Iconometry of Lan Na Craftsmen Compared with that of their Sri Lankan Counterparts, as Found on the Bronze Buddha Images at the Doi Suthep Temple Gallery¹

Prof. M.L. Surasawasdi Sooksawasdi

Faculty of Fine Arts, Chiang Mai University Corresponding author: tibetan07@gmail.com

Abstract

The 14th – 15th centuries Sukhothai and Lan Na historical sources always said about returning of local monks with pure Theravada Buddhism from Sri Lanka. Some sources gave details about Sri Lankan craftsmen who came together with the high monk. Thai art historian used to believe that the Sukhothai style of art was influenced from Sri Lankan style. They also said that the style from Sukhothai came to Chiang Mai together with Sumana in 1371. He began his Suandok Sect at that time while his relics digging up from Si Satchanalai were enshrined in two newly built stupas. An importance one was on the Doi Suthep.

Since no historical documents on Doi Suthep have yet mentioned about the origin of the bronze Buddha images housed at the temple gallery, it is essential to investigate this along with classifying them and determining their age as well as to study and compare the proportion system of the Lan Na founders of the Buddha images and that of their Sri Lankan counterparts. This study will focus on the iconometry of the Lan Na system of proportion referred to as sīhalakkhaṇa, chaturmāṇa and nigrodhalakkhaṇa (characteristic of the lion, elephant and banyan tree respectively) as against that of the caturmāṇa of the Sri Lankan Buddha image founders.

Silpakorn University Journal of Social Sciences, Humanities, and Arts Vol. 14(3): 129-151, 2014

¹ Edited from the research, A Study of Bronze Buddha Images in the Temple Gallery of Wat Prathat Doi Suthep, Chiang Mai Province (2013), funded by the Faculty of Fine Arts, Chiang Mai University

The study revealed that excluding the number of the newly cast Buddha images and those being restored, some of the bronze Buddha images were from Bo Kaeo Village and may have been also from Yang Moen village of Samoeng District, Chiang Mai Province. In the past, around 16^{th} - 17^{th} centuries, these areas must have been of some significance and connected with Chiang Mai directly as a number of the Chiang Mai style Buddha images were found. It was also discovered that the proportion of the Buddha images cast in that time did not follow the Sri Lankan *caturmāṇa* proportion but that of the Lan Na proportion instead. The most popular proportion adopted was the *gajalakkhaṇa* proportion. Nevertheless, this argument should be more studied for the vast area in the future.

Keywords: Doi Suthep; Chiang Mai Province; Samoeng District; Buddha image; iconometry; Lan Na; Sri Lanka

Inscriptions and documents from Sukhothai and Lan Na during the 14th-15th centuries constantly mention several Theras and monks who traveled to Sri Lanka to bring the pure Theravada Buddhism to their homelands — for instance, the New Ceylon Sect which returned to Sukhothai in 1424 and founded the Wat Pa Daeng Sect in Chiang Mai in 1430, and the previous Old Ceylon Sect led by Srisaddha which Hans Penth believes to have arrived to Sukhothai in 1344 with two relics and a troop of Sri Lankan craftsmen (Sooksawasdi and Penth 2007: 150-152). By the same time, study of Lan Na images by Carol Stratton (2004: 373), also notices the 1340s-1380s Gambola style from Sri Lanka influenced Lan Na sculpture. A few years later, Sumana, a student of Utumporn in Mottama, was invited by Phaya Kue Na (1355-85) to found the Wat Suan Dok Sect in Chiang Mai. Surasak Sisam-ang (2008: 17) remarks a bronze meditation Buddha image in Wat Suan Dok cast from that time was influenced by Polonnaruva style. The history of Sumana's journey gives details that he resided in Lamphun in 1369 and then moved to Chiang Mai in 1371. He, as much as Kue Na, was also involved in building a stupa for the relic on Doi Suthep which later becoming Wat Phrathat Doi Suthep.

The history of Wat Phrathat Doi Suthep mentions that the temple was built because of the strong faith of Phaya Kue Na, the sixth king of Mangrai Dynasty, in the relic discovered inside a deserted pagoda at Srisatchanalai, and so he intended to place it in an appropriate location, Doi Suthep. There is, however, no historical document mentioning the source of the bronze Buddha images housed at the Temple Gallery, not even in the ones published by Wat Phrathat Doi Suthep. Therefore, it is important to study the source, categorize, and determine the age of the images at the Temple Gallery. This manuscript also examines the influence of Buddhist art from Sri Lanka, which, as stated in the inscription, arrived in Sukhothai during the period from mid 14th to mid 15th centuries, through the means of iconometry. In this manuscript, a comparative study is conducted of the images at the Temple Gallery in the system of Lan Na craftsmanship with those of Sri Lanka.

