

RESEARCH REPORTS OF THE NARA NATIONAL
CULTURAL PROPERTIES RESEARCH INSTITUTE, No. 62

**REPORT OF
ARCHAEOLOGICAL INVESTIGATIONS INTO THE
ZUTO STUPA, NARA, JAPAN**

English Table of Contents and Summary

Nara National Cultural Properties Research Institute (Nabunken)

2001

Report of Archaeological Investigations into the Zutō Stupa, Nara Japan

Table of Contents

Chapter I: Introduction	1
A. What is Zutō?	1
B. Background of the investigations	2
C. Preparation of the site report	3
D. Abbreviations	4
Chapter II: Historical Background of Zutō	5
A. “Head Mound” of Gembō	5
B. Hypothesis of an earthen stupa erected by Priest Jicchū in 767	5
C. Structure of Zutō: Hypothetical reconstruction	6
D. Meaning of stone images of Buddha	7
E. Historical background of the erection of Zutō	7
F. Initiating archaeological investigations	8
Chapter III: Archaeological Investigations	10
1. Overview of archaeological investigations	10
A. 114 th excavation	10
B. 181 st excavation	10
C. 119 th excavation	12
D. 232 nd excavation	12
E. 237 th excavation	14
F. 247 th excavation	14
G. 257 th excavation	14
H. 264 th excavation	15
I. 277 th excavation	15
J. 282-15 th excavation	15
2. Excavation log	16
A. 114 th excavation	16
B. 181 st excavation	16
C. 119 th excavation	18
D. 232 nd excavation	19
E. 237 th excavation	20
F. 247 th excavation	21
G. 257 th excavation	22
H. 264 th excavation	22

I . 277 th excavation	23
J . 282-15 th excavation	25
3 . Plan and overview of the restoration of Zutō	26
Chapter IV: Archaeological Features	28
1 . Formation of the archaeological site	28
A . Topography prior to the erection of Zutō; process of the erection	28
B . Stratigraphy of the site; topography prior to the archaeological excavations	30
2 . Zutō	32
A . Zutō in the lower stratum (Phase A)	32
B . Zutō in the upper stratum (Phase B)	43
C . Zutō after the Heian Period (794-1185)	60
3 . Other archaeological features	64
4 . Kofun Period burial mound in the lower stratum of the Phase A Zutō	66
Chapter V: Artifacts	68
1 . Rooftiles	68
A . Round eaves tiles	68
B . Flat eaves tiles	71
C . Round and flat rooftiles	73
D . Roof ridge tiles and gap-fill tiles	74
2 . Stone images of Buddha	76
A . Stone images of Buddha on the north face of Zutō	76
B . Images on the east face	78
C . Images on the south face	79
D . Images on the west face	81
E . Central motifs of the stone images	82
3 . Artifacts discovered in the pit resulting from the removal of the central pillar on the top of Zutō	83
A . Bronze coins tied by a cord	83
B . Amber beads	85
C . Ash, charcoal, and wooden boards	85
D . Bronze coins discovered in a pit dug by looters	86
E . Scientific analyses of the bronze coins and amber beads	87
4 . Pottery	89
A . Pottery excavated in the mound constituting Zutō	89
B . Pottery used for rituals in front of stone images of Buddha	90

C. Pottery discovered on the mound surface and the vicinity	91
5. Miniature stone pagodas	93
A. Stone pagodas with hexagonal roof	93
B. Other types of stone pagodas	93
6. Stone and metal artifacts	96
A. Stone artifacts	96
B. Metal artifacts	96
C. Miscellaneous	97
7. Artifacts related to the Kofun Period burial mound in the lower stratum of the Phase A Zutō	98
A. Weapons	98
B. Horse trappings	99
C. Tools	100
D. Accessories	100
E. Pottery	101
F. Scientific analysis of glass beads	103
Chapter VI: Discussion	104
1. Selection of the location for the erection of Zutō	104
A. Spatial relationship with the Shijō (Fourth Major) Street of the Nara Capital	104
B. Spatial relationship with the main axis of the Tōdai ji temple complex	106
C. Meaning of the location of Zutō	106
2. Temporal change in the physical structures of Zutō and their calendrical dates	107
A. Construction of the Phase A Zutō	107
B. Construction of the Phase B Zutō	108
C. Temporal change in the Phase B Zutō	109
3. Hypothetical reconstruction of the structure of Zutō	111
A. Phase A Zutō	111
B. Phase B Zutō	112
C. Structure of the roof	122
D. Piling up the earth and stones to erect the mound	124
4. Rooftiles	126
A. Eaves tiles in the Phase A and Phase B	126
B. Temporal change in the Tōdai-ji type eaves tiles and their distribution	126
C. Calendrical dates and distribution of rooftiles other than the Tōdai ji type	132
D. Roof of Zutō	134

