# The Archaeology of "Ferry Money": An Archaeological Approach to Numismatics and Monetary History of 14th-18th Century Japan

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#### ABSTRACT

Among the various sub-disciplines in contemporary archaeology, historical archaeology is one of the most exciting fields in both North America and Japan. There exists, however, a striking contrast between these two academic traditions in terms of their development and resulting research foci. This paper presents an archaeological and numismatic analysis of coins associated with burials from historic sites in Japan and attempts to reconstruct the dynamics of money circulation during the early Edo period (primarily the 17th century). Through a comparison of this case study to historical archaeology in North America, the question "What are the essentials for historical archaeology?" is addressed.

KEYWORDS: historical archaeology, numismatics, ferry money, Edo period, Japan

# Editor's Note (by HABU Junko)

This paper is the full version of the late SUZUKI Kimio's lecture that was given at the Center for Japanese Studies of the University of California, Berkeley, in August 2003. The original manuscript was in Japanese, which I translated into English prior to his lecture at UC Berkeley.

SUZUKI Kimio (1938-2004) was Professor of the Department of Archaeology and Ethnology at Keio University. While his early research focused on the archaeology of the prehistoric Jomon period of Japan, from the mid-1980s onward, he passionately worked on laying down the foundation of historical archaeology of Japan, especially that of the Edo period (1603-1868).

The paper consists of three main sections. The first section critically reviews the development of historical archaeology in Japan in comparison to that in the United States.

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In doing so, Suzuki provides a convincing argument that historical archaeology should play active roles in our understanding of past sociopolitical dynamics and histories of diverse sociopolitical groups. The second section is a succinct summary of his life-long project of examining the changes in the circulation of Edo period coins. The final section discusses the future of historical archaeology in Japan and the rest of the world with an emphasis of its interdisciplinary nature.

In re-reading this manuscript 10 years after it was written, I was struck by Suzuki's strong emphasis that, unless historical archaeology can address key questions that are relevant to contemporary society, archaeologists will no longer be able to justify the necessity of their own discipline. Through his examination of the development of historical archaeology in North America, Suzuki argues that archaeological studies of the recent historic past should be part of the large-scale social and political movements: they should be inseparably related to the reexamination of people's social and ethnic identity, their memory and the sociopolitical structures behind individuals' actions. While Suzuki's discussion is focused on the archaeology of the recent historical period, this point should be taken seriously for archaeological study as a whole, especially in the context of not only the severe economic recession over the past decade but also ongoing debates about the role of social sciences in dealing with current social, economic, political and environmental problems.

As a former student of Keio University, I had the privilege of taking part in the excavation and site report preparation of the Makino Family's cemetery excavation at the Saikaiji Temple (Suzuki 1986a). At that time, the idea of excavating Edo period remains was foreign to most archaeology students, and many of my classmates were skeptical of its validity. This paper elegantly shows how much we can learn from archaeological studies of recent historic past, and what kinds of visions these studies could provide. Today, Edo period archaeology is an established sub-discipline in Japanese archaeology, but this paper reminds us of the importance of maintaining active discussion on the role of archaeology, historical or not.

In publishing this manuscript here, only a handful of really minor changes were made in the text. I wish to thank SUZUKI Tomiko, the widow of SUZUKI Kimio, who kindly gave our journal permission to publish this manuscript. Two colleagues, SAKURAGI Shin'ichi and SAKURAI Jun'ya helped me compile the list of references. Beth Cary proofread the English manuscript on short notice. All responsibility for translating and editing this manuscript rests with me (HABU Junko).