Analyzing the styles and dating of the Buddha images at the Temple Gallery

At the Temple Gallery of Wat Phrathat Doi Suthep, which has the temples in the west and the east (Figure 1), there are altogether forty-six images (Figures 2, 3). Phrathepvorasitthajarn, the head monk, states that the images were collected fairly recently, in 1951 or 1952 during the era of Luang Pho Fu or Phra Ubalikhunupamajarn (Fu Attasivo), Lord Abbot of the fifth Buddhist Region and the superior of Wat Phrasingh (Phragruvititsasanatorn and Phragrubaidikalha Amarametho 2008: 99–100). Some were in good condition but some had been restored since they were damaged by fire before collected at the temple gallery. The interviews conducted by Hans Penth in 2003 reveal that some images were from Ban Bo Kaew in Samoeng District, Chiang Mai. A Buddha image in meditation gesture in the gallery dated in 1476 (Penth 2004: 245-254) may affirm the relation between Chiang Mai and Samoeng because its inscription that named "Wat Kon Lan" should point to the Wat Ton Lan in Samoeng Nuea today.

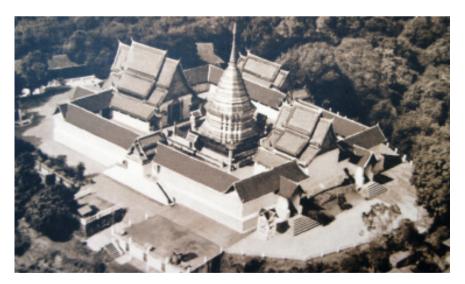


Figure 1: Aerial photograph showing the temple gallery surrounding the stupa of Doi Suthep.

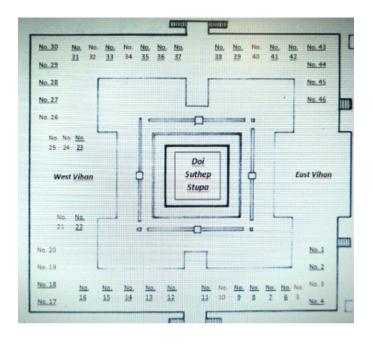


Figure 2: 46 Buddha images around the temple gallery, 34 of which are in a condition suitable for the analysis.



Figure 3: Some of the images around the temple gallery.

Of the forty-six images, thirty-four bronzes were in good condition and suitable for the analysis. The selected images are nos. 1, 2, 4, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 22, 23, 27, 28, 29, 30, 31, 33, 35, 36, 37, 38, 39, 41, 42, 43, 44, 45, and 46. A total of thirty of them are in the subduing Mara posture (four of which have the characteristics of Phra Singh) and the other four images are in the meditation posture.

Styles and dating

Based on the history of Lan Na, the five eras of Lan Na art history have been studied as follows:

- 1. First Period: Phaya Mangrai to Phaya Phayu (1296–1350). It was the era of the founding of Chiang Mai, and the Mangrai Dynasty began to expand its power over western Lan Na.
- 2. Second Period: Phaya Kue Na to Phaya Sam Fang Kaen (1350–1441). It was the era when Lan Na accepted the Lankawong Sect from Sukhothai.
- 3. Third Period: King Tilokarat to Phaya Thao Mae Ku (1442–1557). It began as the golden age of Lan Na until the kingdom was lost to King Bayinnaung of Burma.
- 4. Fourth Period: Phra Nang Visuthathevi to Po Mayunguan (1564–1774). Lan Na was under Burma's rule for two centuries.
- 5. Fifth Period: Phra Chao Kavila to Chao Kaew Navarat (1774–1892). Lan Na was liberated from Burma by the cooperation with Rattanakosin and became its protectorate.

The researchers studied the style and determined the age of each image, and the results are as follows:

1. Subduing Mara images

1) Most of the subduing Mara images belong to the Chiang Mai School. Dating is around the beginning of the third period, which is the second half of the 15th century to mid 16th century, or from the reign of King Tilok to the reign of Phra Mueng Ketklao. The total number of the images in this posture is twenty-one, those being image nos. 1, 4, 6, 7, 8, 9, 12, 15, 16, 18, 23, 29, 30, 31, 33, 35, 36, 37, 39, 44, and

