PHRA NAKORN KHIRI: AN ARCHITECTURAL REPLIC A OF
Tā-VA-TIṂ-SA BUDDHIST HEAVEN

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Abstract. The Phra Nakorn Khiri royal palace majestically spans three zeniths of a mountain range called Khao Mahasawan (the Great Heaven Mountains) in Petchburi province west of Bangkok. Buildings in the royal palace compound are of western architectural order. The palace encompasses numerous Buddhist symbols that embody the Lord of Buddha’s compassion. This paper researched into the ingenious application of simple architectural design concepts to the construction of Phra Nakorn Khiri to replicate Tā-va-tiṃ-sa heaven. Tā-va-tiṃ-sa is a heaven realm of deva (deities) in a Thai Buddhist Cosmology belief. Fragrant frangipani trees were planted around the buildings and line avenues linking the three zeniths. The plant species was selected for the scent of its blossoms, which is believed to be the scent in the Tā-va-tiṃ-sa heaven realm.
1 INTRODUCTION

In 1859, at the behest of King Mongkut (Rama IV) of the Chakri dynasty, a royal palace [1] was constructed on a mountain 95 meters above sea level outside in the province of Phetchaburi, 200 km west of Bangkok. The palace and compound covers a total area of 600 rai (i.e. 240 acres). The initial purposes of this first-ever mountain palace in the Kingdom of Thailand were as the King’s summer vacation residence and as a place to receive guests of foreign states.

According to accounts by Dr. Bradley [2] concerning King Mongkut’s brief visits to Phra Nakorn Khiri,

In May of 1860, the King paid a royal visit to Phetchaburi province to inspect the construction progress of the mountain palace. In October of the same year, the monarch travelled by his royal barge to the province to offer monastic robes in a royal Kathina ceremony (i.e. end of Buddhist Lent) at a temple near the foothills of Phra Nakorn Khiri.

In November of 1861, the King travelled to the province to preside over a royal religious ceremony in which the Buddha relics were enshrined inside a jedi (pagoda). In the same year, a ruler of a Prussia which is what is now Germany sent an envoy to Thailand to establish a diplomatic relationship. The delegates paid a visit to Phra Nakorn Khiri (Figures 1, 2).

The structures and floor plans of the buildings inside the palace compound are in line with established royal customs, except for an observatory which was constructed to satisfy the King’s keenness in astronomy. Every building in the palace compound is connected to one another by a long winding avenue lined with frangipani trees. The appearance of most of the buildings is of western architecture.

In 1935, Phra Nakorn Khiri was registered as a national historical site by Thailand’s Department of Fine Arts. The buildings in the palace compound have since been restored under a project called Phra Nakhon Khiri Historical Park to the original conditions as best as possible. In addition, the place has been transformed from a royal palace to a national museum as well as a national library for the general public to visit.

2 THE PALACE

On the highest zenith (of the three) situated the royal palace and its elements, including the observatory. The other two zeniths sit a jedi (pagoda) and was a royal temple, respectively. The constructions are connected to one another by a long winding avenue lined with fragrant frangipani trees (Figure 3).

The building nomenclatures were christened by King Mongkut and seven are identical to those of important celestial objects and beings of two heaven realms: the Cā-tum-mahā-rājīga and the Tā-va-tīm-sa heaven realms, as described in an ancient literature text called Te-bhūmi [3], which is of great religious and literary value. The seven nomenclatures are: Veja-yanta...
The word vajira was added to Veja-yanta Piman and Piman was altered to prasat (i.e. palace). The new nomenclature Veja-yanta-vajira-prasat is the name of a thorn hall in the palace compound whose rooftops sit five prang (corn husk-shaped pagodas). It is speculated that this building must have been of paramount importance taking into consideration its spectacular design [1] (Figures 4a, 5a).

The words Su and deva were removed and Rāja (i.e. royal) was added in front of the nomenclature Su-dham-mā-deva-sabpā. The new nomenclature Rāja-dhammā-sabpā is the name of a dhamma hall located in front of Veja-yanta-vajira-prasat in the same compound. The hall was used by the King to give a discourse or sermon to his courtiers and officials to impart the Buddha’s teachings to which the monarch was truly devoted [4] (Figures 4b, 5b).

