

Landscape Architectural Design of Memorials: The Case of the Seven Kings of Siam, Rajabhakti Park

Pornthum Thumwimol

Fine Arts Department, Ministry of Culture, Thailand

thumwimo@hotmail.com

ABSTRACT

 memorial site and architectural landscape plan is symbolic and is psychologically designed to communicate a meaning or a theme to visitors. Its success depends upon the unity of the following three components:

1. Nature: the existing geography and environment
2. Site planning: the management of the space usage and symbolic landscape design
3. Landscape elements: statues and the decorative elements.

Of these three components, landscape architecture plays a crucial role in connecting the other two components in order to create unity and the sense of place. This case study of the architectural landscape design and planning of Rajabhakti Park, a Memorial to Seven Kings of Siam in Hua Hin, Prachuap Khiri Khan Province, identifies the principles used in communicating the symbolic meaning.

The first part of the study analyzes the three main elements that led to the symbolic concept and includes:

- The site plan derived from reading and understanding the values of the site, then using them in a harmonious way,
- The design which communicates symbolic meaning and has a specific form that reflects the appropriate concept or philosophy,
- The design of scenery and atmosphere perceived through usage of space and the composition of landscape elements.

The second part of the study is involved with design concepts that suit the functions.

Keywords: *memorial, prodigious characteristics of the area, landscape architecture, concept of symbolic design, treatise on war strategy, statues, space, sense of place*

Rajabhakti Park¹ is a Memorial to the Seven Kings of Siam. The project is located in an area of 222 rai² in Hua Hin District, Prachuap Khiri Khan Province³ and displays the statues of seven past Thai Kings. In 2014, the project was launched by the Royal Thai Army and the objectives are as follows:

1. To honor the Kings of Siam, from the past to the present
2. To prepare the park to be used as a venue for important ceremonies of the Royal Thai Army and for welcoming important foreign guests
3. To be used as a tourist site and a historical resource

The project was divided as follows:

The Fine Arts Department Ministry of Culture, has been responsible for designing the master plan, the landscape and the statues of the seven Kings.

The Royal Thai Army, as the owner of the project, has been responsible for implementing the plan and the overall construction.

The Rajabhakti Park involves the following main parts.

1. The statues of seven notable Thai kings are King Ram Khamhaeng (reigned 1279-1298) of the Sukhothai period, King Naresuan (1590-1605) and King Narai (1656-1688) of the Ayutthaya period, King Taksin (1767-1782) of the Thonburi period, and King Rama I (1782-1809), King Mongkut (1851-1868), and King Chulalongkorn (1868-1910) of the Rattanakosin period.

The statues were cast in bronze. The scale of statue is 7.49 times larger than human size with a height of approximately 13.90 meters or 16 meters in total, including their royal attire.

2. A multi-purpose plaza in front of the royal statues, where important ceremonies of the Royal Thai Army will be held and important foreign guests will be welcomed.
3. A museum detailing the lives and activities of the Kings.
4. The architectural landscape.

CONCEPT OF SYMBOLIC DESIGN

The site planning and landscape design of a memorial space is a design that communicates the main meaning to bring a sense of place. Its sense is derived from the unity of the following three components:

1. Nature: the existing geography and environment
2. Site planning: regarding management of function and the military theme design⁴
3. Landscape elements; the statues as the main attraction, and the decorative military elements

From these three components, it can be said that the landscape design plays a crucial role in connecting the statues and environment in order to create a sense of unity and to emphasize the sense of place.

The symbolic concept is incorporated into the design as follows:

Understanding the topography and the landscape characteristics for site selection

Understanding the strategic locations of the physical elements and spiritual aspects of the site is important in developing a plan that enhances the area. This understanding allows for the addition of new elements to strengthen the overall landscape. The following elements were considered:

¹ King Bhumibol Adulyadej named the project as “Rajabhakti Park”, which means “the park that has been built with people’s loyalty to the monarchs”.

² one rai = 1,600 square metres.

³ is 199 km. south-southwest of Bangkok. Hua Hin District is also the location of the primary summer royal residence of King Bhumibol Adulyadej (Rama IX).

⁴ In case of Rajabhakti Park, the pattern of organizing troops for ancient Thai Army is used to locate the statues and formed the open space.

