

REPORT UPON ARCHAEOLOGICAL RESERCH IN
THE DEPARTMENT OF LITERATURE. VOL XIII

STUDY ON THE ANCIENT TILES OF THE
SILLA DYNASTY, KOREA

BY

KOSAKU HAMADA & SUYEJI UMEHARA

With

A CORPUS OF ANCIENT TILES OF
THE SILLA DYNASTY



THE KYOTO IMPERIAL UNIVERSITY

1934

TO THE MEMORY OF
REV. DR. ARCHIBALD HENRY SAYCE
(1845-1933)

WHO WAS KEENLY INTERESTED IN THE FOUNDING
OF THIS INSTITUTE
AND WATCHED ITS DEVELOPMENTS SYMPATHETICALLY
THIS NUMBER
IS AFFECTIONATELY DEDICATED

CONTENTS

I. Collections and Study of the Ancient Tiles of the Silla Dynasty.	1
II. Uses of the Tiles and Bricks in Silla.	2
III. Sites Where Ancient Tiles and Bricks are Found in Keishû.	3
IV. Varieties of Forms of Silla Tiles.	4
V. Convex Tiles with Ornamental-Disks.	5
A. Lotus Flower Pattern Groups.	5
B. Animal Pattern Groups.	6
VI. Concave Tiles with Ornamental Faces.	7
A. <i>Karakusa</i> Pattern Groups.	7
B. Angels and Animal Pattern Groups.	8
VII. Bricks and Other Tiles.	9
A. Paving-Bricks.	9
B. Wall-bricks, &c.	11
VIII. Tile-Patterns and the Sites Where Tiles are Found.	12
IX. Characteristics of the Silla Tiles—Concluding Remarks.	14
Index of Temple Sites and other Geographical Names to the Corpus of Ancient Silla Tiles. (In Japanese)	

PLATES

—A CORPUS OF ANCIENT SILLA TILES—

	Plates
Disk-tiles with Lotus-flower Designs. (Photos)	I-XIV
Disk-tiles with Animal-figure Designs. (Photos)	XV-XVII
Oval-disk Tiles. (Photos)	XVIII
Oblong Tile-plaques. (Photos)	XIX
Disk-tiles with Lotus-flower Designs. (Rubblings)	XX-XXXII
Disk-tiles with Animal-figure Designs. (Rubblings)	XXXIII-XXXVI
Oval Disk-tiles. (Rubblings)	XXXVII
Flat-tiles with <i>karakusa</i> Designs. (Photos)	XXXVIII-XLI
Flat-tiles with Animal and Angel Designs. (Photos)	XLII-XLIV
Flat-tiles with <i>karakusa</i> Designs. (Rubblings)	XLV-XLIX
Flat-tiles with Animal and Angel Designs. (Rubblings)	L-LVIII
Paving-Bricks. (Photos)	LIX-LXII
Wall-Bricks. (Photos)	LXIII
Paving-Bricks. (Rubblings)	LXIV-LXX
Wall-Bricks. (Rubblings)	LXXI
Ridge-end Tiles. (Photos)	LXXII-LXXV
Relief Panel with Figure of Guardian God. (Coloured)	FRONTISPIECE

ILLUSTRATIONS

	Page in Jap. text
Fig. 1. Round and semicircular disk-tiles found at I-chou China. (Kyoto Imperial University collection)	8
Fig. 2. So-called disk-tile found at A-fang Palace of Ch'in, China. (After Ch'in-han-wa-chuan-lu)	8
Fig. 3. Disk-tiles of Six Dynasties & T'ang in China: (1-2) From Hsiu-shan Park in Nanking, China. (3-7) From cave temples at Yün-kang. (5-6) From Imperial tomb of T'ai-tsung of T'ang.	8-9
Fig. 4. (1) Han disk-tiles from the city site of Lo-lang, Korea. (Mr. Ito's	

	collection) (2) Disk-tiles from Fuyo. (Kyoto Imperial University collection)	10-11
Fig. 5.	Disk-tiles of Kokryō period from the vicinity of Heijō. (Mr. Ito's collection)	10-11
Fig. 6.	Tiles of Kaoli period from the vicinity of Kaijō (Mr. Ito's collection)	10-11
Fig. 7.	Ornaments of bricks found at Fuyo. (Rubblings by Umehara) ...	11
Fig. 9.	Site of the main-hall of Koryū Temple, Keishū.	13
Fig. 10.	Rubblings of tiles and bricks: (1) Of Reishū Temple. (1) Of Shūsen Temple. (3) Of an unknown temple at Kōshū. (By Mr. Karube)	16-17
Fig. 11.	Map of Keishū and its vicinity showing of the sites of ancient temples. (By Mr. S. Ono)	18-19
Fig. 12.	Flat-tile found in the site of Shisai Temple, Keishū.	21
Fig. 13.	Various tiles found in Keishū: (1) Complete specimen of a disk-tile. (2) Oval-diked tile. (3) Corner-tile. (4) Tiles used on fence-walls, &c.	24-25
Fig. 14.	(1) Disk-tiles found at the site of Kōryū Temple, &c., Keishū. (2) Complete specimen of a flat-tile from Keishū.	24-25
Fig. 15.	Sections of disk-tiles found at the site of Rinkai Palace, Keishū. (By Mr. Arimitsu)	23
Fig. 16.	Sections of flat-tiles found in Keishū. (By Umehara)	24
Fig. 17.	Stone ridge-end ornament <i>Shibi</i> found at the site of Girin Temple, Keishū. (By Mr. Nose)	25
Fig. 18.	So-called <i>chidori</i> -shaped paving-tiles found at Shitennō Temple, Keishū.	26
Fig. 19.	Tile-disks with lotus-flower patterns showing their development. (By Hamada)	29
Fig. 20.	Various types of lotus-flower patterns on tile-disks found in Keishū. (By Hamada)	30
Fig. 21.	Lotus-flower patterned tile-disk found at the castle site of Taga-jō, Japan.	32
Fig. 22.	Geese pattern on an ivory-rule in the Shōsō-in Repository.	35