5. Zutō as mentioned in historic sources	141
A. Various issues concerning the date of the initial construction of Zutō	141
B. Zutō after the construction	147
C. Chronology related to Zutō	152
6. Religious and ideological background to the construction of Zutō	155
A. Ideology behind the erection of the colossal Buddha at Tōdai-ji	155
B. Ideological and religious background of planning the Phase B Zutō	156
C. Ideology behind the construction of the Phase B Zutō	158
D. Ideology behind the construction of the Phase A Zutō	159
7. Genealogy of Zutō as a stupa	164
A. Similar stupas in Japan	164
B. Hypothesis of the southern origins of the Zutō-type stupa	165
C. Hypothesis of the Korean origins of the Zutō-type stupa	166
D. Hypothesis of the Chinese origins of the Zutō type stupa	169
8. Reconstruction of tuff pagoda with hexagonal roofs	174
A. Hexagonal pagodas in the Nara and Heian Periods	174
B. Reconstruction of the stone pagoda at Tō-no-Mori, Nara	177
C. Hypothetical reconstruction of the stone pagoda on the top of Zutō	180
9. Sourcing the stones used for the Zutō construction	182
10. Kofun Period burial mound in the lower stratum of Zutō	184
ChapterⅦ: Summary	191
A. Structure of Zutō and its temporal change	191
B. Historical background to the construction of Zutō; genealogy of the Zutō-type stupa	192
Supplementary tables	193
English summary	199
Plans	
Plates	

Summary

This book is a report of archaeological investigations conducted at the site of Zutō, 頭塔 a Nara Period (710-794) earthen stupa. It is located in Nara City, approximately one kilometer south of the Tōdai-ji 東大寺 Buddhist temple. It is an earthen mound, with the surface paved with stone slabs and roofed with tiles. Ten times of archaeological excavations were conducted by staff of the Nara National Cultural Properties Research Institute from 1978 to 1998, prior to restoring the stupa to its original condition. While previous research into historic sources suggests that Zutō was constructed by Priest Jicchū 実忠 (? ?) of Tōdai-ji in 767, the excavations revealed two stratigraphically overlapping features of stupas, which suggests that the construction of Zutō took place twice. It has also become clear that a Kofun Period burial mound was destroyed in the process of the construction of Zutō.

A. Overview

Zutō consisted of the top “stupa” portion and the foundation platform. It was quadrangular in morphology. The stupa in the upper stratum (hereafter Phase B) had a seven-story structure ; i.e. it had seven terraces that were paved with stones and seven stone walls. A total of eleven stone images of Buddha were placed on each directional face of the stupa, forty-four all together for the four directions. On the first (lowest) terrace were five stone images of Buddha in each direction, three on the third terrace, two on the fifth terrace, and one on the highest, seventh terrace. The stupa in the lower stratum (hereafter Phase A) was a three-story structure. Each story had a stone wall, but it remains uncertain whether each terrace was paved with stones.

B. Structure of Zutō and its temporal change

Phase A Zutō: The Phase A Zutō was badly disturbed during the construction of the Phase B Zutō, but may be reconstructed to a three-story stupa. We speculate that the construction of this Zutō was once completed.

