

ENGLISH SUMMARY

The preceding chapters have discussed the results of a total of eleven excavations at Yamadadera temple. A summary is provided here, along with comments on research topics for the future.

1. Archaeological Features

A Sequence of Changes in Archaeological Features at Yamadadera

The sequence of changes in archaeological features at Yamadadera divides broadly into seven phases as follows: Phase I – prior to the construction of Yamadadera; Phase II – the time of construction of Yamadadera in the reigns of Kōgyoku and Kōtoku (mid-seventh century); Phase III – from the completion of the Yamadadera cloister in the reign of Tenmu (latter part of the seventh century) to the mid-eighth century; Phase IV – from the mid-eighth to the latter half of the ninth centuries; Phase V – from the first half of the tenth through the beginning of the eleventh centuries; Phase VI – from the first half of the eleventh to the destruction of Yamadadera by fire at the end of the eleventh century; Phase VII – from the time of the reconstruction of Yamadadera in the Kamakura period on.

Phase I: Judging from the artifacts recovered, it is seen that prior to the construction of Yamadadera this area was used for human livelihood from the Jōmon period on, up to the fifth and sixth centuries during the Kofun period. Over this interval, valleys opening at various points to the west appear to have become gradually filled.

In the first half of the seventh century, over an area extending from the pagoda (SB 005) and the south gate (SB 001), and spreading approximately 60 m north-south and 50 m east-west, is a residential area marked off by pillared fences. To the south of this the Yamada road (SF 614) was constructed with gutters on its northern and southern sides. The orientation for both features veered twelve degrees west of north, and was made to follow the topography of the valley.

Mokkan (wooden documents) were recovered from the northern gutter of the Yamada road (SF 614), from which it is thought that the precinct to the north was not an ordinary settlement, but was possibly the former residence of the builder of Yamadadera, Soga no Kurayamada Ishikawamaro, or one of his clan members. In other words, it may be said that Yamadadera was built by utilizing the residential land of the clan which built it.

Phase II: The period of construction of Yamadadera (mid-seventh century). Preparation of the grounds was conducted on a large scale by cutting down the hillside and filling in the valley that had remained in the first part of the seventh century.

While the main hall (SB 010), the cloister surrounding it (SC 050, 060, 070, 080), and the middle gate (SB 003) were built, together with the large pillared-fence delimiting the temple precinct as its outer wall (SA 500, 570, 600, 680) and its several gates, the temple was still not complete. The south gate was an embedded-pillar gatehouse (SB 599). To the south the new Yamada road (SF 608A), which shared the same orientation as Yamadadera, was completed.

Also, shafts for banners were erected at various places within the cloister, in addition to points SX 604, 619, 621, and 624 in front of the south gate.

Phase III: The time of completion of the various temple buildings, with the pagoda (SB 005),

lecture hall (SB 100), and the treasure hall (SB 660A) newly constructed, and the priests' living quarters (SB 110, 111) and other facilities also completed. The south gate was renovated as a building standing on pillar base stones (SB 001), and parts of the southern and eastern main drainage channels (SD 531, 625B) were improved as stone-lined ditches.

In this period as well there were banners erected in front of the south gate (SX 603) and at various places within the cloister.

Phase IV: The interior of the cloister was paved with tile, and to the east of the cloister the "Tōhoku-in" (northeast hall) was constructed. The treasure hall (SB 660B) was also improved. To the south and east of the cloister, as it appears that earth kept sliding down from the nearby hillside, drainage channels (SD 552, 705) were newly constructed just outside the cloister.

Phase V: The eastern sector of the precinct outer wall collapsed in the first part of the tenth century, and was improved on that occasion to a tamped-earth wall (SA 535). It is thought that the other three sides were also converted to tamped-earth structures. The area within the cloister was also completely converted to a graveled surface. The "Tōhoku-in" is thought to have been abandoned at this time.