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#### Introduction

Historical archaeology represents an important sub-discipline of archaeology. Put simply, it can be defined as the archaeological study of periods supported by written documentary evidence. In both Japan and North America, historical archaeology is one of the most popular research fields in contemporary archaeology. The historical development of this research field in Japan differs significantly from that in North America, however. Focusing on the differences, the first part of this paper discusses how historical archaeology in Japan varies from its counterpart in North America in terms of goals, theories, and methodologies. In the second part, I present results of my research on copper coins from the terminal Sengoku and early Edo periods. Using archaeological analyses of copper coins excavated from burials from the late 16th to the 17th centuries, I will interpret the dynamics of currency circulation within Japan during the 17th century (see also Suzuki 1999a, 1999b, 2002). On the basis of these results, I will suggest a mode of currency management by the Tokugawa Shogunate. The final part of this paper deals with the implications of my research on copper coins: through the discussion of this case study, the aim of which is to examine the interrelationships between currency circulation and other human activities, I will raise several theoretical issues in the context of world archaeology.

# Historical Archaeology: Differences between Japan and North America

The beginning of the development of historical archaeology in Japan goes back to the early 20th century. As early as the 1930s, several scholars suggested that archaeology could make a significant contribution to the study of periods for which we have historical documents. In 1937, the archaeologist GOTO Shuichi (1937) published a book titled *Nihon Rekishi Kokogaku*, or "Japanese Historical Archaeology." In the book, Goto suggested that a wide range of topics should be examined in historical archaeology. These topics included dwellings, settlements, weapons, forts, shrines, temples, tombs and burial mounds, arts and crafts, coins, and clothing. His perspective shows a sharp contrast to the traditional view of archaeology of the historical period, in which only Nara period (710–794) temples and palace sites were the primary foci of research. Put another way, Goto's book was the first academic writing in which a wide range of sites and artifacts during and after the Medieval period were identified as research materials for historical archaeology.

This new direction of research suggested by Goto (1937) resulted in the 1956 publication of the 7-volume series titled *Nihon Kokogaku Koza* or "Lectures in Japanese Archaeology."

The seventh volume of this series was devoted to historical archaeology, and was edited by GOTO Shuichi and the historian ISHIMODA Sho (1956). The volume consists of five chapters: 1. Material Cultures of Ancient and Medieval Societies; 2. Lifeways of Agricultural and Fishing Villages; 3. The Development of Japanese Clothing, Foodways and Dwellings; 4. Craft Production and Commerce; 5. Ceremonies and Religions. The Appendix for the volume included an article titled "History and Archaeology" written by the historian UEHARA Senroku (1956). In this article, Uehara summarized major contributions to historical archaeological studies from the pre-war period to the 1950s. He convincingly argued that these findings would make significant contributions to the historical study of Ancient and Medieval periods.

To summarize, Japanese historical archaeology was already a well-established sub-discipline of archaeology in light of research conducted from the pre-war period to the 1950s. This characterization of historical archaeology is very similar to the tradition of classical archaeology in Europe. In other words, historical archaeology was considered part of the holistic study of Japanese history (cf. Hamada 1937). At the same time, however, historical archaeology in Japan up to the 1950s was considered a supplement to the study of history through written documents. This characteristic remained a fundamental part of Japanese historical archaeology thereafter (Suzuki 2005).

The development of historical archaeology in North America was rather different from that in Japan. On one hand, classical archaeology majors in the European tradition were usually associated with classical literature studies in the humanities. On the other hand, archaeology proper was usually included in the department of anthropology, which was part of the social sciences. As a result, as far as I know, what we call historical archaeology today did not exist in the education system of North American universities. Archaeological studies of historical periods were extremely rare, with the exception of a limited number of preservation movements of historical sites and monuments related to Anglo-Americans. A small number of excavations of historical sites was conducted by non-specialists, who were not academically trained in archaeology.

Two developments in the 1960s resulted in major changes in historical archaeology in North America. The first development was the establishment of the Conference on Historic Site Archaeology and the publication of its proceedings in 1960. The second was the formation of the Society for Historical Archaeology and the publication of its journal *Historical Archaeology* in 1967. Subsequent developments in historical archaeology in North America are well summarized by such scholars as Kathleen Deagan (1982) and Barbara Little (1994). These reviews indicate that new developments in American historical archaeology over the past several decades reflect changes in approaches not only to American archaeology but also to the re-examination of American history. This trend was part of larger-scale social and political movements, in which the

concepts of Americans and American Culture were re-evaluated, and the reconstruction of public memories was actively sought. Re-evaluation of the concept of "American" can be seen in various aspects of contemporary American society (Suzuki 2000).

