EXCAVATIONS ON 13TH AND 14TH BLOCKS OF FIRST WARD, ON EIGHTH STREET, THE WESTERN SECTOR, HEIJ $\overline{0}$ CAPITAL, NARA

ENGLISH SUMMARY

BOARD OF EDUCATION YAMATO-KORIYAMA CITY, NARA 1990

EXCAVATIONS ON 13TH AND 14TH BLOCKS OF FIRST WARD, ON EIGHTH STREET, THE WESTERN SECTOR, HEIJŌ CAPITAL, NARA

--1989---

TABLE OF CONTENTS

Chapter	I	Introd	uction	1
		1.	Excavations of the Heijō Capital	1
		2.	Preparation of the Present Report	3
Chapter	II)	Investi	gation	4
		1.	Circumstances of the Investigation	4
		2.	Area of the Excavation	5
		3.	Overview of the Excavation	8
			A. Excavation by Yamato Kōriyama City	9
			B. 156–32nd Heijō Project by the Research	
			Institute	10
			C. 168th Heijō Project by the Research	
			Institute (south section)	10
			D. 168th Heijō Project by the Research	
			Institute (north section)	11
			E. 179th Heijō Project by the Research	
			Institute	12
		4.	Excavation Log	13
		5.	Mapping by Photogrammetry	22
Chapter I	II S	Site		25
		1.	Overview of the Site	25
		2.	Features	26
			A. Features of the Phase I (Early half	
			of the Early Nara Period)	26
			B. Features of the Phase II (Later half	
			of the Early Nara Period)	39
			C. Features of the Phase III (Early half	
			of the Late Nara Period)	47
			D. Features of the Phase IV (Later half	
				58
			E. Other features	61
			F. Wells	63
			G. Features containing ritually buried pottery	70

Chapter IV	Uneartl	hed Artifacts	71
-	1.	Artifacts Related to the Workshops	71
		A. Artifacts related to metal production	71
		B. Artifacts related to lacquer ware	78
	2.	Artifacts of Metal, Glass and Stone	81
		A. Metal artifacts	81
		B. Glass artifacts	84
		C. Stone artifacts	85
	3.	Coins	86
	4.	Pottery	87
		A. From Pit SK 2001	88
		B. From Ditch SD 1500	90
		C. From Ditches SD 1387, 1440, and 1345	92
		D. From pits	93
		E. From post holes	95
		F. From wells	97
		G. Glazed ceramics and trade ware from Silla	
		(668–935), Korea	101
		H. Other clay objects	
		I. Ceramic ink stones	
		J. Discussion	
	5.	Wooden Objects	
		A. Tools for wood working	
		B. Spool and spindle	
		C. Ornaments for dress	112
		D. Vessels	114
		E. Ware for meals	117
		F. Part of a desk	117
		G. Ritual objects	118
		H. Others	118
	6.	Artifacts with Inscriptions	120
		A. Wooden tablets	
		B. Documents on paper soaked in lacquer	
		C. Pottery with inscriptions in ink	125
	7.	Tiles and Bricks	
		A. End-roof tiles	
		B. Round and curved roof tiles	
		C. Roof tiles for various uses and bricks	
	8.	Faunal Remains	
	9.	Plant Remains	
	10.	Artifacts from features containing ritually	10,
	10.	buried pottery	138
		1	
Chapter V	Discussi	sion	141
	1.	Features of the Urban System and	
		Arrangement of Land	141
	2.	Change in Features over Time	153
	3	Residential Unit and Architecture	164