In the first half of the eleventh century, a large amount of earth slid down from the hillsides to the south and east, and the southern and eastern sides of the cloister collapsed. By this time the southern and eastern tamped-earth walls had already collapsed and remained in the shape of earthen ramparts. But the pagoda, main hall, and the western half of the cloister and tamped-earth enclosing wall remained, as did the lecture hall and priests' living quarters.

Phase VI: Soldier monks from Kōfukuji stormed the temple in 1187, taking the main image from the lecture hall. Layers of scorched earth are found near the lecture hall, pagoda, and main hall, and from a chronological evaluation of the objects recovered, it is inferred that these structures were burned down in 1187. Yamadadera was thereby reduced to nothing.

Phase VII: It is deduced from the objects recovered that Yamadadera was rebuilt in the Kamakura period. It appears that a main hall was built at the spot of the former lecture hall (SB 100), and that to its southwest a sutra repository, belfry, or perhaps a small Buddha hall was erected on the former site of the cloister's northern side. It is also clear that at this time Yamadadera was partitioned off by a large ditch, for purposes of defense and protection from fire.

B The Plan of Construction at Yamadadera

Yamadadera consisted of the main hall (SB 010) and pagoda (SB 005) lined up north-south and enclosed by the cloister (SC 050, 060, 070, 080), with the precinct outer wall (SA 500, 570, 600, 680) delimiting the area to the outside. Between the outer wall and the cloister stood the treasure hall (SB 660), etc., and the lecture hall (SB 100) was placed on the cloister's main axis. This layout is called the Yamadadera style, in distinction from the Shitennōji style of layout in which the lecture hall is centered on the cloister itself.

Scale of the Buildings: The south gate (SB 001) was a building with pillars standing on foundation stones, and had a low podium. The structure was 3 x 2 bays, with a total length of 30 *shaku* (approximately 8.8 m) along the ridge axis, and a transverse length of 17 *shaku* (approx. 5.0 m), with the *shaku* used in its construction taken as 29.45 cm.

Remains of the middle gate (SB 003) no longer exist due to subsequent leveling of the area, but

from the holes for the scaffolding used in its construction, and from other evidence, it is reconstructed as 3 x 3 bays. The size of the building is inferred to have been 30 *shaku* (approximately 9.1 m) along the ridge axis, and 22.5 *shaku* (approx. 6.8 m) in transverse length, taking the *shaku* of construction as 30.24 cm.

The pagoda (SB 005) was a building with pillars standing on foundation stones, and having a podium faced with hewn stone (with a height reconstructed as 1.74 m). The building was 3 x 3 bays, and 22 *shaku* (approx. 6.5 m) square, taking the *shaku* of construction as 29.7 cm.

The main hall (SB 010) also had pillars standing on foundation stones, and a podium faced with hewn stone (reconstructed as 1.8 m in height). The building had an unusual plan of a core (*moya*) and a peripheral portion (*hisashi*) both of 3 x 2 bays. Taking the *shaku* of construction as 30.24 cm, the total length along the ridge axis was 48 *shaku* (approx. 14.5 m), and the transverse length was 38 *shaku* (approx. 11.5 m).

The lecture hall (SB 100) is inferred to have been a building with pillars standing on foundation stones, and a podium faced with hewn stone. The building was 8 x 4 bays, and 111 *shaku* (approx. 32.7 m) along with ridge axis by 49 *shaku* (approx. 14.4m) transversely, taking the *shaku* of construction as 29.45 cm.

The treasure hall (SB 660B) also had pillars on foundation stones, and a low podium. The nature of the outside face of the podium is unclear. The building was 3 x 3 bays and oriented north-south, and taking the *shaku* of construction as about 30.5 cm, the length along the ridge axis was 19.5 *shaku* (approx. 6.0 m), and the transverse length was 16.5 *shaku* (approx. 5.0 m).