- 45. This could be traced by comparing them to other bronze images in Chiang Mai which have the inscriptions at the pedestal, indicating that they were built in the same period. The examples, mostly in Chiang Mai, are; a subduing Mara Phra Saenthong at Wat Chedi Luang, Mueng, Chiang Mai, from 1482–1483 (Penth 1976: fig. 6n), a subduing Mara image at Wat Thungyu, during 1494–1945 (Penth 1976: fig. 10), a subduing Mara image at Wat Phra Chao Mengrai, during 1494–1945 (Penth 1976: fig. 11n), a subduing Mara image at Wat Chang Taem, during 1495–1946 (Penth 1976: fig. 12n), and a subduing Mara images No. 343/2435 at the National Museum, Wat Benchamabophit, Bangkok, which has the style of the 16th century Chiang Mai School (Sisam-ang 2008: fig. 28).
- 2) There are two Chiang Mai School subduing Mara images that are dated as belonging to the late third period, which is late 16th century image no. 2 and image no. 22 which have the style comparable to those of a subduing Mara image at Wat Pha Bong, Mueng, Chiang Mai, cast during the first reign of Phra Mueng Ketklao during 1535–1536 (Penth 1976: fig. 20n).
- 3) There are three Chiang Mai School subduing Mara images that date back to the fourth period, which is late 16th century, namely, image nos. 27, 28, and 38 which have style comparable to those of a subduing Mara image at Wat Prasart, Mueng, Chiang Mai (Penth 1976: fig. 23n), cast in 1590, and a subduing Mara image at Wat Chalermphrakiet, Mueng, Chiang Mai, cast in 1591 (Penth 1976: fig. 24n), during the period that Lan Na was colonized by the Toungoo Dynasty of Burma.

2. Subduing Mara images with the style of the Phra Singh

There are four Chiang Mai School subduing Mara images with the style of a replicated Phra Singh image dating back to the third period, which is late 15th century, namely, image nos. 13 (Figure 4), 41, 42, and 46. It is certain that these images were inspired by the Phra Sihinga image at Wat Phra Chao Mengrai, Mueng, Chiang Mai, built in 1470 (Penth 1976: fig. 2n)





Figure 4: A Phra Singh style image, **Figure 5:** A meditation image, No.13, 1473, at the Temple Gallery. No. 43, 1476, at the Temple Gallery.

3. Meditation images

- 1) There is one Chiang Mai School meditation image that dates back to the third period (late 15th century): image no. 43 (Figure 5), which has an inscription indicating that it was built in Chulasakarat 838 or 1476.
- 2) There is one Chiang Mai School meditation image that dates back to the third period (early 16th century): image no. 17 (Figure 6), which can be categorized in the same group as the two subduing Mara at the Temple Gallery, nos. 2 and 22.
- 3) There is one Chiang Mai School meditation image that dates back to the fifth period, after the period of the regional county government: image no. 14 (Figure 7). It was built in 1943, the period of the World War II, by Phra-gru Anusornsilakhan, the head monk of Wat Muen Sarn and the director Wat Phrathat Doi Suthep at that time.



Figure 6: A meditation image, no. 17 at the Temple Gallery.



Figure 7: A meditation image, no. 14, built in 1943, at the Temple Gallery.

Characteristics of a Great Man (*Mahā Purusha Lakshaṇa*) and the iconometry of Buddha images at Wat Phrathat Doi Suthep's Temple Gallery

Characteristics of a Great Man

The Buddha is traditionally regarded as having the thirty-two characteristics of a great man. Among craftsmen and Buddhists, these characteristics are considered a great man such as Lord Buddha or great king (Maha Chakrapat). Thais believe that a man with such characteristics should be honored either politically, i.e., by him becoming a great king, or religiously, i.e., by him becoming enlightened like Lord Buddha who experienced the enlightenment of *dhamma*.

It has been found that the above-mentioned thirty-two characteristics of a great man are inscribed in the bronze images in Chiang Mai, as well as in the other eighty minor characteristics, *Anuphayanchana*, that could be found in a Sanskrit scripture called *Lalitavistara* of *Sarvastivadin* Sect which was composed after the discovery of the Buddha images in the beginning of the first century

(Krairiksh 2009: 26; Monvitun 1969). This scripture later was famous between Mahayana Buddhists too. The thirty-two characteristics of a Great Man also appeared in the Lakhana Sutra Tigha Nikaya Patikavakka Suttantapidok as in *Pathamasombodhi* of Theravada Buddhism. Bamphen Ravin (1992) mentioned that Pathamasombodhi was rewritten in a different versions in Thai and Pali, such as Lan Na version of Dephindarassabhikku, around 1834–1835. Another well-known one is *Pathamabodhikatha* written by Phrasuvannarangsithera, a famous Thera of Chiang Mai during the 16th century.

