

Excavating the Nara Capital (2)

Economy of the Nara Capital

By Tanaka Migaku

1. Toward an Era of Currency

A highly unexpected discovery took place in 1979 during an archaeological excavation that was carried out prior to the construction of the Nara Central Post Office. The site was 7.8 hectares in area, situated approximately one kilometer east of the Nara Imperial Palace site, and a part of the Nara Capital, the eighth-century political and economic center of Japan. The archaeological evidence shows that bronze coins, or *Wado Kaiho*, were apparently cast there. *Wado Kaiho* were coins officially issued by the government from 708 to 760, the first coinage in Japanese history. No contemporary written sources, however, mention that coins were cast in the Capital. Moreover, communal buildings and mansions were located in the excavated area when the site was a part of the Capital; it is difficult to believe that official bronze coins were cast there. The discovery thus poses an enigma.

Before solving this mystery, it is necessary to put *Wado Kaiho* into the broader context of history. Japanese coins were modeled after Chinese counterparts. Coins in ancient East Asia were all cast, as opposed to coins in Western Asia and

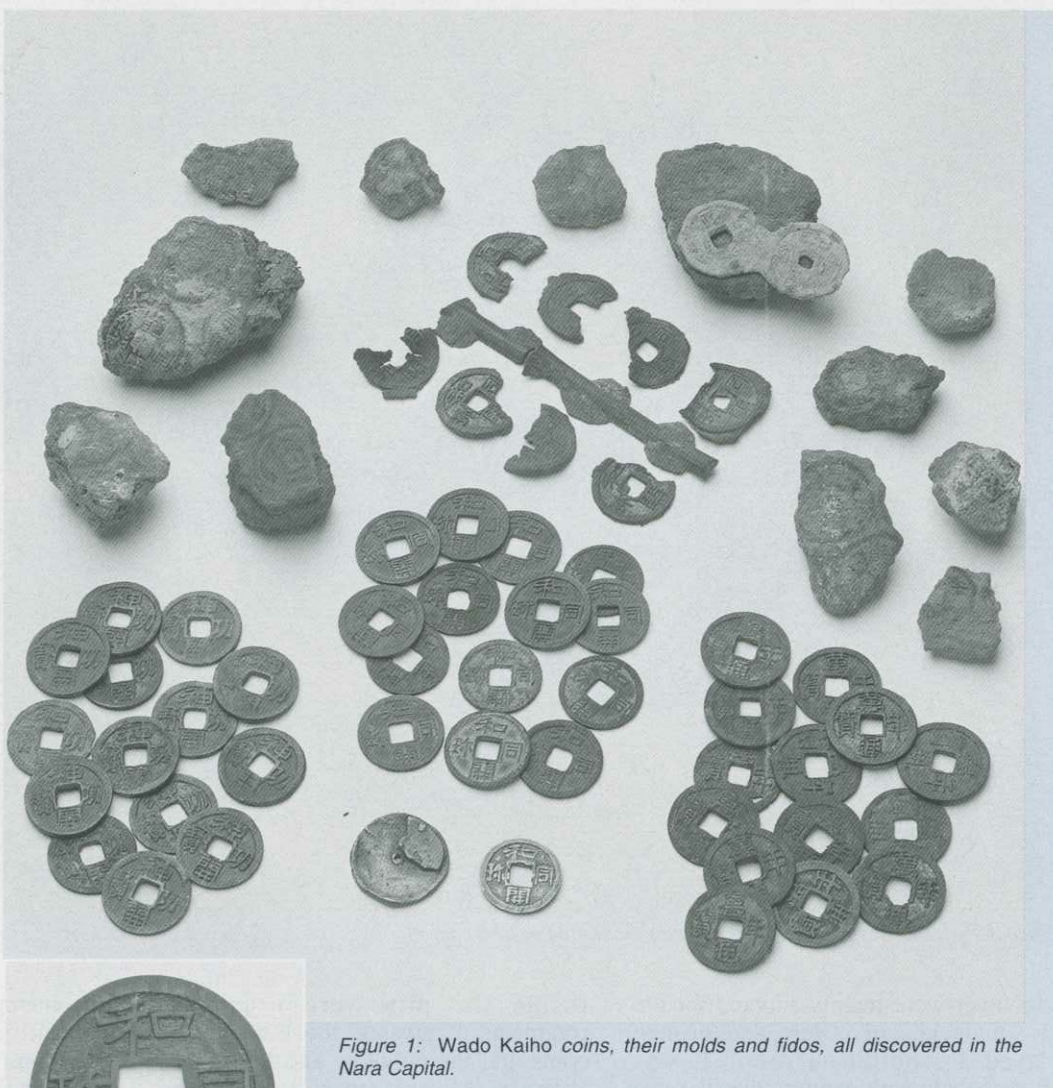


Figure 1: *Wado Kaiho* coins, their molds and fidos, all discovered in the Nara Capital.