Physical space

- Mountains create a powerful and awe-inspiring background. To the west of the site is a chain of mountains. Installing the group of the royal statues in front of these mountains lends a majestic and powerful image and creates a sense of unity.
- Direction of the sunlight affecting the light on the statues and viewer's visual experience of them. Placing the group of royal statues in locations where they receive beautiful reflected light but are not backlit allows people to see them in a changing relief throughout the day. The changes of light playing on the statues create different moods of beauty due to the various directions of the sunlight.
- Slopes from the mountains to the front entrance. Generating a 45 degree angled slope from the mountains to the front

entrance echoes the mountains' slope allowing a visual unity. It also helps with water drainage systems.

- The main road provides the access to the front area.

Spiritual space

In terms of the spiritual aspect, the overall location is considered good. The belief in auspicious locations, according to the Siamese *Feng Shui*, and the concept of a genuine place applies to the setting. The geographic landscape combined with the new elements results in a complementary effect.

The correct analysis of site reconnaissance is an important part of design and site planning. It is advantageous if most of the geographical conditions are not changed. Preserving natural forms and their distinct perspectives allows a positive combination with new elements.



Figure 1:
Printed images of the statues being tested to see how statues of this size might be installed in the way specified by the plan



Figure 2:
A sketch of the scenery in keeping with the design concept of the overall image of the location of the royal statues



Figure 3:
A bird's eye view of Rajabhakti Park under construction



Figure 4:
Establishing the royal statues, using a surveyor's theodolite to specify the location



Figure 5:
Casting the royal statues



Figure 9:
Analysis of the location and the site of the base of the statues in relation to the geographical conditions

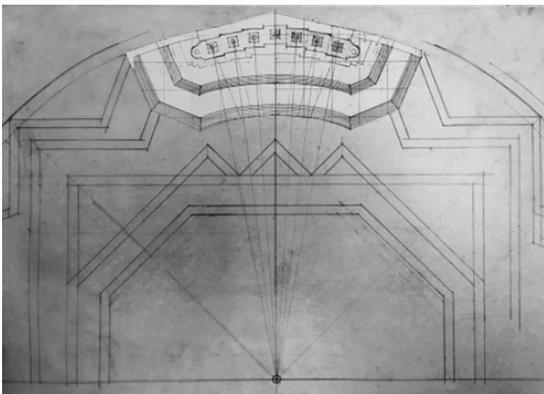


Figure 10:
Considering the location and the relationship between the plaza and the base of the royal statues

The design reflects the theme and philosophy of the military theme.

The landscape of this Memorial implies a majestic quality and the august power of the Thai Kings. This also relates to a strong military institution that has protected the Throne and the country both

historically and currently. The military has stood side by side with and supported the monarchy, with the King as the Supreme Commander of the Armed Forces. The selections of symbolic forms, which are meaningful and in accordance with the project are important in adding an aesthetic value to the statues, unify the site and setting. Additionally, the landscape design also means to demonstrate the Thai identity, particularly the use of Thai characteristics as the basis for the design concept.

It is appropriate that a traditional Thai concept for military planning is reused as a landscape design concept. Therefore, the layout chosen is one used for organizing troops of ancient Thai armies. This formation was sourced from the ancient Treatise of War Strategy⁵, a strategy for deploying troops since the Ayutthaya Period. The selected forms of troop arrangement are the “*Chakra Phayuha*” or the “*Pathum Phayou*”. These two formations take the form of a *Chakra* disc or a lotus flower, which can be used for both stationing the troops and moving them in the battle on an open plain. The *Chakra* is also a symbol of God Narayana’s⁶ weapon. According

⁵ Thailand has a Treatise of War Strategy that has been used since the olden days. As well as discussing strategic warfare, it also includes beliefs relating to auspicious times and astrology. The Treatise of War Strategy volume in the Ayutthaya Period was made from mulberry fiber, known as Sa paper.

⁶ or Rama, otherwise the Hindu god Vishnu.

to Thai tradition, the King is considered to be the incarnation of the Narayana, hence, the Thai army employs the symbol of *Chakra* as his representative.

The form is the combination of a circle and an octagon, the center being an octagon and the outside consisting of the *Chakra* disc contained within a circle. The disc consists of sixteen sharp serrated blades or lotus petal shapes, indicating that this area is strong, powerful and difficult to defeat. The plan includes the bases of the royal statues as part of the *Chakra* disc to create overall unity.

The planning and landscape design includes:

- Interpreting and communicating the philosophical meaning and applying it to the plan
- Analyzing the geographical condition, together with natural setting of the plan
- Utilizing special techniques, included specifying the size of the statues, regulating the spacing between them and the sight perspectives
- Establishing the layout plan includes specifying the sites where the royal statues are to be installed, specifying their size, designing their plinths, conserving the existing trees and planting the new vegetation

The scenery and the atmosphere; the perceptions generated from the creation of space and the composition of landscape elements

The most important thing in the design of landscape elements is ensuring that forms and positions will not interfere with the royal statues or detract from them. The issues to be considered are appropriate locations, appropriate sizes and appropriate forms.

