

<ABSTRACT>

Iconometry of the Main Buddha at Sokkuram Monument
- Indian Theories of Proportion and its Application to
the Sokkuram Monument. -

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In this paper, I studied Indian theories of proportion, focusing on their parallels with Greek theories, this application to Buddhist sculpture, and their spread to East Asia : I concluded by examining the proportions of the main image at Sokkuram monument. There are two main purposes in studying these problems : one is an attempt to deduce the original intention of the artists who constructed Sokkuram : the other is to confirm the importance of proportion in Buddhist sculpture. For these purposes a survey of the evolution of the Indian theory of proportions is necessary to establish the origins of certain concepts.

'Silpa-sastras' means the canon of doctrine of fine arts. The term Silpa denotes sculpture in a narrow sense, but all arts, sculpture, painting, and architecture in a broad sense. By the seventh century, when Esoteric Buddhism began to be popular in India, the Hindu silpa-sastras were highly developed and influenced Esoteric Buddhist iconography. The most important of these texts were Citralaksana (Theory of painting), Brhat-Samhitā (Ancient Indian Encyclopaedia), Pratimalaksana (Theory of the Proportion of Statues), Pratimalaksana, Sariputra, Dasatala-nyagrodhaparimandala-pratimalaksana (On the essentials of the Plastic Representation of the Buddha Comparable to the Ten-span-wide Nyagrodha Tree). The first two are Hindu texts and the latter four are Buddhist. All six deal with the proportions of various parts of the body of divine image. Several principles can be formulated by summarizing and comparing these texts.

Two main principles of proportion can be extracted from the exposition of Brahma and the Buddha : One is 'nyagrodhaparimandala' and the other 'talamana'. These two important concepts of proportion are similar to the main principles of Greco-Roman canons of proportion. Ultimately, the Western artists who followed and developed the Greek canon and the Asian artists who worked from the Indian canon, all pursued the same principles of proportion in making divine statues.

All of the Indian treatises on image-making (figural sculpture) describe the proportion of nyagrodhaparimandala at the opening of the theory of proportions of the Mahapurusa (creator) Sanskrit 'nyagrodhaparimandala' means 'circle shaped as the Nyagrodha tree.

This is one of the thirty-two beauty marks(laksana) of the Mahapurusa. This simile, as discussed above, was adopted for the proportions of Cakravartin and the Buddha.

Vitruvius writes as follows :

For if a man lies on his back with hands and feet outspread, and the center of a circle is placed on his navel, his fingers and toes will be touched by the circumference. For if we measure from the sole of the foot to the top of the head and apply the measure to the outstretched hands, the breadth will be found equal to the height, just like sites which are squared by rule.

We thus find that Indian and Greek canons share a striking similarity in common. Since Leonard da Vinci studied Vitruvius' theory and made a drawing based on it, the artists of the Renaissance can be seen to have found inspiration in the work of Vitruvius.

The concept of *nyagrobapari-mandala* has basically different meaning from the concept of *talamana*. Therefore, in this paper, the two concepts are separated. In my iconometry consists of two different concepts. The former term, *nyagrobapari-mandala* has the broader, metaphysical sense : this principle is closely associated with the sacred geometry of square and circle based upon a cosmological world view. The latter term, *talamana*, has a more practical, narrower sense.

Tala means the length of a face and *mana* the length of a body. *Talamana*, therefore, can be literally translated "the proportion of face to body".

It is usually said the distance between the tips of the thumb and the middle finger, when they are stretched out, is called the *tala*. This distance corresponds to the length of the face. Finally, *tala* means the length of the face and becomes the basic unit of proportion of human body. The length of face is divided into three equal parts in Indian theory as well as in Greek and Egyptian theory. While in Indian theory nine-faces and ten-faces *tala* system were ideal, in Greek theory eight-faces proportion was most beautiful.

Yoneda mainly examined the ground plan, emphasizing the architectural planning. I, however, have emphasized the proportion of the main statue and focused on the elevation and facade. If the proportion of the facade is examined in terms of the proportion of the statue, the following relationship between them can be pointed out : the breadth of the two shoulders determined the distance between the two pillars : one half of the height of the main image determined the height of the pedestal : and the total height of the image including the pedestal determined the height of the arched entrance.

Thus, the measurements of the main image (the body of the Buddha) determined

the proportions of the architecture. In this respect, Sokkuram demonstrates eloquently remarkable relationship between the architecture and sculpture based upon the mathematical bodily proportions of the main image. This is one of the most important monuments exhibiting such a fundamental problems and clear solution as well in the history of world art.

These principles have been born out by a detailed analysis of the Sokkuram monument in connection with the measurements of its main image.

The new analysis of Sokkuram monument will be summarized as follows.