Fig. 23.	Geese pattern on a buddhist scroll found by Sir A. Stein in Chinese Turkestan. (After Serindia)	36
Fig. 24.	Various types of <i>karakusa</i> patterns on flat-tiles found in Keishû. (By Hamada)	39
Fig. 25.	Square brick with a phoenix design in Minami-hokke-ji Temple, Japan.	43
Fig. 26.	Square brick with an angel relief in Okadera Temple, Japan. ...	45
Fig. 27.	Paving-tile found at the site of Jugyô-in at Dazaifu, Japan. ...	48
Fig. 28.	Paving-tiles of T'ang dynasty found in China, &c. (Rubbings)	48-49
Fig. 29.	Cloisonné mirror in the Shôsoin Repository.	49
Fig. 30.	Brick-pagoda of Shinroku Temple, Rishû.	52
Fig. 31.	Ruined brick-pagoda of Butsurei Temple, Seidô.	54
Fig. 32.	Various tiles found at the site of Rinkai Palace, Keishû. (Photo by Mr. Arimitsu)	60-61
Fig. 33.	Tile-disks with <i>kalavinka</i> design found in Keishû, (Rubbings)	62-63
Fig. 34.	Flat-tile with <i>kalavinka</i> design found in Keishû. (I) (Rubbings)	62-63
Fig. 35.	Do. (II) (Rubbings)	62-63
Fig. 36.	Same lower-face designs of flat-tiles found at various places in Keishû.	62-63
Fig. 37.	Glazed cinerary urn found in Keishû.	63
Fig. 38.	T'ang mirrors: (1) Angel-patterned. (2) <i>Hôshôge</i> -patterned. ...	66-67
Fig. 39.	Various types of ancient Japanese disk-tiles.	66-67
Fig. 40.	Various types of ancient Japanese flat-tiles.	66-67
Fig. 41.	Ancient Japanese tiles in Silla style. (Rubbings)	66
Fig. 42.	Disk-tile with human face found at Kôrin Temple, Keishû. (Photo Mr. Arimitsu)	67
Fig. 72.	Wall-brick with a hunting scene found at Shaseiri, Keishû (Rubbing by Mr. Saito)	72
Fig. 73.	Do. (Photo Mr. Saito) (End of Eng. text)	

STUDY ON THE ANCIENT TILES OF THE SILLA DYNASTY, KOREA

(Résumé of the Japanese Text)

I. COLLECTIONS AND STUDY OF THE ANCIENT TILES OF THE SILLA DYNASTY

Those who visit Keishû 慶州 (Kyongtju), the ancient capital of Silla or Shiragi 新羅, will see the huge sepulchral mounds in the neighbourhood of the town, stupendous monuments of all earlier period of her kingdom, and recall her flourishing periods in viewing the stone pagodas and images, &c., in the museum and at the temple-sites. These are, indeed, lamentable relics of the past ages, of some thousand years ago, when the kingdom held sway over the whole peninsula, and decorated her capital with palaces and temples, erected after the style of T'ang art in China. Besides these images and pagodas, there are countless numbers of the humbler sort of relics of the same great age, scattered over fields and road-side. These are fragments of the roof-tiles and bricks once used in the palaces and temples. Though they may appear trifling and insignificant, they reflect in their ornamental patterns the plastic art of those days, as eloquently as the largest stone monuments could do.

These tiles, however, did not attract connoisseurs until Dr. Sekino first noticed them in 1903 in connection with his exploration of the ancient architecture of the peninsula and collected by late Dr. R. Imanishi with more eagerness in 1904, some specimens were afterwards published with his notes. Later on Mr. H. Moroga and others followed their example and accumulated their collec-

(1) Keishû is approached from Taikyû, in the main line of the railway between Fusan and Keijô (Seoul), some 40 miles east by motorcar or by the light rail-way.