The following concepts are used for analyzing and designing to make each sector harmonious with the environment and allowing it to create the sense of place.

a. Endowment of the place and defining the overall image

The mountains are the focal point of the area having distinctive physical characteristics. The analysis shows that they form the solid background for the

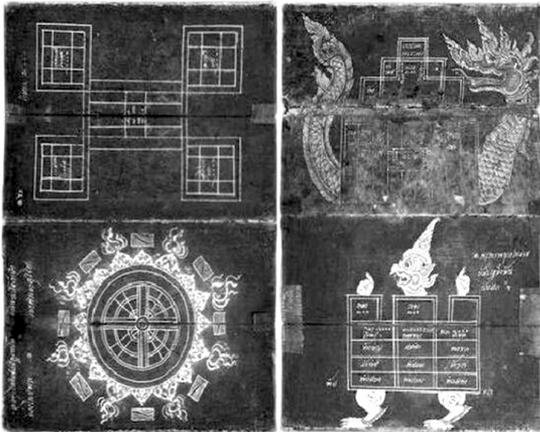
group of royal statues. The main visual axle of the park moves vertically towards the mountains. The group of royal statues, installed on this site, is symbolically important and distinctive. This is due to the mountainous focal point, which is the most important natural element.

The directions and the movement of the sunlight influenced the decision of where to install the statues because light touching these objects would have an impact upon the visual experience. The plan specified that the statues be installed in front of the mountains in a direction south-east of the view from the main entrance. This location is exposed to the sunlight throughout the day and into the evening. The sun's movement will change the light on the statues, making the viewing the statues a varied experience in terms of beauty and atmosphere.

Rajabhakti Park is located on the inclined slope from the mountain range leading down to Petchkasem Road. The design specified a large plaza for activities of the Armed Forces; military parades, royal activities or other important events. Because the ground had been leveled before and the area did not originally have a large number of existing trees it was not difficult to build a large plaza for people who come to pay respect to the royal statues.

The *Chakra Phayuha* was considered when the scope of the functional areas and the park's space were specified. Some details were omitted and the results are as follows:

- The octagonal plaza is considered the center of the park. It is the park's focal point or its 'navel'. This part is also the location of an open space for paying homage and organizing important activities. The octagonal plaza overlaps the square shape that is related to the surrounding area
- The encompassing circle is a radius of serrated blades and is the connecting area between the plaza and the surrounding area. The radius of the serrated blades is symbolically important in the plan when it is viewed from high ground. The placement of new items used the rim of the *Chakra Phayuha* and includes; the construction of a boundary wall to prevent landslides, the change into inclined slopes and the cultivation of plants.



- The roads that connect all parts of the park are the outermost part of the Chakra Phayuha's frame. The area has been adapted to blend with the geographical conditions and to connect with other service points that are important to the area, for example, parking lots and restrooms. The location of each part has been specified in order not to interfere with the perspective of the Memorial.

Figure 11:
The form taken from *Treatise of the War Strategy* (the image in the left being the Chakra Phayuha)



Figure 12:
The plan of the area and a model of Rajabhakti Park



Figure 13:
Overlaying the plan on an aerial photograph of the real location, showing the constructed parts and the parts to be constructed

b. The important axis of the area and the perspective used in specifying the spacing and location

The axis of Rajabhakti Park

The main access of the park is the Northeastern entrance, corresponding to the central axis of the mountains in a south-westerly direction. By focusing the entrance to the park along the central axis of the mountains will allow people to see the mountains as the focal point of the area. Therefore the statues in front of the mountains will be invested with a majestic sense and power.

The center of Rajabhakti Park or the “navel” of the park

The *Chakra Phayuha* is contained in a round frame, with the center point and radii pointing outwards. This center is the origin of the locations of all the elements which are related and contribute to the unity of the plan of the park. The specification of the center was considered from the beginning when the layout was first suggested because this part is located on the main axis of the park. The most important specification of the site is the group of Royal statues. The site of each statue is on a radius of 250 meters, emitting from the navel. From this center vantage point, people will be able to see all the statues.

The specification of the size and the height of the statues and their plinths

Each statue is 13.9 meters in height, with the attire included the height is an average of approximately 16 meters. The design of the base plinth is designated to be in line with the topography and the open space. The statues are located on a three-level platform.