The talamana of the Sokkuram image has important common features with the Indian canons. Furthermore, it is evident that the dimensions of the main Buddha image determined the measurements of the architecture.

- (1) The total height of the seated Buddha image, including the pedestal which is harmonious in proportion to the image, determined the height of the circular hall.
- (2) The fathom or arm span of the main image determined the diameter of the circular hall as well as that of the dome.
- (3) The length of the main Buddha's face determined the height of the niches and the radius of the halo and the canopy of the main image,

On the basis of the relationship between the main image and the basic structure of the main hall, other detailed parts were determined.

- (1) The lines radiating from the center of circle I which is in accord with the top of the main image, determined the shape of wedges of the dome.
- (2) The band of the niches is not higher than the level of the head of main image.
- (3) The distance from the inside of one niche to that of the opposite is the same as the height of the circular hall.
- (4) The diameter or the height of the circular hall is eight times the length of the main Buddha's head.
- (5) The height of the circular hall is divided into four equal parts of which one circle is accord with the halo of the main image.
- (6) The diameter of the canopy (capstone) over the main image is one fourth of the diameter of the circular hall.

The dimensions of the main Buddha also determined the measurements of the facade which is one of the most important architectural designs.

- (1) The total height of the main image including its pedestal determined the height

of the arched entrance.

(2) The height of the pedestal is half of the main Buddha's height.

(3) The two shoulders of the main image determined the distance between the two pillars.

Thus, the dimensions of the main Buddha image are absolute units of standards determining all the architecture. All the parts of architecture and the pedestal of the main image were planned through accurate and systematic mathematical measurements and geometric proportions. Therefore, the main image, the core of this monument, must have been based upon the system of the mathematical relations between its various members.

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Dating of the Two Monks' Stupa on Kodal-won Site

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Kodal-won was a famous zen Buddhist temple in the early Koryo Period. The stupa, stone stele and stone statue pedestal have attracted attention as representative of the stone arts of Kodal-won. Of the stone objects, the sarira stupa of Buddhist priest Wonjong (treasure No. 7) and the sarira stupa on the Kodal-sa site (national treasure NO. 4) have been regarded as important material for dating stupas from the late Unified Shilla period and the early Koryo period. However, there are some problems in the present dating of the two stone objects.

The stele of the sarira stupa of priest Won-jong in the collection of the National museum of Korea in Seoul states that both the stupa and the stele were completed in A.D. 977. Judging from the style and technique of the tortoise-shaped pedestal and the capstone of the stele, however, the stupa on the Kodal-sa site should be the sarira stupa of priest Won-jong because the two both have the stone tortoise pedestal and flying-cloud design of the same style and the stupa has octagonal base and the lattice windows on the story and the roofs appearing heavy and dull. It is true that sarira stupa of priest Won-jong (Treasure No. 7) and the stupa on the Kodal-sa site share the same style. However, the similarity ends there. The sarira stupa of Priest Won-jong was sculptured with more refined technique and the foundation stone of the base is right rectangular and the stone tortoise is much more classical. The cloud-design is curled and the roof is very much of the style of Shilla stupas. Therefore, this pagoda may be regarded to belong to Priest Won-gam who founded Kodal-won and died in A.D. 869, which is presumed to have been erected between 869 and 873 when Priest Hong-gak, the top student of Won-gam's, left Kodal-won. It is thought that the stupa had been completed before 890 at the latest.

The style of the stupa of Priest Won-gam known as the Kodal-won style was kept alive by the stupa priest Hong-gok presumed to have been built around 886, the stupa on the Kyongbuk University campus, the stupa of Priest Chin-gong on the Hungbop-sa site in Wonju and the stupa of priest Won-jong set up in 977. It must be noted that the style of these stupas was found most often in Kangwon-do province.

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A Study on <Mountains and Rivers without End> By Yi In-Mun(1745 after 1824)

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Yi In-mun was one of the court painters attached to Kyujanggak, the Royal Library erected and particularly sponsored by King Chonhjo. He was eager to restore the monarchal power through operating that institution effectively. By taking the magnificent nature and the peaceful life of man as material in his long handscroll <Mountains and Rivers without End>, and through developing the landscape into Kaleidoscopic scenes overlooked from an extremely high and distant view, Yi In-mun expressed the eternity of the Chonjo Kingdom symbolized by the territory and the people. He also implicitly expressed his own being ('the old pine tree and the flowing water' is his penname).