(2) The Silla dynasty is often divided into three periods, the earlier (—653), the middle or flourishing period (654—779) and the later period (780—935).

tions. At last a corpus of some 600 items was compiled by Dr. Sekino in the *Atlas of Korean Antiquities* (Vol. V). These collections, however, are consist chiefly of specimens coming from peasants' or dealers' hands, and naturally we can not be certain of their provenance. Then Mr. Mitsunari, some ten years ago, began his collection, hunting tiles personally at the sites, and Mr. Moroga his regional searches village by village. The first special album of the Silla tiles was published, by Umehara's assistance, in 1925, and consists of Mr. Moroga's collection.⁽¹⁾ We owe our corpus and study of the Silla tiles in the main to these more reliable collections, which were handed over, lately in part the former to Mr. Ichida and the latter to the Keishû Museum, &c. We do not of course overlook other important collections, public or private, such as those of the Government Museum of Seoul, Imperial Museum of Tokyo, Archaeological Museum of our own Institute, and of Messrs. S. Ito of Kyoto, D. Shibata of Keishû, &c.

II. USE OF THE TILES AND BRICKS IN SILLA

The invention of roof-tiles and bricks in burnt clay seems earlier in China than Western countries, appearing at least in the later period of the Chou dynasty, as exemplified, at I-chou 易州 in Hopei province. (Fig. 1) It gradually became into vogue during the Ch'in and Han dynasties, as the actual remains of tiles, and other evidences show us. (Fig. 2) South Manchuria yields also Han tiles from castle sites and elsewhere where the Chinese civilization was established. So it was in the Lo-lang 樂浪 district in north Korea, yielding very interesting specimens as the district name, Lo-lang, would indicated. (Fig. 4) Kokuryō or Kokuri 高句麗, the northernmost of the three peninsular kingdoms once established, adopted first Han-style tiles and bricks with certain modifications. (Fig. 5) Then on its later lotus-patterned tiles it reflects the influence exercised from the succeeding Northern dynasties of China, all of which is exemplified by the remains discovered at various sites. (Fig. 3)

In Paktje or Kudara 百濟, one of the southern kingdoms, occur tiles of somewhat different patterns, probably having relation to the southern dynasties

(1) *Shiragi-Kogafu* 新羅古瓦譜 (Published by the Society for the Preservation of the Antiquity of Keishû). Only the volume I (Flat-tiles and Bricks, etc.) appeared.

of China.⁽¹⁾ (Figs. 4 & 7) Our Silla or Shiragi 新羅, another kingdom of the south, was the latest of all three, in her adoption of Chinese civilization. She introduced Buddhism first from Kokuryō, and the art of tile manufacture from Paktje, until direct intercourse began with the T'ang Empire. But she displayed at last far more artistic and versatile activity on tile ornaments than the mother country of her arts, China, likewise surpassing her sister country, Japan and others, as if myriads of flowers and blossoms should be brought forth in profusion in a garden at one time.

III. SITES AT KEISHU WHERE ANCIENT TILES AND BRICKS ARE FOUND

The sites at Keishū where ancient tiles and bricks occur are confined to those of the palaces and Buddhist temples, not extended to private houses. The Buddhist temples naturally, and the palaces in Chinese style as well, date back to the days when that religion was introduced into the Kingdom, in the reign of Hōkō 法興王 (514—539). Since then, however, King Shinkō 眞興王 (540—578) and his successors, had erected temple after temple, such as Eikō 永興寺, Kōrin 興輪寺, Kōryū 皇龍寺 (Fig. 8), &c., and most eagerly of all, King Bumbu 文武王 (661—680), after the unification of the whole peninsular kingdoms, had built the most magnificent temples. The famous temple Shitennō 四天王寺 owes its foundation to this King. (Fig. 9) This enthusiasm for building temples was not confined to the vicinity of the capital, but extended over the whole territory, as verified by actual remains of stone pagodas, &c. Unfortunately, almost all these temples have been devastated since the fall of the dynasty, except a few, for example, Funkō 芬草寺, Hakuritsu 柏栗, Bukkoku 佛國寺, &c. But nearly sixty temples, of which the names and the sites are identified, still are recognized in the neighbourhood of Keishū, as the following summary list gives:

Keishū 慶州邑 12,	Senhoku-men 川北面 5,	Gaitō-men 外東面 5,
Naitō-men 內東面 19,	Kenkoku-men 見谷面 3,	Yōhoku-men 陽谷面 4,
Nainan-men, 內南面 12,	Kōsei-men 江西面 3,	Sei-men 西面 4.

Moreover, if we add those sites of anonymous temples, more than one hundred

(1) This is the hypothesis proposed by Dr. T. Sekino. See his *History of Korean Art* (1932).

or so will be counted.⁽¹⁾ Naturally, the quantity and quality of the ancient tiles coming from each site differs, but as a rule large temples erected by Kings or Government, such as Shitennô, Kôrin, Fumon 普門寺, Shôrin 昌林寺, Kansen 甘泉寺, &c., produce tiles in rich as quality as in quantity, to these only the palace site of Rinkai 臨海殿 may be compared.