The study showed that the Lan Na image craftsmen in the past did not distinguish between Theravada iconography and those of Mahayana because the thirty-two characteristics of a Great Man from *Pathamasom-bodhi*, and those from *Lalitavistara*, have been used for sculpted images both together. In fact, many of the great characteristics of the two sects are identical, for example, the body of a Singha, the chin of a lion, fingers and feet with net-like surface, tilted feet with the print of a gear wheel Chakra attached tightly to the ground (flat feet), tall body likes a banyan tree, and a visibly prominent skull etc. However, the eighty minor characteristics only scripted in *Lalitavistara* have been used by Lan Na craftsmen too.

Lan Na iconometry

Art historians have attempted to find a systematic approach to iconometry. The latter, Nancy H. Dowling (2011: 68) tried to measure the iconometry of the Buddha images and the Khmer god images in standing position of the Pre-Angkorian period. It was found that the early Khmer craftsmen always used the Indian system. As for the Lan Na systems, presently there have been numerous documents mentioning the proportion or the iconometry for making a Buddha image, which appeared to be used identically among the craftsmen. The identical characteristics are lion-like, elephant-like, and Banyan tree like (Woodward Jr. 1997: 23; Vichian-khew 2006: 50) (Figure 8). That is,

1) *sīhalakkhaṇa* (lion-like characteristics) images are those whose lap's width from the left to the right knees is the same as the length

from the foot to the nose.

- 2) *gajalakkhaṇa* (elephant-like characteristics) images are those whose lap's width from the left to the right knees is the same as the length from the foot to the eyebrows.
- 3) *nigrodhalakkhaṇa* (banyan-like characteristics) images are those whose lap's width from the left to the right knees is the same as the length from the foot to the hairline.



Figure 8: Lan Na Buddha image iconometry.

 $s\bar{\imath}halakkhaṇa$ A=B gajalakkhaṇa A=C nigrodhalakkhana A=D

("A" is the width between two knees, called a lap.)

Certain books on iconometry, such as the one by Srilau Ketphrom, also point out the details of the image's face that it should have, like the characteristics of 'rajasinghalakkhaṇa.' This face, king of lion's characteristics, consist of Thai face (the face of a great king), Khmer face, and Jora face (the face of a thief). Piriya Krairiksh (2009: 3) mentions that the reason why a thief is compared to a king is due to the fact that even though a king is supposed to be the protector of his people, he can fleece them as well, as stated in Tripitaka, the Suttantapitaka Tikha Nikaya and the Anghuttara Nikaya, that what brings disasters to the people are kings, thieves, ministers, warfare, fear, and fighting.

Sri Lankan iconometry

Ancient Sri Lankan scriptures on Buddha image casting, such as *Rupa Vali* and *Manjusri Chittrakarmasastra*, which have Mahayana origin, mention that the two systems well-known among the Sri Lankan craftsmen are the *navatala* system and the *uttama dasatala* system. However, it appears that the Sri Lankan images, both Anuradhapura and Polonnaruva styles, all used the *navatala* system, that is, the system which follows the norm that the four proportions must be equal (Figure 9):

- 1. The distance from the left knee to the right knee, called a lap
- 2. The distance from the hairline to the base
- 3. The distance from the right shoulder to the left knee
- 4. The distance from the left shoulder to the right knee

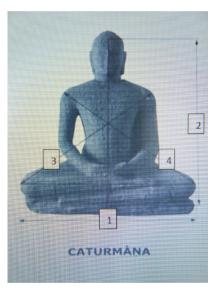


Figure 9: *caturmāṇa* (*navatala*), Sri Lankan iconometry, in which all four proportions must be equal.

This system was also called *caturmāṇa* by the Sri Lankan craftsmen. Benjamin Rowland states that ever since Sri Lanka received Buddhism and Buddhist art from India, the Sri Lankan craftsmen developed their own style, both in the Mahayana and Theravada ideals. The materials used included stone, glass, and bronze. It cannot be denied that the thirty-two characteristics of a great man influencing Buddha image-making in India had the same influence in Sri Lanka as well since the craftsmen there take into consideration such characteristics,

namely, a prominent skull, hair between the eyebrows, and a body like a lion (Rowland 1981: 153–154).

Buddha images in Sri Lanka were built in two popular postures: the standing position and the flat-leg meditation. Images in *Nibbhāna* posture are rarely seen and those in subduing Mara are almost non-existent. Standing images in Sri Lanka also have a palm in the forgiving hand gesture (*Abhaya*), signifying protection from all kinds of danger, as also sometimes meaning blessing since the inner palm of a Sri Lankan image in forgiving posture does not face outside, but rather the side of the right palm (Diskul 1974: 24, fig. 15). The iconometry of the Sri Lankan images, especially the standing ones, are built in *thalam*, a unit measurement, same as that in India. One *thalam* is equal to the distance from the hairline to the chin, that is, the palm span of a normal person. The overall iconometry of a standing image is nine *thalams*.

