amares, Brahmas Rangsana, Utara Pimook and Taksina Pimook.⁶⁴
- King Rama III ordered the repair of various palaces of Bangkok, including Wang Na.⁶⁵
- Chaofa Mongkut went into the monkhood. The historical records of the reign of King Rama II, Prince Damrong Rajanupap.⁶⁶

1826: The leader of Vientian was a rebel. Viceroy Maha Sakdiponlasep led the troops to the North East of Thailand.⁶⁷

1831: Viceroy Maha Sakdiponlasep fell sick.⁶⁸

1832: Viceroy Maha Sakdiponlasep died on May 1, 1832 at the age of 46. The funeral was held at Isarawinijaya Hall.⁶⁹

⁶⁰ Ibid p.127

⁶¹ Chao Phraya Tipakornwongsa, the historical records of the reign of King Rama III, p. 1

⁶² Ibid.

⁶³ Ibid p.2

⁶⁴ Ibid.

⁶⁵ Ibid p.6

⁶⁶ Ibid p .208

⁶⁷ Ibid p.22

⁶⁸ Ibid p.48

⁶⁹ Ibid.

- Prince Chutamani was promoted to the next viceroy as Chaofa Krom Khun Issares Rangsana (Later, King Rama IV appointed him to be King Pinklao). He was a younger brother of King Mongkut.⁷⁰

1833: The funeral of Viceroy Maha Sakkdiponlasep was held at Wang Na.⁷¹

1841: Prince Issares Rangsana led the naval troops to Ban Tae Maht on January 24, 1841. (Ban Taey Maht was a city in Vietnam).⁷²

1849: Wat Bovorn Satann Suttawas was repaired.⁷³

1852: King Rama III died on March 31 1852, aged 64.⁷⁴

1868: Chaofa Chulalongkorn was elevated to be King Rama V.⁷⁵

1869: Chao Phraya Tipakornwongsa collected the stories of the early Rattanakosin Era. He wrote the historical records of the reign of King Rama I to King Rama IV. The name of this historical record was widely known as “the historical records of Chao Phraya Tipakornwongsa”

1887: Viceroy Bavorn Vichaicharn passed away.

-King Rama V cancelled the position and authority of the viceroy.

1901: King Rama V ordered his brother, Krom Damrong Rajanupap to publish the historical records of Tipakornwongsa.

⁷⁰ Ibid.

⁷¹ Ibid p.50

⁷² Ibid p.103

⁷³ Ibid p.145

⁷⁴ Ibid p.153

⁷⁵ Chao Phraya Tipakornwongsa, the historical records of the reign of King Rama V. p 77

Chapter 4

Background of the National Museum of Bangkok

The name of the National Museum, Bangkok figures in records right from the establishment of major museums in Thailand and was probably first used during King Rama VII's reign.

Historical records state that there was a designated place to keep all valuable antiques in the time of King Rama IV. The king had sent his Royal command to establish a particular building for himself before the time of King Rama VII royal edict. King Rama IV designated a particular building which was to accept his private collection and items in his precious storeroom. He also named the building "Prapas Bibidhabhanda"⁷⁶ for the reason that it was built in the area of Grand Palace. It was safe, being in the Grand Palace's territory and near the Sivalai Maha Prasad Hall.

In 1874⁷⁷, during King Rama V's period, another building, Concordia Hall was built in the area of the Grand Palace. Nevertheless, the name was later changed to "Sala Sahathi Samakhom. The word "museum" was applied for the first time.

⁷⁶ Yupho, Development of National Museums in Thailand 1990, Thai Culture, New Series No 24 ,Fine Art Department, p3.

⁷⁷ Ibid



37. The Photograph of King Rama VII

Source: The National Museum Phranakorn

In 1887⁷⁸, King Rama V issued a command to transfer the antiques from the Concordia Hall to three buildings in Wang Na namely Phra Thinang Sivamok Phiman, Phutthaisawan Chapel, Phra Thinang Issaravinijaya. On December 4th, 1889 by the Royal Decree, the museum became a museum directorate under the Department of Education.

In 1892⁷⁹, the Department of Education was renamed as the Ministry of Education. The three buildings came under the control of the Ministry of Education and the Museum was opened for audience two days a week. Art objects were exhibited with printed catalogues in both Thai and English languages.

Three different buildings in the Wang Na were used as a Museum as follows:

1. Phra Thinang Sivamok Pimann was used to exhibit antiques in prehistoric division.

⁷⁸ Ibid

⁷⁹ Ibid

2. Phutthaisawan Chapel still held all the antiques in the same position as when it was a palace, as they did not change the location of Phra Buddha Sihing.
3. Phra Thinang Issaravinijaya exhibited antiques from the Concordia Hall.

On April 19th, 1926⁸⁰ in the time of King Rama VII, he ordered the contents of the hall to be transferred to the Royal Institute where H.R.H Prince Damrong Rajanubhab, son of King Rama V, was the supreme authoritarian in the institute. On the special occasion of King Rama V' birthday, the king re-established this museum by changing the name with clear pronunciation to be "the Museum of Bangkok". Around 1929-1930, there was a survey of the condition of the buildings in the museum to check for damages.

On May 3, 1933⁸¹ the administration of the museum was transferred to the Fine Arts Department.

4.1 A study of the period between 1917 -1967 was undertaken to understand the function and use of the archeological buildings and antiques of Wang Na after it was changed to be a museum

In 1929-1930⁸², the architect who had studied the condition of the archeological buildings did research on the damage done to the Phra Thinang Sivamok Pimann's bodies, and said that the main structure, including the poles and beams had been destroyed. Therefore, the government transferred these buildings, which were museums, from the supervision of the Royal Institute's control to be under supervision of the Department of Fine Arts on May 3rd, 1933. The name was also changed to the National Museum, Bangkok⁸³.

⁸⁰ Ibid p 7

⁸¹ Ibid p 8.

⁸² Ibid

⁸³ Ibid

4.1.1 The main principle of conservation in the past.

In 1947⁸⁴, after World War II, Mr. Chauncey J. Hamlin, who was the President of the Buffalo Museum of Science, New York, United States of America, submitted a proposal asking for permission to establish the International Council of Museum (ICOM) in Thailand⁸⁵. Thereafter Thailand was registered to be one of ICOM's members. The Fine Arts Department was responsible for the conservation of the archeological buildings and the administration the museum, and the department appointed a person to be in charge of the First Thai National Committee. The following is an extract from the statutes of the ICOM concerning the definition of a museum, and the aims and methods of ICOM:

Section II: Definition of a Museum

Article 3

ICOM shall recognize as a museum any permanent institution which conserves and displays.

Article 4

Within this definition:

- a. exhibition galleries permanently maintained by public libraries and collections of archives;
- b. historical monuments, and parts of historical monuments or their dependencies, such as cathedral treasuries , historical, archeological and natural sites , which are open to the public;

Section III: Aims and Methods of ICOM

⁸⁴ Ibid p 11

⁸⁵ Ibid

Article 5

- a. to stress the essential unity for purpose behind the museum concept;
- b. to further cooperation between museums and members of the museum profession in different countries;
- c. to protect and promote the interest of the museums and the museum profession and widen their influence;
- d. to emphasize the importance of the part played by the museums and the museum profession in each community, and in the promotion of knowledge and understanding among people;
- e. to co-operate with other international organizations whose aims are similar to those of ICOM and especially with UNESCO.

When the Museum for Bangkok was transferred to the Fine Arts Department, the Restoration Project was initiated in 1952.

4.1.2 Conservation Area

After King Rama V had given declaration to end the position of Viceroy, there were many changes in the area of Wang Na. Every fortress and most of the buildings were demolished. However, some buildings were saved such as the area around the chapel of Wat Bawornsatan Suttawas and the building of Issares Rajanusorn, which was surrounded by small buildings. Later the buildings were used for other purposes. Unfortunately, they were all eventually demolished. Only the body of Wat Bawornsatan Suttawas, the building of Isaret Rajanusorn and small Chinese architectural building named “Keng Nukij” survived.

Analysis of the main changes:

1934⁸⁶ - A group of buildings of Issares Rajanusorn and the compound of Wat Bawornsatan Suttawas were used as classrooms for the Classical Dance College.

1934 - An area around Wang Na was divided to be a theater called Silpakorn Theater.

1951 - Some old archeological buildings, which were built near the precinct with Wat Bawornsatan Suttawas were converted to classrooms for the College of Fine Arts.

1953 - The Fine Arts Department and the Museum of Bangkok participated with ICOM by sending only annual subscription to a conference in Italy. This action meant that the ICOM headquarters understood only a few of the resolutions and suggestions of Thailand.

1955 - The Fine Arts Department repaired the roof and the exterior walls of the Phutthaisawan Chapel first in 1955, and then in 1963. The wall on the northeast side had suffered most severely.

The Progress of museum administration in international relations:

In 1965, ICOM had invited the chairman of the Thai National Committee to join the occasion of the 7th General Conference of ICOM which was being held in New York. The Thai National Committee did send some members to this general conference.

In 1967, the Fine Arts Department requested exhibition cooperation and a display of antiques in the Museum of Bangkok at UNESCO. Dr. Grace Morley, the museum's expert, took a trip to Thailand to accept this responsibility, on March 2nd, 1967.

⁸⁶ Ibid p 8

On April 15th, 1967, Dr. Morley wrote a letter to Mr. Dhanij Yupho, the Director-General of Fine Arts Department, to tell her impressions of the museum during the time she had been working in Thailand, she said;

“Installation is a success, in all galleries the standard is very high, labeling is attractive with good text and at a high level of education, excellent maps which are decorative, use of photographs to illustrate settings or architectural complexes from which exhibited objects come.”

4.1.3 The Problems in Conservation

a. The letter from Dr. Morley encouraged the author to realize that in the 1960's when they were setting exhibition rooms and other rooms they were not concerned about the meaning of archeological sites including the antiques of Wang Na. The dealers at that time never had a clear understanding of the authenticity of the Wang Na in historic precincts.

b. Monetary problems existed in of restoration archeological sites.

c. Ignoring problems regarding the worth of Wang Na's archeological site: The Museum was open only in daytime while the National Theater was only open at night time. The problem was that the audiences could walk through the museum at night where there was no fence. The attendance came in and out easily. Otherwise, the meaning of conservation was not understood nor was it concerned with its worth in history. They did not realize the need to take care of easily-broken items.

d. By misfortune many of the ancient buildings were torn down and replaced with new concrete buildings. As a result there was a group of controversial new buildings among the ancient ones which has caused Wang Na to lose its ambience.

The Role of ICCROM and the Fine Art Department in 1969

Since 1969, conservation activities have been jointly carried out by Thailand's Fine Arts Department and the International Centre for the Study of the Preservation and the Restoration of Cultural Property, located in Rome. This joint work represents a new stage in the application of modern conservation treatment to Thai cultural property. Here follows a description of these two institutions and their respective roles in mural conservation.

At this point some explanation of the generally used term "cultural property" may clarify some of the Department responsibility. An accepted definition is as follows, as stated in the final act of an intergovernmental conference held in The Hague (1954) on the protection of cultural property in the event of armed conflict :

"Movable or immovable property of great importance to the cultural heritage of every people, such as monuments of architecture, art, or history, whether religious or secular; archaeological sites; groups of buildings which, as a whole, are of historical or artistic interest; works of art; manuscripts, books and other objects of artistic, historical, or archaeological interest, as well as scientific collections and important collections of books or archives of reproductions of the property defined above."

Thus, the Fine Arts Department is responsible for multidisciplinary conservation treatments, especially to murals. For example, mural conditions for a wide variety of materials and media. This is of special importance in the applications closely related to temple architecture and mural treatment may be incomplete without attention to the supporting structure.

Chapter 5

Information on the Condition of Wang Na's Remaining Historical Buildings after an on-site Investigation

It is a clear fact that the area of Wang Na has been irrevocably changed. Each official department that makes use of the land has built a wall to separate their territory, changing the road line and the old pathways in the process. This chapter describes the outcome of three main ancient groups of buildings once part of Wang Na and now operated each by a different government service. The old building of Wang Na, which in the current time has become the national theater, is gone completely. The theater building was re-constructed around 1960.

1.1 The current condition of ancient buildings under the supervision of the National Museum, Bangkok



38. National Museum, Bangkok Thailand

Photographed by Bussayamas Nandawan



39. National Museum, Bangkok Thailand

Photographed by Bussayamas Nandawan

1. The Phutthaisawan Chapel

Era: Early Rattanakosin, built in 1787

Style: Ayudhya Architectural Style. The Phutthaisawan Chapel was built after the fall of Ayudhya, but its design is based upon Ayudhya prototypes.

The paintings inside the chapel are the oldest murals in Bangkok. The panels between the windows depict scenes from the life of the Lord Buddha. The murals are painted in the classic style, in two dimensions in tempera colored with mineral and earth pigments. The Phutthaisawan Chapel has a step and red poles on the lawn in front of the chapel like a howdah mount, used by royalty to mount elephant.

The existing condition



40. National Museum, Bangkok Thailand

Photographed by Bussayamas Nandawan

- The pediment is made from wood. Its east and west side depict the Vishnu Brahman God in the pavilion, encompassing a typical Thai motif called *Lai Kan Khod*. On both sides of the Brahman Pavilion are two other pavilions, one which shows a high relief statue of a Hindu divinity, bowing to Vishnu. The overall condition of the pediment and carved patterns is fairly good. The decorative colored glass mosaic and

gold leaves are ageing. Some mosaics are broken others have disappeared. The whole pediment is coated with dust.

- The roof is made from clay; its tiles are covered with black fungus.



41. The pole is in a fairly good condition. One post is cracked. Some parts of the walls are clearly cracked. The walls are covered with water stains and bird droppings.