IV. VARIETIES OF FORMS OF THE SILLA TILES

The tiles and bricks found at the sites of palaces and temples at Keishû show very rich variety, containing every imaginable form, far surpassing the ancient tiles of Japan. (Fig. 13) The majority, however, is naturally the common roof-tiles, convex or half-cylindrical tiles, with or without an ornamented round disk, and concave or plane tiles, with or without decorated face.⁽²⁾ Besides these we come across here many other unusual forms which never or seldom occur in Japan, such as convex tiles with an oval disk, concave tiles with two faces, used at roof-corners, the specially made small sized one, and the rafter-end plaques. In Kokuryô, as during the Han dynasty of China, ornamental patterns were only applied on the disks of convex tiles, but in Silla, as time went on, the patterns also occur on the faces of concave tiles, as in Japan. The patterns are occasionally applied even on the undersides of disks or faces of tiles, a thing unheard in ancient Chinese or Japanese tiles. All these tiles were manufactured with moulds, sometimes, of wood, when very precise patterns were needed, but mostly of clay. We have a few actual remains of them. (Fig. 14) The acroterions or ridge-end tiles with ogre-face or fish-tail shapes are also found elsewhere.⁽³⁾

Bricks were also used in Silla, for paving floors or constructing walls of buildings or pagodas. They are usually plain, but often with ornamental patterns. There are also, though only in the case of the Shitennô temple, large tablets with reliefs. They are green-glazed, a technique which we have seen used on other tiles occasionally.

(1) A more detailed list, with the names of temples, is given in the Japanese text. This list as well as a map (Fig. 11) showing all these sites we owe to Mr. K. Osaka's labourous research and his kind contribution to us.

(2) Of the terminology of tiles in various forms see the Japanese text where a more detailed discussion is given.

(3) There is a rare example cut in stone found at Girin temple 祇林寺. (Fig. 17)

V. CONVEX TILES WITH ORNAMENTAL DISKS

(Plates I-XXXVII)

A. Lotus Flower Pattern Groups

The chief patterns applied on convex or half-cylindrical tiles are those of lotus flower groups, as in ancient Japan. This kind of ornament was unknown in Han times, but came into vogue after the introduction of Buddhism especially in the Six dynasties. Its earliest example now extant is perhaps that of Kokuryō, which still reflects a certain trace of the favourite Han device of quatered round disks. Four thin petals then multiplied into eight or six and gradually broadened. (Fig. 19). This was done first in Paktje, and Silla and Japan adopted it.⁽¹⁾ The evolution of the patterns (Fig. 20) may be described as follows:

- (1) **Thin single-petaled flower patterns:** (I; XIX) There are many varieties in this class, according to the forms of petals, &c. The calyx in the centre is usually larger than in Japan. The correct dating of tiles with these patterns is probably the earlier part of the Post-unification period of Silla. This evolved on the one hand to
- (2) **Chrysanthemum-like flower patterns:**⁽²⁾ (II-IV; XX-XXII) The petals here are multiplied to 16 or 32 and occasionally smaller flowers are piled up around the calyx. We see more elaborate examples in what follows:
- (3) **Broad double-petaled flower patterns:** (V-XI; XXI-XXVIII) Thin petals now become much wider, having frequently one or two raised portions and occasionally pretty, trefoil-like veins inside. As a whole, the modelling is quite plastic, like our Japanese tiles of the Nara and Pre-Nara periods. But here we see very often the duplicated or triplicated smaller flowers in the centre as a characteristic feature of the Silla tiles. The finest examples, such as those from the Rinkai Palace or Shitennō Temple, mostly belong to these categories. Over-decorated designs and superficial techniques show naturally its decadence.
- (4) **Honeysuckle- and 'Hôsôge'-like flower patterns:** (XII-XIV; XXIX-XXXII) The

(1) We know of a very few examples of lotus patterned tile-disks in China, except those from Nan-king and from Yün-kang. (Fig. 3)

(2) The chrysanthemum crest of the Japanese Imperial household is also a deliviation from the lotus flower.

flower leaves become here honeysuckle and *hōsōge*-like,⁽¹⁾ gradually losing the characteristic features of the lotus flower, except its large calyx in the centre. Some much resemble the designs of the cloisonné mirrors of the Shōsō-in. Among a great number of varieties, of which many are degenerated, those found at the temple-site at Nankan 南澗 &c., can be considered the best. In Japan this kind of patterns is very seldom seen.⁽²⁾

- (5) **Other naturalistic flower patterns:** (XXX, &c.) Some reflect more or less original lotus features, but others are quite free and naturalistic in treatment, showing a *hōsōge* or other fantastic flowers. This class of patterns of course is not the orthodox style of the Silla tiles.

While the above-described patterns are applied on the main surface, the tile-disk **borders** are encircled usually by a dotted band or occasionally by other elements, and sometimes but very seldom with a zig-zag pattern which is quite common in Japan. Disked-tiles of the best period often have ornamental patterns, usually of vines, on the **underside of disks**. **Oval disks**, few in quantity, have the same, but rather simpler patterns.⁽³⁾

B. Animal Pattern Groups.

In the Silla tile-disks we find other kinds of patterns besides those mentioned above, that is animal designs of fowl and beasts. The rim, however, frequently contains the lotus, and the ground the *hōsōge* patterns, &c.