As for the images in the sitting posture, most appear to be in the flat-leg meditation posture, in lines with the Sri Lankan ideal's, called *Buddhānussati*, is same as *vipassanā* of Theravada Buddhism. Based on the study of Sri Lankan craftsmen who inherited the methods from their predecessors, Coomaraswamy, a famous Indian philosopher and scholar, states that popular meditation images that are of appropriate proportion have a height of five *thalams*, measuring from the bottom to the head (not including the pedestal) (Coomaraswamy 1908: 152 ff.).

Findings

The study of iconography by comparing the Lan Na system and those of the Sri Lankan clearly shows that Chiang Mai craftsmen were not acquainted with the Sri Lankan system, called *caturmāṇa*, because no image at the temple gallery has proportions that match this system, even though image nos. 13, 42, and 44, show the nearly similar proportion. On the contrary, Chiang Mai craftsmen during the 15th–16th centuries must have been familiar with their own Lan Na system, to a certain degree. The craftsmen favored the *gajalakkhaṇa* (elephant-like characteristics) the most and *nigrodhalakkhaṇa* (banyan-like characteristics) the second most,

with *sīhalakkhaṇa* (lion-like characteristics) found only in one image (see the table of the iconometry). The findings can be summarized as follows:

- 1. Although no images with exact *sīhalakkhaṇa* could be found, image no. 31 is the closest in its characteristics.
- 2. There are seven images with *gajalakkhaṇa*: nos. 2, 14, 15, 17, 29, 39, and 45, and there are seven others having nearly similar proportion, which are images nos. 7, 8, 18, 28, 30, 41, and 42.
- 3. There are three images with *nigrodhalakkhaṇa*: nos. 4, 35, and 38, and there are seven others having nearly similar proportion, which are images nos. 9, 12, 13, 23, 36, 42, and 44.



Figure 10: Srilao Ketphrom with villagers at Ban Yang Mern, Samoeng, Chiang Mai.

Origin of the temple gallery collection: exploration at Samoeng, Chiang Mai

During the field study at Ban Bo Kaew, or 'the well of gems,' Samoeng district, the locals were interviewed, and many of them confirm that there has been a discovery of bronze image in the county of Bo Kaew and has been given to Wat Phrathat Doi Suthep in the age of

their fathers and grand-fathers. However, no Chiang Mai School bronze images in the area could be found in the field study at Ban Bo Kaew. Different from the exploration at Ban Yang Mern, or 'staying for a quite long period (of the Lord Buddha),' (Figure 10) it was found that the area was significant during the 15th—16th centuries and that there were many ancient ruins scattered around.

One important piece of evidences is an image on the altar of Wat Yang Mern (Figure 11), which came from a deserted temple at Ban Ang-gai which is 2.2 kilometers by aerial measurement from Ban Yang Mern. The image is in a meditating position and a subduing Mara gesture: oval face, head slightly swollen on the sides, each eyebrow beautifully curved and both sides meeting at the nose, with slim eyes, prominent nose, and small mouth. There is a node on the chin with a chin line. Also, it has a narrow forehead, small dense hair nodes, a slim waist, a cone-shaped *ketumālā*, or *uṣṇīṣa*, and a flame halo, or *Rassamī*.



Figure 11: A bronze subduing Mara image built in 1556 at Wat Yang Mern, Samoeng, originally from a deserted temple at Ban Ang-gai.

The undercloth's edge hangs at the waist with the right hand placed nearly the right knee in the subduing Mara gesture. The four

fingers are slim and equally long, touching the pedestal. The robe is worn diagonally, with the right shoulder bare, and the edge has two lines. The kind of shawl's edge is long, reaching the edge of the undercloth. The end of the shawl is decorated with Prachamyam flowers. There is no line of the robe's edges that are placed over the undercloth, placing between the knees and the feet. The edge of the robe at the ankle has two lines. The hexagonal pedestal has two lotuses clasped together and there is a bas-relief line in the lowest pedestal. There are inscriptions on the pedestal at the front of the board. Srilau Kedprom's examination reveals that the characters are Dhamma Lan Na in the Tai Yuan language. The inscriptions say that in Chulasakarat 918, or 1556, Mahasangharajanandapanyo and Chao Muen Sarn built this bronze image as a cause for *Dibbāyachakkhuyān*, or 'knowledge as a holy eye' (Phrathepvedi 1988: 96).

The inscription shows the importance of Samoeng in the mid 16th century, to be precise, in 1556, two years prior to the seize of the Burmese Tongoo in 1558. Muen Sarn, the co-donor of this image, is possibly a reference to the title of a bureaucrat named after Muen Sarn who built Wat Muen Sarn in Chiang Mai during the reign of King Tilok. The title was inherited and the duty consisted of certifying ambassadors and translating royal letters. It is possible that a Muen Sarn in the mid 16th century gave this image to a temple at Ban Ang-gai in Samoeng, or that he was the local governor in the area at that time and that's how his name appeared as the co-donor.