The cloister (SC 050, 060, 070, 080) had pillar foundation stones, and a relatively low podium faced with natural stones. There was a rain gutter along the interior side. The cloister corridor was built with a single wall, and taking the *shaku* of construction as 30.24 cm, it was 12.5 *shaku* (approx. 3.8 m) in width. The middle gate, described above, stood at the center of the southern side. There were doorways at the centers of the eastern, western, and northern sides, and at both ends of the northern and southern sides.

Although the precinct outer wall (SA 500, 570, 600, 680) was built as a large pillared-fence, it had a podium approximately 2 m wide. The south gate described above opened at the center of its southern side, and there were also gates opening at the centers of the other three sides.

Plan of Construction: The cloister had an overall length of 287.5 *shaku* (approx. 86.9 m) north-south, and 280 *shaku* (approx. 84.7 m) east-west, taking the *shaku* of construction as 30.24 cm. There were doorways opening at the center of the eastern and western corridors, with the northern and southern sections of each corridor dividing into 11 bays (of 12.5 *shaku* length) each. The north-south length was planned by subtracting one 12.5 *shaku* span from 300 *shaku*. The northern and southern corridors were designed with the 30-*shaku* middle gate or the north side's doorway opening at the center, and 10 bays (of 12.5 *shaku*) to the east and west on each side.

The precinct outer wall shows slight variation in the orientation of each side, as well as variation in the lengths, but is inferred to have been planned as 627 *shaku* (approx. 185.6 m) in overall north-south length, and 400 *shaku* (approx. 118.2 m) east-west, taking the *shaku* of construction as between 29.5 and 29.6 cm. The eastern and western sides are seen to have been planned as 600 *shaku* of wall, to which the eastern and western gates were added, and the northern and southern sides as 400 *shaku* in overall length including the northern and southern gates. The span between posts of the outer wall is basically 8 *shaku*, but judging from the layout of the posts in plan and from the archaeological features themselves, toward the eastern and western ends of both the northern and southern sides, and in the northern half of the western side, it may be assumed that a slightly longer span was commonly used between posts.

The *shaku* used in construction was around 30 cm in length throughout, but with slight variation. While some of the difference in this regard can be attributed to the passage of time, one cause is thought to be that the main hall and cloister, which used *shaku* of over 30 cm, and other structures with *shaku* of less than 30 cm, were built by different groups of artisans.

C Architectural Characteristics of Various Structures at Yamadadera

Main Hall (SB 101): The building has an unusual design of a core and peripheral portion each having 3 x 2 bays. Seen structurally, it is thought that the building was designed to strengthen the corners of the eaves by placing the bracket assemblies in radial fashion, as in the fan-like shape seen on the Tamamushi shrine of Hōryūji. A number of such examples have been discovered since the main hall at Yamadadera was excavated, and it is now thought that there was considerable variation in ancient architecture in this regard.

Cloister (SC 050, 060, 070, 080): Part of the structure collapsed and was preserved due to a large landslide in the first half of the eleventh century. As a result, it has become possible to obtain a great amount of information on seventh-century architecture, for which examples were until this time extremely rare, apart from the western cloister of Hōryūji.

In comparison with Hōryūji's western cloister, the structure's columns are low and the space between the rails of the windows is narrow, giving a closed off but imposing outward appearance. With regard to each particular architectural member as well, in the method of crafting the bracket assemblies or the curve of the rafters, etc., results have been obtained which change previous understandings of architectural history.

Lecture Hall (SB 100): As a characteristic particular to the Yamadadera lecture hall, the entire front face of the peripheral portion (*hisashi*), the southernmost bay on each lateral face, and two bays in the center of the rear face of the structure were provided with doors that could be opened, differing in this regard from the lecture halls of the Nara period on which are closed off. Looking closely at the locations of doorways on the rear face, the arrangement changed to the central portion plus both ends in the Nara period, and only the two ends in the Heian period.

Whereas the lecture hall was originally a place for discussions, a main Buddha image later came to be placed at its center, and it is inferred that the central doorway to its rear thus lost its function. It is thought that while the Yamadadera lecture hall drew upon an old style of layout, it presents a transitional form in which a main image came to be placed in the structure.