Photograph by Bussayamas Nandawan

- The exterior of the chapel has doors opening to the east and west. The eastern main entrances of the chapel consist of three doors; the largest entrance is in the centre. In the past, only the viceroy when getting in and out of the chapel used this central entrance. The door is made from wood and is decorated with gold patterns or *Lai Rod Nam*.⁸⁷

⁸⁷ *Introduction to the Thai temple, K.I. Matics, White Lotus*

Gold and lacquer decoration (*lai rod nam*) begins with giving a wooden panel three coats of black lacquer. After the drawing has been traced, a yellow gummy paint is applied on the sections, which are to remain black. A thin coat of lacquer is then painted on the surface. When this is semi dry, gold leaf is applied over the entire panel. After twenty hours the wood is washed with water, which detaches the gold leaf laid on the gummy paint. The finished design is neat in every detail.

Gold and lacquer decoration (lai rot nam) technique is usually chosen for the inner surfaces of doors and windows panels, and some of the most valuable objects, such as book cabinet for manuscripts.

- The exteriors of the door panels are decorated with golden trees, while their interiors are decorated with paintings, depicting protectors standing above a giant. Each door is in a fairly good condition. The western doors are closed. Although their condition is fairly good, some parts of the painting are fading away. The door frame is in fairly good condition but dusty and unclean. There are some bird droppings on the windows, while some gold leaf parts and carved wood are broken or have disappeared.
- The interior of the chapel is in a fairly good condition, but it is untidy since the security guards are using it too. Some of their clothes are hanging at the back of Phra Buddha Sihing throne, while some food plates are placed near it. Chairs are placed in a disorderly fashion near the historic lacquered and gilded book cabinets.
- The mural paintings have been repaired but dampness continues, thus the deterioration of the paintings continues; flakes are coming off from the paintings. Some areas of the mural paintings are entirely disappearing. There are dampness and water stains on the walls.
- The floor is made from large wooden planks. The condition is good as visitors take their shoes off before entering the chapel.
- The ceiling is decorated in such a manner that it makes the chapel look like a castle in the sky. Wooden carved stars are attached to the ceiling. They are in a good condition, although some of their paint is peeling off.

2. The Phra Thinang Sivamok Pimann



42. The front view of Phra Thinang Sivamok Pimann. The main entrance is a large wooden door that folds up vertically with glass panes. The door's strength is weak.

Photograph by Bussayamas Nandawan



43. The side view of the Phra Thinang Sivamok Pimann

Photograph by Bussayamas Nandawan

Era: Early Rattanakosin Period, built in 1782

Style: Built similarly to the Phra Thinang Song Peun at Ayudhya. Presently this building serves as the exhibition area of the History of Thailand. The gable ends of this historic building are special with their typical Wang Na unique style.

The existing condition

- A new small building is being constructed at the right side, behind the present building. The west side of this historic building is a walkway with rest rooms of the National Museum.



44. The interior view showing the original roof structure of the Phra Thinang Sivamok Pimann

Photograph by Bussayamas Nandawan

- The hip-shaped Roof is covered with clay tiles, there are three roof layers. The roof condition is fairly good, although fungi cover the clay tiles.
- Pediments are made of wood and decorated with gold leaves and glass mosaic. The pediment at the east depicts the Hindu God Narai seated on Garuda. It is encompassed

with the typical Thai motif called *Ka Nok*. The condition of both pediments is fairly good, but dusty. Some of the glass mosaic broke and disappeared. The stucco is deteriorated.

- The wall is a load-bearing wall. It is painted white. The whole wall is in a fairly good condition. There are some hairline cracks and the entire building is damp.



45. The Phra Thinang Sivamok Pimann: The recent function of this building is used as an exhibition space for a display called History of Thailand.

Photograph by Bussayamas Nandawan

3. The Tamnak Dang building or Red House⁸⁸



46. The Tamnak Dang building or Red House at National Museum, Bangkok, Thailand

Photographed by Bussayamas Nandawan

Era: Early Rattanakosin period, the exact period of construction is not known.

⁸⁸ History of Red House:

In 1782 AD which was the reign Rama I, he built the new palace at the east of Chao Phraya River, after finishing the construction in 1785 AD, he moved from the old palace in Thonburi to live the grand palace in the same year.

The Red House is finished during that time and King Rama I allowed his elder sister, Princess Srisudarak to live in this house. The red house is situated behind the Dusit Maha Prasat Hall and Phra Wimaan Rattaya Hall in the Grand Palace compound.

Since Princess Srisudarak was pass away in 1789 AD, her daughter Queen Srisuriyendra while holding the tile of Princess Boon Rod took procession of this red house to be her resident until moved to the old palace in Thonburi with her husband, High Prince Issarasoonthorn. After Prince Issarasoonthorn went to throne to be King Rama II in 1809, he moved to the Grand Palace with Queen Srisuriyendra, however there was no clear evidence to ensure that on her return to the Grand Palace, Queen Srisuriyendra back to stayed at this red house once again or not. Later in 1814 AD Queen Srisuriyendra and her son, Prince Chutamani moved to stay at the old palace at Thonburi again until she passed away. In the reign Rama III, there was the construction and restoration many buildings in the Grand Palace particularly the inner zone. So he commanded to tear down the red house and assembly it again at the Thonburi palace. The Red House was still situated at the Thonburi Palace until the reign King Rama IV, Prince Chutamani, his younger brother of King Rama IV, was nominated to be King Pinklao in 1851. King Pinklao lived at Wang Na. He ordered that the Red House be moved to Wang Na area.

After the death of King Pinklao, The Red House was abandoned until Queen Sri Saovarindara, Queen of king Rama V, visited Wang Na (at the time it was changed to be national museum already) she noticed the deterioration of the red house. Then she donated money for restoration and on completion she came to open the Red House in 9 September 1928 on her auspiciousness of her 66 th birthday anniversary.

Style: Traditional house built in Ayudhya Architectural style.

The Red House is a historic house situated at the back of the Phra Thinang Sivamok Pimann. Its history and architecture are considered to be important. The objects, which are exhibited, are mostly fine furniture and vessels. The red house is a rare and valuable part of our cultural heritage.



47. The Tamnak Dang building or Red House at National Museum, Bangkok, Thailand

Photographed by Bussayamas Nandawan

The Red House is a historic house situated at the back of Sivamokhaphimaan Hall. Its history and architecture is considered to be important. The objects, which exhibited mostly, are fine furniture and vessels. The red house is one of the valuable cultural heritages.

The existing condition

- There are quite a number of objects in this historic house. Its view is however, quite spoilt as to the right behind it is the wall of the Thammasat University equipped with many electronic devices. Moreover, the restroom of the museum is close to this historic house.



48. The wood pole is split.

Photograph by Bussayamas Nandawan

- The roof tiles are made from clay, black fungi cover them and some tiles are cracked.



49. The pediment is made from teak wood. It is painted but the colors have started fading.

Photograph by Bussayamas Nandawan

- The wooden walls are in a fairly good condition. Some are patched and/or repaired. Bird droppings can be found near the ceiling.



50. The patio is made from wood planks, the latter are in fairly good condition. The floor has wood stains caused by rainwater. Part of the patio area has fading colors due to the large number of visitors, frequently passing through. Deterioration is accelerated by the weather.

Photograph by Bussayamas Nandawan



51. Exterior window frames have deteriorated due to dampness and bird droppings.

The windows decayed after the paint peeled off.

Photograph by Bussayamas Nandawan

- The door is in a fairly good condition. The threshold is worn out as visitors regularly step on it.
- The interior of this historic house is in a fairly good condition, but there are many unclean areas. Bird droppings are visible at the corners of the rooms, walls and ceiling.
- The furniture in the house is in a fairly good condition though covered with dust.

4. The Mangkhala Phisek Pavilion



52. The Mangkhala Phisek Pavilion at National Museum, Bangkok Thailand

Photographed by Alisa Desha

Era: Rattanakosin Period, built during the reign of King Rama IV

Style: The building is constructed in a similar way to the Grand Palace buildings. The wooden building was erected on a high concrete base. This pavilion copies the architectural style of the Grand Palace as the standing of King Pinklao was at the same level in the monarchy as King Mongkut (Rama IV). King Mongkut ordered the construction of this pavilion, originally meant for King Pinklao to mount his horse.

The existing condition



53. The Mangkhala Phisek Pavilion

Photograph by Bussayamas Nandawan



54. The Mangkhala Phisek Pavilion

Photograph by Bussayamas Nandawan



55. The Mangkhala Phisek Pavilion

Photograph by Bussayamas Nandawan



56. The Mangkhala Phisek Pavilion

Photograph by Bussayamas Nandawan

5. The Mhu Phra Wimaan or living quarters



57. The Mhu Phra Wimaan or living quarters at National Museum, Bangkok, Thailand

Photographed by Bussayamas Nandawan



58. The Mhu Phra Wimaan or living quarters at National Museum, Bangkok, Thailand

Photographed by Bussayamas Nandawan

Era: Rattanakosin Period built during the reign of King Rama I.

Viceroy Maha Surasinghanaj ordered to build these living quarters only for him.

Style: the living quarters were built against one another and they were separated by shared narrow and deep verandahs.

Roof has two slopes. Building is a load-bearing wall. The arts and architecture is unique. Form and material of this building are under design of The Royal Hierarchy. Therefore these living quarters was not decorated at the top of the building. These living quarters consisted of 9 small rooms. They connect with the same roofs.

Doors and windows are enriched by splendid mother of pearl inlay work. It seems that the tradition for employing this type of multi-colored iridescent shell and other materials such as inlay during Ayudhya period, achieved its highest fruition at this time, and continued during the Early Rattanakosin period. Examples of this tradition are seen at the Grand Palace, Wat Phra Kaew and at various building and monasteries throughout the Thonburi/Bangkok area.



59. The Mhu Phra Wimaan or living quarters at National Museum, Bangkok, Thailand

Photographed by Bussayamas Nandawan



60. The Mhu Phra Wimaan or living quarters at National Museum, Bangkok, Thailand

Photographed by Bussayamas Nandawan



61. The Mhu Phra Wimaan or living quarters at National Museum, Bangkok, Thailand

Photographed by Bussayamas Nandawan



62. The Mhu Phra Wimaan or living quarters at National Museum, Bangkok Thailand

Photographed by Bussayamas Nandawan



63. The Mhu Phra Wimaan or living quarters at National Museum, Bangkok, Thailand

Photographed by Bussayamas Nandawan

1. Room: Phra Thinang Wasanta Wimaan

Style: It is two-storey building serving as the rainy season residence for Viceroy Maha Surasinghanaj.

At present, this room displays the ancient porcelain collections.

2. Room: Phra Thinang Wayu Sataan Amares

Style: It is two-storey building serving as the summer residence for Viceroy Maha Surasinghanaj.

At present, this room displays gold objects belonging to the viceroys.

3. Room: Phra Thinang Brahmes Thada

Style: the viceroy used this hall in summer. It is a two-storey building. At present, this room displays the ancient monk's accessories at the second floor. The ground floor displays the ancient textiles.

4. Room: Phra Thinang Pimook Montian

Style: This building oriented to Issaravinijaya Throne Hall. This building is connected to Phra Thinang Burapha Pimook and Phra Thinang Taksina Pimook.

At present, this room displays the ancient palanquins.

5. Room: Phra Thinang Burapha Pimook

Style: Building connected to Phra Thinang Pimook Montian and Phra Thinang Brahmes Thada.

At present, this room displays the ancient music instruments.

The existing conditions:

- The pediment depicts the divine or *Deva* encircled with ornamental motif or *Kanok*. It is decorated with glass mosaic on carved wood.
- The wall is of fairly good condition but there are some damaged areas and cracks aggravated by birds' droppings and dampness.

6. Room: Phra Thinang Taksina Pimook

At present, this room displays ancient puppets and play things.

Style: Building is a load-bearing wall type, connected to Phra Thinang Pimook Montian

- Roof: Hip roof covered with clay tiles, the condition seems to be good. There are some stains on the tiles.
- The pediment depicts the divine or *Deva* encircled with an ornamental motif or *Kanok*. The pediment is made of carved wood, which is decorated with glass mosaic and lacquered work.

The existing conditions:

Most glass mosaic and lacquered work has deteriorated by aging and weathering. The wall is in severe state as most of the wall area is damp and wall paint is peeling off while some cracks are found. Bay windows are covered with metal net to block the birds. The whole area is very dusty.

7. Room: Phra Thinang Patchima Pimook

At present, this room displays the mother of pearl objects.

Located behind Phra Thinang Wasanta Wimaan

The existing condition:

The wall is damp. The paint is bulged. There is a lot of dust and also damp stains on the wall.

8. Room: Phra Thinang Prisdang Bhimook

At present, this room displays the ancient weapons.

Located behind Phra Thinang Wayu Sataan Amares

The existing condition: The wall is damp.

9. Room: Phra Thinang Utara Bhimook

This building is behind Phra Thinang Brahmes Thada.

At present, this building serves as the display of ancient Sukhothai stone manuscript.

The existing conditions:

Roof and pediment: The hip roof is covered with clay tiles, the pediment depicts the divine holding a knife, sitting on the bench, enclosing with the ornamental motif or *Kanok Praew*. The pediment is decorated with glass mosaic. The condition seems to be in a good state, though there are signs of deterioration.

6. Phra Thinang Issaravinijaya



64. The photograph of Phra Thinang Issaravinijaya

Photograph by Bussayamas Nandawan

Era: Rattanakosin Period during the reign of king Rama III, functions as the throne hall for the third viceroy of Rattanakosin called Viceroy Maha Sakdiponlasep.

Style: The building has bay windows around the building.