The relationship between Samoeng and Chiang Mai must have been an ongoing one until the period of the Burmese occupied in the late 16th century. During the field visit at Samoeng Nuea, a bronze image was found at Wat Ton Lan (Figure 12). It was a subduing Mara in the manner of sitting cross-legged. The distance from the left knee to the right is considerable. The face is quite round and the hair concaved on the forehead. Curved eyebrows meet at the top of the nose, with the eyes glancing downward. The nose is prominent and the lips are wave-shaped. The chin's node is not prominent. The hair buns are medium-sized and the *ketumālā* has the shape of a quite tall cone. The halo is lotus bud-like.

The body is taller than other Phra Singh images. The chest is wide and the waist is slim. There is no undercloth's edge hanging under the navel, and the right hand is placed at the edge of the knee. The kind of shawl's edge is cut straight with no decoration. Note that there is a trace of hem down to the navel, possibly indicating that an alteration has been made. The robe's edge likes a ribbon overlays side of the left limb as a feature of Phra Singh. However, in front of the shin, we found a ribbon overlaid which is different from general images (figure 13).



Figure 12: A subduing Mara image **Figure 14:** A simulated Phra Singh at Wat Ton Lan, Samoeng. named Phrabuddhamangraichao



Figure 14: A simulated Phra Singh named Phrabuddhamangraichao built in 1566 at Wat Chai Phrakiet, Chiang Mai old city.



Figure 13: a ribbon overlaid in front of the shin of figure 12

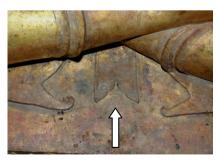


Figure 15: a ribbon overlaid in front of the shin of figure 14

The image at Wat Ton Lan can be categorized as a simulated Phra Singh since it has the same characteristics as a Simulated Phra Singh image at Wat Pa Tueng in Sankamphaeng, built by Muen Dab Ruen in 1488 (Griswold 1957: 82 pl. XIV). The image from Wat Ton Lan, however, must have been later created in the mid 16th century. Despite the tall body and the soft wax-like feet comparable to an image built by Therasina and a governor in 1523 at Wat Yuan in Chiang Kham, Phayao (Griswold 1957: 88 pl. XXXV), the face matches the simulated Phra Singh named Phrabuddhamangraichao, the main image at Wat Chaiphrakiet, built by a Burmese commander and Phra Nang Visudhidevi in 1556 (Griswold 1957: 92–93 pl. XLVI; Penth 1976: fig. 22n) (Figure 14). Also, this image has the unusual characteristic of the centipede-fang-shaped robe hem overlapping the front shin (figure 15) (Sooksawasdi 2012: 368). Therefore, the image at Wat Ton Lan can be categorized under the fourth-period Lan Na School, starting from the reign of Visudhidevi to that of Po Ma Yu Nguan.

Conclusion

It has been found that most of the 34 images at the temple gallery at Wat Phrathat Doi Suthep date back to the late 15th to mid 16th centuries, that is, during the reign of King Tilok, Phra Yod Chiang Rai, Phra Mueng Kaew, and Phra Mueng Ketklaom, which is considered the golden age for Lan Na, which went on until the late 16th century. The rest of the images were built recently.

The comparative analysis of the Lan Na proportion system and those of the Sri Lankan clearly shows that Chiang Mai craftsmen were not familiar with the Sri Lankan proportion system called *caturmāṇa* because no image at the temple gallery has the proportions that match this system, although image nos. 13, 42, and 44 do show some nearly proportions. On the contrary, the Chiang Mai craftsmen during the 15th–16th centuries must have been familiar with the Lan Na system, to a certain degree. The craftsmen favored the *gajalakkhaṇa* the most and *nigrodhalakkhaṇa* the second most, with *sīhalakkhaṇa* found only in one

image, image no. 22. Nevertheless, this argument should be more studied for the vast area in the future.

Moreover, the base of the image at Wat Yang Mern shows the importance of Samoeng district in the mid 16th century, to be precise, in 1556 (Chulasakarat 918), that is, during the reign of Thao Mae Ku. The relationship between remote area at Samoeng and Chiang Mai must have continued until Chiang Mai was seized by Burma in the late 16th century, as can be inferred evidently from the bronze image at Wat Ton Lan in Samoeng Nuea. Trade route, as much as the geographical feature, small plain among mountains, should be the factors for the growing up of those rural communities.