In summary, the development of American historical archaeology during and after the 1960s has been closely intertwined with various issues and problems in contemporary American society. I suggest that this social background has resulted in a major difference between American and Japanese historical archaeology. Historical archaeology in Japan developed rapidly during and after the 1970s when a wide range of sites and artifacts, including those from the Meiji through the Showa periods (latter 19th century to latter 20th century), began to be excavated. The majority of these excavations, however, were rescue excavations as a result of large-scale land development associated with rapid economic growth. Very few of these excavations were academically oriented. In most cases, excavations of Medieval and recent features and artifacts were conducted accidentally, typically only when they happened to be found in the process of excavating prehistoric and early historic sites. Very few excavations targeted artifacts and features specifically from the Edo period (17th-mid-19th century) (Suzuki 1988).

Because the development of historical archaeology in Japan has been rather accidental, its purpose has not necessarily been clear. A general statement that all the buried cultural properties are national assets is not sufficiently convincing to receive active support from Japanese citizens for preserving Medieval and recent historical sites. In addition, the research interests of historical archaeologists often do not overlap with those of historians. As a result, even though historical archaeologists emphasize the importance of the study and preservation of archaeological remains, their relevance may not be recognized by historians. During Japan's high economic growth period, obtaining financial support for the preservation and excavation of archaeological sites was relatively easy. However, with the severe recession over the past several years, it is becoming increasingly more difficult to receive support from the general public for archaeological excavations. Archaeologists are now expected to properly justify the necessity of excavating individual sites, and to provide adequate explanations of why individual sites and artifacts need to be excavated or preserved.

# Copper Coins and Currency Circulation in Edo Period Japan

In 1982, I conducted my first excavation of an Edo period site (Suzuki 1986a). It was an excavation of the cemetery of the Makino Family, the feudal lords of the Nagaoka Clan. The cemetery was located at the Saikaiji Temple in Minato-ku, Tokyo, near the campus of Keio University. This excavation was conducted prior to the restructuring of burial lots.

Skeletal remains excavated from these burials were subsequently reburied in a temple in Nagaoka, Niigata Prefecture. A total of 17 graves dating from 1664 to 1853 were These included the graves of clan heads, their wives and mothers, as well as collected burials of infants and children. The excavation revealed unique features of burial chambers and coffin structures. Associated grave goods included gold coins, silver pipes, ink and portable writing kits, and incense burners. Together, these remains provided us with invaluable data for understanding funeral customs among feudal lords. In 1985, I excavated two more Edo period sites. The first was the subsidiary residential property of the Uesugi Family (Suzuki 1986b), and the second was a cemetery associated with branches of the Zojoji Temple (Suzuki 1988). The former produced a large number of artifacts, including ceramic sherds, roof tiles, pipes, ink stones, kitchen utensils, toys, nails, furniture fragments, whetstones, and copper coins. Food remains including fish bones and shells were also found in garbage pits (Suzuki 1986b). The latter excavation revealed skeletal remains of approximately 300 individuals, which were interred in casks These burials were associated with various grave goods, such as called havaoke. ceramics, lacquerware, coins, ink stones, pipes, combs, bronze mirrors, sewing kits, and juzu beads (Suzuki 1988).

Among these artifacts, I was particularly interested in the gold coins excavated from burials of feudal lords, and the large number of copper coins found in other burials. These coins were called *rokudo-sen* (six *mon* coins), the ferry money to be paid to the ferryman when the dead person crosses the river that divides this world from the other. It seems that gold coins were used for feudal lords because of their high rank. The inclusion of *rokodo-sen* as grave goods gradually became common through the latter half of the Medieval period, when graphic images of hell began to be circulated among commoners. As the use of coins became more common during the Edo period, the custom of *rokudo-sen* became extremely popular. In 1742, the Tokugawa Shogunate banned the use of coins as burial goods, but the custom continued to flourish. Today, the custom is still practiced in some rural areas of Japan.