65. The throne is for the viceroy

Photograph by Bussayamas Nandawan

The existing conditions:

- The roof is connected to the next buildings and is covered by clay tiles. The roof has two levels. The tiles seem to be in a good condition. There are dirty stains on the tiles.
Pediment: the pediment oriented to the east, depicts the divine or *deva* encompassed by ornamental motifs or *Kanok*. The pediment is carved wood decorated with colored glass mosaic and lacquer work. Most of the glass mosaic is deteriorated and no longer shines brightly.
- Door and window panels are also designed with gold and lacquer work or *Lai Rod Nam*. The panels are made of hard wood. The main entrance has three doors designed with the gold and lacquered work. They depict the image of a tiger attacking a cow while the other depicts ornamental motifs of flowers and birds. Mostly the condition is fairly good but there is some dirt from birds' droppings. The lacquer work is colorless.
The concrete floor and floor tiles are cracked and unclean. Moreover, termites are found at this area.

7. Kheng Nukij Rajaborihaan.



66. Photo of Kheng Nukij Rajaborihaan

Photograph by Bussayamas Nandawan

Era: During the reign of King Rama IV

Style: Chinese.

The Chinese building was built in the reign of King Rama IV; it is a one storey Chinese style house. Roof is covered with Chinese roof tiles. Pediments depict the *Pudtan* flower and pheasant.

The existing conditions:

- The roof tiles are covered with black stains that occurred from rain and dampness. Some parts seem to be in severe condition because there are some cracks. The pediments that depict the Chinese painting are peeling off and some of them are colorless.
- At the entrance, there is the accordion carved door and a painted Chinese vase. Its condition is only fair because some of the color is peeling and there is a lot of dust. Some parts are damaged and decayed by termites and dampness.
- There is one small door and one small window at the north. There are the ventilation windows along the south wall. There are mural paintings inside this building. There are Chinese characters explaining the historical record of *Hong Sin*. There is the marble sign carved with the golden words “Kheng Nukij Rajaborihaan”

- Most of the Chinese painting is damaged by dampness and also with aging of the materials. From observation, there are a lot of concrete patches that may have been caused by the leaking roof. Some parts of the wall were cracked but most of them are decayed and suffered from dampness. Moreover, there is a lot of debris in this building.
- The exterior and the surroundings of the Chinese house should be better managed and preserved. It seems to be abandoned in spite of its location behind Phra Thinang Issares Rajanusorn.

8. Phra Thinang Issares Rajanusorn



67. The Photo of Phra Thinang Issares Rajanusorn

Photograph by Bussayamas Nandawan

Era: In the time of King Pinklao

Style: European Style

Current function of this building: Unaltered

Phra Thinang Issares Rajanusorn was built as the residence for His Majesty King Pinklao. The former name of this building is *Phra Thinang Wongjandra*. The building is situated at the north of Wang Na. The building has two floors with patio. Interior decoration is western style. The building is currently near the spirit house on the artificial mountain, called “*Kao Mo*.”

The existing conditions

- The building is painted in white. There are two stories with stairs and two entrance doors on each side. There is a veranda on the upstairs with pillars engraved in the western style supporting it. The handrail design is sparse ring and is like the Kaew Shing Daung ornamental motif.
- Roof: It is a hip roof (there is no record of the original tiles). The south and the east pediments depict the stucco of the King Pinklao emblem, the hair pin placed on the royal bowl entwined with the floral arrangement. The stucco is in good condition but has some stain spots.
- Windows: The windows are made of wood painted yellow and the window frames are painted red. The windows are rectangular, aligned in a semicircular form on the outside; this part has many stains while the paint layers are peeling off.
Doors: The doors are made of wood in accordion style, painted in red and yellow.
- On the ground floor, there are glass rectangular windowpanes that are dirty but unseen. The wall is in severe condition because the wall plaster is covered with the black stains and some fungus. Furthermore, the painted layer has peeled off.

The wooden doors also painted in red and yellow, their condition seems to be good but the doorframes and the lintels are damaged from dampness. The wall is in a severe condition; there are patches of dampness at the ground level (around 2 ft high from the ground). Some parts of Phra Thinang Issares Rajanusorn are neglected by the museum officers, there is some debris on the floor and have no any maintenance. The north side is connected to another building; there is a lot of debris and some garbage.

- The east façade is connected to the museum restaurant, this may cause dampness because there is a wash area nearby this building and near the wall plaster is damaged.

1.2 The current condition of ancient buildings under the supervision of the Bunditpanasilpa Institute⁸⁹

Wat Bavornsataan Suthawas



68. Photo of Wat Bavornsataan Suthawas

Photograph by Bussayamas Nandawan

Era: Early Rattanakosin In the reign of King Rama III or King Phra Nangklao. Viceroy Maha Sakdiponlasep, the viceroy of King Rama III built this monastery but passed away before it was completed the construction was continued to the time of King Rama V.

Style: Typical Style of Wang Na

⁸⁹ Bunditpanasilpa Institute is an educational institution with a primary focus on the visual arts, Thai traditional classical dance and music.

The existing conditions



69. Wat Bavornsataan Suthawas

It is a hip roof covered with orange and green color clay tiles. The roof has two layers. The monastery is quite tall in structure. The condition seems to be good with some black stains. The roof structure is supported by Kor Shong elements. These components are made of wood and decorated with stucco. The stuccowork molds the flower arrangements around the bottom of the roof. The floral style resembles European ribbon. At some spots the stucco condition is broken and missing.

Photograph by Bussayamas Nandawan.



70. Pediment of Wat Bavornsataan Suthawas

Photograph by Bussayamas Nandawan

- Pediment: The pediment is made from wood. Its east and west side depict the Thai flower motif. The overall condition of the pediment and carved pattern is fairly good. The decorative colored glass mosaic and gold leaves are ageing. Some mosaics are broken others disappeared. The whole pediment is dusty.



71. It is very dirty on the patio. Objects unrelated to the monastery are placed close to the walls.



72. The wall is painted white. The whole wall is in a good condition. But there are some hairline cracks and the entire building is damp.

These photographs by Bussayamas Nandawan



73. Wat Bavornsataan Suthawas

Garbage is disorganized. Cleaning seems irregular. Nobody seems concerned about keeping the place clean. Photographs by Bussayamas Nandawan



74. The door panels made of hard wood decorated with gold leaf and black lacquer on carved wood with ornamental motif or Kaew Shing Daun (pattern of composite circles of glass)



75. This monastery has three large doors with each direction north, south, east, west respectively.

Photographs by Bussayamas Nandawan

- The doors components are made of wood and decorated with stucco. The stucco work molds the flower arrangements around the frame of the doors. The stucco work has Chinese ceramic and color glass mosaic in floral designs. In some areas, the stucco is broken and/or missing. Doorframes are spilt. The termite attacked the wood. Damp is widespread. The conditions are severe because the ornamentation has deteriorated. Examples are the glass mosaic and Chinese ceramic which are almost entirely missing on the Kaew Shing Daung carved wood panel of this monastery. They are covered with the gold leaf on top. Most of the lacquer works are deteriorated.



76. The condition of the threshold; the wooden thresholds are decayed and rotted.

The painted layers are peeled off.

Photograph by Bussayamas Nandawan.

- This monastery has eight windows. The style and material are matching with the doors but of smaller size. They are in a severe condition. They are contaminated and damaged by weathering and neglect.



77. The condition of the window frame made of the stucco decorated with porcelain and glass mosaic: The glass inlay are cracked and lost and the lacquer work severely damaged.

Photograph by Bussayamas Nandawan.



78. The upper basement of this monastery is very dirty because of dirty water.

Photograph by Bussayamas Nandawan



(1)



(2)

79. These are two photos to show how conditions of floor tiles are stained black.

The building base is now spilt and broken.

Photographs by Bussayamas Nandawan



80. The platform of this monastery has small five steps. There are widespread black stains. The plants are glowing between the seams. The tiles are cracked. The floor has sunk.

Photograph by Bussayamas Nandawan



81. There some damage on the wooden materials. The doors and window have split and are scratched. The gold parts are rubbed. Photographs by Bussayamas Nandawan



82. The electronic wires are in a mess. They jump from one window to another window. Vulgar nails were put on the wooden window panels for hanging the wires.

Photograph by Bussayamas Nandawan

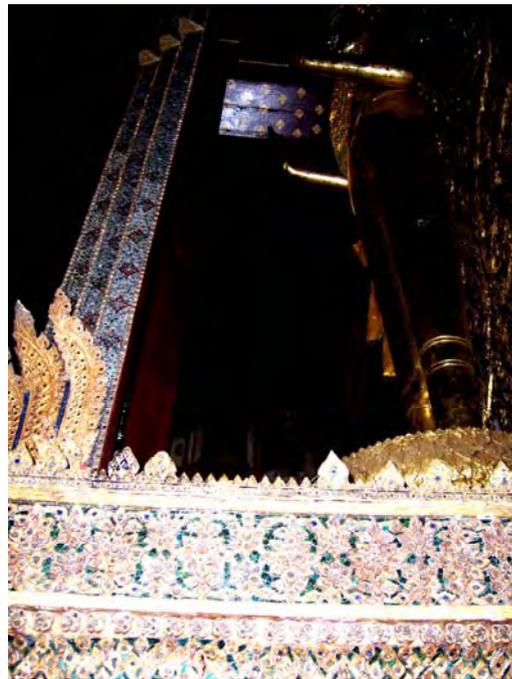
- Mural painting: The mural painting and walls are in a severe condition. Windows and doors are split. Even though most of the mural and painting were restored the mural paintings are still damp due to exposure to heavy rain and high humidity in the air. The paint flakes are found around the inner wall and windows and doors. Fungal structures were observed on the surface of the mural.



83. Decay on the mural painted surface. Photographs by Bussayamas Nandawan



84. Religious articles were place on the window. Photograph by Bussayamas Nandawan



85. The wooden ornamental decorations of the Standing Buddha statue are broken.

Photograph by Bussayamas Nandawan



86. The deterioration is exasperated by ill use. Some people use the corners of the monastery or close to the window frames as his or her storage. There are many motorbikes parked close to the monastery.

Photograph by Bussayamas Nandawan

1.3 The current condition of ancient wall under the supervision of Thammasat University.

Wang Na Wall



87. Photograph by Ms. Alisa Decha

Era: Early Rattanakosin

Style: Ayudhya style, with Bai Sema on top of a brick wall. At the time it was built, it was meant to be the boundary of Wang Na. Now it is used as the walls of Thammasat University.

The existing condition



88. Photograph by Ms. Alisa Decha

This wall is made from bricks and ancient lime cement. As this was the wall of Wang Na, the Bai Sema, placed at the top of the wall, reflects the signature style of this palace. The overall condition of the wall seems to be good, especially where the wall faces the Phra Chan Road. Some parts of the wall are deteriorating and incline toward the Thammasat University. When the white plaster of the wall started cracking, it was covered with new paint. However, there are now some painted layers that have cracked and peeled off again, while some have been covered and repaired with wall putty.



89. Overall the wall is now covered with black stains caused by dampness. Moreover, birds' droppings also affect its original identity and condition.

Photograph by Ms. Alisa Decha.



Bai Sema is loose.

90. Wall of Wang Na, now enclosing Thammasat.

Photograph by Ms. Alisa Decha

Some loose Bai Sema broke off and disappeared as no cleaning is done nor is a wall conservation plan at hand. The inner wall is now part of the Thammasat University and most parts of it cannot be observed as these are now connected to the Faculty of Commerce and Accountancy, the canteen and the Faculty of Social Administration. Some parts of the wall are affected by dampness too, particularly behind the canteen, as this is an area for washing and cleaning.



91. Main Gate of old wall of Wang Na, now enclosing Thammasat.

Photograph by Ms. Alisa Decha

The main gate was reconstructed to show off its original style. Its condition is good but there is a lack of maintenance such as at the top of the ancient gate, where weed roots grew through the wood and which, at a later stage, may affect the entire wooden gate.

Conclusion

After this survey into the present condition of the ancient buildings of Wang Na site it is possible to ascertain the main causes of deterioration and then to propose possible methods of preservation.

Analysis of deterioration of buildings:

In Bangkok, temperature ranges between 22^o and 38^o C. Humidity is high, almost throughout the year, and the rainfall fairly high during the summer months. Influence of heat in the mechanical decay of building material, mainly because of expansion and contraction of minerals, is well known. The decay due to heat is greatly increased by high humidity. Nearly 90 per cent of the total annual rainfall takes place during the six months of the monsoon; other months are comparatively dry. Continuous change in the temperature and weather conditions have the effect of straining the outer layer of the building materials which start showing signs of cracks and exfoliation.

The main sources of moisture in building are:

1. Water rising from the ground by capillary action
2. Condensation from the atmosphere

The main causes of damage to monuments found in buildings of Wang Na are summarized by:

1. Humidity
2. Contaminated or unclean air
3. Neglect
4. Pests, fungi, bacteria, wood beetles, ants, rats and birds

Conclusions regarding the deterioration at Wang Na site:

1. Air pollutions can be ruled out in most cases, thus leaving temperature and moisture as principle causes of deterioration of cultural property.
2. Special precautions should be taken against growths and damage caused by microorganisms and insects. Proper air circulation and ventilation combined with refrigerating “units” are simple safeguards against condensation.
3. All these actions are very simple indeed and can be carried out by a technician, preferably having training in conservation of buildings and ancient objects. Such a person should have knowledge of local climatic conditions to apply them to the various sections of buildings.
4. As a maintenance plan, fungicides and insecticides will be applied to wooden building material regularly.
5. All metal parts should be coated with a protective insecticidal and fungicidal varnish.
6. Walls and roofs should be insulated.
7. It is important that objects should not be placed in direct contact with external walls or near to a source of heat.

Chapter 6

Details of Building's Interior Spaces

The architectural style of Wang Na follows royal requirements, that is the buildings were built in accordance with rank and honour and thus not at the same level as buildings designated for the King. Even though the entire functions of these buildings were similar, the details were not. First, the roof tiles of Wang Na were made from natural colour terracotta tiles. Second, the top of the building (*Yod Prasart*) was not decorated. There was however an exception in the case of King Pinklao, where the rank was equal to that of King Mongkut. Therefore, Phra Thinang Kochakam Prawej (built at the time of King Pinklao) had some decoration on the top of the Yod Prasart. The architectural style of Phra Thinang Kochakam is similar that of Phra Thinang Arporn Pimok at the Grand Palace.