- (1) **Confronting geese patterns:** (XV; XXXIII) The geese hold flower-twigs in their beaks, and some *hōsōge*-like flowers are seen over them. The birds sometimes do not exactly confront one another, but the heads only, while the bodies face in the same direction. It is a very smart design, seen also on an ivory rule in the Shōsō-in. (Fig. 22) This kind of patterns were quite in vogue in the T'ang dynasty.
- (2) **'Kalavinka' patterns:** (XVI; XXXIV-XXXV) The *kalavinka* 迦陵頻迦, human-

(1) The *hōsōge* 寶相華 is a floral design derived from the honey suckle and acanthus leaves, developed in China in the T'ang dynasty.

(2) In Bitchū and other provinces rare examples are found. Some scholars think of them as influenced by Korea, but others as the natural decadance of the T'ang ornament in Japan.

(3) Rafter-end tiles have also similar but much more simpler patterns.

faced bird derived from India, is represented on the disks sometimes seen from the side, sometimes from the front. It is often surrounded by a broad outercircle of lotus flowers.

- (3) **Winged lion patterns:** (XVIII, XXXV) Somewhat similar to the previous patterns, but never with the lotus outercircle. The crouching lion is nicely modelled. This is one of the most successful designs.
- (4) **Winged 'ch'i-lin' pattern:** (XV, XXXV) This mythical Chinese animal *ch'i-lin* 麒麟 seems also probably to have originated in Western Asia, as also the winged lion. The animal is here represented suitably on an oval disk in its sitting position.
- (5) **Frog and hare pattern:** (XV, XXXV) This represents the two animals in the Moon-world, after an old Chinese tradition. Clever but somewhat too complex design for a tile-disk.
- (6) **Animal-face patterns:** (XVII, XXXVII) Lion-like animal-face patterns derived from the favourite Han design in China, which is traceable to the *t'ao-t'ieh* 饕餮 of the Chou period. This is not very harmonious with the other graceful sorts of patterns.⁽¹⁾

VI. CONCAVE TILES WITH ORNAMENTAL FACE

(Plates XXXIX-LXXIII)

A. *Karakusa* Pattern Groups

In China the ends of a concave or plane tiles were not decorated in the Han period, nor in Kokuryō either. We find the earliest examples in Japan. Those of Silla belong a little later, mostly dating back to the Post-Unification period. As the end-face of a concave tile gives more spacious room for design than the disk of a convex tile, the decorative treatment is consequently freer and more graceful than on other tiles, though the motives are not much richer. We may classify the patterns into two groups, the *karakusa* 唐草 (vine or rinceau band ornament) and angels and animals. The former is more predominating and can be described under the following four headings:

(1) We must here add a tile disk with human face. It was quite recently found at the site of Korin temple. This seems but a trial piece made by hand-modelling. (Fig. 31)

- (1) **Honeysuckle⁽¹⁾ 'karakusa' patterns :** (XXXIX ; XLV-XLVII) This kind is also very common in our Nara and Pre-Nara flat-tiles, and we never come across in Silla such excellent examples as those of the Hôryû-ji temple. The earlier ones are often very naturalistic and graceful, with light undulations and simpler foliages. They become gradually heavier and more complex, though some nice examples do occur in the later stages.
- (2) **Grape-vine 'karakusa' patterns :** (XXXIX, XL, XLII ; XLVI-XLVIII) Grapes as well as grape-vine patterns were introduced from Western countries, and became very favourite ornaments in the times of the Six dynasties and T'ang. In Silla grape-vine patterns were used more than in Japan, and they are in many cases very successful, exhibiting graceful forms and delicate technique.
- (3) **'Hôsôge' and other 'karakusa' patterns :** (XXXIX, XL ; XLVIII-XLIX) In some cases being practically indistinguishable from the former *karakusa* patterns, we may call these are the over-elaborated development and decadant forms of the others. The foliage now becomes quite fantastic and often too complex, though occasionally fine examples are found.
- (4) **Other floral patterns :** (XXXVIII-XLIX) Sometimes the *hôsôge* in a discontinuous and scattered composition and sometimes other flowers in a more or less naturalistic manner. We can not say, however, that these patterns are very successful as tile ornaments, and must class them as degenerated.
- The **border ornaments** of these flat-tiles are much the same as those of the cylindrical tiles, which usually consist of dotted bands, or often of simple lines—the wise device not disturbing the main patterns. **Lower-face ornaments** are found also on those which belong to the best period, and the ornaments usually consist of the same, but slightly simplified sorts of patterns, showing often very refined and graceful taste.

B. Angels and Animal Pattern Groups

In Silla, as we mentioned before, the flat-tiles have more artistic designs than the cylindrical ones, and in the flat-tiles these angels and animal patterns display more beautiful motives than the *karakusa* groups, reaching almost to the climax of their attainment. The animals, however, seem originally to have been mere accessory elements of the *karakusa* or floral designs which gained gradually their

(1) A leaf which sometimes is called the honeysuckle, palmette or anthemion &c.

importance and changed situation quite contrary at last. In Japan as well as in China we have yet not heard of these kinds of patterns represented on tiles.