The first section is above the ground level and adjusted to make it harmonious with the landscape. The second level is the main platform shared by all the statues; its height is six meters. The third level contains a separate base for each statue. Each base is 7.50 x 7.50 meters and is approximately four meters in height.

The statues are 15 meters away from each other, approximately equal to the height of each. They do not appear be too close or too far from each other with all of them in line with the mountains. All are faced to gravitate towards the center of the park.

c. The landscape elements

The landscape elements consist of buildings in the park. They are simple in form to appear modest and do not outshine the statues. They are of a Thai style or a style that communicates strength, the monarchy and the military. The plants cultivated in the park are the symbolic color yellow for a king so Golden Shower trees have been grown in great number around the plaza. The expectation is to create a truly beautiful atmosphere that reminds viewers of the kings when the Golden Shower trees are in full bloom.

The main entrance

The Rajabhakti Park is entered from Phetchakasem Highway, opposite to the entrance of another military zone. This south-eastern entrance consists of a gate, a portal and a signboard with the project's name. It has the following overall design concept:

-- It is meant to be a landmark that draws people's attention when they enter from Phetchkasem Highway, focusing on the place of entry

-- It is designed to be a welcoming area that is grand, spacious and open because of the appropriate style of landscape elements that are unique to this park, creating a good first impression upon arrival

-- The design of the entrance is in line with the overall plan, starting from the road, which is the main axis of the entrance into the plaza. When the park is viewed from the road outside the project and the view pans to the inside of the project through the portal, with the seven royal statues as the focal point of the area and the mountain chain as the background, this is a way of specifying the viewing angle through a row of apertures, which constitute the identity and unity of the area, consisting of the axis, the plaza, the raised platform of the royal statues and the mountain chain.

The design of this part is not only for welcoming visitors but also contributes to the logistics of



Figure 14:
The scenery of Rajabhakti Park according to the landscape architecture concept

entering and exiting. It also ensures safety and security of the important areas of the project.

Other landscape elements in this area involve the following:

- The design of the roads and footpaths which are wide and open,
- The design of landscape elements including; large, decorative poles along both sides of the roads that serve as observation points and emphasize the perspective that leads to the royal statues, the signboard, and the lighting system and plants

The Signboard of Rajabhakti Park

The signboard displays the name of the project and serves as a landmark to attract the attention of visitors and those who pass by on Phetchakasem Highway.

-- The signboard is an equilateral triangular creating a shape that is 2.50 meters high. The signboard wall forms a link with the perspective of the entrance. The board bears the name of the park in the large letters that can be clearly seen from both directions of Phetchakasem Highway.

-- On the upper part of the signboard are large elevated trays in lotus-shape or the shape of raising both hands palm to palm, in a contemporary style that is plain and unique. The elevated trays, represent

showing respect, are made of a gold colored metal, which can clearly be seen both throughout the day and at night. The interior of each tray is octagonal with a base of four meters in width and 5.50 meters in height. Each tray is formed from 77 small, medium and large metal strips being folded together to create a bush pattern. These 77 metal strips represent the Thai subjects of the 77 provinces who are unified in paying respect and showing loyalty to the country's institution of monarchy.

-- The structure of an elevated tray is made from iron sheets of three sizes that are welded to form a gold colored shape. The inside is lined with iron screens of gold color. Electric lights are installed on the inside of the trays.

The Gate, the Portal and the Fence at the Entrance

The design of the portal at the entrance and the fence has the following concept:

-- The entrance portal⁷ is made of large columns, whose bases are two meters wide and nine meters high. It is a way of emphasizing the beautiful angle that leads to the raised platform of the royal statues. The location of this group of columns does not affect the important perspective inside the park. The columns are made in the Rama V, Art Deco style, adapted from the columns at the Royal Thai Army Headquarters⁸. The gigantic columns create a sense of awe. Both sides of the archway are decorated with the emblem of the Royal Thai Army

⁷ This entrance portal has not been yet established.

⁸ Formerly Chulachomklao Royal Military Academy on the Rajadamnoen Avenue.

-- The gates on each side of the entrance are T- archways consisting of four columns, with a sentry point in the lower part. This portal include the officials' control points by military guard and a storage room

-- The design of the surrounding area involves an inclined slope with a hard covered surface, the cultivated plants and the lighting system to light the main roads

The Design of the Raised Platform for the Royal Statues

The concept is to emphasize the harmony between the landscape and the grandeur of the seven royal statues.