The architectural style of Wang Na had an impact on other temples and buildings, which the Viceroy commanded to be built or repaired. In this way an art style, applied to arts and architecture, emerged and became eventually known as *Sakul Chang Wang Na or Wang Na School*. Examples are Wat Mahatat Yuwaraj Rangsarit and Wat Chanasonkham. Evidence to this new art style is the setting of *Bai Sema* or the boundary marker of the assembly hall or Ubosot, attached to the outer walls of the Ubosot.

The interior of The Phutthaisawan Chapel

The floor of the hall measures 32.70 x 10.10 meters. The walls are entirely covered with mural paintings.



92. Statue of Buddha; Phra Buddha Sihing.

Source: Mural Paintings of Thailand Series, Phutthaisawan Hall

The Phra Buddha Sihing image is the presiding Buddha image in the Phutthaisawan Chapel and is seated on a Mandala-shaped throne. It is believed that this particular image came from Lanka and later became the prototype of the Sukhothai Buddha images. The Phra Buddha Sihing image is made of bronze and is covered with gold leaf. The image is in the gesture of meditation and in the posture of folded legs. A double row of upright lotus petals is seen on the base. On either side of the platform on which the throne of the Phra Buddha Sihing image is placed there are two standing images of the crowned Buddha. They are in the gesture of *calming the ocean* with both hands. These images are surmounted with five-tiered umbrellas decorated with glass mosaic and are thought to have been made for Prince Kromluang Issaranurak.

The standing statue on the proper right is covered with gold. The robe and halo are decorated in the same way as the one on the left. The plinth and canopy of this image are also

almost identical to those of its counterparts. This image is 1.70 meters high. These two statues are probably made for Krom Laung Phithakmontri and Krom Laung Issaranurak respectively. It is not known where these statues come from but they have been preserved here since the time of King Pinklao.



93. Three book cabinets.

Photograph by Bussayamas Nandawan

Three book cabinets

There are three book cabinets for keeping manuscripts. They are decorated with gold and lacquer decoration using *lai rot nam*⁹⁰ technique, which is usually chosen for the inner surfaces of door and window panels. Some of the most valuable objects in the book cabinet are historical manuscripts.⁹¹

The cabinets are used as room dividers and they are placed behind the group of Buddha images towards the back of the hall. Maha Sakdiponlasep had these cabinets made to hold the Tripitaka and he himself selected the artists. The name of one of the artists appears as Chao Krom On.

⁹⁰ Gold and lacquer decoration (*lai rot nam*) begins with giving a wooden panel three coats of black lacquer. After the drawing has been traced, a yellow gummy paint is applied on the sections which are to remain black. A thin coat of lacquer is then painted on the surface. When this is semi dry, gold-leaf is applied over the entire panel. After twenty hours the wood is washed with water which detaches the gold-leaf laid on the gummy paint. The finished design is neat in every detail.

⁹¹ From Introduction to the Thai temple, K.I. Matics, White Lotus publisher wrote "The chapel contains three cabinets, decorated with Gold and black lacquer and painted. They depicted episodes from the Ramayana, The Thai version of the Indian epic.

Doors and windows are often enriched with exquisite mother-of-pearl inlay work. It seems that the tradition for employing this type of multi-colored iridescent shell and other materials as inlay was established during the Ayutthaya period; this technology achieved its highest fruition at this time, and continued during the Early Rattanakosin period. An example of this tradition is seen at the Grand Palace, Wat Phra Kaew, at Wang Na and at various building and monasteries throughout the Thonburi-Bangkok – area. Such panels were painstakingly inlaid with tiny sections of shell from the Gulf of Thailand and the inlay designs are far more polychromatic than analogous mother of pearl designs made either in China or in the Philippines.

Gold and lacquer decoration (*lai rot nam*) begins with giving a wooden panel three coats of black lacquer. After the drawing has been traced, a yellow gummy paint is applied on the sections which are to remain black. A thin coat of lacquer is then painted on the surface. When this is semi dry, gold-leaf is applied over the entire panel. After twenty hours the wood is washed with water which detaches the gold-leaf laid on the gummy paint. The finished design is neat in every detail.

The mural paintings in the Phutthaisawan Chapel



94. Mural paintings in Phutthaisawan Chapel.

Photograph by Bussayamas Nandawan

The mural paintings in this Chapel are believed to be oldest and undisputedly the most valuable ones executed during the Rattanakosin period. There is an important antique that represents the masterful workmanship of artists at that time. Maha Surasinghanaj ordered prominent artists of the time to start working on the paintings around 1796.

The mural has been partly retouched at a later time but it still retains its original artistic value. In 1983 it was noted that the condition of the murals had regrettably deteriorated; the colors were flaking off in some areas and faded in others. The cover part of some of the walls has cracked on the surface and white cement has been applied to fill the cracks in such a way that some of the paintings have been covered. The inevitable result has been the destruction of invaluable elements of the cultural heritage of all Thais.



95. Above and below. Details of the mural painting.

Photo from *Mural Painting of Thailand Series, Phutthaisawan Hall*



96. Mural painting at Phutthaisawan Chapel.

Photograph by Bussayamas Nandawan

In Thailand, depictions of the *Thosachat* or ten last lives of Lord Buddha are found at Phutthaisawan Chapel and at the following monasteries:

- Wat Phutthaisawan in Ayutthaya , the upper part of the south wall.
- Wat Chompu Wek in Nonthaburi province.
- Wat Dusittaram in Thonburi.
- Wat Suthat, Bangkok⁹²

As mentioned earlier, the mural painting during the first reign of Rattanakosin Era had characteristics similar to those of the Ayudhya period. Some of the artists were trained in the late Ayudhya style. Mural painting at Phutthaisawan Chapel changed the intention of their work by including a richer coloration and applying gold-leaf ornamentation in a way, which differed greatly from the earlier murals. For example the compositional elements of the murals became more complex in their elaborate architecture and the naturalistic expression became more graceful or refined.

Traditions of Thai Mural Painting

Origin, Purpose, and Themes

Ancient Hindu and Buddhist tradition embodied in the religious architecture and external decoration of Thai temples are also elaborated inside temple buildings in the colorful painting that embellish the walls. Painted for the most part by anonymous artists, temple murals are not merely decorative but serve a didactic purpose: to make Theravada Buddhist scriptures in the Pali language accessible to all through graphic visual narrative.

⁹² Boisselier. La Peinture, p 195-211; Dorothy H.Fickle, the Life of the Buddha Murals in the Phutthaisawan Chapel (Bangkok: Fine Arts Department, 1972, p 1-4).

According to Thai Temple Painting (Bangkok: USIS, 1957). Note, Waldemar C. Sailer, Illustrations from Thai Literature found on the door and window castings of the consecrated ordination hall of Wat Suthat Ratchaworamahawihan, Bangkok, Thailand (On the occasion of the Royal Ceremony at Cremation of Somdet Pra Buddhacarya at Wat Thepsirinthrowat, 17 December 1983, Bangkok, 1983).

Phutthaisawan Chapel mural paintings are depicted episodes from the Life of the Buddha. Interpretation of the manuscript written in Pali language had naturally been confined to monastically educated elite. However, the concepts outlined in the manuscripts provided the basis of mural subject matter on a grand scale, expanding both the scope and the audience.

As murals were intended for the wider audience, to ensure easy recognition of episodes and to facilitate understanding of the underlying lessons, artists followed certain conventions in terms of layout of murals within the building.

General layout of mural painting

These conventions of repetition have been relatively consistent as is evident from some of the earliest surviving mural fragments found at Ayudhya. Additionally content disposition of the murals within a building suggests ritual significance, following as it does the traditional directions of alignment of the assembly hall. Thus people seated on the floor of an assembly hall worshipping the Buddha, can be appreciated at a glance with some of the major themes of the teachings.

Characteristics of mural painting

A characteristic of most Thai mural painting tradition is the small, almost miniature size of the individual scene. In the best of traditions, whether Ayutthaya or Rattanakosin, the landscape, architecture and figures are depicted in a highly stylized two-dimensional “Flat” form. Every scene in a given panel or area has the same size value, as there is no diminution of size to suggest distance between scenes.

The planes of the wall itself are horizontal and vertical, the panoramic activities and scenes are painted in such a manner that from the viewer’s perspective all areas may be read, whether they are painted high above, near the ceiling, or low down.

Such episodes and scenes, through occurring at different points in time, are depicted simultaneously, being separated by landscape or architecture or as an eye-catching zigzag design.

Knowledge of the contents and chronology of events of the traditional subject matter of painting is essential to “unlock” the significance of their scenes.

The main characters portrayed in these episodes are rendered in a highly stylized manner, “frozen” in graceful attitudes and gestures. No matter how dramatic an episode, the faces of celestial and noble beings remain always serene.

Emotions are expressed by hand gestures; for example, the arm delicately raised with the hand touching the forehead signifies lamentation or weeping. Graceful inclination of the body, frequently in a S-shape curve or semi-profile, with the face in full profile, is also characteristic. Movement, particularly of flying celestial beings, is suggested by their anatomy and visually graceful disposition of limbs.

Evolution of Thai murals



97. The mural painting at Ajanta Cave in India

Source: www.indianpath.org

In the above mural painting at Ajanta Cave in India, many of the painting traditions found in the Thai murals can be observed. Researchers believe that more than 2,000 years ago, these paintings began as an enclave for Buddhist monks and scholars who sought shelter in the natural caverns during the monsoon rains and began decorating the cave walls with religious motifs to ward of boredom during the season when they could not do much outside. Using wooden structures as models for their work, they developed the caves and subsequently expanded to a permanent complex that might have housed around 200 residents.

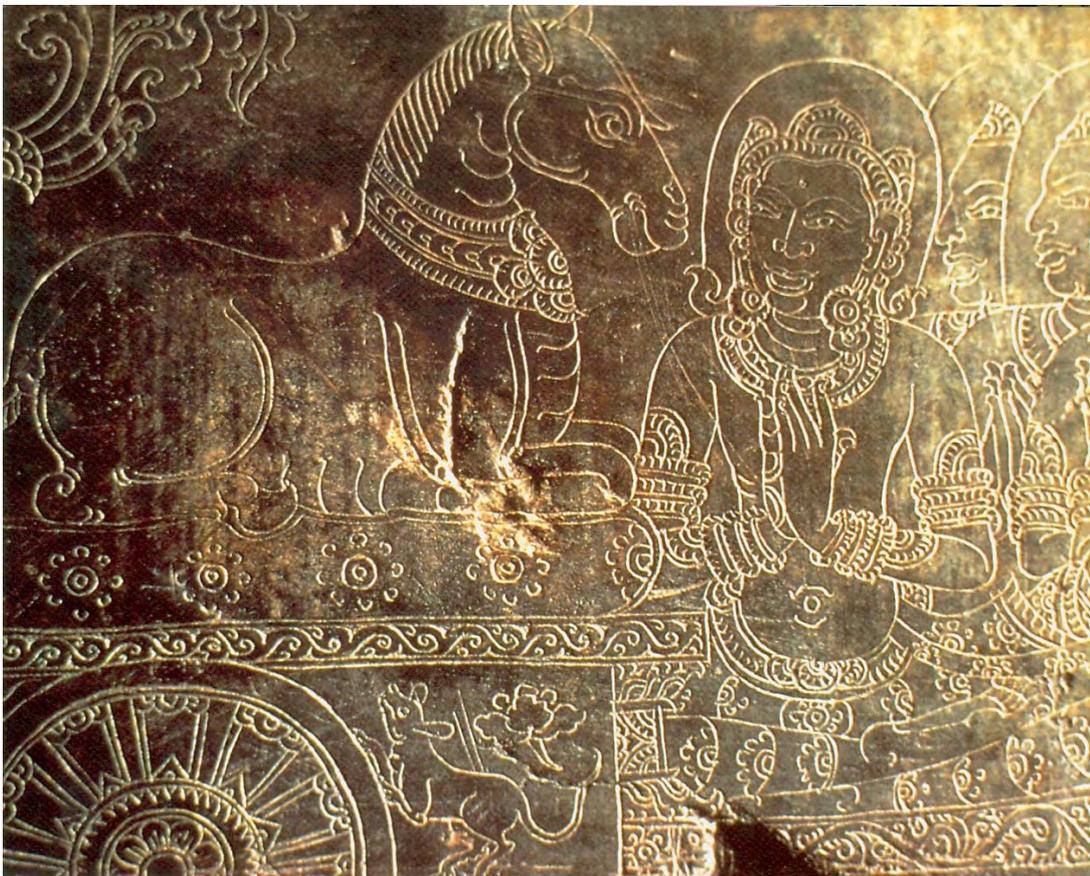


98. The painting: Bodhisattva Padmapani holding the lotus.

From Ajanta, cave in India, 6th-7th century

Source: *Writings from Asia Treasure, Myths and Traditions*. National Museum Volunteer. 1996

Evidence of painting traditions earlier than those of Ayudhya is scarce. Although rock paintings and designs on burial utensils and pots dating from the prehistoric period have survived, of the much later “Indianized” civilizations only elusive suggestions of graphic expression, using techniques of incising (“drawing” as against “painting” or coloring) date from the pre-Thai kingdom of Dvaravati (seventh-eleventh century AD), and the Thai kingdom of Sukhothai (late thirteenth-mid fifteen century AD). Surviving in carved and incised stone, as well as bronze, are scenes that indicate a bold sense of line and composition.