	4. Age Determination of Wooden Objects		
	by Dendrochronology	175	
	5. Artifacts Related to Metal Production and		
	the Nature of the Workshop	179	
	6. Fuhon 富本 Coins	186	
	7. Nature of Unearthed Documents	189	
	8. Appearance of Small-Unit Residences	194	
	9. Nature of Features Containing Ritually		
	Buried Pottery	198	
	10. Conclusion	202	
Sup	plementary Tables	205	
Eng	lish Summary	215	
	LIST OF FIGURES		
	G'		
1.	Site map: according to the Heijō Capital Grid (Jōbō 条坊)	5	
0	System		
2.	Close up of site area: the southern portion of the Heijō Capital	U	
3.	Lacquer container of round bentwood vessel from Eleventh Block Well SE930	7	
1	Bronze mirror decorated with marine mammals and grape vine	,	
4.	(Kaijū budō kyō 海獸葡萄鏡) from northern side ditch of		
	Ninth Street	7	
=	Survey map of Area 6AII	8	
5. 6.	Plan of the 164-10th Heijō Project	12	
7.	Grid of excavation units: by Yamato-Kōriyama Municipal Board	14	
/.	of Education and by the Research Institute (the 156–32nd Heijō		
	Project)	13	
8.	Grid of excavation units (south section): the 168th Heijō Project	15	
9.	Grid of excavation units (north section): the 168th Heijō Project	17	
10.	Grid of excavation units: the 179th Heijō Project	20	
11.	Datum points	23	
12.	Topographic sketch and stratigraphic key	25	
13.	Preserved pillar: SB1537	29	
14.	Wooden basal plate for a pillar: SB1680	30	
15.	Cross-section of Ditches SD1499 and SD1500	35	
16.	Cross-section of Ditches SD1495 and SD1496	35	
17.	Cross-section of Ditches SD1495 and SD1496	35	
18.	Cross-section of Ditch SD1568	35	
19.	Cross-section of Pit SK1908	37	
20.	Cross-section of Pit SK2026	38	
21.	Cross-section of Pit SK1489	38	
22.	Preserved pillar: SB1325	39	
23.	Post hole superimposition of Structures SB1380 and SB1381	40	
	- -		

24.	Preserved pillar: SB1395	40
25.	Preserved pillar: SB1830	42
26.	Preserved pillar with wooden basal plate: SB1890	43
27.	Preserved pillar: SB2065	43
28.	Cross-section of Pit SK1348	
29.	Cross-section of Pit SK1825	45
30.	Cross-section of Pit SK1943	46
31.	Cross-section of Pit SK2001	46
32.	Preserved pillar: SB1470	48
33.	Preserved pillar: SB1326	58
34.	Cross-section of Pit SK1304	
35.	Cross-section of Pit SK1775	
36.	Cross-section of Pit SK1910	
37.	Cross-section of Feature SX1552	62
38.	Horizontal framework of a well	64
39.	Vertical framework of Well SE1700	67
40.	Horizontal framework of Well SE2070	68
41.	Stopper for a lacquer container	78
42.	Lacquer container recycled from Sue pottery, Type A basin	79
43.	Reconstructed lacquer container with stopper emplaced	79
44.	Pottery from Ditches SD1387, SD1440, and SD1345	94
45.	Pottery from pits and post holes	96
46.	Pottery from Wells SE1375, SE1335, SE1365, SE1560,	
	SE1385, SE1360, and SE1530	98
47.	Pottery from Wells SE1867 and SE1870	100
48.	Pottery from Anapchi 雁鴨池 Pond, Korea	101
49.	Other clay objects	102
50.	Pottery stand: type K pot of Sue pottery	107
51.	Long (rectangular) comb (scale drawing)	
52.	Short (vertical) and stemmed combs	113
53.	Round bentwood vessel 34: joint	114
54.	Birch bark vessel: joint	116
55.	Large round bentwood vessel from the the Daifuku 大福 site,	
	Sakurai City, Nara	117
56.	Type 6134-B round edge roof tile: ventral view	128
57.	Type 6285-B roof tile: finger prints prserved in the ventral side	128
58.	Type 6229-A roof tile	128
59.	Type 6229-A roof tile: ventral view, showing traces of	
	cloth used in separating inner mold from clay	128
60.	Edge roof tile (trimming adjustments); end (sumi 隅) roof tile; and inscribed roof tile	122
61.	Type 6646-Ba roof tile	
62.	Type 6721-C roof tile	
63.	Brick: weathered surface	
64.	Brick with punctations	
65.	Artifacts from Feature SX1535	
66.	Artifacts from Feature SX1400	
J J .		1 10