Dhata-raṭṭha, Virūḷ-haka, Virū-pakkha, and Vessu-vaṇa are four guardian deities of the Cā-tum-mahā-rājiga heaven realm. The four nomenclatures were slightly changed and used to name four fortresses on the palace compound, i.e. the Dhata-raṭṭha pokpong, Virū-haka-borirak, Virū-pakkha-pongkun, and Vessu-vaṇa-raksa fortresses (Figures 4c, 5c).

The last nomenclature relating to celestial body is Phra-dhad-jom-pech, which was used to name a renovated pagoda housing the Buddha’s relics. The pagoda had existed and was in a dilapidated state prior to the construction of Phra Nakorn Khiri royal palace. The King thus ordered the renovation of the pagoda (Figures 4d, 5d).

3 Cā-tum-mahā-rājiga and Tā-va-tiṃsa HEAVEN REALMS

Cā-tum-mahā-rājiga and Tā-va-tiṃsa are the heaven realms associated with sensual pleasures and displeasures, e.g. lust, greed, anger, happiness and sorrow. According to Tebhūmi (Figures 6), a collection of parables about the three worlds, i.e. the worlds of human beings, devas and Brahmas [5], a king who upholds kingly virtues is regarded as a demigod. As head of a state or country, the king is revered as Indra, highest ruler of all deities. The Phra Nakorn Khiri royal palace was thus constructed to closely resemble the celestial bodies in the lower Cā-tum-mahā-rājiga and upper Tā-va-tiṃsa heaven realms (Figures 7).

3.1 Cā-tum-mahā-rājiga heaven realm

The Cā-tum-mahā-rājiga heaven realm is believed to be located above the top of the Yungan-dhara Mountain or 42,000 leagues above the Sī-dan-tara Ocean (i.e. 672,000 km). There are four great deva kings, collectively called Catu-loka-ban, guarding the heaven realm. The four great kings are Dhata-raṭṭha, Virū-haka, Virū-pakkha, Vessu-vaṇa guarding the East, South, West and North, respectively (Figure 8). The devas of this heaven realm have a life span of 500 heaven years or 9,000,000 human years [3].
3.2 Tā-va-tiṃ-sa heaven realm

The Tā-va-tiṃ-sa heaven realm is believed to be located above the top of the Sineru Mountain, which is regarded as the central universe. This heaven realm is 84,000 leagues or 1,344,000 km above the Sī-đan-tara Ocean. The constructions on this realm are made of precious stones and gold and there is heavenly music always playing in the air. In addition, everything on this heaven realm is of sensual pleasure nature. The devas of this heaven realm live 1,000 heaven years or 18,000,000 human years [3]. A Buddhist story tells of the Buddha made a visit to the Tā-va-tiṃ-sa heaven realm to give sermons to his mother, who was born a deva in this heaven realm. The nomenclatures of celestial bodies belonging to this heaven realm which are slightly adapted and adopted to name the buildings in the Phra Nakorn Khiri palace compound are as follows:

3.2.1 Veja-yanta Piman

Veja-yanta Piman is Indra’s abode, which is located at the center of the T-va-tiṃ-sa heaven realm (Figure 9). The Indra’s palace is 45 leagues (720 km) in height. Inside are magnificent columns embroidered with precious stones [6].

3.2.2 Su-dham-mā-deva-sabpā

It is an assembly hall of devas to listen to dhamma discourses. It has the same height as Veja-yanta Piman (45 leagues or 720 km) and inside is magnificent columns embroidered with precious stones [6] (Figure 9).

3.2.3 Cuḷā-maṇī-cetiya (or Phra-dhad-jom-pech)

Cuḷā-maṇī-cetiya is a pagoda enshrining the Buddha’s bun and upper fang. It is located outside the heaven walls to the southeast. The pagoda is 10 leagues (160 km) in height adorned with precious stones. Indra and other devas usually pay a visit to this place to worship and offer musical performances [6] (Figure 9).