As the name indicates, typically *rokudo-sen* were six copper coins placed either in the hand of the deceased, or in a small bag around the neck called *zuta-bukuro*. When I examined these coins, I noticed that the coin assemblages from different periods show different characteristics. *Rokudo-sen* associated with burials from the early 17th century consist only of coins imported from China. *Rokudo-sen* assemblages from the mid-17th century consist of both imported coins from China and domestic coins called *Kan'ei Tsuho*, which were minted from 1636, during the Kan'ei era. *Rokudo-sen* assemblages from the end of the 17th century to the 18th century primarily consist of domestic coins, i.e., various types of *Kan'ei Tsuho*. By examining changes in the composition of these *rokudo-sen* assemblages, it becomes possible to reconstruct the dynamics of copper coin

circulation within Japan from the 16th to 18th centuries.

It may be useful to look back on the history of the use of currency in Japan before I present the results of my analysis. From the beginning of the 8th century to the 10th century, copper coins minted by the ancient Ritsuryo State were commonly in use. During the 11th century, however, the use of these domestic coins became less common. By the mid-12th century, a large number of copper coins minted by various Chinese dynasties began to be imported. These Chinese coins include *Kaigen Tsuho* of the Tang dynasty from the 7th century, various Northern Song coins dated during and after the 10th century, Southern Song coins, Yuan coins, *Kobu Tsuho* and *Eiraku Tsuho* of Ming, coins of Liao and Jin in northern China, and coins made by other Southeast Asian and East Asian dynasties, including Annam, Ryukyu, and Choson. Because Japanese Medieval samurai domains could not issue their own coins, foreign coins from East Asia, North Asia, and Southeast Asia were all in use.

In the beginning of the 17th century, the Tokugawa Shogunate achieved political unification of Japan. Following its establishment, the Tokugawa Shogunate first issued gold and silver coins in 1601, and then copper coins in 1636. As a result, imported copper coins that were commonly circulated during the Medieval period were gradually replaced with newly issued domestic coins called *Ko-kan'ei Tsuho*, which means old Kan'ei currency. This implies that a large-scale replacement of currencies from old imported coins to newly-minted domestic coins occurred for the first time in Japanese history. We know that the amount of imported copper coins circulated in Medieval Japan was quite large. This is because, archaeologically, a total of more than 3.5 million imported coins have been found within Japan in caches from the Medieval period. Recalling these imported coins and replacing them with newly minted domestic coins would have entailed various political and economic difficulties. However, historical documents tell us little about the process of this major change in Japanese monetary history.

Figure 1 (all the figures can be found after *References*) shows the relative frequencies of different types of copper coins in *rokudo-sen* assemblages. This figure was made using frequency seriation, a quantification method developed in American archaeology during the 1930s. The five types are imported coins, three types of copper *Kan'ei Tsuho* (Ko-Kan'ei Tsuho, so-called Bun-sen, and newly-issued Shin-Kan'ei Tsuho, issued in 1636, 1686, and 1697, respectively), and Iron Kan'ei Tsuho issued in 1739. Samples were taken from 366 assemblages of *rokudo-sen* recovered from burials in Edo. Although the total number of excavated Edo period burials associated with copper coins is much larger (923), the remaining samples had either greater or fewer than 6 coins, and thus were excluded from the current analysis. As the figure indicates, among the battleship-shaped curves represented in this diagram, those that show the transition from

the Medieval imported coins to Ko-Kan'ei Tsuho are not as smooth as the others. In other words, very few burials were associated with both imported coins and Ko-Kan'ei Tsuho (for details, see Suzuki 1999a: 134-136).