67.	Orientation of streets and avenues, the southern portion	
	of the Heijō Capital with respect to Capital gates	142
68.	Declination of two minor streets between the Seventh and	
	Eighth Major Streets	143
69.	Declination of Major avenues and streets, Western	
	Sector of the Heijō Capital	144
70.	Declination of minor avenue in the eastern half of the	
	Eastern Sector, Third Quarter	147
71.	Relationship between minor avenue in the East Third Quarter	
	and Higashi Horikawa Canal	147
72.	Streets, avenues, and alleys within the excavation areas	149
73.	Reconstructed plan of streets and avenues surrounding the	
	Thirteenth and Fourteenth Blocks, First Ward on the Eighth	
	Street, Western Sector	150
74.	Features of the Phase II and IV in the Thirteenth and Fourteenth	
	Blocks, First Ward on the Eighth Street, Western Sector	151
75.	Features in the Tenth Block, Third Ward on the Ninth	
	Street, Eastern Sector	152
76.	Features in the Ninth Block, Third Ward on the Eighth	
	Street, Eastern Sector	152
77.	Phase I features	155
78.	Phase II features	157
79.	Phase III features	159
80.	Phase IV features	161
81.	Tenth Block, Third Ward on Ninth Street, Eastern Sector	167
82.	Fourteenth Block, Second Ward on Sixth Street, Eastern Sector	167
83.	Eighth Block, First Ward on Fifth Street, Eastern Sector	168
84.	Shōdō 正道 site, Kyoto Prefecture	169
85.	Distribution of artifacts and features associated with metallurgy:	
	the northern portion of the Fourteenth Block excavation area	171
86.	Ninth Block, Third Ward on Eighth Street, Eastern Sector	
	(Early Nara Period)	173
87.	Ninth Block, Third Ward on Eighth Street, Eastern Sector	
	(Middle Nara Period)	173
88.	Master tree-ring pattern (Japanese cypress) (bottom); tree-ring	
	pattern of a wooden board from a well (top)	177
89.	Master tree-ring pattern (Japanese cypress) (bottom); tree-ring	
	pattern of a rectangular bentwood vessel (top)	
90.	L-shaped tuyere of recent times	
91.	L-shaped tuyere: reconstructed use	
92.	Various fuhon 富本 coins	187
93.	Register for taxation (keichō 計帳), the Otagi County	
	in the present Kyoto Prefecture (Shōsō-in Treasures)	181
94.	Nara Period residential tax records for the Western Sector,	_
0 =	Heijō Capital (Shōsō-in Treasures)	189
95.	Shigyō hachimon 四行八門 land allotment system	16-
	for the Heian Capital	196

LIST OF TABLES

1.	Excavation projects: dates and areas	8
2.	Photogrammetric datum points	23
3.	Photogrammetric camera settings	24
4.	Heijō Capital well sizes	69
5.	Results of fluorescence X-rays analysis on chemical contents	
	of crucibles and slags, etc.	77
6.	Size and weight of glass beads	84
7.	Heijō Capital pottery chronology	87
8.	Pottery assemblage from Pit SK2001	106
9.	Tang China (618-907) and Silla Korea (668-935) trade ware	
	from the Heijō Capital	109
10.	Results of fluorescence X-rays analysis on chemical composition	
	of pottery	
11.	Size of combs (horizontal type)	
12.	Round bentwood vessels: basal sizes	
13.	Size of ritual wooden blades (igushi 斎串)	
14.	Pottery with ink inscription	
15.	Faunal remains	
16.	Botanical remains	
17.	Artifacts from Feature SX1400	140
18.	East-west major streets and north-south major avenues, the	140
	Heijō Capital: coordinates	142
19.	Minor streets between the Seventh and Eighth Major	143
	Streets: coordinates	143
20.	Major north-south avenues in the Western Sector, the Heijō	145
	Capital: coordinates	143
21.	Minor avenues between the East Second and East Third	
	Avenues: coordinates	147
22.	Width of minor streets and avenues between major north-south	• • •
	avenues and east-west streets in the Capital	148
23.	Minor streets and avenues surrounding the Thirteenth and	
	Fourteenth Blocks: proposed coordinates	150
24.	Size of the Heijō Capital structures (lacking foundation stones)	
	based on the intercolumnar space	164
25.	Size of verandaed structures (lacking foundation stones) based	
	on the intercolumnar space	
26.	Spatial distributions of different-sized structures in the Capital	165
27.	Size of structures with interior/core pillar supported (sōbashira 総柱)	
	in the Heijō Capital	166
28.	Dendrochronological absolute dates	
29.	Japanese master chronology by six species	178
30.	Sites in the Heijō Capital and Palace which yielded documents	
	on paper soaked in lacquer	190

31.	Presence of small scale residences mentioned in the Gesshakusenge	
	月借銭解 [Nara Period document listing peoples' debts and	
	properties]	194
32.	Standard of distributing parcels of land for residences in the	
	Fujiwara 藤原 (694-710) and Naniwa 難波 (726-734) Capitals	195
33.	Features containing ritually buried pottery from the	
	Heijō Capital	200
	SUPPLEMENTARY TABLES	
1.	Principal architectural features	
2.	Wells	
3.	Whetstones	209
4.	Size and weight of coins	210
5.	List of end roof tiles	211
6.	Distribution of slags and crucibles	213