99. Engraving of a Jataka story on schist slab, 14th century. Found at Wat Sri Chum, Sukhothai, Thailand. 170 cm x 32 cm National Museum, Bangkok

Source: Writings from Asia treasure, myths and traditions. National Museum Volunteer. 1996

General characteristic of Ayudhya period mural paintings



100. The mural painting from the church of Wat Rajaburana in Ayudhya

Source: www.umong.thaiis.com/umongpainting

That relatively few murals of considerable antiquity have survived intact is due not only to inclement elements but also to man's inhumanity to man. The destruction of the 400 year-old civilization of Ayudhya in 1767 was devastating, effectively depriving the Thai people of much of our material history, recorded in the seeming 'permanence' of brick and stone and in the more ephemeral paper of scriptures. Thus of the written word within Ayutthaya itself, there remain very few murals or scriptures that can be confidently dated before 1767 (the time of destruction). Since

numerous restorations have taken place since then, however, remnants of fine mural paintings are evident in provincial temples that escaped the destruction of the metropolis. Characteristics of these are the pale background and predominantly pastel colors. However, this characteristic is for most part the result of time, not intent.

The pale background was, in fact, originally white, their present muted quality being the result of the dust and dirt of centuries. Figures, landscape, and architectural forms in the murals were outlined in red or black, highlighting them against the pale (white) backgrounds. This emphasis on contour lines and contacts with backgrounds, linear as against painterly quality, is a feature of Ayudhya period painting.

Bangkok or Rattanakosin – period mural paintings

Murals painted after the foundation of Bangkok in 1782 continue thematic traditions but differ from the surviving examples of the Ayudhya period. Characteristic of the Bangkok period is the copious use of gold and vivid colors of an extensive palette frequently highlighted by dark backgrounds. This development evolved in the course of the massive building program inaugurated by the Chakri kings to establish the new kingdom. Over succeeding decades, dozens of temples were restored or newly built, their increasingly sumptuous appearance, externally as well as internally, reflecting the dynamic growth of the new capital.

The newly established Chakri dynasty appreciated the importance of linking the new kingdom with the old through art and ritual. Thus the construction of Wat Phra Sri Ratanasasdam and the palace area adjacent to it followed Ayutthaya traditions. Wang Na is still in use today as part of the National Museum, Bangkok. The Phutthaisawan Chapel was the private chapel of the viceroy. This royal chapel is open to the public and enshrines the second most venerated image in the kingdom, the Phra Buddha Sihing.

The mural painting in The Phutthaisawan Chapel shows abundant use of gold and the proliferation of vivid colors superimposed on dark background areas, a characteristic of much of

Bangkok or Rattanakosin period painting. These dark backgrounds are not uniform but vary in gradation of tone, thus conveying an illusion of depth, closer inspection of the murals within the chapel reveals earlier traditions developed and extended. Here and there, important scenes are separated or emphasized by their dramatically red backgrounds, limited and outlined by the zigzagging device. Elsewhere, scenes and episodes are separated in time and space by intricately delineated architecture, as well as landscapes of trees and twisted rock formations. The latter are rendered in a primarily Chinese style.

The subject matter of the paintings in the chapel is confined to the Life of the Buddha, depicted in the bays between the windows on the lateral walls, as well as the east and west walls. Not typical is the placement of the scene of Enlightenment of the Buddha or, victory over Mara, in a bay on the northern wall instead of the usual eastern or entrance wall.

Though parts of the murals in the Phutthaisawan Chapel have been restored at various times, there are many episodes that are outstanding in their draughtsman. For example, depicted at the rear west wall, in palaces and procession, are scenes in the lives of the parents to be of the Buddha. The most important scene delineated in turn by landscape, the red zigzag and finally the multiple roofs of a great palace, depicts the wedding of the parent of the Buddha, King Sudhodana and Queen Mahamaya. A *Bai Sri* or ceremonial vessel at the center of the composition separates the figures of the bridal pair, the king and queen. Slightly below them are registers of attendant guests. The regal symmetry of the scene is enhanced by zigzag-framed screens decorated with intricate floral designs, reminiscent of the falling flower motifs of the Ayudhya period. The potential monotony of all the formally aligned figures is relieved by their vitality and individuality. While most turn toward the central royal figures, here and there others turn towards their neighbors in smiling conversation. The musicians at the lower edge of the composition are particularly lively.

Painting at the Phutthaisawan Chapel shows the characteristic of Bangkok period painting in that busy crowd scenes enliven the formality of the central episode. The richness of the evolving tradition of Rattanakosin period painting is reflected by their attention to details,

harmonious grouping of scenes and excellent of observation of both high and low ranking characters.

Analysis of the themes of the mural painting at Phutthaisawan Chapel

The tempera mural painting did represent an attitude toward art, which can best be interpreted in 5 ways:

1. The superb arts of the Ayudhya Era remained overwhelmingly religious in artist element. Maha Surasinghanaj love for classical arts as a patron was reflected in the depiction of the paintings he ordered for his chapel. Painting subjects were restricted to the life story of Lord Buddha. Even Rattanakosin painters who were familiar with Ayudhya style, but painting at Phutthaisawan Chapel, used darker, brighter color background and with shiny gold leaf decoration and bright gold for the divine's clothes to emphasize his goodness.
2. The human figures are flat and unreal. Buildings are symbolic objects, not places to live in. The sizes of windows are out of proportion. The human figures are not fixed proportionally to the buildings or rooms.
3. It is impossible to look at figures in the painting and imagine what the characters are thinking or what they are about to say. It looks like they are hiding the meaning.
4. The fascination with the use of gold leaf resulted in its use to distinguish important people and divine beings. The bright reflections from gold make them stand out from other ordinary men and women. The painters put gold leaf for special emphasis of line and form. The most skilled painters spent their time only on renderings of the divine beings.
5. The most important person is always set in the middle zone of the landscape or building and is surrounded by other people. Every person who encircles the Lord Buddha will turn his or her heads to watch the Lord Buddha and hope for a sign to Nirvana.

Conclusion of analyzing paintings of Phutthaisawan Chapel

The painting all show:

1. The spiritual aspect
2. The paintings do show a revolution in the use of color
3. Proportion and measurements are not important to Thai traditional painters.
They do not think about perspective
4. The paintings could be called a pictorial encyclopedia of human behavior in that they display the good characteristics of Lord Buddha as well as man's great achievements during the life of the Buddha.

The Arrangement of the Mural Painting

The mural is divided into two main parts, upper and lower, with the top level of the doors and windows serving as the dividing line. The celestial assembly is painted in the upper part. Narrow strips in which stylized floral and vegetal motifs alternate representing the different layers of heaven.

The lowest level depicts *Deva* or angel and *Yaksa* or Giant and mythical animals, one after another, against a red background. This level represents the lowest heaven of the celestial world. Chutamani chedi are shown just above the central door panels at both entrances. Two Brahmans in the gesture of adoration flank the ones above the front door of the chapel, while two Sakkas or Indra flank the one at the rear.

The background color of the second level is dark color. It is thought that it was retouched at a later time because in some parts a dark brown can be detected which is presumably original. The faces of the *Deva*, or the celestial beings depicted in this register are alternately shown frontally and profiled.



101. Picture shows the image of Deva on second level. Illustration drawn by Ms. Kiriya Chayakul

In the third level, the color of the background is red, otherwise it is similar to the registers immediately below, with the Deva showing their faces alternately frontally and profiled.

In The fourth level is the highest level. It shows images of Brahman portrayed against a dark background like that of the second level.

The celestial assembly in this chapel is almost identical with that depicted in other monasteries. The celestial beings are in the gesture of adoration, apparently paying homage to the presiding of the Lord Buddha, or as if they had come to listen to the teaching of the Lord Buddha, who is symbolized by the main image in the Chapel.

Rishi (hermits) and *Vidhadhara* (scholars) are depicted flying above the celestial assembly. They are holding the lotus in their hands with the palms placed together in the gesture of paying homage to the Lord Buddha. They are divided from the layer of the celestial Assembly by horizontal zigzag lines.

The lower section of the murals, depict scenes from the life story of the Lord Buddha, from the version popularly called Phatom Somphothikhatha by the Thais. This particular version

of the life story of the Lord Buddha started with the marriage of Prince Sudhodana and Princess Sririmahamaya. The first episode is painted on the bay of the wall between the main door and the door to the north at the back of the hall.



102. Before conservation:

This mural painting of the first bay depicts Prince Sudhodana seated on the right of the Bai Sri, the ceremonial vessel always present at auspicious occasions, Princess Sririmahamaya is on its left.

Source: *Mural Paintings of Thailand Series, Phutthaisawan Hall*



103. After conservation

Photo by Bussayamas Nandawan, March 2008

Conservation of mural painting at Phutthaisawan Chapel

The mural has been repaired several times. Recent retouching can be seen on in many areas of the mural. Judging from the technique and workmanship they probably were done in the time of King Rama IV. Some westerners in the soldier uniform are also added in the north wall mural.

The conservation efforts carried out under the supervision of the Fine Art Department are the following:

1957: The three pairs of door-panels in front door are newly gold-black lacquered and gilded.

1969: The outer surface of the window panels was all newly decorated with motifs of gold and silver trees. The window frames were also mended by Mr. Avuth

Yuwaphukkha and Mr. Amphan Sunthonphithak. The window panels were repaired. The figures of door guardians are partly repainted with the traditional type of pigments.

1971: Some areas of the bays on the south wall were repaired.

1973: The south and the north walls were repainted.

1982: The Fine Arts Department conducted large-scale repair of the mural paintings in preparation for the celebration the year of the Rattanakosin Bicentennial⁹³.

When comparing the paintings on the southern wall to those on the northern wall, which were retouched during the time of King Rama IV, the differences are apparent:

1. The paintings completed during this reign show an interest in perspective. Dark colors were used much more than in previous times.
2. The zigzag lines are not well used and the human figures are not depicted as dramatically as before. Eventually the murals became less and less traditional and less classical. On the other hand, the paintings became more realistic than stylized.

Because the painters in the time of King Rama IV did not yet truly understand perspective, the structures they painted seemed to be falling apart. Moreover the costumes and the style of the architecture were transmuted into attempts at modern rendering of western styles. The costumes especially were represented in a different manner from the traditional style and sometimes are not entirely correct or do not coincide with the natural context.

Advantages of the mural conservation

1. The Department of Fine Arts staff, mural painters and conservation students are theoretically eligible for advanced conservation training abroad.
2. Due to their cultural background, many staff members are naturally skilled in this particular type of painting.
3. Students accept foreign academic knowledge.

⁹³ Phuthaisawan Chapel, mural painting of Thailand series, Muang Boran Publishing House 1983, p.31.

4. Traditional painters have a good name in Thai society.

Disadvantages of mural conservation

1. The number of staff of the conservation team is too limited.
2. The National Museum, Bangkok does not have the authority to increase the number of permanent staff members and inspection team.
3. A limited department budget and staff reduces the number and quality of on-site training opportunities.
4. The status of many conservation painters appears to be, as artisans rather than trained professionals who are being employed.
5. Government funds for mural conservation training through fellowships abroad are not available.
6. The budgets for hiring assistants to the mural painters are not available.
7. Although it appears that a high rate of retouch work on the murals has been undertaken, (on an almost yearly basis) the deterioration seems to be moving at a faster pace. The simple solution would be to have large numbers of students receiving observation and conservation training on site.
8. The style of some replacement work incorporates numerous modern elements and the sizes of lines are without any attempt to accurately mimic the original painting.

Recommendation for repairing the mural painting at Phutthaisawan Chapel

There are clearly some problems in the repairing of the original surface of the mural painting at Phutthaisawan Chapel. In tradition painting, lines are the main element used in efforts to show the meaning of the image and the best skill of the painter.

Lines include draft lines, final lines, decorative lines and others devised according to their respective functions with includes; brush lines, hard lines, floral and leaf lines, broad-top and thin end lines and so on according to their shapes and brush movement. Different lines perform different duties. Therefore, the thickness of lines, the beginning and ending of the brush

stroke made by the mural painter should have the precision of experienced artisans and the highest level of skill be used for the best repair or conservation.

Connection of the Influence of Indian Art on the images of Wang Na

Raja Deekshithar⁹⁴ wrote in his study that:

The earliest textual reference to the sphinx of India is found in the Yajur Veda. The earliest known depictions in stone of sphinxes are found in central and north west India and date to the 1st century BC until the 2nd century AD. They are found among the decorations of Hindu, Buddhist and Jain shrines. And they show distinct Hellenistic influences especially in that they often have wings of the type typical of Greek sphinxes.

The earliest dated example of a sphinx in southern India is found in the sculpture of Mamalapuram. In the 6th and 7th century kings of the Pallavas dynasty employed artists who experimented in the vicinity of this ancient port with various architectural and sculptural forms.

The domination of the Pallavas was eclipsed in the 9th century by the Chola kings, whose centre of power lay in the delta of the Kaveri River. The Cholas dominated southern India

⁹⁴ Raja Deekshithar was born in the community of hereditary priests of Shri Shiva Nataraja, the Dancing Lord. His family has been the guardians of the very ancient tradition preserved in the Shri Shiva Nataraja temple in Chidambaram, South India. His father was a great master and yogi. It is through him and at a very young age that knowledge of the Himalayan masters has been passed on. His first experience of the Spiritual Light came to him from a wandering yogi when he was eleven years old. Soon after that event, his life took a different turn. He developed a strong desire for formal western education, to learn English and speak to people from other parts of the world. Even in those early days the temple attracted Western visitors, and he wanted to communicate with them and broaden his outlook on the world. He finished his school education and went to university to study English Literature. He read Shakespeare and Milton. After attaining his degree he grew his hair long and followed in the footsteps of his father. He was initiated into the doctrine and tradition of the Shri Shiva Nataraja temple, and for over ten years he served Lord Shiva Nataraja and Mother Tillai Ambal (a form of the Goddess), and also the devotees, as a ritual performer. At some point foreign visitors and researchers started coming to him, to ask him about the temple and the tradition. With some he had long discussions, and he came to realize the gulf that yawns between contemporary Western thinking and the way our ancestors approached the world. The two world views are apparently entirely contradictory. But the spiritual energy of his father and his masters, together with the academic knowledge from the West granted him the ability to transcend the realm of paradox.

for over four centuries and made generous contributions towards the temples and towards the arts, generating some of the greatest treasures of human civilization. It was in the temples constructed and supported by them that we find many of the early sphinx sculptures.