-- The lower part of the platform is in the form of steps ascending to the upper part. This is a way of connecting the plaza and the statues. Originally,

there were two steps but during the construction one step was eliminated. This is the level where people can pay homage to the statues

-- The middle part connects all seven royal statues. This is the place where people pay respect to the statues and where ceremonies are held. Its length is approximately 100 meters. It is of Thai contemporary style architecture

-- The upper part is where the base of each statue is located. Each statue is 15 meters from the next. There is a passageway connecting this part with the plaza below

-- The base of each statue is placed horizontally to the radius of the center of the area, which has a unifying effect and makes the royal statues the focal point. The width and the height of the base are arranged in connection with the surrounding landscape and the background. The style is plain, similar to the wall of a fortress, emphasizing the distinctiveness of the statues on top

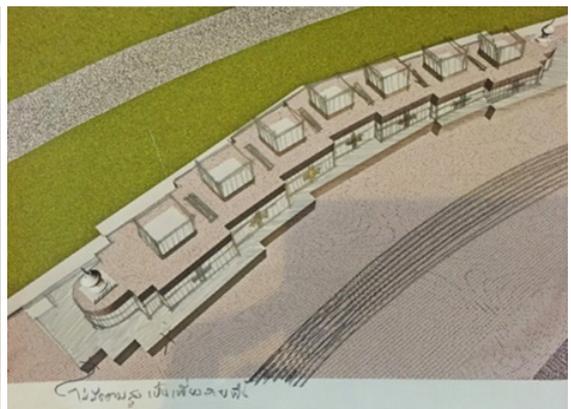
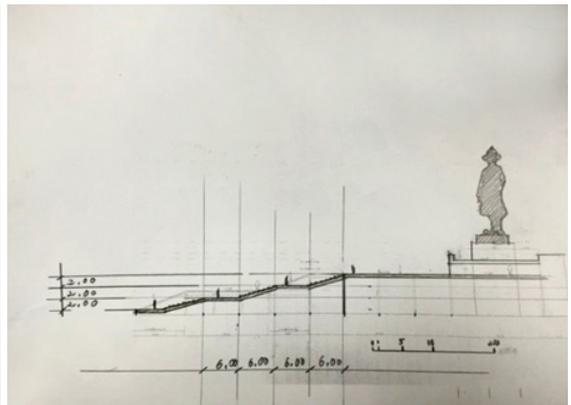
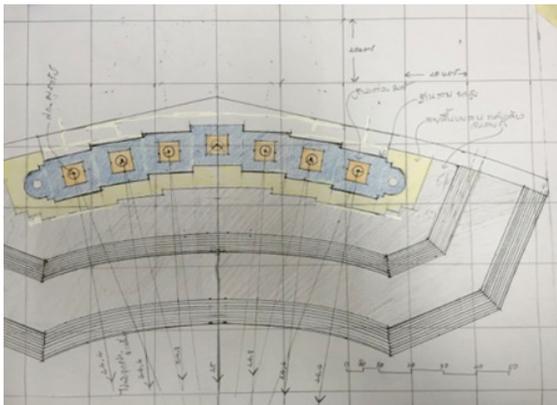


Figure 15:
The design of the base

-- The base is turned into a museum building on the plaza. There is an entrance that does not interfere with the activities performed in the open space in front of the statues.

In conclusion, this case study consisted of two parts. Each part examined the architectural landscape design and the planning processes. The first part looked at the symbolic and psychological aspects while the second part looked at the function of the park.

The first part involved the symbolic and psychologically designs and analyzed the main elements that led to the following concepts:

-- The site planning is derived from reading and understanding the values of site elements and then uses them in a harmonious way

-- The design communicates symbolic meanings through forms that reflects the theme and philosophy

-- The design of the visual scenery and atmosphere is perceived through the use the space and the composition of landscape elements

The second part of the study involved the function of the space as a military ceremonial space rather than a recreational space. An important aspect is that the functional design should not detract from the main symbolic messages.

The design process and the execution of the project have met the following problems:

-- The statues were cast in parts and when these parts were assembled, the statues might not be exactly the same as the mock-up because the assembling process started from the lower part to the upper part. The angle might have deviated, for example, the angle of the upper part of the statue might have deviated from the original and this would affect the form of the statue. In this case, corrections were made during the installation

-- A misunderstanding of the concept giving priority to the function; the change in the function of some areas would cause problems involving an inability to communicate the symbolic meaning and make it apparent

-- The change and adaptation of the landscape components that were not in line with the main concept at the beginning of the construction tended to lessen the value of the meaning intended or could

destroy other concepts that had been specified at the beginning. An example being: the angle being obstructed because of inappropriate positioning or size or foreign elements that were incongruous with the overall context, such as growing palm trees near the inner plaza of the park.

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