PLANS AND SECTIONS

- 1. Entire floor plan of Areas 6AII-O, -P, and -Q
- 2. Northern half of the northern portion of Fourteenth Block in Area 6AII-O
- 3. Southern half of the northern portion of Fourteenth Block in Area 6AII-O
- 4. Northern half of the Thirteenth Block; the southern portion of the Fourteenth Block in Areas 6AII-P and -Q
- 5. Eastern half of the Fourteenth Block in Area 6AII-Q
- 6. Northern half of the Thirteenth Block; the southern portion of the Fourteenth Block in Areas 6AII-P and -Q.
- 7. Thirteenth Block in Area 6AII-Q

COLOR PLATE

Frontispiece: Metallurgical artifacts

PLATES

- 1. Aerial photograph of the excavated areas and their vicinity (1955)
- 2. Aerial photograph of the excavated areas and their vicinity (1980)
- 3. Thirteenth Block in Area 6AII-Q: south section of 168th Heijō Project excavation areas, from the north
- 4. Thirteenth Block in Area 6AII-Q

- 1. Alley SF1320, Structures SB1325 and 1326, and Well SE1305, from the east
- 2. Structures SB1363 and 1364, Well SE1365, Pit SK1361, from the west
- 5. Thirteenth Block in Area 6AII-Q
 - 1. Structures SB1336 and 1350, Well SE1335, from the west
 - 2. Structures SB1314, and 1316, Well SE1315, from the north
 - 3. Structure SB1350, from the north
- 6. Thirteenth Block in Area 6AII-Q
 - 1. Fences SA1370, 1371, and 1372, Well SE1375 Pit SK1373, from the east
 - 2. Structures SB1380 and 1381, from the east
 - 3. Structure SB1406, Features containing ritually buried pottery SX1400 and 1401, from the east
- 7. Thirteenth Block in Area 6AII-Q
 - 1. Alley SF1320, Pit SK1304, from the south
 - 2. Alley SF1320, Structure SB1395, Ditches SD1387 and 1412, Pit SK1409, from the south
- 8. Thirteenth and Fourteenth Blocks in Areas 6AII-P and -Q: north section of the 168th Heijō Project excavation areas, from the northeast
- 9. Thirteenth and Fourteenth Blocks in Areas 6AII-P and -Q
 - 1. Minor street SF2000, and its side ditches SD1495, 1496, 1499, and 1500, from the west
 - Minor street SF2000, Pits SK1493, 1502, 1508, 1509, 1511, and 1515, from the east
- 10. Thirteenth Block in Area 6AII-Q
 - 1. Structures SB1470, 1471, and 1472, Fense SA1473, from the east
 - 2. Ditches SD1412 and 1487, from the south
 - 3. Underdrain SX1489
- 11. Thirteenth Block in Area 6AII-Q
 - 1. Structures SB1476, 1477 and 1478, from the east
 - 2. Structures SB1425 and 1482, Fense SA1483, from the south
- 12. Thirteenth and Fourteenth Blocks in Areas 6AII-P and -O
 - 1. Alley SF1320, Minor Street SF2000, Wall SA1570, from the south
 - 2. Wall SA1570, from the south
 - 3. Wall SA1570, and the ditches along the wall, SD1649 and 1668, from the north
- 13. Fourteenth Block in Area 6AII-P
 - 1. Structures SB1559 and 1561, Fence SA1558, Well SE1560, from the south
 - 2. Structures SB1585, 1586, 1587, and 1588, from the south
- 14. Fourteenth Block in Area 6AII-P
 - 1. Eastern half of the northern excavation units under the 168th Heijō Project, from the southeast
 - 2. Structure SB1534, Feature containing ritually buried pottery SX1535, from the east