In composition, the handscroll reveals Yi's habitual joint use of the two kinds of methods. One is arranging the outlines of the main objects in similar forms to dispose in the same direction, thus securing the desired unity and the power. Another is the symmetrical composition in which the right and the left parts are almost always contrasted in various phases. In addition, the handscroll as a whole shows remarkable organic structure and process. The fact mentioned above led the author to analyze the painter's logical plastic thought to conclude that the hidden meaning in composition is closely related to the contents of Taijitsushuo(太極圖說), a noted Chinese writing illustrating the Neo-Confucian theory, which was also the leading principle of Chonson Kingdom, as evidenced in the citation and its explanation of Hongjaejonso(弘齋全書), the Royal Anthology of King Chonjo.

All the magnificent scale, the highest quality of the material, the majestic and exquisite style, and the contents of the seven seals of the <Mountains and Rivers without End> reveal that the handscroll was painted for the king, and was originally in the Royal collection.

For the dating of the Painting, assuming that the style of this work is not so far away from that of <The Elegant Gathering of the Four Wise men> dated 1820 A.D., <Mountains and Rivers without End> also is supposed to have been painted around that time. It means that this work is the masterpiece of the around 75 year-old court painter who had faith in Confucianistic social order and poured into that handscroll

all the techniques and pictorial individuality attained through his long artistic life. At that time, Yi In-mun was probably proud to be court artist of Ch'ngjo Kingdom, as the cultural light of the Kingdom was still radiant, but it was scheduled to lose its spirits soon after his death.

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Comparison between Characteristics thorough Plastic Elements in the Literati Painting in China and Korea

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The ideal of literati painting resides in the fact that it is gratis : art for art. It is meant for a public of connoisseurs, This literati painting born in China prospered in Korea in different contexts.

In order to analyse the distinctive features of their of their works, We may ask ourselves upon the attitudes of the artists in front of the three fundamental data of the experience-Heaven, earth and man -characterizing respectively their mind.

The chinese painters tend to seize the reality of human being in the bosom of Nature-point of view of Laozi -while the korean painters are inclined to perceive the reality of Nature through the human being one-way of looking of Confucius. The quality of the pictorial form in Korea is represented by the humanist naturalism, the one of China by the mystical naturalism.

The literati painters, attracted by metaphysics and mystic, renounce all which is mundane obligations. Then, they retire to buddhist monasteries or taoist hermitages. So the literati painting is the product of a meditative and lonely life in the state of an absolute release. Giving their attention to the social body the korean painters observed the strict moral of confucianism. The social responsibilities squared not only to their missions but also to the very way of their own realization.

Of course, the chinese literati painting basing themselves on globalist formula, while they are opposed to those of the Northern school, realistics. In Korea the academism represented the first stage of their moral instruction -while they agreed with the gradualists, adepts of the accumulation of efforts and experience, the literati painters remained therefore faithful to the esthetics of the Northern school, even after the introduction of the Southern one. It is therefore the eclectic style which is predominant there.

The mysticism of the chinese painters aims at carrying out an experiment of the ultimate reality, namely supernatural. The works may be characterized of the notions of "void" (no existing manifestation) , of "dynamism" (yin -yang dualism manifestation) and of limitless (eternal flow of things manifestation) . The korean artists are clinging to the research of the realistic relativity loather than to the spiritual absolute one. Consequently, the confucian conceptions-such as conformity (regularity) , equilibrium (stability) and existence (Presence) determine the characteristics of the korean

literati painting.

In the composition of the Chinese pictorial art, the verticality is remarkable. In front of a work, one who gazes at it feels a sensation which allows him to enter into an unreal and mysterious world. In order to create this effect, the painters appeal to a symmetrical composition, to a contrasted structure between the vertical and horizontal movement. The Korean painters privilege the horizontality in the pictorial composition, which means they are anxious about stability and equilibrium. They rely only on asymmetry. In a work, they introduce only analogous elements either vertical or horizontal; they are searching for the absence of symmetry and avoid the contrast between vertical and horizontal.

In China, the echelonment of plans is strongly sustained owing to the Process of isolation. This process establishing no physical connection between the plastic forms, it gives us the impression that the forms are in an unsteady state. In Korea, the echelonment of plans is extremely dependant of the liaison Process. This last one allows to maintain the gravity in the figuration and in the echelonment of the plans.

The Chinese painters cling to the background which is valorized by the non-realist of the mounts. The height of the mountains not being bound by natural scale, it evokes an unreal and irrational sensation. In the instance of Korean art, the connection in the echelonment of the plans results in the focusing on single plan or on two plans. On the former one the artist insists on the affinity with human world.

In China the contrast between the highest mountains and the less high ones is noteworthy. The Korean painters observe the principle of conformity in the combination of mountains and rocks. In China, the search for pronounced contrast may be observed too in the combination of the trees. In Korea, considering this combination, the principle of regularity is faithfully observed. The almost excessive importance given to small rocks is evident. The rocks which ornament the mountains are acting as to show these last ones higher. In the greatest part of Korean works, such rocks are absent - the result of it is increased communication and sympathy between the elements of Nature and the personages represented in the pictures.