- (1) **Confronting phoenix patterns:** (XLII, L-LII) This fantastic bird, *fêng-huang* 鳳凰, seems to have had its origin also in the West. Quite similar graceful forms can be seen in the art productions of the T'ang or Nara periods. Of course there are certain degenerated examples.
- (2) **Confronting parrots patterns:** (XLIH; L, LI) Akin to the previous patterns.
- (3) **Confronting geese pattern:** (XLIII, LII) We saw a quite similar design on the disk-tiles, but here the pair is repeated twice, thus adapting the pattern to a longer space.
- (4) **Small birds patterns:** (XLII, LII) In these cases birds are represented much smaller than the floral elements. Some seem to be swallows or sparrows, but some humming-birds or the like.
- (5) **Confronting winged 'ch'i-lin' pattern:** (XLI, LIII) Very lively running animals are depicted. Surely this can be counted as one of the finest of animal ornaments, ranking with the phoenix, or angel pattern.
- (6) **Dragon patterns:** (XLIH; LIV-LV) Sometimes a single dragon, and sometimes a pair of them are represented, all with very vigorous attitudes. But it takes at last quite degenerated linear forms.
- (7) **Flying angel patterns:** (XLIH; LVI-LVII) The beasts of the previous patterns are substituted by flying angels. Some with twigs of lotus and the others with rice-bowl or flute, &c. Among many varieties of this kind of patterns the finest ones can be compared with the same design of the famous bronze bell of the Hôtoku temple, Keishû.
- (8) **Animal-face patterns:** (LVIII) The animal face is placed in the centre of floral design and finally it is quite assimilated in it.

VII. BRICKS AND OTHER TILES

(Plates LIX-LXXV)

A. Paving-bricks

In Silla paving tiles or bricks were frequently used in large temples and

(1) In China we know little of the flat-tile design. Those found at the site of Tung-ching-ch'eng 東京城 of P'o-hai 渤海 by Mr. Harada in 1933, show only very simple and poor ornaments.

palaces.⁽¹⁾ They are usually plain, but often decorated with beautiful designs, and show a richer and freer treatment than other tiles, as the broader space admits it. This kind of bricks was undoubtedly employed in China, though we know at present only some inferior examples of the T'ang period, such as of the ancient Kao-ch'ang 高昌 (Chinese Turkestan) and of the P'o-hai 渤海⁽²⁾ (North Manchuria), &c. (Fig. 28) There are various forms of paving-bricks, square, rectangular, triangular and a fancy-form known as *chidori-gata* 千鳥形.⁽³⁾ Ornamental patterns consist chiefly of floral designs, *hōsōge*, lotus, &c.

- (1) **Thin-petaled 'hōsōge' patterns:** (I.X, I.XII; I.XVIII-I.XX) The finest examples are found at the palace site of Rinkai-den, &c. Its graceful rich design recalls a similar pattern on the cloisonné mirrors of the Shōsō-in. (Fig. 29) On the centre we see a large eight-petaled flower with smaller corollae around its calyx, and at the four corners the same *hōsōge* vine ornaments. No one can hesitate to admire this exquisite work with its delicate taste and fluent technique. The half-sized rectangular, and triangular tiles have also the same sort of ornaments.
- (2) **Broad-petaled 'hōsōge' patterns:** (I.X, I.XII; I.XV-I.XIX) Similar to the previous ones, only differing in their broader flower leaves, and lotus-like central corollae. Some have the ornamental bands on their borders.
- (3) **Round lotus patterns:** (I.XII, I.XIX) These patterns are adapted from those on tile-disks. Some have two and the other four flowers. The ground is usually ornamented with honeysuckle *karakusa*, &c.

Among the ornamented paving-bricks those square ones with eight thin petaled *hōsōge* pattern, are the finest of all and these occasionally have the patterns also on one of the four edges, faced probably along the margin of the floor where that side could be seen. This **side pattern** consists of the same *hōsōge* vines, but with lovely confronting deer figures inserted within. It is indeed a very charming design. The existence of triangular tiles tells us that the square tiles were in some cases arranged diagonally to the room.

(1) In Japan the use of paving-tiles was not frequent, but a few ornamented examples are found in Kiushū, &c. (Fig. 27)

(2) Excavated at Tung-ching-ch'eng in 1933 by Mr. Harada, &c.