Europe that were made of a planchet pressed firmly with a pair of dies, leaving an impression on the sides of coins. This difference was probably a result of the choice of raw material used; most coins in ancient East Asia were bronze, a hard metal

that was difficult to imprint. Although silver and gold coins, such as silver *Wado Kaiho* and, from 760 on, gold *Kaiki Shoho* and silver *Taihei Gempo*, were issued in eighth-century Japan, they were rarely circulated. The predominance of bronze coins in ancient East Asia is also distinct from Western Asia and Europe where gold



Figure 2: Loop of less than 100 bronze coins that were tied by a cord.

and silver were mainly adopted for the raw materials of coins, and bronze played a subordinate role. It was after the fifteenth century that the use of gold and silver coins revived and took a leading role in Japan.

Archaeologists at the excavation mentioned above discovered thirty-one pits filled with charcoal, ash, and burned earth within an area measuring 15 meters north-south and 20 meters east-west. These pits were more or less rectangular: 0.5 to 1.9 meters per side, and 0.5 to 1 meter in depth.

Inside the pits were crucibles, fragments of tuyeres, the *Wado Kaiho* coins and their molds, and their fidos (Figure 1), all mixed with the charcoal, ash, and burned earth. Clearly, bronze was melted in the crucibles, before being poured into the molds of the *Wado Kaiho* coins.

Historically, we know that the casting of the *Wado Kaiho* coins took place in areas of southern Osaka Prefecture, southern Kyoto Prefecture, and western Yamaguchi Prefecture. At the same time, we frequently find

in contemporary historical sources that regulations to prohibit counterfeit coins were issued. Those who cast counterfeit coins were sentenced to death. The eighth-century prohibition of counterfeit coins leads us to suspect that the coins cast at this archaeological site were indeed these very counterfeit coins.

I want to emphasize that the use of coins as a currency was very much in vogue in the eighth century. This is the reason some people wanted to produce counterfeit coins. This point



Figure 3: Wooden tablets used as tags attached to special regional products that were delivered to the Capital.

is important because some historians doubt if the coins truly functioned as currency in eighth-century Japan. In addition to the existence of counterfeit coins, some lines of historical evidence also give support to my argument. Firstly, eighth-century

documents from the Shosoin Treasury record that coins were used for the payment of wages. Secondly, some wooden tablets have inscriptions in ink describing monetary transactions at markets in the Capital.

Another archaeological observation

leads us to suspect that eighth-century people valued bronze coins as a currency. Three kinds of bronze coins, including *Wado Kaiho*, were issued in the eighth century, and, as with Chinese coins, they were all circular with a square hole in the center. Each coin had a value of one *mon*, a unit in currency. When a large number of coins were transacted, they were tied together with a cord or straw that was put through the square holes. Clusters or loops of tied bronze coins have been discovered in Japan (Figure 2). Each loop consisted of 97 or 98 coins; it was rare for one hundred coins to be tied together. Archaeologists and historians speculate that a tied loop of coins had a value of 100 *mon*. The difference between 97 or 98 coins and a value of 100 *mon* was the result of a commercial custom practiced in China, whereby two or three coins served as payment for those who counted the coins. To start with, the value for the amount of bronze required for the production of a single bronze coin was lower than the legally defined value of a single bronze coin. Moreover, 97 or 98 coins were considered to have the value of 100 *mon*. All these point to the interpretation that coins issued by the government functioned as a currency trusted by the people. All in all, coins were valid for trade,

exchange, and payment of goods in the eighth century.