Acknowledgement

I would like to express my greatest gratitude to the Faculty of Fine Arts, Chiang Mai University, who has funded the research project, and Assoc. Prof. Dr. Thanes Sriwichailamphan, Director of Social Research Institute, for the Archive of Lan Na inscription service as much as his significance guidance for fieldwork in Samoeng. I am highly grateful to Srilao Ketphrom for his continuous support for the Lan Na culture information and inscription in this research, as same as Phrathepvorasitthajarn, the head monk of Wat Phrathat Doi Suthep, Assoc. Prof. Yupin Khemmuk of Ratchapat Chiang Mai University and Duangchan Chantarat, the Lan Na master sculptor, who gave much virtuous advice for this project. Thank you for Ms. Sulaluck Khaophong who did her best co-operation until the research be finished. Monks and villagers in Samoeng, friends and students who their names are not mentioned here have to be thankful too. I am also thankful to the Chiang Mai University Press for the first draft translation that is necessary for finally completed. However any faults are all my responsibility.

Table 1: Proportion of the thirty four Buddha images in the research with their types

images No.	knees	sihalak. fnose	gajalakkhana	nigrodha. fhairline	caturmana	inscription	proportion types	
1	67.0	62.5	feyebrows 70.0	72.0	66.0/65.0/72.0	no	is not alike to any prop. types	
2	58.0	52.0	58.0	60.0	56.0/56.0/60.0	yes	gajalakkhana	
4	76.0	66.5	73.5	76.0	71.0/72.0/76.5	no	nigrodhalakkhana	
6	53.5	43.0	57.0	59.5	52.5/52.5/59.5	no	is not alike to any prop. types	
7	68.0	62.5	69.0	73.0	67.0/68.0/73.0	no	is alike to gajalakkhana	
8	54.0	49.5	55.0	57.0	51.0/51.0/57.0	no	is alike to gajalakkhana	
9	68.0	54.0	64.0	67.0	62.0/65.0/67.0	no	is alike to nigrodhalakkhana	
11	67.5	61.5	69.5	71.5	65.0/65.0/71.5	no	is not alike to any prop. types	
12	77.0	67.0	74.0	78.0	71.0/77.0/78.0	no	is alike to nigrodhalakkhana	
13	82.0	68.0	77.0	81.0	81.0/81.0/81.0	no	nigrodha & caturmana	
14	64.0	57.0	64.0	67.0	61.5/64.5/67.5	yes	gajalakkhana	
15	71.0	63.5	71.0	74.0	69.0/69.0/74.0	no	gajalakkhana	
16	60.5	56.0	63.0	65.0	60.0/60.0/65.0	no	is not alike to any prop. types	
17	57.0	51.0	57.0	60.0	56.0/56.0/60.0	yes	gajalakkhana	
18	68.5	62.5	69.5	72.0	67.0/67.0/72.0	no	is alike to gajalakkhana	
22	62.0	57.5	87.0	66.0	62.0/60.0/66.0	yes	is not alike to any prop. types	
23	75.0	62.0	70.0	74.0	71.0/73.0/74.0	no	is alike to nigrodhalakkhana	
27	72.5	68.5	76.0	79.0	73.0/73.0/79.0	no	is not alike to any prop. types	
28	56.0	51.5	57.0	59.5	56.0/55.0/59.5	no	is alike to gajalakkhana	
29	53.0	47.0	53.0	55.0	52.0/52.0/55.0	no	gajalakkhana	
30	64.0	56.0	63.0	66.0	63.0/63.0/66.0	no	is alike to gajalakkhana	
31	58.5	57.0	63.5	67.0	59.0/59.0/67.0	no	is alike to sihalakkhana	
33	80.0	65.0	72.5	77.0	74.0/74.0/77.0	no	is alike to any prop. types	
35	76.0	64.5	72.5	76.0	72.0/73.0/76.5	no	nigrodhalakkhana	
36	77.5	66.5	73.5	76.5	72.0/75.0/76.5	no	is alike to nigrodhalakkhana	
37	49.5	46.5	52.0	54.0	48.0/48.0/54.0	no	is not alike to any prop. types	
38	58.0	49.0	55.0	58.0	55.0/56.0/57.5	no	nigrodhalakkhana	
39	72.0	63.0	72.0	75.0	71.0/71.0/75.0	yes	gajalakkhana	