(3) These elegantly shaped tiles are found at the site of Shitennō Temple. They are green glazed, but without ornamental patterns. (Fig. 18)

B. Wall-bricks, &c.

We do not know yet in the case of Silla the use of bricks for building tomb-chambers, as in the Lo-lang district or in Kudara, but they were employed often to build pagodas after the Chinese fashion. In a few cases⁽¹⁾ they are ornamented with very beautiful patterns.⁽²⁾

- (1) **Buddha and pagoda patterns:** (LXIII, LXXI) A quite similar pattern is found on those coming from Nôsho-men and those of the temple Butsurei. Here the images of Buddhas and of pagodas are represented alternately in a row. The small Buddha is quite Silla-style, and the pagoda seems the picture of the then prevailing masonry one. Some inferior sorts of the same pattern are found elsewhere.
- (2) **Temple and cloud patterns:** (LXIII, LXXI) Only seen on those occurring at Nôsho. Very finely depicted small Buddhist temples are shown on the floating clouds, which signify that the scene is in paradise. The temple is also quite Silla-style. On the heads of bricks a certain fish-like animal-head is represented beside the half-cut temple figure.
- (3) **Flying birds and 'karakusa' patterns:** (LXIII, LXXI) We have the specimens from Nôsho as well as from the Butsurei temple. (Fig. 31)
- (4) **Flying angel pattern:** (LXIII, LXXI) Somewhat coarse in technique.
- (5) **Round 'karakusa' pattern:** (Fig. 31) This is seen on the bricks of the pagoda of the Shinroku temple. (Fig. 30) Each brick has semi-circular patterns which make complete circles supplemented by the ones in the next layer.
- (6) **Honeysuckle and lotus patterns:** (Fig. 7) Seen on those found at the Shûsen temple 鷺仙寺 and very similar to patterns on the paving-tiles there.

Besides the above-mentioned bricks and tiles there is another kind of tiles which were used as **decorative relief-panels** in the pagodas of the Shitenno temple. (Frontispiece & LXXII) We have in Japan only small specimens found

(1) There are known three pagodas which are built with ornamented bricks, the seven-storied pagoda of the Shinroku temple 神勒寺 (Keiki Province), the ruined pagoda of the Butsurei temple 佛羅寺 (North Keishô Pr.), and the pagoda site at Nôsho 農所面 (South Keishô Pr.).

(2) See Hamada's article in the *Studies of Art*, 美術研究 (No. 17) 1933.

in Yamato,⁽¹⁾ which can not be compared with this grand work. These are represented Four Guardian Gods or Lokapalas, each in armour, seated on vanquished demons. Unfortunately three large pieces now extant are broken at the top, but we can make out how finely modelled, with nice proportion and power the figures are. One, it is thought represented Jikoku 持國天, while two others, which were made from the same mould, Zôchô 增長天. Each panel must have originally measured about two feet square and appears to have been covered in green-glaze.

We may add here one more sort of tiles, the **ridge-end tiles** (LXXII-LXXV) in the shape of a fish-tail 鰭尾 or in the tablet-shaped tiles with demon face 鬼板. They are very well modelled and to be compared with fine examples of our Nara or Heian periods.⁽²⁾

VIII. TILE-PATTERNS AND THE SITES WHERE TILES ARE FOUND

We have seen in the foregoing chapters the ornamental patterns of the Silla tiles, which principally consist of lotus flowers, on the cylindrical tiles, and *karakusa* or vines, on the flat tiles. This, however, is much the same as in the ancient Japanese tiles of the corresponding periods, Silla only differing in its complex and rich variation of the same elements of patterns, with the addition of certain fresh motives, such as animals and angels.

Do all these patterns belong to the same age, or can we distinguish them into accurate periods? Unfortunately not at present, because the history of each temple or palace has not yet been cleared up. The only thing we can do is to arrange the patterns according to types, and assign them temporarily in historical periods. Thus, generally speaking the simpler patterns belong to an earlier period, and the fully-developed ones to the flourishing period, while the weak and decadant examples to a later period. At any rate all these tiles can be dated mostly to Silla's Post-Unification period, or the 7th to 10th centuries A.D.

Before we discuss the characteristic features of the Silla tiles it is necessary

(1) Small tiles with trinity Buddhas are found at the Yamada temple 山田寺, &c. Larger tiles with an angel, and with a phoenix are preserved now at the Oka 岡寺 and Minami-Hokke 南法華寺 temples respectively. (Figs. 25 & 26)

(2) See the note on p. 16 and Figs. 43 and 44.

here to enumerate certain important facts relating to the different tile-patterns and the sites where tiles are discovered. The first is that in Silla a single temple site yields many different tile-patterns. This is not noticed so often in Japan. For instance at the site of the Kôrin temple nearly 67 species of tiles in different patterns were collected by Mr. Mitsunari in a single day. This was also so at the Shitennô temple and other places.

In certain temples naturally a number of buildings exist, and the dates of erection may differ in each case, resulting in special varieties of tile-patterns. But there are certain limits in them. The number of rebuildings and restorations of a temple might have reached ten or twelve during the Silla dynasty. In our Japanese temples, however, a very moderate number of different patterned tiles are obtained, and, moreover, all the patterns are more or less in unity, being never so varied and confused as in Silla. Were the Silla people indifferent to uniformity in tile-patterns, or, if not what was the reason for it? We shall answer this later on.

Secondly, in Silla quite similar patterned tiles are found at different temple sites. This is verified also by the painstaking study of rubbings. For example, the same *kalavinka* patterns come out from the Saburo and Fumon temples and the Rinkai palace, &c. (Figs. 33 & 35) This occurs very seldom in Japan. How can we interpret this remarkable fact, otherwise than that all these tiles were manufactured at one factory and distributed to the different temples, or else that tiles of one temple, after its decay, were transferred to and reused in another temple?