- 3. Structures SB1553 and 1584, from the north
- 15. Fourteenth Block in Area 6AII-P
 - 1. Structure SB1532, Pit SK1980, from the east
 - 2. Structure SB1531, Features containing ritually buried pottery SX1592 and 1593, from the east
 - 3. Pit SK1552, from the south
- 16. Fourteenth Block in Area 6AII-O: 179th Heijō Project excavation areas, from the north
- 17. Fourteenth Block in Area 6AII-O
 - 1. Alley SF1970, Wall SA1570, from the north
 - 2. Structure SB1710, from the east
 - 3. Structures SB1682, 1760, 1790 and 1791, from the east
- 18. Fourteenth Block in Area 6AII-O
 - 1. Structures SB1820 and 1830, Fense SA1900, Pits SK1824 and 1951, from the east
 - 2. Structures SB1780, 1781, and 1810, from the south
 - 3. Well SE1870, Pits SK1861, 1915 and 1943, from the east
- 19. Fourteenth Block in Area 6AII-O
 - 1. Structure SB1890, Fence SA1850, Well SE1867, from the south
 - 2. Pit SK1863, from the north
 - 3. Pits SK1825 and 1826, from the north
 - 5. Pits SK1775, from the south
- 20. Fourteenth Block in Area 6AII-O
 - 1. Excavation area of the 156–32nd Heijō Project, from the north
 - 2. Excavation area of the 156–32nd Heijō Project, from the south
- 21. Fourteenth Block in Area 6AII-O
 - 1. Excavation area by the Yamato-Kōriyama Municipal Board of Education in 1984, from the west
 - 2. Excavation area by the Yamato-Kōriyama Municipal Board of Education in 1984, from the north
 - 3. Structure SB1890, from the north
- 22. Wells in the Thirteenth Block in Area 6AII-O
 - 1. SE1305, from the west
 - 2. SE1315, from the north
 - 3. SE1365, from the north
 - 4. SE1375, from the north
- 23. Wells in the Thirteenth and Fourteenth Blocks in Areas 6AII-P and -Q
 - 1. SE1530, from the west
 - 2. SE1550, from the south
 - 3. SE1555, from the west
 - 4. SE1555, from the north
- 24. Wells in the Fourteenth Block in Area 6AII-P
 - 1. and 2. SE1700, from the south
 - 3. SE1560, from the east

- 4. SE1867, from the south
- 25. Wells in the Fourteenth Block in Area 6AII-O
 - 1. SE1870 and 1880, from the south
 - 2. SE1870, from the west
 - 3. SE1917, from the south
 - 4. SE2020, from the south
- 26. Features containing ritually buried pottery in the Thirteenth and Fourteenth Blocks in Areas 6AII-P and -Q
 - 1. and 2. SX1535, from the east
 - 3. SX1579, from the east
 - 4. SX1400, from the west
 - 5. SX1592 and 1593, from the northeast
 - 6. SX1578, from the north
 - 7. SX1401, from the south
 - 8. SX1310, from the south
 - 9. SX1572, from the north
 - 10. SX1589, from the northeast
- 27. Metallurgical artifact 1
- 28. Metallurgical artifact 2
- 29. Metallurgical artifact 3
- 30. Metallurgical artifact 4
- 31. Metallurgical artifact 5
- 32. Artifacts of metal, glass, and stone
- 33. Metallic artifact
- 34. Artifact related to lacquer work 1
- 35. Artifact related to lacquer work 2
- 36. Coin 1
- 37. Coin 2
- 38. Ceramic 1
- 39. Ceramic 2
- 40. Ceramic 3
- 41. Ceramic 4
- 42. Ceramic 5
- 43. Ceramic 6
- 44. Ceramic 7
- 45. Wooden object 1
- 46. Wooden object 2
- 47. Wooden object 3
- 48. Wooden object 4
- 49. Wooden object 5
- 50. Wooden object 6
- 51. Wooden tablets, lacquer soaked paper with inscriptions
- 52. Lacquer soaked paper with inscriptions
- 53. Brick 1
- 54. Brick 2
- 55. Faunal and Plant remains
- 56. Artifacts from Feature containing ritually buried pottery SX1535
- 57. Artifacts from Feature containing ritually buried pottery SX1400

ENGLISH SUMMARY

This report summarizes the achievements of excavations carried out by the Yamato-Kōriyama Municipal Board of Education in 1984 and by the Nara National Cultural Properties Research Institute from 1985 to 1986. The excavations took place in Kujō-chō, Yamato-Kōriyama City, Nara Prefecture prior to the remodeling of a garbage processing plant in the northern part of the city. The excavated areas, which extend for approximately 7,400 square meters, are historically designated as the Thirteenth and Fourteenth Tsubo 坪 [Blocks] of the First Bō 坊 [Ward] on the Hachijō Ōji 八条大路 [Eighth Major-Street] in the Ukyō 右京 [Western Sector] of the Heijō 平城 Capital [in use 710–784, A.D.] (see Fig. 1). In the vicinity of the site are the Nishi Ichi 西市 [West Market] and the Rajō Mon 羅城門 [South Central Gate] (see Fig. 2). These excavations confirmed long-held expectations of the existence of state-sponsored workshops for metallurgy and the production of lacquer ware during the Nara Period [710–794].