Other Structures: It is clear that the south gate (SB 001) had all of the spans between pillars on the ridge axis as doorways, and took a three-bay, three-door style having no parallel in ancient temple architecture. The treasure hall (SB 660B) was slightly longer in the north-south direction, but from the eave supports and other materials recovered in the excavation, it is presumed to have had a hipped and gabled roof with eaves flaring out at the corners.

2. Artifacts

A *Mokkan* (wooden documents)

While the sixty-four recovered items are small in numbers, *mokkan* related to sutras which were recovered from the treasure hall (SB 660B) and its environs, and items dating from the first half of the seventh century are noteworthy.

Mokkan from the Treasure Hall (SB 660B) and Its Environs: Large-scale *mokkan* that can be called records of the loaning of sutras held in the treasure hall were found, and in addition to the names of the sutras and the manner of their care, the loaning of these materials over at least the period spanning Tenpyō Shōhō 6 to Kōnin 2 (754 to 807) has become clear.

Mokkan from the First Half of the Seventh Century: One of the oldest *mokkan* in Japan was recovered from the gutter (SD 619) on the north side of the old Yamada road. While there is nothing remarkable about the contents of the item, along with the existence of a pillared fence (SA 620) it is thought to indicate the possibility that a residence belonging to Soga no Kurayamada Ishikawamaro, who built Yamadadera, or to a member of his clan, stood at this location.

B Roof Tiles

Roof tiles were recovered in tremendous amounts. From the analysis and study of these materials, the course of construction of Yamadadera and its subsequent maintenance and care, and also the nature of the reconstruction of Yamadadera in the medieval period have been clarified.

Tiles Used in the Original Construction: In the mid- to late seventh century, around the eaves the so-called Yamadadera style of round eave tile (types A-D) were used in accordance to the particular building, together with the four-ply arc style of flat eave tile (types A-D) and rafter-end tiles (types A-E), while the *kudarimune* (descending ridges perpendicular to the main ridge) and *sumimune* (descending ridges on the corners of the hip roof) had lotus motif ridge-end tiles (types A and B), and the main ridges of the south gate (SB 001), middle gate (SB 003), main hall (SB 0101, and lecture hall (SB 100) had single-bodied *shibi* (fishtail-shaped ridge-end ornaments; types A-E), and the cloister had double-bodied *shibi*.

The pagoda used two types of eave tiles and rafter-end tiles, and from the method of manufacture it can be inferred that the construction of the pagoda was undertaken from the middle of the century over the latter part of that century, with an interval in which work was interrupted.

Tiles Used for Repairs: From the end of the seventh to the latter half of the eighth centuries, it is estimated that the roof tiles were re-laid approximately three times. Round eave tiles were made with new techniques even while utilizing the molds for the Yamadadera style (types A-C), and flat eave tiles were also made in the four-ply arc style but with new techniques (types F-H). Tiles made for Daikandaiji temple, and for the Nara capital and palace, were also utilized. Ridge-end tiles were evidently all changed over to items of the demon-face style (types A and B) from the latter half of the eighth to the first part of the ninth centuries.

Tiles Used in the Medieval Reconstruction: After Yamadadera burned at the end of the twelfth century, in the early Kamakura period, by the latter half of the thirteenth century at the latest, a main hall was erected above the former lecture hall, and other restorations were made. Round eave tiles had a triple swirling-comma design, and flat eave tiles had a symmetrical intertwining floral design.

C Other Items

Pottery: In addition to one Late Jōmon example, pottery of every sort from the Kofun period (fifth-sixth centuries) to the medieval period was recovered.

Pottery recovered from beneath the fill used to prepare the grounds for the construction of Yamadadera (SD 619, etc.) has yielded data essential for the construction of seventh-century

ceramic typologies. As for items associated with Yamadadera itself, in addition to every type of glazed stoneware, the pottery used by the monks in daily life, recovered from pit SK 575, is noteworthy.