The Phase A Zutō had serious structural deficiency. For example, both the foundation platform and stupa itself were not square in plane. Rather, they were trapezoidal, with the north side wider than the south side. Each side of the stupa at its base was not straight. The top of the foundation platform was not level and horizontal, but inclined or tilted. The orientation of the platform and that of the stupa did not match, either. Therefore, the measurements of the various portions of this phase of Zutō varied from part to part. The length of a side of the foun-

dation platform was 31.8 to 33.0 meters, a side of the first story of the stupa from 20.2 to 21.75, the second story from 13.2 to 14.3, and the height of the foundation platform from 1.0 to 1.6 meters. The original plan was to situate the stone wall of the second story and that of the third story upon the two hypothetical lines dividing the length between the center of the stupa and the stone wall of the first terrace into three equal segments. The height of the first story was 3.45 meters. The height of the stone wall of the first story was approximately 2.35 meters. We speculate that the terrace of the first story was adopted with a roof at a gradient of 30%, with roof tiles. A large niche where an image of Buddha must have been placed was discovered at the center of the east face. No other actual images of Buddha have been discovered for the Phase A Zutō.

Phase B Zutō: The foundation platform for the Phase A Zutō remained to be used. The Phase A stupa portion was, however, pretty much destroyed in the process of the construction of the Phase B Zutō. The Phase B stupa portion was considerably expanded. The possible reasons for this re-construction were: 1) to correct structural deficiencies of the Phase A Zutō; to re-model the stupa portion into a seven-story structure from a three-story one, thereby lowering the height of the stone wall of each story; and 3) to increase the number of Buddha images that were to be placed in each story. Still, the structural deficiencies were not fully corrected, and the following problems remained. The plan of the stupa was rectangular with four different side length, the stone walls of the same story were not parallel, and the foundation platform and the pavement of each story was tilted in the direction of the stone wall.

The length of each side of the stupa portion was between 24.2 and 24.8 meters, and the height of Zutō was approximately eight meters. The original plan for the entire stupa was: the stone walls for the third, fifth, and seventh stories should be placed on the hypothetical lines that divide the length between the stone wall on the first story and the central axis of the stupa into four equal segments; the stone walls for the second, fourth, and sixth stories should be placed on the hypothetical lines that divide the space between the stone walls of the lower story and upper story into 2 : 3. The width of the stone pavement and degrees of gradient clearly correlated to each other. The stone pavements on the odd number of stories (second, fourth, and sixth) were wide, and gradient was gradual, between five and ten percent. On the other hand, the pavements on the odd numbers of stories (first, third, and fifth) were narrow, and gradient was steep, between 25 and 30%. This observation

suggests to us that rooftiles were only adopted to cover stories of to the odd numbers. On the summit of the stupa was, we presume, wooden one-story stupa roofed with tiles. Underground of the summit was a base stone, on which the central pillar of the presumed wooden structure stood. On each story of the Phase B Zutō were several stone Buddha images. We presume that five on each face of the first story, three on each face of the third story, two on each face of the fifth story, and one on each face of the seventh story, forty-four in total.

As to the dates of the construction of the Phase A and Phase B Zutō, several clues are at our disposal. First, our excavations revealed that a Kofun Period tumulus was destroyed during the construction of the Phase A Zutō. In the “Zō Nan-ji Sho Ge” (『造南寺所解』 Notes on the Construction of Buddhist Temples in Nara, a document kept in the Shōsōin 正倉院 Treasury at Tōdai-ji) was an article that described the destruction of a Kofun Period tumulus in 760 A.D. If this description was indeed for the construction of the Phase A Zutō, it is then possible to suspect that the construction took place in 760. Re-modeling of this Zutō into the Phase B one probably started around 765. The project completed in 767, as clearly recorded in the *Tōdai-ji Yōroku* (『東大寺要録』 Major Records of the Tōdai-ji Buddhist Temple) and the *Tōdai-ji Bettō Shidai* (『東大寺別当次第』 Order of the Tōdai-ji Bettō).