Major Excavated Features

Excavations have uncovered evidence of numerous structures, fences, alleys, ditches, wells, and pits. Most of these are dated to the Nara Period, which is divided into four phases in this volume: Phase I (early half of the Early Nara Period), Phase II (later half of the Early Nara Period), Phase III (early half of the Late Nara Period), and Phase IV (later half of the Late Nara Period.)

i) Features of the Phases I and II (Early Nara Period)

Metal work and lacquer ware workshops appear to be confined largely to the Fourteenth Block, while what appears to be the remains of governmental office complex (kanga 官衙) occupies the Thirteenth Block.

The northern half of the Fourteenth Block is divided into two clusters of features by a fence. Each cluster, one in the north and the other in the south, consists of a well, structures and a smelting furnace. The smelting furnaces are not intact; most of the features have been destroyed by pits filled with metal slag, and discarded metallurgical tools such as crucibles and tuyeres. We did, however, discover fragments of the furnace wall and the wall of a pit baked by excessive heat. The great quantity of charred material associated with these features is indicative of metal production.

In the southern half, we discovered a three-room building with a veranda (hisashi 庇), which we suspect was a central part of this workshop complex. Surrounding this building were numerous structures. Some of these structures may have functioned as storehouses, since they are supported by many more pillars than would typically be found in residential structures, and this would seem to be sonsistent with a reinforced superstructure.

Unlike the case of the metal workshop, none of the features in the Fourteenth Block can be directly linked to lacquer ware production. We, nonetheless, suspect that such features exist to the east of the present limits of the excavation, because artifacts related to lacquer ware are concentrated along the eastern edge of the excavation.

In the Thirteenth Block, we have discovered a cluster of architectural remains which presumably pertain to a governmental office complex. The center of this building complex consists of two major structures, the Main Hall and Front Hall, wells, storehouses, and open areas. We assume that this complex occupied one or one-half $ch\bar{o}$ FJ¹. It is noteworthy that the whole building complex faces north towards the workshops of the Fourteenth Block, rather than south which would be the standard orientation. This leads us to suspect that the complex was closely linked to the workshops, reinforcing the impression of state sponsorship.

Other important discoveries include features containing ritually buried pottery. Some pottery contained ritual objects used for ground-breaking ceremonies in connection with construction of some structures.

ii) Features of the Phases III and IV (Late Nara Period)

In the Late Nara Period, the whole character of the Thirteenth and Fourteenth Blocks changes, and these Blocks become purely residential.

The Thirteenth Block is divided into the eastern and western sectors by a fenced alley. The northern half of the western sector consists of two residences within an area that corresponds to one sixteenth of a block. These residences are nearly square in plan, which is very unusual. The southern half of the western sector consists of four residences in the area of one thirty-second of a block. Each residence is composed of two to three buildings and a well.

In the Fourteenth Block, the wall which formerly marked the southern boundary of the Block was torn down and replaced by a fence during the Late Nara Period. Similarly, the wall dividing this Block into the eastern and western sectors became an alley. The eastern sector was divided into four parcels of which only one thirty-second of a block was alloted for residences and two parcels of one sixteenth block residential allotments. The alley only extends to the end of northernmost residential allotments, rather than to the northern end of this Block, suggesting that the sole purpose of this alley was to to provide egress for the inhabitants. As was the case of the Thirteenth Block, these one sixteenth block residences are square in plan. While such residences generally consist of one Main Hall, a well, and a store house, one of the residences in this Block has two Main Hall-structures.

In addition to the remains of residences, we have discovered several features containing ritually buried pottery in the Thirteenth and the southern half of the Fourteenth Block. Some pottery contains female afterbirth, presumably wishing new-born babies a good health. These features are dated to the Late Nara Period when these Blocks were turned into residential districts.