Buddha-Image Tiles: There are items of various types having single, four, and twelve images, and the application of gold leaf can also be discerned. In particular, it can be inferred that the twelve-image tiles were for use in the pagoda.

Wooden and Bone Implements: While the amounts were not great, various types of wooden implements were recovered. Discoveries worthy of note are: ritual items from just prior to the construction of Yamadadera or from the first half of the seventh century, namely wooden effigies in the shape of pointed boards, black lacquered vessels, and oracles bones; black-lacquered miniature shrines and other boxes for holding various types of Buddhist paraphernalia and sutra scrolls, stored in the treasure hall (SB 660B) at Yamadadera; a horizontally-long picture frame, thought to have been for use on the south gate (SB 001).

Also, horse bones and teeth were recovered on the interior of the eastern side of the precinct outer wall, from layers deposited from the tenth to the first half of the eleventh centuries, but the reason for these materials being there is unclear.

Metal and Glass Items: In addition to various types of iron nails for use in the buildings, items recovered included iron tools, corner brackets for eave supports, and bell-shaped wind chimes from the pagoda (SB 005), Buddhist paraphernalia stored in the treasure hall (SB 660B) such as gilt bronze decorative items or copper plates with five Buddha images and embossed Buddha images, plus vessels and other items of lead glass. Vessels, etc. of lead glass were also recovered from above the podium of the main hall (SB 010). There were a total of twenty-six coins, which served as important clues in tracing the changes in features at Yamadadera.

Stone Tools, Items Related to Casting: It became clear that artifacts related to casting, which accompanied the construction of Yamadadera, are found lying relatively close to the buildings themselves. The mold recovered from the remains of the foundry for casting the temple bell, which accompanied the reconstruction of Yamadadera in the medieval period, is of special note.

Most of the stone tools were whetstones, but the discovery of a stone used as a body warmer can be said a rare find.

3. Topics and Prospects for Future Research

It can be said with some measure of pride that after eleven excavations, and long periods thereafter of sorting and studying the results, it has been possible to trace out the history of Yamadadera in reasonably fine detail. Among ancient temples built in the seventh century, Yamadadera can be called the ground-breaking example of one which has been brought to light almost in its entirety through excavation. But there are still areas for further work.

Verification of the Priests' Living Quarters and External Facilities: It was inferred that Yamadadera had priests' living quarters on three sides of the temple precinct. But only a small portion of these have been investigated. In particular, verification of the nature of the row of pillar base stones (SB 111) remaining to the north of the lecture hall (SB 100) is necessary.

To the north and east of the precinct outer wall eastern sector (SA 500) is the "Tōhoku-in"

(northeast hall). The extent of this facility is still unverified, nor is its nature clear. It is possible that other facilities in addition to this one, related to the temple, lay outside the precinct outer wall.

Concerning the Residence from the First Half of the Seventh Century: The residence of Soga no Kurayamada Ishikawamaro, who initiated the construction of Yamadadera, or of a member of his clan, on the site of the temple has been inferred. Investigation has been restricted to an extremely small portion of it, due to the thick layer of fill used in preparing the site for the temple's construction.

The residential area was inferred to have extended about 60 m north-south by 50 m east-west, but it is possible this was not the center of the lot, which may have continued farther north. It is hoped that the results of investigation of this northern area will also help clarify the history of the Yamada road.

Yamadadera Style Eave Tiles and Their Influence: From examinations of the designs on the faces of the tiles and from the method of their manufacture, it has become clear that Yamadadera style eave tiles divide into two periods, belonging to the mid-seventh century and the latter half of that century.

Yamadadera style eave tiles have become an important index for studying the expansion of Buddhism (through temples) to various regions. Taking the results of work at Yamadadera as the foundation, a careful reexamination of Yamadadera and related styles of eave tiles, and those of other styles in each region is a task for further work.