Zutō after the 780's: At some point in the 780's, a lightning hit Zutō, and the wooden structure on the summit burned down and was lost. Therefore, the central pillar for the structure was pulled out. Then, tied groups of coins and amber beads were offered to the pit resulting from pulling out the central pillar, rituals were conducted on the summit, and everything was buried in the pit. In the late 790's or the beginning of the ninth century, coins were buried again, and a land-breaking ritual was conducted on the summit, prior to the erection of a thirteen-story, hexagonal tuff pagoda on the summit. After that, roofs with tiles and stone walls of some stories of this Zutō began to collapse, and stone images of Buddha began to expose themselves. In the *Shichidaiji Junrei Shiki* (『七大寺巡礼私記』 Personal Notes of Pilgrimage to the Seven Great Temples in Nara) dated to the late twelfth century, Zutō was recorded as a “thirteen-story big tomb,” and probably this record describes such a condition of Zutō at that time.

In the late eleventh century, memorial services were conducted for the stone images of Buddha by placing earthenware dishes used as lamps in front of them. This event might be related to the Bodai-in 菩提院 at the Kōfuku-ji 興福寺 Buddhist temple, which attempted to incorporate Zutō into the Bodai-in organization after the eleventh century.

After the fourteenth century, the eastern face of the foundation platform was modified. During the Tokugawa Period (1600-1868), the ownership of Zutō was transferred from the Kenshō in 賢聖院 of Kōfuku-ji to the Jōtoku-ji 常德寺 temple of the Nichiren 日蓮 sect. Zutō became a subsidiary temple of Jōtoku-ji. It was also around this time that the southeastern corner and southwestern corner were partially destroyed. Since the beginning of the Meiji Period (in the 1870's), Zutō has been a national property.

C. Historical background of the erection of Zutō; origins of Zutō

Ideological and religious basis of the construction of the Phase B Zutō:

Twenty-seven stone images of Buddha have been discovered at Zutō. Their stylistic analysis suggests that the ideological basis of Zutō was mainly Buddhavatamsaka-nama-mahavaipulya Sutra 華嚴經 (Kegon Kyō), and also incorporates some Saddharma-pundarika Sutra 法華經 (Hoke Kyō). Since Zutō was auxiliary to Tōdai-ji, it is possible to imagine that the ideological and religious basis of the construction of Zutō was Buddhavatamsaka-nama-mahavaipulya Sutra, which was also the ideological and religious foundation for the erection of the colossal image of Buddha Vairocana at Tōdai-ji. Then, a question remains why the ideas of Saddharma-pundarika Sutra were incorporated. A hypothesis gains support that a tendency existed in the 750's not to distinguish Buddhavatamsaka-nama-mahavaipulya Sutra and Fanwang Sutra 梵網經 (Bonmō Kyō) clearly. This tendency may be apparent in the observation that illustrations based on the ideas of the Bonmō Sutra were engraved to lotus leaves that constituted a part of the seat where the Buddha Vairocana sat. It is also possible that the ideas of the Tendai 天台 Sect were respected at that time.

This tendency was probably a result of a visit to Nara by Chinese Priest Jianzhen 鑑真 (688-763) in 754. He brought Japan numerous texts, including the *Tendai Hokke Sandaibu* (『天台法華三大部』 Three great books related to Saddharma-pundarika Sutra, written and compiled by Zhiyi 智顗). Researchers hypothesize that, at the occasion of Jianzhen founding a Buddhist ordination platform at Tōdai-ji, the fusion of vinaya and Buddhavatamsaka-nama-mahavaipulya developed into the unity of the Tendai Sect and Buddhavatamsaka-nama-mahavaipulya. On the top of the ordination platform at Tōdai-ji was a ranta-stupa where both Prabhutarantna Tathagata and Buddha seated. A similar emphasis of the ideas of Saddharma pundarika Sutra at the Phase B Zutō was probably a result of this tendency at Tōdai-ji; it is likely that both Rōben 良弁 (689-773) and Jicchū adopted the overall trend of the

religious community in Nara at that time.