104. The characteristics of the Purushamriga are lion bodies, with mane, and only a human face, with elongated ears.

Source: www.sphinxofindia.rajadeekshithar.com/art.html

In this period the main characteristics of the Purushamriga are lion bodies, with mane, and only a human face, with elongated ears. A few are depicted crouching, and in pairs. Most are striding or jumping. During this period we also see occasionally Purushamriga that have the lower body of a lion, with the upper body of a human being, and are shown half upright. Often they are engaged in the worship of the Shiva Linga with a lamp and a bell. Many of the depictions are narrative panels relating the story of the chase of Bhima by the Purushamriga from the Mahabharata.

After the fall of the Chola Dynasty various dynasties dominated different parts of Southern India, until the kings of Vijayanagara, modern Hampi in Karnataka, became the emperors of the South. In temple architecture of this period we also find many depictions of the Purushamriga. By this time most sculptures show the Indian sphinx with the lower body of a lion and the upper body of a human being. They are depicted as rishis or seers, as described in the Mahabharata story. With long matted hair knotted on top of their head. With moustaches, long beards and elongated ears with disks, they are shown worshipping the Shiva Linga.

The final phase of artistic development in southern India took place under the Nayakas. This was a dynasty that owed alliance to the emperors in Vijayanagara, but ruled from Madurai. Their sculptors developed the concept of the sphinx-human beast into a fully upright man with lion's hips, legs and claws. These imposing life-size sphinxes are also depicted as rishis.

In other parts of India we also find sphinxes depicted in the various local artistic idioms. In the temples of Orissa, for instance in Konarak, Banpur and Garudipancana, besides the half upright lion-human sphinxes, we find the sphinx also as an upright being with a human body, lions claws for legs, feet and hands, and human head with fangs. Here they are called Nara-virala. Among the sculpture of the terracotta temples of Bengal we find the half-upright human-beast sphinx-type. Temples built during the medieval period in central India have depictions of the sphinx with a lion body and a human head.

Sri Lanka is also included in the cultural sphere of the South Asian subcontinent. Sphinxes have been found among the artifacts included in the foundation deposits of Buddhist shrines and have been depicted on banners belonging to various religious institutions. They are also found among the sculptural art of the islands.

One final appearance of a Purushamriga worth mentioning is found in one of the courtyards of the 18th century Prasad Phra Thepidon palace at Wat Phra Kaew, Bangkok, Thailand

During the lectures at the auditorium of the National Museum, Bangkok on 24th February 2007, it was said that the image of animal deities in Thailand was received from ancient Indian art. There are also many types of images with animal bodies and human heads depicted using this symbolism as a vehicle for gods and goddess. These images of animal deities appear in art during the Ayutthaya period and Early Rattanakosin Era.



105. This photo shows the human head and deer body of the figures painted on a bookcase, in Ayudhya period. This bookcase is at National Museum, Bangkok

Photograph Bussayamas Nandawan



106. Illustration of the window drawn by Ms. Kiriya Chayakul



107. Picture of Asun Paksa, Bird body and Giant head depict at Phra Thinang Burapha Bhimook.

Source: From the lecture at the National Museum, Bangkok, 2007



108. Photo of Kinnorn and Kinnaree, with human head and bird body,
depict at Phra Thinang Wasanta Bhimaan.

Source: The lecture at The National Museum Bangkok, 2007

Chapter 7

Recommendation and Guidelines for the Conservation of Wang Na

The traditional western approach to conservation is given in the Venice Charter (1965) and the Burra Charter (1979: revised edition 1999). Both documents emphasize the authenticity of the original physical fabric and the need to add new materials in a way, which is clearly distinguishable. In Asia the issue of historic authenticity differs as the local community frequently repairs many traditional buildings on a cyclical basis, whether they are religious or secular. The Asian approach as described in the Nara document places more emphasis on maintaining the condition of the site, utilizing traditional building skills and renewing earlier fabric with new and similar materials using traditional methods.

The standards of conservation practiced for Wang Na need to address issues of identification, documentation, retention issues and authentic preservation of Thai heritage. It is important to articulate clearly what is the significant character of Wang Na, whether they are buildings or a precinct, and associate this information with future strategies that ensure the historical importance of the site will not be diminished by inappropriate alteration.

Guidelines for retaining the authenticity of places in the historic precinct of Wang Na

Step 1: Assess cultural significance

- Gather evidence as to why the site is important, including a clear and concise understanding of the historical development of the area.
- Use early photographs to compare current appearance with past appearance.
- Analyze evidence, prepare a detailed inventory and decide what is significant.

Step 2: Consult with the consensus

- The group will consult and reach an agreement. This is an essential part of any conservation process and can be undertaken in a variety of ways.
- Without consultation the community may not develop any feeling of ownership of the process, making implementation of proposals problematic.
- Develop leadership strategies and focus on the involvement of holders of cultural knowledge within the community.

Step 3: Develop conservation policies, goals & implementation strategies.

- Gather information; record the condition of the elements, which contribute to the character, study available resources, the legislative framework and the current and proposed land uses.
- Formulate consistent strategies, which clearly outline buildings and elements which can be retained and conserved.
- Outline a management strategy and planning framework, which can achieve conservation objectives.
- Conservation and reuse guidelines
- Funding sources and incentive programs
- Cultural tourism opportunities
- Interpretation guidelines and proposals

Step 4: Carry out the heritage conservation strategy

- Conserve and maintain precincts and individual buildings.
- Promote new development proposals, which reinforce a unique sense of place.
- Retain and develop traditional and new economic bases.

There is a need for specific standards to be used in architecture conservation.

The purpose of the guidelines for the conservation of Wang Na

The primary purpose of the Guidelines for the Conservation of Wang Na is to provide practical guidance to achieve good conservation. This study is not intended to replace the role of conservation practitioners or provide detailed technical specifications appropriate to every situation. It does offer results-oriented guidance for decision making when planning for, intervening on or reusing a historic place.

A second purpose of the Guidelines for the Conservation of Wang Na is to develop a new set of guidelines. The future project should respect and conserve the Wang Na value and the unique character of elements of the historic site.

Principle behind the guidelines

Heritage conservation involves identifying, protecting and promoting the elements that our society and history value. The term “heritage” can cover a wide range of physical things from a garden to a mural painting. The term “heritage conservation” has traditionally been associated with protecting cultural or spiritual values and the physical environment, that is, the tangible landscapes, buildings, structures and artifacts that have been created throughout the history.

The fundamental principles that form the basis for good conservation practice have traditionally been collected and published in “charters.”

These charters reflect the efforts to spell out as clearly as possible the reasons why one idea or one action may be better than another when dealing with our fragile and irreplaceable historic places. Each of the charters embodies a certain philosophy. There are specific cultural associations in Australia’s Burra Charter, for example. The author has chosen this charter as a philosophical foundation for the guidelines that follow. The main principles are presented in a sequence of actions from “beginning” to “end”, from understanding the historic place to making changes to it.

A. Understanding

An understanding of the history of Wang Na is an essential first step toward good conservation, which is achieved through documentary and oral research and physical investigation. It is important to know where the heritage value of the historic place lies and how it fits physically and functionally into its surroundings. The evaluation of a *historic place* is an important part of the process of understanding it. Planning, reusing and intervening on a historic place must be made with this prior understanding.

B. Planning

Planning must come first to a historic place. In other words, conservation work must be coordinated and integrated with on site planning and other future-oriented activities. Planning is the mechanism that links a comprehensive understanding of the history of Wang Na with interventions that respect the place's specific heritage value. In planning, it is important to maintain a sense of the longer term and the larger picture, and to not place emphasis on particular character-defining elements at the expense of others. Planning should include consideration of *all* factors affecting the future of a historic place.

C. Intervening

Any interventions to Wang Na, any actions or processes that result in a physical change to its tangible elements, must respect its heritage value. In any intervention, as French archaeologist Adolphe-Napoléon Didron wrote in 1839, "It is better to preserve than to repair, better to repair than to restore, better to restore than to reconstruct." New contributions should respect the spirit and substance of the old. The objective for the conservation of a historic place is to meet functional goals while respecting its heritage value and character-defining elements. This "minimal intervention" approach is the foundation of good conservation practice. Translating good intentions into respectful interventions and clear, unambiguous instructions (usually in the form of design drawings and specifications) is essential.

These guidelines, which deal with different resource types including their separate components, should not be used in isolation but take in consideration the overall view of the

whole historic site and its environs. There may be heritage value in the relationships between archaeological sites, landscapes, buildings or engineering works, and these values should not be compromised when undertaking a project on individual components of a historic place.

Each of the guideline sections in this chapter begins with recommendations concerned with preservation, i.e., stabilizing, protecting, maintaining and/or retaining the elements that are important in defining the heritage value of Wang Na. All conservation projects should follow these Guidelines.

The guidelines' approach to work, treatments, and techniques that are listed in the "Recommended" column on the left; those that are not are listed in the "Not Recommended" column on the right.

Studied in this section are:

- Exterior wood
- Windows
- Entrance and porches
- Mechanical systems

Guidelines for Buildings

Exterior wood and other wooden elements

Recommended	Not Recommended
<p>Preserving exterior wood features - such as siding, brackets, columns, window and door surrounds or architraves, cornices, pediments and balustrades and; their paints, finishes and colors - that are important in defining the overall heritage value of the building.</p>	<p>Removing or radically changing exterior wood elements that are important in defining the overall heritage value of the building.</p>
<p>Documenting the form, type and color of coatings such as paint; and the condition of exterior wood features prior to beginning project work.</p>	<p>Undertaking project work that will have an impact on character-defining exterior wood elements without first documenting their existing character and condition.</p>
<p>Protecting and maintaining exterior wood elements by preventing water penetration and by maintaining proper drainage so that water or organic matter is not allowed to stand on flat, horizontal surfaces or accumulate in decorative features.</p>	<p>Failing to identify, evaluate and treat the causes of exterior wood deterioration, including leaking gutters, cracks and holes in siding, deteriorated caulking in joints and seams, plant material growing too close to wood surfaces or insect or fungus infestation.</p>
<p>Inspecting painted exterior wood surfaces to determine whether repainting is necessary or if cleaning is all that is required.</p>	<p>Removing paint that is firmly adhering to and thus protecting exterior wood surfaces.</p>

Recommended	Not Recommended
<p>Retaining coatings such as paint that help protect the exterior wood from moisture and ultraviolet light. Paint removal should be considered only where there is paint surface deterioration and as part of an overall maintenance program that involves repainting or applying other protective coatings in kind.</p>	<p>Stripping paint or other coatings to reveal bare wood, thus exposing historically coated surfaces to the effects of accelerated weathering.</p>
<p>Removing damaged or deteriorated paint to the deep layer using the gentlest method possible (sanding by hand), then repainting in kind.</p>	<p>Using strong paint removal methods. These methods can forever damage exterior woodwork or cause terrible fires.</p>
<p>Applying chemical preservatives to exterior wood elements such as beam ends that are exposed to decay hazards and are traditionally unpainted.</p>	<p>Failing to follow the manufacturer's product and application instructions when repainting exterior woodwork.</p>
<p>Inspecting buildings to determine the reason(s) for any damage or degradation, such as scratch, fungal decay or insect infestation (e.g., beetles, ants, termites, and bats).</p>	<p>Using chemical preservatives if they have not been used historically, because they can change the appearance of exterior wood.</p>
<p>Treating active infestations of insects by first identifying the type of insect and then implementing a program of elimination appropriate to that insect. If using pesticides and follow the manufacturer's product and</p>	<p>Undertaking remedial project work on log buildings without first identifying the actual cause(s) of damage or degradation.</p>

Recommended	Not Recommended
application instructions. Fumigation should be done only by a licensed applicator.	(None)
Retaining exterior wood or deteriorated exterior wood that can be repaired.	Neglecting to treat known conditions that threaten buildings, such as, fungal decay or insect infestation, thus putting them at risk of further deterioration.
Replacing in kind extensively deteriorated or missing parts of exterior wood elements where there are surviving prototypes. The new work should match the old in form and detailing.	Failing to undertake adequate measures to protect exterior wood elements.
Evaluating the overall condition of the exterior wood to determine whether more than protection, maintenance and limited repair or replacement in kind are required; in other words, if more extensive repairs to wood elements will be necessary.	Removing deteriorated exterior wood elements that could be stabilized, repaired and conserved; or using untested consolidates and untrained personnel, thus causing further damage to fragile elements.