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Puksaesounun-do and Pukkwansuch'ang-rok - True Scene Paintings by Hahn Shi-gak (1621 ~ ?) -

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Puksaesounun-do(北塞宣恩圖) by hahn shi-gak depicts the scenes of the national civil and military services examination specially held in Kilchu, Hamgyong-do province, a northern province bordering China, in the fifth year of the reign of King Hyonjong(A.D 1664). This painting is in the collection of the National Museum of Korea in Seoul.

Two examination scenes, one for the civil service examination and the other for the military service examination, are painted under the title of the paintings written in the ornamental calligraphic style on a scrolled roll. Besides, information regarding the examinations, such as the date, examination officials, examination problems names of successful candidates with their date of birth, age and birth place, is written.

Pukkwansuch'ang-rok(北關 唱錄) is in a private collection and has never been shown publicly. An album, it consists of six true-scene paintings and 34 pages of poems in Chinese characters. In the paintings Kim-Su-hang, the examiner, Hong Sok-ku, the magistrate of Ich-on County, Min Chong-jung governor of Hamgyong-do Province, O Chin-ik, an official of the province, and Cho Song-vo, magistrate of I song County, are depicted. These persons are the same ones who were recorded in Puksae Sonun-do and this fact and that the size and the technique of the square seal applied on the two paintings are identical lead us to conclude that the two works were painted by Hahn Shi-gak in the same year. The poems on Pukkwansuch'ang-rok are poems by Kim Su-han and poems in response to his poems by those listed on the album.

An instructor of the Painting Bureau, Hahn Shi-gak appears to have been a leading painter of his time. Unfortunately, only a dozen or so of his works remain. The two works I am introducing in this paper will throw a new light on Hahn shi gok as a true-scene painter preceding Chong-son(1676 ~ 1759), widely hailed as the creator and master of the true-scene paintings, by half a century who made initial contribution to the development of the the-scene paintings of the Chongjo period

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Buddhist-Gong with Inscription of Sanoe-sa(思惱寺) Temple

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On October 18, 1993, 379 metal objects including a gong with a 34 Chinese character inscription have been accidentally unearthed as utility poles were being removed during the expansion work of the Mushim-ch'on River dikes located at 270 Sajik-dong, Ch'ongju City, Ch'ungch'ongbuk-do Province.

The inscription in a row on the side of the gong revealed after removing the thick patina says that a buddhist-gong for Sanoe-sa Temple was made on May 24, the Year of Rooster(the cyclical year of Kiyu;己酉) 35 kun(斤) of copper was consumed to make it and the expense and technical supervision were provided by artisan Kim Son. Sanoe-sa was a historical Buddhist temple which was in Ch'ongju about 750 years ago in the Koryo period.

With the diameter of 48.5cm and the width of the side of 10.5cm this buddhist-gong was one of the larger Koryo gongs. There thick-lined concentric circles divided the gong surface into three decorative zones with designs in relief. The innermost circle with lotus overies is surrounded by a band with lotus petals, which is encircled by the outermost containing arabesque and peak-shaped designs. The innermost circle has striking point at the center which is surrounded by three circles of lotus overies.

The lower part of the outermost band is filled with mountain peak-shaped patterns flanked by symmetrical upward-looking arabesque designs while the upper part is left plain. In contrast to all the Koryo buddhist-gong which were completely filled with designs, this one has an upper half free portion represented the sky above the mountains and if my thinking is accepted as reasonable the peak design may be viewed to symbolized the earth and the space in the upper half a boundless heavenly world.

Three rings to hang the buddhist-gong appear to have been cast as part of the gong itself, rather than attached later to the completed instrument. This is one of the very well-made buddhist-gong with uniform thickness and few spots containing base metal and few air cells caused during the casting process.

It is hard to determine in which cyclical year of kiyu(己酉), which had occurred about half a dozen times in the Koryo period, this buddhist-gong was manufactured. Since all of the 378 artifacts unearthed together with this buddhist

gong were Koryo objects and the nature of the objects strongly suggests that they were all used by one temple. It is logical to link the end of the Koryo temple with foreign invasions, especially the seven Yuan aggressions in the Koryo period. Therefore, it may be reasonable to date the end of Sano-sa Temple to 1251, a cyclical year of Kiyu(己酉), in which the Yuan forces fiercely attacked Ch'ungju, not far from Ch'ongju, for 80 consecutive days, during Yuan's fourth invasion of Korea.

The unearthed objects which were actually used in a temple, when completely surveyed and investigated by art historians and others, will increase the number of quality metal objects from the Koryo period and will contribute to the further study of the Buddhist culture of Ch'ongju region in the Koryo period.

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