Historical background of the construction of the Phase B Zutō: After the death of Empress Dowager Kōmyō 光明 (b. 701) in 760, political divisions between the party of Fujiwara no Nakamaro 藤原仲麻呂 (706-764) and Emperor Junnin 淳仁 (733-765) and the party of Retired Empress Kōken 孝謙 (718-770) and Priest Dōkyō 道鏡 (?-772) became apparent. Priests Rōben and other priests at Tōdai-ji joined the anti-Nakamaro party. At the time of Nakamaro's rebellion, Priests Ankan 安寛 (?-?), Jicchū, and others sided with the party of Dōkyō. After the rebellion, Priest Jicchū produced a model case for a small temple-complex to store one million miniature pagodas. We support a hypothesis here that the construction of the upper stratum Zutō was an outcome of the same intention as to produce one million miniature pagodas and to build a monastery to house them. These projects were carried out in prayer for the tranquility of the imperial court, prolonged life of the empress who did not have an heir, and the national security.

Questions still remain to be considered: First, what made it necessary to attach the ideological significance discussed above to the Phase B Zutō? Although the Phase B Zutō was a re-modification of the Phase A Zutō, the possibility remains that the physical structure of and ideological significance attached to the two phases of Zutō are distinctive. The re-modification might represent an act that Zutō was repainted with the current religious ideology that was dominant at Tōdai-ji.

Secondly, why was it necessary to reconstruct nearly the entire structure of Zutō, rather than simple re modification? The Phase A Zutō had numerous structural deficiencies, and was poorly constructed. It is likely that the poor structure resulted in serious troubles soon after the completion, such as the collapse of stone walls that were too high. The reconstruction of Zutō may be interpreted the same as Priest Jicchū's other achievements of making up the poor works of the Zō-Tōdai-ji Shi (造東大寺司 Bureau of the Tōdai-ji Construction) that reduced and decreased the function and motivation of the Tōdai-ji construction.

Historical background of the construction of the Phase A Zutō: We propose a hypothesis that the Phase A Zutō was founded by Empress Shotoku 称徳 (Retired Empress Kōkon enthroned again) in prayer for the recovery from illness of the Empress Dowager Kōmyō, who was closely involved in Tōdai-ji and Shin-Yakushi-ji 新薬師寺. It is likely that the image placed at the center of the eastern face of the lower stratum Zutō was Bhaisajyaguruvaiduryaprabha (Yakushi 薬師, a Buddha for healing). The construction started right before the death of the Empress Dowager Kōmyō. The selection of the site for the construction of

this Zutō was, in terms of the direction, closely related to the locations of both Tōdai-ji and Shin-Yakushi-ji. Another line of evidence gives support to our hypothesis; the Phase A Zutō was not or could not be destroyed when Priest Jicchū constructed the Phase B Zutō. Since Jicchū sided with the party of Priest Dōkyō and Empress Shōtoku, it is inconceivable that Jicchū would destroy facilities originally built by Empress Shōtoku.

Stylistic origins and genealogy of Zutō: A dominant hypothesis is that Zutō could be traced back to the south Asian origins. However, we would argue that the origins were Chinese pagoda constructed with tiles. Our hypothesis is based on the following lines of evidence: the method of construction featured by piling up materials rather than assembling frames; eaves not jutting out of the roofs; and, each story setting back from the lower story. All these three are of Chinese origins. It is possible that this style was adopted in lieu of a tall, wooden pagoda, in order to emphasize Chinese taste.

Chronological Table

Era Name				Year	Emperor or Empress's Name		
Wadō	和	銅	1	708	Gemmei	元	明
Reiki	靈	龜	1	715	Genshō	元	正
Yorō	養	老	1	717		"	
Sinki	神	龜	1	724	Shōmu	聖	武
Tempyō	天	平	1	729		"	
Tempyō-Kampō	天平感宝		1	749	Kōken	孝	謙
Tempyō Shōhō	天平勝宝		1	749		"	
Tempyō-Hōji	天平宝字		1	757			
	"		2	758	Junnin	淳	仁
	"		8	764	Shōtoku	称	德
Tempyō-Jingo	天平神護		1	765		"	
Jingo-Keiun	神護景雲		1	767		"	
Hōki	宝	龜	1	770	Kōnin	光	仁
Ten'ō	天	応	1	781	Kammu	桓	武
Enryaku	延	暦	1	782		"	