By that time, the central government controlled approximately 260,000 square kilometers of the 370,000 square kilometer Japanese archipelago. Thus far, nearly 5,000 *Wado*

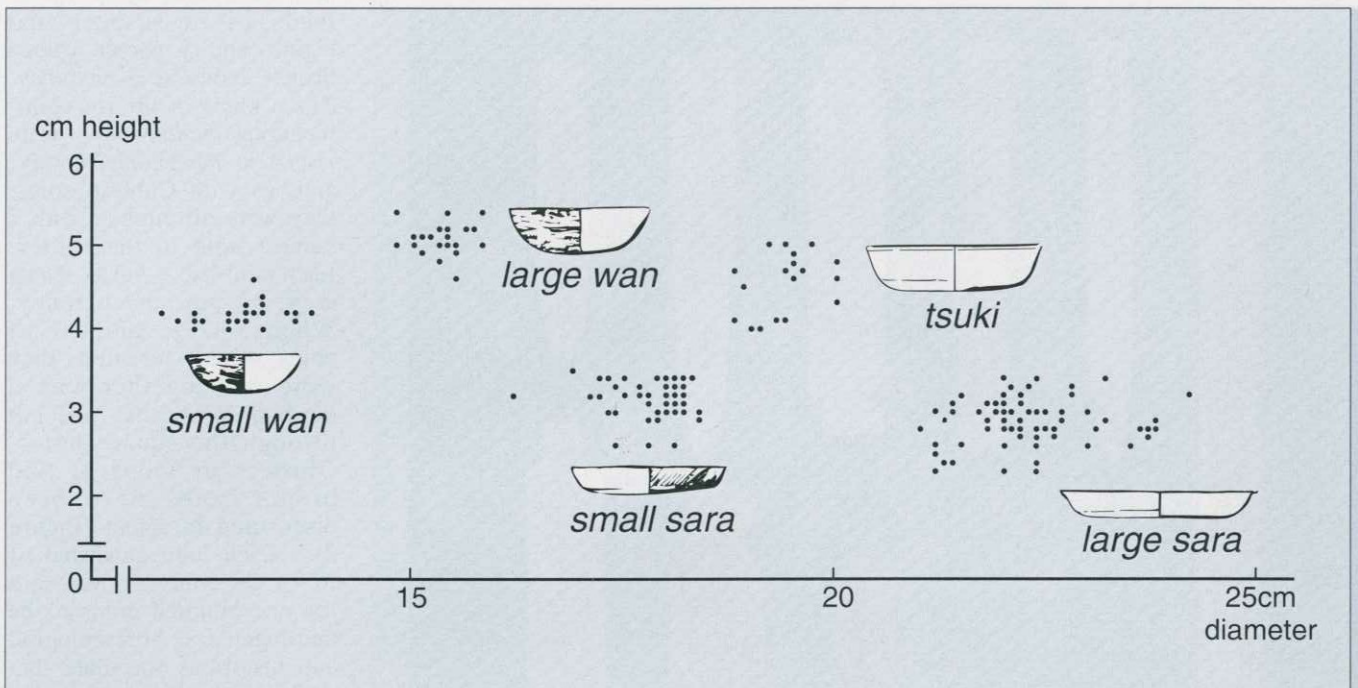


Figure 4: Highly standardized haji earthenware food-serving vessels.

Kaiho coins have been discovered at various places in the 260,000 square kilometer area. However, 40% of them were in the Nara Capital and its immediate vicinity. An additional 35% were discovered in the area within 70 to 80 kilometers from the Nara Capital. Bronze coins were fully adopted in the central region of mainland Japan. The 100,000 consumers residing in the Nara Capital, in particular, contributed considerably to expediting the adoption of a monetary economy.

2. Toward an Era of Nationwide Circulation of Commodities

It was on January 24, 1961 when I was in the process of excavating an eighth-century garbage pit in the Nara Imperial Palace site that the first archaeological discovery of a wooden tablet with an ink inscription took place. Since the garbage pit was wet, organic artifacts were also recovered besides fragments of pottery and roof tiles.

Since then, the discoveries of a large

number of wooden tablets with ink inscriptions have been reported from many sites. The wooden tablets are classified into several kinds, but the following three are common (in the order of quantities discovered thus far): 1) those used for simple paperwork within governmental offices; these are often slender and rectangular in morphology, while formal documents were written on paper; 2) tags attached to commodities that were delivered to the central government from the provinces, which are often notched so that they could be tied to commodities with a cord or pointed so that they could be inserted into piles of commodities; these commodity tags are the focus of this section; and 3) those used for practice in calligraphy or just scribbling.

Numerous wooden tablets used as tags have been discovered in the Nara Capital (Figure 3). The tags identify a tax payer's name and address as well as the quantity and items of a special regional product delivered to the Capital. The delivery of such a product was required by the eighth-

century taxation system. The central government rented 0.6 acres of rice paddies to men above six years old and 0.4 acres to women also above six years old. In return, people were obliged to pay taxes. Taxes were primarily in the form of rice and labor contribution to the government, but they also took the form of a special regional product.