Additional Guidelines for Rehabilitation Projects

Recommended	Not Recommended
<p>Rehabilitating an exterior wood element, if an evaluation of its overall condition determines that more than preservation is required.</p>	<p>Failing to evaluate the overall condition of an exterior wood element in order to determine the appropriate method of conservation.</p>
<p>Repairing exterior wood elements by patching, piecing-in, consolidating or otherwise reinforcing the wood using recognized preservation methods. Repair may also include the limited replacement in kind - or with a compatible substitute material - of those extensively deteriorated or missing parts of elements where there are surviving prototypes such as brackets, molding or sections of siding.</p>	<p>Replacing an entire wood element such as a cornice or wall when repair of the wood and limited replacement of deteriorated or missing parts are appropriate.</p> <p>Using a substitute material for the replacement part that neither conveys the same appearance as the surviving parts of the wood element nor is physically or chemically compatible.</p>
<p>Replacing in kind an entire exterior wood element that is too deteriorated to repair - if the overall form and detailing are still evident using the physical evidence as a model to reproduce the element. Examples of wood elements include a cornice, entablature or balustrade. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.</p>	<p>Removing an entire exterior wood element that is irreparable and not replacing it, or replacing it with a new element that does not convey the same appearance.</p>

Guidelines for Buildings

Windows

Recommended	Not Recommended
<p>Conducting an in-depth survey of the condition of windows early in the planning process so that repair and upgrading methods and possible replacement options can be fully explored.</p>	<p>Undertaking project work that will have an impact on character-defining windows without first documenting their existing character and condition.</p>
<p>Repairing and stabilizing deteriorated windows and window elements by structural reinforcement, weather protection, or correcting unsafe conditions, as required, until any additional work is undertaken. Repairs should be physically and visually compatible.</p>	<p>Removing deteriorated materials such as wood, cast iron or bronze from windows that could be stabilized, repaired and conserved; or using untested consolidates and untrained personnel, thus causing further damage to fragile elements.</p>
<p>Replacing in kind extensively deteriorated or missing parts of windows where there are surviving prototypes. The new work should match the old in form and detailing.</p>	<p>Replacing an entire window element such as a shutter when limited replacement of deteriorated and missing components is appropriate.</p> <p>Using replacement material that does not match the historic window or window element.</p>
<p>Evaluating the overall condition of windows to determine whether more than protection, maintenance and limited repair or replacement in kind are required; that is, if more extensive repairs to windows will be necessary.</p>	<p>Failing to undertake adequate measures such as cyclical maintenance to protect windows.</p>

Additional Guidelines for Rehabilitation Projects	
Recommended	Not Recommended
Rehabilitating a window, if an evaluation of its overall condition determines that more than preservation is required.	Failing to evaluate the overall condition of a window, in order to determine the appropriate method of conservation.
Repairing window frames by patching, splicing, consolidating or otherwise reinforcing. Such repair may also include replacement in kind - or with a compatible substitute material - of those parts that are either extensively deteriorated or are missing, when there are surviving prototypes such as architraves, sills and interior or exterior shutters and blinds.	Failing to reuse serviceable window hardware such as sash lifts and sash locks. Using substitute material for the replacement part that neither conveys the same appearance as the surviving parts of the window, nor is physically or chemically compatible.
Replacing in kind an entire window that is too deteriorated to repair using the same sash and pane configuration and other design details. If using the same kind of material is not technically or economically feasible when replacing windows deteriorated beyond repair, then a compatible substitute material may be considered.	(None)

Additional guidelines for restoration projects

Recommended	Not Recommended
<p>Restoring a window, if an evaluation of its overall condition determines that more than preservation is required; i.e., if repairs to wood features from the restoration period will be necessary.</p>	<p>Failing to evaluate the overall condition of a window in order to determine the appropriate method of conservation.</p>
<p>Repairing window frames and sashes from the restoration period by patching, splicing, consolidating or otherwise reinforcing. Such repair may also include limited replacement - preferably in kind - of extensively deteriorated or missing parts such as architraves, sills and interior or exterior shutters and blinds when there are surviving prototypes.</p>	<p>Replacing an entire window from the restoration period when repair of materials and limited replacement of deteriorated or missing parts are appropriate.</p> <p>Using a substitute material for the replacement part that neither conveys the appearance of the surviving parts of the window, nor is physically or chemically compatible.</p>
<p>Replacing in kind a window feature from the restoration period that is too deteriorated to repair using the same sash and pane configuration and other design details.</p>	<p>Removing a window feature from the restoration period that is irreparable and not replacing it or failing to document the new work.</p>

Entrances and porches

Recommended	Not Recommended
<p>Preserving entrances and porches - and their functional and decorative features such as doors, fanlights, sidelights, pilasters, entablatures, columns, balustrades and stairs - which are important in defining the overall heritage value of the building.</p>	<p>Removing or radically changing entrances and porches that are important in defining the overall heritage value of the building so that, as a result, the heritage value is diminished.</p>
<p>Documenting the form, materials and condition of entrances and porches prior to beginning project work.</p>	<p>Undertaking project work that will have an impact on character-defining entrances and porches without first documenting their existing character and condition.</p>
<p>Protecting and maintaining the masonry, wood and architectural metals that comprise entrances and porches through appropriate surface treatments such as cleaning, rust removal, limited paint removal and reapplication of protective coating systems in kind.</p>	<p>Failing to provide adequate protection of materials on a cyclical basis, this result in deterioration of entrances and porches.</p>
<p>Retaining entrance and porch elements or deteriorated entrance and porch elements that can be repaired.</p>	<p>Removing or repairable material such as wood, cast iron, terra cotta tile and brick from entrances and porches.</p> <p>Removing an entrance or porch because the building has been reoriented to accommodate a new use.</p>

Recommended	Not Recommended
(None)	Creating new entrances on a character-defining elevation.
Repairing and stabilizing deteriorated entrance and porch elements by structural reinforcement, weather protection; or correcting unsafe conditions, as required, until any additional work is undertaken. Repairs should be physically and visually compatible.	Removing deteriorated entrance and porch elements that could be stabilized, repaired and conserved; or using untested consolidates and untrained personnel, thus causing further damage to fragile elements.
Replacing in kind extensively deteriorated or missing parts of entrance and porch elements where there are surviving prototypes. The new work should match the existing elements in form and detailing.	Replacing an entire entrance or porch element when limited replacement of deteriorated and missing components is appropriate. Using a replacement material that does not match the historic entrance or porch element.
Evaluating the overall condition of materials to determine whether more than protection, maintenance and limited repair or replacement in kind are required; i.e., if more extensive repairs to entrance and porch elements will be necessary.	Failing to undertake adequate measures to protect entrances and porches.

Additional guidelines for rehabilitation project

Recommended	Not Recommended
<p>Rehabilitating an entrance or a porch, if an evaluation of its overall condition determines that more than preservation is required.</p>	<p>Failing to evaluate the overall condition of an entrance or a porch in order to determine the appropriate method of conservation.</p>
<p>Repairing an entrance or porch by reinforcing the character-defining materials. Repair will also generally include the limited replacement in kind - or with a compatible substitute material - of those extensively deteriorated or missing parts of repeated elements where there are surviving prototypes such as balustrades, cornices, columns, sidelights and stairs, or where there is clear evidence such as old paint traces on adjacent surfaces.</p>	<p>Replacing an entire entrance or porch when the repair of materials and limited replacement of parts are feasible.</p> <p>Using a substitute material for replacement parts that neither conveys the appearance of the surviving parts of the entrance and porch, nor is physically or chemically compatible.</p>
<p>Replacing in kind an entire entrance or porch that is too deteriorated to repair - if the form and detailing are still evident - using the physical evidence as a model to reproduce the element. If using the same kind of material is not technically or economically feasible, then compatible substitute materials may be considered.</p>	<p>Removing an entrance or porch that is irreparable and not replacing it; or replacing it with a new entrance or porch that does not convey the same appearance.</p>

Additional Guidelines for Restoration Projects	
Recommended	Not Recommended
<p>Restoring an entrance or a porch, if an evaluation of its overall condition determines that more than preservation is required; i.e., if repairs to features from the restoration period will be necessary.</p>	<p>Failing to evaluate the overall condition of an entrance or a porch in order to determine the appropriate method of conservation.</p>
<p>Repairing entrances and porches from the restoration period by reinforcing the historic materials. Repairs will also generally include the limited replacement - preferably in kind - of those extensively deteriorated or missing parts of repeated features such as balustrades, cornices, entablatures, columns, sidelights and stairs where there are surviving prototypes, or where there is clear evidence such as old paint traces on adjacent surfaces. The new work should be unobtrusively dated to guide future research and treatment.</p>	<p>Replacing an entire entrance or porch feature from the restoration period when the repair of materials and limited replacement of parts are appropriate.</p> <p>Using a substitute material for the replacement part that neither conveys the appearance of the surviving parts of the entrance and porch, nor is physically or chemically compatible.</p>

Mechanical Systems Heating, air conditioning, electrical and plumbing	
Recommended	Not Recommended
Preserving elements of mechanical systems - such as heating plants, vents, fans, grilles, switch plates and lights - that are important in defining the overall heritage value of the building.	Removing or radically changing elements of mechanical systems that are important in defining the overall heritage value of the building.
Documenting the form, materials, function and condition of mechanical systems prior to beginning project work.	Undertaking project work that will have an impact on character-defining mechanical systems without first documenting their existing character and condition.
Protecting and maintaining mechanical, plumbing and electrical systems and their elements through cyclical cleaning and other appropriate measures.	Failing to provide adequate protection of materials on a cyclical basis, this results in deterioration of mechanical systems and their visible elements.
Preventing accelerated deterioration of mechanical systems by providing adequate ventilation of attics, crawl spaces and basement so that moisture problems are avoided, and by providing access for servicing.	Enclosing mechanical systems in areas that are not adequately ventilated so that deterioration of the systems results, or in areas that cannot be accessed easily for servicing or maintenance.
Improving the energy efficiency of existing mechanical systems to help reduce the need for elaborate new equipment. Consideration should be given to installing storm windows, insulating attic crawl spaces if appropriate.	Installing unnecessary climate control systems that can add excessive moisture to the building. This additional moisture can either condense inside, damaging interior surfaces.

Recommended	Not Recommended
<p>Repairing and stabilizing deteriorated mechanical systems until any additional work is undertaken. Repairs should be physically and visually compatible.</p>	<p>Removing deteriorated mechanical systems that could be stabilized, repaired and conserved; or using untested consolidate and untrained personnel, thus causing further damage to fragile elements.</p>
<p>Replacing in kind extensively deteriorated or missing parts of mechanical systems where there are surviving prototypes. The new work should match the old in form and detailing and have adequate capacity.</p>	<p>Replacing an entire mechanical system when limited replacement of deteriorated and missing components is appropriate. Using a replacement material that does not match the historic mechanical system element.</p>
<p>Evaluating the overall condition of mechanical systems to determine whether more than protection, maintenance and limited repair or replacement in kind are required; i.e., if more extensive repairs to mechanical systems will be necessary.</p>	<p>Failing to undertake adequate measures to protect mechanical systems.</p>
<p>Additional Guidelines for Rehabilitation Projects</p>	
Recommended	Not Recommended
<p>Rehabilitating a mechanical system, if an evaluation of its overall condition determines that more than preservation is required.</p>	<p>Failing to evaluate the overall condition of a mechanical system in order to determine the appropriate method of conservation.</p>

Recommended	Not Recommended
<p>Replacing in kind — or with a compatible substitute material — those visible character-defining elements of mechanical systems such as ceiling fans, switch plates, grilles or plumbing fixtures that are extensively deteriorated.</p>	<p>Installing a visible replacement element that does not convey the same appearance.</p>
<p>The following Rehabilitation work is highlighted to indicate that it involves a particularly complex technical or design aspect and should only be considered after the <i>Preservation and Rehabilitation</i> concerns listed above have been addressed.</p>	
Recommended	Not Recommended
<p>Alterations/Additions for the New Use</p>	
<p>Installing a completely new mechanical system, if required, for the new use, while ensuring that it causes the least alteration possible to the building's floor plan and the exterior elevations, and the least damage to the character-defining building materials.</p>	<p>Installing a new mechanical system so that character-defining structural or interior elements are radically changed, damaged or destroyed.</p>
<p>Providing adequate structural support and vibration isolation for new mechanical equipment.</p>	<p>Failing to consider the weight and design of new mechanical equipment, resulting in a weakening or cracking of character-defining structural members or finished surfaces.</p>
<p>Installing the vertical runs of ducts, pipes and cables in non-character-defining areas.</p>	<p>Installing vertical runs of ducts, pipes and cables in places where they will obscure character-defining elements.</p>

Recommended	Not Recommended
<p>Installing air conditioning units in the window frames in such a manner that frames are protected. Window installations should be considered only when all other viable cooling systems would result in significant damage to character-defining materials.</p>	<p>Radically changing the appearance of the historic building or damaging or destroying windows by installing heating/air conditioning units in character-defining window frames.</p>
<p>Additional Guidelines for Restoration Projects</p>	
Recommended	Not Recommended
<p>Restoring a mechanical system, if an evaluation of its overall condition determines that more than preservation is required; i.e., if repairs to mechanical features from the restoration period will be necessary.</p>	<p>Failing to evaluate the overall condition of a mechanical system in order to determine the appropriate method of conservation.</p>
<p>Repairing mechanical systems from the restoration period by augmenting or upgrading system parts, such as installing new pipes and ducts, rewiring or adding new compressors or boilers.</p>	<p>Replacing a mechanical system from the restoration period or its functional parts when it could be upgraded and retained.</p>

Recommended	Not Recommended
Installing a new mechanical system, if required, in a way that results in the least alteration possible to the building.	Installing a new mechanical system that alters the structural or interior features of the restoration period.
Providing adequate structural support for new mechanical equipment.	Failing to consider the weight and design of new mechanical equipment, resulting in a weakening or cracking of character-defining structural members or finished surfaces.
Installing the vertical runs of ducts, pipes and cables in closets, service rooms and wall cavities.	Installing vertical runs of ducts, pipes and cables in places where they will obscure features from the restoration period.
Installing heating/airconditioning units in such a manner that features are not damaged or obscured and excessive moisture, which will accelerate the deterioration of historic materials, is not generated.	<p>Concealing mechanical equipment in walls or ceilings in a manner that requires the removal of building material from the restoration period.</p> <p>Cutting through features such as masonry walls in order to install heating/air conditioning units.</p>

The following restoration work has been highlighted to indicate that it involves the removal or alteration of existing mechanical systems and features from periods other than the accepted restoration period; and the replacement of missing mechanical systems and features from the restoration period with all new materials. This work should only be considered after the *Preservation* and *Restoration* concerns listed above have been addressed.

Recommended	Not Recommended
Removing Existing Features from Other Periods	
Removing or altering mechanical systems and features, such as a plumbing fixture, dating from other periods.	Failing to remove a mechanical system or feature from another period, thus confusing the depiction of the building's significance.
Documenting materials and features dating from other periods prior to their alteration or removal. If possible, selected examples of these features or materials should be stored to facilitate future research.	Failing to document mechanical systems and features from other periods (which results in the loss of a valuable portion of the historic record) prior to removing them from the building.