Artifacts Discovered at the Site

The metallurgical tools which have been discovered in the Fourteenth Block are particularly noteworthy for several reasons. The crucibles are of interest because most of them have been refashioned from regular Haji wares. In addi-

¹ A unit of area; in the Heijō Capital, one *chō* equals one Tsubo or Block and is roughly 16,900 square meters in area; hereafter referred to as a "block".

tion, the crucibles from the Thirteenth Block are small. This fact, taken together with the discovery of unfinished metal belt fittings, suggests that this workshop specialized in the production of small items. A rare from of L-shaped tuyeres (Figs. 90 and 91) is also worthy of note.

Furthermore, a well at the southern end of the Thirteenth Block dated to the Late Nara Period yielded numerous metallurgical tools, such as iron tongs, iron dippers, as well as large whetstones, unfinished copper products and a great quantity of charred material. Although we could not detect clear features of a metal workshop, we suspect that such features exist to the south of our excavated areas.

The artifacts associated with the lacquer ware industry include discarded lacquer containers and sheets of paper soaked in lacquer. The lacquer containers are Sue ware, which have been broken up to extract the half-solidified lacquer inside, indicating intensive use of lacquer. Since some of the lacquer containers were made outside of the Kinki region, we suspect that lacquer was entering the Capital from several different sources. In addition, we have discovered a bunch of grass fibers used for the stopper of a container and paper used for the lid of a container. All of these strongly indicate the presence of a lacquer craft workshop. Some of the paper which has been soaked and preserved in lacquer consists of recycled sutras, census registrations, and record of taxpayers' registrations, clearly demonstrating active governmental involvement in the industry.

Other artifacts which suggest the nature of this site include: wooden tablets with inscriptions, one of which has the character Hata (秦 [family name]); a crown made of lacquered cloth (shissha kan 漆沙冠), fuhon 富本 coins, bronze mirror decorated with marine mammals and grape vine (kaijū budō kyō 海獸葡萄鏡), roof tiles glazed in three colors, ceramic ink stones with sheepshead decoration, ceramics imported from Silla, Korea (668–935), pottery with inscriptions in ink.

Nature of the Site

As was mentioned previously, the site covers the Thirteenth and Fourteenth Blocks of the First Ward on the Eighth Street, Western Sector of the Heijō Capital. It is evident that metal and lacquer ware workshops occupied the Thirteenth Block, and a cluster of buildings presumed to be a governmental office complex were located in the Fourteenth Block in the Early Nara Period. In the late Nara Period, these two Blocks were turned into residential districts.

As we have noted, there is good reason to believe that the workshops were under direct governmental control. Historical records suggest that the workshops belonged to the organizations such as Imono no Tsukasa [典鋳司 Beureau of Metal Production] and Nuribe no Tsukasa [漆部司 Bereau of Lacquer Work] under the Ōkura Shō [Ministry of Finance]. If this is indeed the case, the cluster of buildings in the Fourteenth Block are likely to be an administrative facility for these workshops.

For the residential districts in the Late Nara Period, we have distinguished two classes of allotments: one sixteenth of a block and one thirty-second. These Fourteenth and Thirteenth Blocks are unique in that the one sixteenth parcels are square in plan, rather than the usual horizontal rectangle. Another significant discovery is the existence of one thirty-second block parcels, which are

described in historical sources, but which had not been confirmed until the recent discovery at the Tenth Block, Third Ward on Ninth Street, the Eastern Sector of the Capital. These two discoveries push back the beginning dates of the shigyō hachimon [四行八門] system¹ (see Fig. 95) to the Late Nara Period. If indeed this is the case, the square parcel in the area of one sixteenth of a block may represent two units of residential allotments under this system rather than the usual allotment system in effect during the Nara Period.

In general, people of the lower classes were given smaller parcels of land to the out of the Fifth Major Street, farther from the Heijō Palace. This standard practice may not hold true for the case of residences in the Thirteenth and Fourteenth Blocks. One factor is its close proximity to the West Market, which was one of two national redistribution and trade centers. Another factor is the discovery of metallurgical artifacts dated to the Late Nara Period. Therefore, future research should help to resolve such questions on the nature of these residences.

In conclusion, the major gain of this series of projects is that we have for the first time grasped the nature of government controlled workshops in the Capital. While the nature of the Late Nara Period features still remain subject to further discussion, this report, nonetheless, provides invaluable data for understanding residences during the Late Nara Period.

¹ Literally, "four columns and eight gates system"; the land allotment system common in the Heian Capital; a square piece of land is divided into four columns, and each column is further divided into eight rows, thereby creating thirty-two parcels of land.