When the Tokugawa Shogunate issued new copper coins in 1636, the Shogunate declared by the law that new coins were equivalent to old imported coins, and thus they should not be distinguished from each other. The edict to terminate the circulation of old coins was finally issued in 1670, 34 years after the minting of Ko-Kan'ei Tsuho. If we assume that both types of coins were circulated during those 34 years, we would expect to find varied combinations of these two types of coins in *rokudo-sen* assemblages dated 1636–1670. However, archaeological data indicate that the transition from old coins to new coins occurred rapidly. In other words, archaeological data suggest a different picture from the conventional interpretation derived only on the basis of historical documents

These results led me to examine another question: Did the rapid change from old coins to new coins occur only in the city of Edo, the political center, or did it occur throughout the Japanese archipelago? To answer this question, *rokudo-sen* data were collected from various parts of Japan. Results from different regions were summarized in Figures 2 to 5. The results indicate that, in all the regions, including the Kanto region (excluding Edo) (Figure 2), the Chubu region (Figure 3), the Kinki region (Figure 4), and western Japan (Chugoku, Shikoku and north Kyushu regions) (Figure 5), the transition occurred rapidly. The data indicate that the rapid transition from old coins to new ones was not unique to Edo, but that it occurred almost simultaneously throughout the Japanese archipelago (Suzuki 1999a: 137-145).

Very few scholars in the fields of Edo period economic history and monetary history have focused on economic changes caused by this rapid currency replacement. looking at fragmentary historical documents, I found that the price of copper coins declined dramatically around 1642, six years after the minting of Ko-Kan'ei Tsuho. Tokugawa Shogunate responded by providing a large amount of economic support to shukuba-machi, or post stations, along major roadways, such as Tokaido and Nakasendo. According to edicts issued in 1616 and 1617, fifteen to sixteen years after the Tokugawa Shogunate first minted gold and silver coins in 1601, the Tokugawa Shogunate declared that the exchange rate between newly-minted gold coins and old Medieval imported coins should be 4,000 mon in copper coin per 1 ryo in gold. However, the actual exchange rate was determined by money exchangers on the basis of market rates. This is very similar to the flexible rate system of foreign currency exchange today. The exchange rate fluctuated depending on the circulation amount of gold coins and copper coins, and on changes in the seasonal demand for these currencies. The rapid decline in the value of copper coins in the early 1640s was apparently caused by the influx of a large amount of

new copper coins. More than 1.3 billion copper coins were minted in the four years from 1636, and as a result, copper coins were over-supplied.

Such fluctuations of the exchange rate between gold and copper coins resulted in major economic turmoil. Many samurai were paid in gold coin, which they regularly needed to exchange with copper or silver coins for daily use. Farmers and city dwellers were primarily using copper coins: in other words, for these people a decline of the copper coin value implied a decrease in their asset value. Samurai and other people who traveled along Tokaido and major roadways tended to carry their money in the form of either gold or silver coins; when necessary, these people exchanged gold and silver coins with copper coins to pay their travel expenses. Thus, the decline in the copper coin value was advantageous to these travelers with gold coins. In contrast, people living in *shukuba*, or post stations, incurred serious economic losses. For the Tokugawa Shogunate, active interaction between Edo and Kansai was critical for both economic and military reasons. Thus, the economic destabilization of post stations and the resultant decrease in public safety were seen as serious problems.

In order to solve these problems, the Tokugawa Shogunate took to controlling currency in an extremely tactical manner. In 1642, the Shogunate provided 500-900 *ryo* of loans in gold per post station requiring no collateral and no interest. Each post station was told to use the gold to buy copper coins, which were then used to pay back the debt to the Shogunate. For the repayment, the official exchange rate of 4,000 *mon* per 1 *ryo* was used. Because the market exchange rate at that time was 6,000 *mon* per 1 *ryo*, post stations benefited significantly from this policy.