The content of these tags vividly illustrates that various products from many different regions were delivered to the Capital. For example, floss silk was transported 500 kilometers from Northern Kyushu and iron 250 kilometers from the Chugoku mountains in Western Honshu (the mainland). From the coastal regions of the mainland came shellfish, fish, and salt. These commodities were not only consumed in the Nara Imperial Palace but also sold at two official markets in the southern part of the Nara Capital. For that purpose, a branch office of the national government and storehouses were located in the markets.

The Eastern and Western Markets



Figure 5: Sue stoneware jar that contained bonito fish broth for delivery to the Capital.

were approximately six hectares in area. They opened at noon, and closed at sunset. A canal ten meters wide and three meters deep ran through each of the markets from north to south. Grains, other agricultural products, sea foods, cloth, and other craft products were available at stores located in the markets. People could obtain most of commodities necessary for daily life there. One of the poems included in the *Man'yōshū*, a collection of some

4,500 poems in the seventh and eighth centuries runs: "Although I went to the Western Market and purchased silk of my own choosing, a sales clerk gave me one of poor quality." Since the markets were always crowded, they were also an effective place to hold public executions and corporal punishments.

Another line of archaeological evidence that helps us understand the nationwide circulation of commodities is ceramics, the most frequently

discovered class of artifacts in the Nara Capital. Three kinds of ceramics were used in the eighth century, namely *haji* earthenware, *sue* stoneware, and glazed wares. While both *haji* and *sue* were used by people of all social classes for daily purposes, but glazed wares were luxury items used only by aristocrats and priests.

Haji earthenware was made by a coiling technique, which was dried and fired with straws and woods. Neither potters' wheels nor kilns were used in the process. The traditional methods and techniques involved in the production of *haji* were at the same levels of technology as prehistoric times. They were also made in rural agricultural villages and were available to peasants. What distinguished *haji* adopted in the eighth century was the standardization. The *haji* food-serving vessels excavated in the Nara Imperial Palace site were clearly differentiated into the functional and standardized classes of large *wan* (deep bowl), small *wan*, *tsuki* (bowl), large *sara* (dish), and small *sara* (Figure 4). A system already existed in the eighth century that allowed for the production of traditional earthenware according to fixed standards.

Sue was unglazed stonewares made using potters' wheels and fired in kilns at temperatures higher than 1,000 degrees in centigrade. The *sue* production technology was adopted from the Korean peninsula in the fifth century. This technology produces ceramics much harder than *haji*. Most of *sue* wares discovered in the Nara Capital were made in the vicinity of the Capital. Some were products transported for 150 kilometers from the present Aichi, Gifu, and Okayama Prefectures. These areas are now major ceramic production centers of Japan. Owing to the market economy, a system existed that allowed for the productions of ceramics of standardized forms and of special regional types.

The ceramics were not only commodities in themselves but also



Figure 6: Pottery fired at low temperatures, which was used for the production and transportation of salt.

the means of transporting other goods to the Capital. For example, a group of long-necked *sue* jars of approximately 20 centimeters high are thought to have been used to deliver bonito fish broth from present eastern Shizuoka Prefecture, 300 kilometers to the east of the Nara Capital (Figure 5). The bonito fish broth was used as a flavoring. Archaeologically, we see that these *sue* jars were of inferior quality, and not standardized in terms of morphology. They would not be suitable as “special regional products.” A historic source mentions that bonito fish broth was donated to the Capital as a tax in kind from the eastern Shizuoka region. Indeed,

some of the long-necked jars have ink inscriptions on the bottom mentioning the volume of liquid contained.

Salt was also delivered inside ceramic vessels. In early historic times, salt was obtained by boiling condensed sea water in ceramic pots. The condensed sea water was obtained by squeezing sea weeds that had already absorbed sea water and was then dried under the sun. In some cases, ceramic bowls of the same type as ones used for salt production were also used for deliveries to the Capital (Figure 6). Ceramics have been unearthed in the Capital which are identical to those discovered in coastal areas where salt production did take

place.

Nationwide circulation of commodities with the Nara Capital as the center was very much in vogue in the eighth century. This was the beginning of the consolidation of Japan into a single economic sphere. The Capital’s political control over most of the Japanese archipelago and the presence of 100,000 consumers greatly contributed to this economic process.

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