Moreover, there are heavenly plants on the Tā-va-tiṃ-sa heaven realm. Tan (palm trees) are most dominant and surround the heaven moats forming the outermost border of Tā-va-tiṃ-sa. One Tan has a stem, leaves and fruits of each of three different materials: gold, silver and chrysoberyl. For example, the stem, leaves and fruits could be of gold, silver and chrysoberyl, respectively, or of any other order of the materials. The trees produce a beautiful melodic sound when a wind blows [3].

Aāsa-pati is a celestial vine which blossoms every 1000 years and lasts for a millennium. The devas of the two heaven realms would gather to appreciate the blooming flowers. Pārijāta is a celestial tree which blooms every 100 years and lasts for a century. Its flowers are dark yellow and its fragrance pervades the air for a distance of 100 leagues [3] (Figure 9).
CONCLUSIONS

The architectural and landscape design of the Phra Nakorn Khiri palace to replicate the Tā-va-tiṃ-sa heaven realm is an excellent template that new generations of Thai architects could integrate into their design and creation of contemporary architectural works and landscape.

To the untrained eye, the site of this mountain palace was chosen out of convenience. In fact, the location for the construction of the palace was meticulously selected as the lands were plentiful with palm trees, which were an analogy of heavenly Tan trees.

The nomenclatures of key buildings in the palace compound were derived from the celestial bodies and objects in the Tā-va-tiṃ-sa heaven realm. In addition, the placement and organization of the buildings and structures at various elevations of the mountain amid lush forests were intended to give an image that the palace is hovering above the ground, which was an analogy of a heavenly place floating in the clouds.

Frangipani trees, which are non-indigenous plants, were planted in the palace compound for their fragrant scents and to create the ambience of the Tā-va-tiṃ-sa heaven realm.

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REFERENCES

Phra Nakorn Khiri: an Architectural Replica of Tā-va-ṭīṃ-sa Buddhist Heaven

Figure 1: During the journey to Phra Nakhon Khiri of the Prussia's delegates in 1851 AD

Figure 2: The Prussia's delegates in front of Phra Thinung Phetphum Phairot, the hall for the king to give audience to his courtiers during his stay at Phra Nakhon Khiri
Figure 3: Layout of the Phra Nakhon Khiri

- **Phra-dhad-jom-pech**
- **Veja-yanta-vajira-prasat** palaces
- **Rāja-dhammā-sabpā** palace
- **Rāja-dhammā-sabpā** palace
- 4 fortresses
  - Dhata-raṭṭha pokpong in the east,
  - Virūl-haka-borirak in the south,
  - Virūl-pakka-pongkan in the west and
  - Vessu-vaṇṇa-raksa in the north
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Figure 4b: Rāja-dhammā-sabpā palace (in front)

Figure 4c: One of the four fortresses (right)

Figure 4d: “Phra-dhad-jom-pech” the stupa

Figure 4e: Panoramic view from the fortress

Figure 4: Vintage photos in 1963 AD by Paitoon Nimipal (http://www.bloggang.com/data/p/pn2474/picture/1300770467.jpg)
Figure 5a: Veja-yanta-vajira-prasat palaces

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Figure 5c: The footpath leading to the fortress

Figure 5d: “Phra-dhad-jom-pech” the stupa (right)

Figure 5e: Exterior space in front of the king palace

Figure 5f: Walkways and frangipani tree on either side

Figure 5: Photos in 2010 AD by the author
Figure 6: Trai-bhum manuscript
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<tr>
<th>Heaven</th>
<th>Description</th>
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<tr>
<td>Pa-ra-nim-mit-ta-va-sa-vat-ti</td>
<td>252,000 Yoch from Earth</td>
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<tr>
<td>Nim-ma-nor-ra-dee</td>
<td>210,000 Yoch from Earth</td>
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<td>Du-sit</td>
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<td>Yamaloka Niraya (Underworld)</td>
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Figure 7: Two-dimensional representation of Kama-bhumi
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Figure 9: The nomenclatures of celestial bodies belonging to Tā-va-tīm-sa heaven realm