Source: Parks Canada - Standards and Guidelines for the Conservation of Historic Places in Canada

Conclusion

Health and safety, accessibility, energy efficiency, environmental considerations and new additions to historic places can be extremely important aspects of conservation projects. While they are usually not part of the overall process of conserving heritage value (preservation, rehabilitation or restoration), it is important that such considerations be assessed for any potential adverse impact on the heritage values of the historic places. In particular, care must be taken not to obscure damage or destroy character-defining elements.

Chapter 8

Why Ancient Sites of Wang Na need Interpretation.

To help visitors have a memorable edutainment experience that will bring them back again, increase their length of stay, or help them remember the quality of the ancient site of Wang Na. Heritage tourism needs assessments for educational/interpretive programs and media.

Services required:

- Heritage tourism development planning and feasibility studies
- Heritage site interpretive master planning
- Interpretive and educational media development (exhibits, publications...)
- Family friendly educational activities and services
- Pre and post testing/evaluation of interpretive programs, media, services
- Regional heritage tourism planning
- Scenic byway interpretive planning
- Tour guide training, heritage interpretation courses and workshops for tourism professionals.
- Speaker services for conferences and workshops
- Heritage site customer care training for staff
- Heritage tourism marketing and advertising consultation

The dissertation studies and provides a wide range of services in interpretive planning for scenic byways, self-guiding auto tours and tour route planning as well as interpretive media including: interpretive wayside exhibits (design and build), interpretive self-guiding brochure and a self-guiding cassette ancient site tour (32 minutes).

It is the interpretive communications strategies that will help each visitor understand the unique and special stories associated with each unique building. Interpretation reveals the story of the people, places and events that have occurred, or are occurring along the ancient site, and help guide visitors through a living museum of cultural heritage. It changes the building from being a "place" to being an edutainment experience. It gives the ancient site a totally unique character, personality and life. Without interpretation, it's just a building.

The message (interpretive panel, brochure, etc.) must follow the following criteria:

- The communication must first provoke the attention or curiosity of the audience.
- Relate to the everyday life of the visitor – tell them "why they need to know this information".
- Reveal the key concepts of the message or story through a unique viewpoint – save the surprise ending or answer for last.
- Address the whole – illustrate to the visitor how each individual stop along the ancient site relates to the larger main interpretive theme or educational concept of the total site experience or story.
- Has message unity – the design and presentation of the interpretive media along the total byway will have a uniformed themed look (design, fonts, historic dating, etc.).

Interpretive Planning for Scenic Byways – basic considerations.

In developing an interpretive plan for any scenic byway, the following areas are essential to the successful communication of the byway story to the visitors.

- Conduct an interpretive story inventory along the total ancient site (historic sites and features, historic events, current sites/events of interest, view sheds, perceptually exciting areas (visitor perceptual psychology), etc.
- Develop a main interpretive theme, sub-theme and story line for the ancient site. This might include developing a variety of themed self-guiding tours based on visitor interests such as: heritage stops, historic landscapes, etc.

- Develop very specific learning, behavioral, and emotional objectives that the total scenic ancient site tourism/education experience is to accomplish. Then develop specific interpretive objectives for each individual byway stop.
- Audience or market analysis – who are the current or potential ancient site users or potential tourists, what kinds of heritage topics would they most be interested in, what are their travel destinations, why would they want to visit this ancient site.
- Determine the most cost effective interpretive media for the ancient site: Interpretive Panels (number, size, locations); self-guiding booklets; self-guiding cassette tapes, etc.
- Develop an implementation strategy for the ancient site interpretation. This would include costs of media, development and installation times, maintenance or distribution considerations, etc.
- Evaluation – it is important to pre-test any/all interpretive media (panels, self-guiding booklets, etc.) to make sure that the interpretive objectives are met, and that the visitors can easily understand, relate to, and remember the information being presented to them by the media in question.

Why ancient sites can't succeed without interpretation:

Here are ten reasons why the ancient site of Wang Na needs "interpretation" to be successful.

Of course this depends on how to define "success", on how well the educational and tourism development objectives are accomplished. Here are "nine reasons":

1. Regional residents/ancient site users will gain a greater appreciation and pride in their own local heritage.
2. Regional residents may be inspired to take a more active role in the stewardship of heritage sites and features.
3. Regional residents may take on a individual pride in the ancient site resource (have a sense of community ownership in the ancient site).

4. The ancient site interpretation serves as a "heritage tourism" draw or enhancement to bring other visitors to the communities, sites or attractions located along the ancient site. This may have direct positive economic impact to these communities or heritage sites.
5. Visitors will use the ancient site in a responsible manner.
6. Visitors will have a positive educational as well as recreational experience, learning more about the cultural history of the region(s) they are passing through.
7. The ancient site interpretation of local natural or cultural history may inspire visitors to visit other nearby heritage sites – helping regional heritage tourism grow.
8. Ancient site interpretation can increase repeat use of the route for recreation.
9. Having a variety of interpretive themes and topics of interest can increase the marketability or use of the ancient site by more diverse target market groups.

Interpretation can present information at a variety of experience and educational levels, helping to expand the marketability of the ancient site and its associated attractions.

Chapter 9

Conclusion

Over a number of years the significant historical value of the Wang Na site has not been fully recognized. Traditionally, the Fine Art Department in Thailand, has relied on historical representations of Thai history at the National Museum, Bangkok and so it is this, which forms the basis of assessment for the places, people and events of interest in Thai, national history. However, the conventional criteria, structure and framework for evaluation do not adequately respond to the values inherent in the history of Wang Na.

Can the Fine Art Department develop a commemorative approach to viceroyn history in Thailand in ways that are meaningful to Thai people and at the same time upholding the rigor of its own evaluation process?

The author has explored various approaches to this challenge. One possible response is to take the whole “culture landscape” viewpoint. It is the author’s specific aim to speak about and redefine Wang Na in order to widen the historic framework and values, with which people are traditionally presented at the National Museum, Bangkok. By extensive research studying the site (on site and in documentation), its people (past and present), its policies and cultural perspectives, the author is able to fully represent Wang Na by putting it more precisely in historical context.

Is it possible for the concept of “cultural landscape” to be a particularly useful one for the national recognition of Wang Na’s history?

Landscape can provide a conceptual bridge between people and heritage conservation theory. The concept of cultural landscape is a relatively new one in the heritage conservation movement, but has actively emerged in the field of heritage conservation in Thailand. The

approach offers a significant and broader way of looking at places focusing not only on monuments, but also on the relationship between human activities and environment.

Significance is defined by the author as studying a group of buildings, structures and open spaces, which share strong associations with individual events or themes of “national significance”. The historic site should have a sense of history; intrusive elements should therefore be minimal and set apart from the arena that immediately surrounds the site. In both historical and cultural terms, Wang Na is a site strongly associated with the establishment and development of Thailand. Wang Na is also set (since 1780) within the well-preserved “Rattanakosin Island” a long established place with a rich history and strong identity, which it is keen to preserve.

The palace of Wang Na, one of the oldest palaces in Thailand, was the viceroy’s residence from the 18th century to the abolition of viceroy. Designed by Maha Surasinghanaj, first viceroy of Rattanakosin, it is full of outstanding examples of decorative art and its architecture is a remarkable tribute to the Ayutthaya style. On the same site, the Phutthaisawan chapel is one of the most important religious buildings to have survived in Bangkok and one of the finest examples of Late Ayudhya art and architecture. The original construction was built in Early Rattanakosin Era. The Phra Buddha Sihing and the chapel’s mural paintings are of the highest quality; their historical and artistic values are of the same order as the Buddha statue in the Grand Palace. The mural painting includes scenes from the life story of the Lord Buddha (from the version called Phatom Somphothikhatha), for example, the marriage scenes of Prince Sudhodana and Princess Sririmahamaya; the best known panel being the “Scene of engagement depicting the seated couple and the ceremonial cup,” a respected and much worshiped icon of Thai Buddhist Art. These buildings, developed under the viceroy, represented a refined school of art and craft and set the precedent in the Thai school of architecture.

Like many urban environments, Bangkok and the ancient site of Wang Na has suffered many unhappy alterations over time. This is an ongoing problem that must be addressed on a long-term scale and in terms of landscape conservation:

“Considering⁹⁵ that in all periods human have sometimes subjected the beauty and character of landscapes and sites forming part of their natural environment to damage, which has impoverished the cultural, aesthetic and even vital heritage of whole regions...and that, on account of their beauty and character, the safeguarding of landscape and sites...is necessary to the life of men for whom they represent a powerful physical, moral and spiritually regenerating influence, while at the same time contributing to the artistic and cultural life of people...”

This means the preservation and, when possible, the restoration of the natural aspect of rural and urban landscapes, which have outstanding cultural and aesthetic interest or “typical form” surroundings.

Preventive measures should be aimed at protecting sites from damage, which may threaten them. These measures should include, in particular, the supervision of works and activities likely to damage the buildings and sites, for example, the construction of all types of public and private buildings. These should be designed so as to meet certain aesthetic requirements in respect of the building itself and, while avoiding a simplistic imitation of certain traditional forms, should be in harmony with the general atmosphere. It is the author’s opinion that these same principles must be applied to Wang Na, as with all the important ancient sites in Thailand, so that the beauty and character of the site can be safeguarded for future generations to enjoy and appreciate.

⁹⁵ The general conference of the “United Nations Educational, Scientific and Cultural Organization”, meeting in Paris, from 9 November to 12 December 1962.

Bibliography

- Aasen, Chlarence. *Architecture of Siam : a Cultural History Interpretation*. New York: Oxford University Press, 1998.
- Biodeterioration of Cultural Property 3. editons Chiraporn Aranyanak, and Chalit Singhasiri
Bangkok : Thammasat University, 1995.
- Boniface, Priscilla. *Heritage and Tourism in 'the Global Village'* New York : Routledge, 1993.
- Boniface, Priscilla. *Managing Quality Cultural Tourism*. London: Routledge, 1995.
- Conservation and Copying the Cultural Relics at Dunhuang, a paper presented by Prof. Duan Wenjie at an International Seminar on Cave Art of India and China, translated by Bagyalakshmi, held in New Delhi, on November 25-27, 1991.
- Contemporary Issues in Heritage and Environmental Interpretation: Problems and Prospects:
edited by David Uzzell and Roy Ballantyne. London: The Stationery Office, 1998.
- Damrong Rachanuphab, Somdet Phra Chao Borommawong Thoe Chao Fa Krom Phraya San
Somdet (the Princess's Correspondence. Thai text); Vol. 2, Bangkok,1962.
- Dirk Van Der Cruysse; translated by Michael Smithies. *Siam and the West 1500-1700*. Paris:
Silkworm Books,1991 .
- Eilean Hooper-Greenhill. *Museums and the Interpretation of Visual Culture*. London: Routledge,
2000.
- Fitch, James Marston. *Historic Preservation : curatorial management of the built world*. London:
The University press of Virginia, 1990.
- Feilden, Bernard M. *Conservation of Historic Buildings*. , 3rd edition. Oxford: Architectural
Press, 2003.
- Gerini, G.E. *Chulakantamangala : the Tonsure Ceremony as Performed in Siam*. 2rd.
Bangkok,1976.
- Historic, Cultural Landscape Assessment for Wingecarribee shire, N.S.W. Australia: Landscape
PTY, 1992.
- General Guide to the Vajiranan Library and the National Museum. Bangkok: Prachandra Press,
1951.

Mannich Jumsai . King Mongkut of Thailand and the British: the model of a Great Friendship.

Bangkok: Chalermnit, 2000.

Matics, K.I. Introduction to the Thai Temple. Bangkok: White Lotus, 1992.

Nawikachivin, Nathaphat, Luxana Sathapattayakam *Nai Phabkien Bon Phra Thinang*

Phutthaisawan (Architectural styles seen in Mural Paintings in the Phutthaisawan

Chapel. Thai text); A Thesis for High Grade Certificate in Thai Architecture, Graduate

School in Silpakorn University, 1975.

Paramanuchit Chinorot, Somdet Krommaphra, *Phra Pathomphoti Khata* (The First Feast of

Omniscience, a Biography of the Life of the Lord Buddha, Thai text); Maha

Chulalongkorn Racha Vidhayalai, Bangkok, 1960.

Past conservation in Thailand (the Siam Society Under Royal Patronage)

Ringis, Rita. Thai Temples and Temple Murals. New York: Oxford University Press, 1990.

Schuster, J. Mark. Preserving the Built Heritage: Tools for Implementation, NH: University

Press,1997.

Suksri, Naengnoi. Palaces of Bangkok: Royal Residences of the Chakri Dynasty. Bangkok:

Asia Book,1996.

The Journal of the Siam Society. V.92. Bangkok: Amarin Printing and Publishing Public

Co.Ltd., 2003.

The Journal of the Siam Society. V.93. Bangkok: Amarin Printing and Publishing Public

Co.Ltd., 2005.

The Preservation of Historic Architecture: the U.S. Government's Official Guidelines for

Preserving Historic Homes. Connecticut: The Lyons Press, 2004.

Vines, Elizabeth, Streetwise Asia: a Practical Guide for the Conservation and Revitalization of

Heritage Cities and Towns in Asia. Bangkok: UNESCO Bangkok, 2005.

Visitor Management: Case Studies from World Heritage Sites; edited by Myra Shaekley. MA:

Butter Worth Heinemann, 2000.

Weaver, Martin E. Conserving Buildings: Guide to Techniques and Materials. New York: John

Wiley & Sons, c1993.

Wongphuwarak, Prani, Chittakam Fa Phanang Phra Thinang Bhuddhaisawan (mural painting in the Bhuddhaisawan Chapel. Thai text) A Thisis for B.A. Degree in Archeology, Silpakorn University, 1973

Wyatt, David K. Thailand: a Short History. Bangkok: Yale University Press, 1984.

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