Table 1: Continued

images No.	knees	sihalak. fnose	gajalakkhana feyebrows	nigrodha. fhairline	caturmana	inscription	proportion types	
41	72.0	63.0	71.0	74.0	70.0/70.0/74.0	no	is alike to gajalakkhana	
42	49.0	43.0	48.0	50.0	49.0/49.0/50.0	no	is alike to gaja., nigrodha. & caturmana.	
43	80.5	73.0	83.0	85.0	84.0/84.0/85.0	yes	is not alike to any prop. types	
44	75.0	65.0	72.0	76.0	75.0/75.0/76.0	no	is alike to nigrodha. & caturmana	
45	73.0	65.5	73.0	76.0	72.0/72.0/76.0	no	gajalakkhana	
46	70.0	61.5	68.0	72.0	69.0/69.0/72.0	no	is not alike to any prop. types	

Note 1) measure in centimeters 2) types were analyzed by one centimeter error

References

Thai

- Diskul. S. (1974) (BE 2517) Travelling in Sri Lanka. (เที่ยวเมืองลังกา) Bangkok: Rongpim Aungkarngha Khong Gurusapha.
- Krairiksh, P. (2009) (BE 2552) Thai Characteristic: Buddha Image the Identity of Thai Buddhist Arts. (ลักษณะไทย: พระพุทธปฏิมา อัต ลักษณ์พุทธศิลป์ไทย) Second Publish. Bangkok: Amarin Printing and Publishing Co. Ltd.
- Monvitun, S. (1969) (BE 2512) Lalitavistara. (ลลิตวิสตระ) First Part. Bangkok: Fine Arts Department.
- Penth, H. (1976) (BE 2519). Inscriptions on the Buddha Image Pedestals in Chiang Mai City. (คำจารึกที่ฐานพระพุทธรูปในนครเชียงใหม่) Bangkok: Office of the Prime Minister.
- Penth, H., Ketphrom, S. and Srita, S. (2004) (BE 2547) Corpus of Lān Nā Inscriptions Vol. 8: Inscriptions in ChiangMai. (ประชุมจารึก ล้านนา เล่ม 8: จารึกในจังหวัดเชียงใหม่) Chiang Mai: Social Research Institute, Chiang Mai University.
- Phrathepvedi. (Prayut Prayutto) (1988) (BE 2531) Encyclopedia of Buddhism: Words Collection Issue. (พจนานุกรมพุทธศาสน์ ฉบับประมวลศัพท์) Bangkok: Dan Sutthana Karn Pim Co. Ltd.
- Phragruvititsasanatorn and Phragrubaidikalha Amarametho. (2008) (BE 2551) Wat Phrasingh Waramahavihara. (วัดพระสิงห์วรมหาวิหาร) Chiang Mai: Vit in Design Co. Ltd.
- Ravin, B. (1992) (BE 2535) Pathamasombodhi in Lān Nā version. (ปฐมสมโพธิฉบับล้านนา) Bangkok: Audient Stores Publishing.
- Sisam-ang, S. (2008) (BE 2551) Wat Benjamabophit and its National Museum. (วัดเบญจมบพิตรและพิพิธภัณฑสถานแห่งชาติวัด เบญจมบพิตร) Bangkok: Fine Arts Department.
- Sooksawasdi, S. and Penth, H. (2007) (BE 2550) Buddhist Arts of Sihalabhikkhu Sect cal. 1350-1550 (พุทธศิลปะในนิกายสีหพภิกขุ พ.ศ. 1900-2100) Chiang Mai: Social Research Institute, Chiang Mai University.

- Sooksawasdi, S. (2012) (BE 2555) Buddhist Sects in Lān Nā from the Reign of King Tilōk to that of Phayā käo (1441-1525): Studies of Dated Bronze Buddha Images in Chiang Mai. (นิกายพุทธ ศาสนาในล้านนาระหว่างรัชสมัยพระเจ้าติโลกราช-พญาแก้ว (พ.ศ. 1984-2068 / A.D. 1441-1525): ศึกษา จากพระพุทธรูปสำริตที่มีจารึกใน จังหวัดเชียงใหม่) Research Report.
- Vichian-khew, A. (2006) (BE 2549) Antiques-monuments at the Lān Nā temples. (โบราณวัตถุ-โบราณสถานในล้านนา) Chiang Mai: Chiang Mai Rongpim Saengsilp Co. Ltd.

English

- Coomaraswamy, A.K. (1908) Medieval Singhalese Art. Broad Campden.
- Dowling, N.H. (2011) The Measured Art: A Proportional Analysis of Early Khmer Sculpture. Bangkok: White Lotus.
- Griswold, A.B. (1957) Dated Buddha Images of Northern Siam. Artibus Asiae Supplementum XVI Publishing Co.Ltd. Rowland, Benjamin.
- Stratton, C. (2004) Buddhist Sculpture of Northern Thailand. Chiang Mai: Silkworm Books.
- Woodward Jr., H.H. (1997) The Sacred Sculpture of Thailand. Bangkok: River Books.