In connection with this fact, we may mention another fact: that absolutely the same lower-face ornaments frequently occur on different patterned tiles. We can recognize this in at least five cases among the comparatively rare occurrences of the ornaments. (Fig. 36) It suggests that these tiles were fabricated at the same factory or factories, interchanging the moulds freely, which would happen often in quantitative production.⁽¹⁾

(1) We may recall the fabrication of the Silla cinerary urns in glazed pottery. (Fig. 37) The variations of patterns very often are the results of the different combinations of the same stamps.

IX. CHARACTERISTICS OF THE SILLA TILES

—CONCLUDING REMARKS

It is now time for us to consider what relation those facts, which we have enumerated before, have to the tile-patterns and the temple-sites, and at last to summarize some general characteristics of the Silla tiles.

Though the motives of the Silla tiles are rich and multiplied, all their elements seem to have their direct sources in the T'ang Empire of China. As a matter of fact, except some of proper Chinese, most of them are derived from Western origins, such as India, Persia, &c., but they were mixed up and modified considerably in the melting pot of China. The Koreans adapted all these and no element came directly from the West or originated in their own country. The point, however, is not this, but how the Koreans employed all these elements freely and fittingly for tile ornaments, even those which Chinese or Japanese dared not use.

Though not thoroughly studied yet, it seems that the T'ang tiles had much simpler kinds of ornaments. Our Japanese tiles too, as we have mentioned before, have somewhat simpler and more unvarying designs than in Silla. (Figs. 39 & 40) Some would think that in Japan the older patterns, introduced from the earlier periods of the Sui and T'ang, survived and the tilers stuck to them longer. But our Nara period was the very time when anything new of the T'ang art and civilization was adapted and copied, in haste and without selection. How could the artists or tilers have refrained from adapting new elements and motives, if they had been at hand. We must think, consequently, that the extraordinary development of the Silla tiles was chiefly due to her own special conditions or milieu.

We do not know of course what were exactly those special conditions in Silla. There are, however, some remarkable instances to be taken as analogies to support our supposition. First of all, look at the fine filigree work in ancient Silla. Its technique was no doubt introduced from China which also came from the West, but it came into vogue in ancient Silla and developed wonderfully. The delicate inlaid porcelain of the Koryŏ dynasty is perhaps another remarkable instance. Originally copied from Chinese Sung ware, this art reached almost to its perfection in Korea. So it would have been similar with the tilaric art, undergoing the special development in the special milieu of the penin-

sular country after its introduction from China.

In that period the T'ang artists very often came over to Silla. They lead the artistic world and left some very exquisite works, such as the bronze bell of the Hôtoku temple or the plastic monuments in the Sekkutsu-an grotto, &c. Such Chinese artists or their excellent pupils would have also taken part in tile-designing by themselves or have lead their fellow artisans to do so. They apparently were not been satisfied only to repeat the Chinese prototypes, but tried to apply all suitable designs in their stock-books to the tile-patterns, so tastefully and in such as diversity we see in the actual remains.

The Silla tilers, however, forgot that these tiles should have to be placed high upon the roofs of buildings. They designed, it seems, the tile-patterns as if only for the satisfaction of their own artistic impulse. They made, as it were, tiles expressly to be collected in the ruined sites, after having fallen off the roofs, and to be admired by archaeologists a thousand years after. As we have seen before, the facts that such diverse types of tile-patterns are noticed in one temple on the one hand, and that examples of one and the same pattern are found at several sites on the other hand, incline us to think that there was at Keishû only a limited number of tile-factories, and from there the tiles were distributed on demand to various temples. So the tilers, if this was the case, could have been more free with their designs, quite unconcerned about the unity of the patterns and other actual conditions.

At any rate, this was very different from our Japanese tilers of that period. Each temple here had usually its own kilns to make tiles and consequently the unity of patterns was rather expected. The designs also were rather simple and not too fine, as after all the objects were to be set high on the roofs and seen from far off below. So in fact, our Japanese tiles are quite suitable for their practical purpose. The Silla tiles, on the contrary, are unsuccessful in this respect, the ornamental patterns being too fine to be seen from below. In a word, the Japanese tile-patterns are 'architectonic', while those of Silla are 'pictorial'. The formers are effective as adjuncts of architecture, and the latter have an independent merit as relief pictures.

We will not discuss this point further. But we believe that no one hesitate to give very high praise to those nameless artists or craftsmen who left such admirable works in relief in countless numbers, which surpassing its mother country, and sister nations.

甌紋圖獵狩圖三十四第



Fig. 44. Wall-brick with Hunting Scene.

Quite recently an unique specimen of wall-brick was unearthed at Shaseiri in Keishū. It represents a hunting scene in lines most exquisitely in style as well as in composition—two running hares driven by a hunter on horse-back with fully bending bow. Undoubtedly this shows the highly developed pictorial art of T'ang introduced into Silla. (See also Fig. 43 at the end of the Japanese text.)