As a result of this, large amounts of copper coins flowed back from many post stations on Tokaido and Nakasendo to the Shogunate. This functioned as an effective method to retrieve the over-supplied copper coins. In 1655, the Shogunate lent a large amount of copper coins, in this case 3-6 million *mon*, to post stations again. However, this time, each station was told to buy gold coins with copper coins, and pay back the debt with gold. Through a series of such currency management tactics, the Shogunate was able to stabilize the exchange rate. Put another way, by taking advantage of the fluctuation in the exchange rate, the Shogunate was able not only to stabilize the post station economy, but also to retrieve over-supplied copper coins. Once the value of copper coins returned to normal or higher, the Shogunate backtracked, thus successfully retrieving the gold coins that were previously released (Suzuki 1999a, 2002).

This policy was an extremely tactical method of currency circulation control. Through this control, the Shogunate was able to adjust exchange rate fluctuations between gold and copper coins. It is especially interesting to think about the types of copper coins that were returned from post stations to the Shogunate during and after 1642. If the majority of these coins were old imported coins from the Medieval period, the above-described

currency control process would have been an effective method to retrieve old coins. This would explain why the transition from the old to newly minted coins occurred in a relatively short period. Regulations issued by the Shogunate do not specify what types of copper coins should be used for the repayment. However, historical records from the Kagoshima Clan give us an indication that the repayment may have been made primarily with old, imported coins.

Account records of the Kagoshima Clan from 1640 indicate which types of currency were used to pay the tobacco tax within its territory. Of all the tax, 83 percent of the tobacco tax paid in copper coins was with old, imported coins. People seem to have known that old coins would be phased out of circulation in the near future. Given this incidence, it is likely that people at post stations along Tokaido and Nakasendo were thinking the same way. Thus, I suggest that the majority of the repayment from post stations was made in the form of old copper coins.

Based on these lines of evidence, it is likely that the retrieval of old, imported coins occurred quickly. I suggest that the majority of old coins must have been retrieved by 1655, when the value of copper coins rose significantly. No other scenario would explain the high exchange rate of copper coins to gold at this point. In summary, through an archaeological analysis of *rokudo-sen* and an examination of historical documents, I suggest that the transition from imported coins to newly minted Ko-Kan'ei Tsuho was completed by the mid-17th century, and that the transition was a result of tactically manipulated currency control performed by the Shogunate. This date is more than 15 years earlier than the conventional estimate. From this perspective, the 1670 prohibition of the use of imported coins can be seen as the final declaration by the Shogunate, which simply confirmed the fact that old coins were no longer in circulation (Suzuki 1999a, 2002).

#### **Discussion and Conclusion**

This archaeo-numismatic research on the dynamics of 17th century money circulation uses two lines of evidence: archaeological data and historical documents. It may appear that my research adopted the traditional method of historical archaeology, in which archaeological analyses supplemented the study of historical documents. However, it should be noted that very few scholars in the fields of economic history, monetary history, and Edo period history have focused on money circulation dynamics during the early Edo period. This is largely due to the fact that relatively few written documents have been available on this topic. In addition, in the past most historians did not realize the potential contribution of archaeological data for such a study. Even if scholars were interested in this topic, it would have been impossible to examine it using the framework

of a single discipline, such as history or economic history. This is because no single line of evidence is sufficient to approach this issue in a holistic manner. I would like to emphasize that conducting research on this project required an interdisciplinary and synthetic perspective that transcends traditional disciplinary boundaries. The naming of archaeo-numismatic research itself reflects my strong belief that, by accumulating similar kinds of case studies, we can develop a new and interdisciplinary genre of research.

Given the rapid development of historical archaeology on a global scale, the necessity of conducting interdisciplinary research may occur in various parts of the world. This is because historical archaeology deals with a variety of artifacts, features, and sites. For example, in the field of African-American archaeology, several issues that transcend the traditional boundary of archaeology have been raised. These include the economic structure and the movement of commercial goods and people within the triangle marked by the industrial district of northern United States, the Caribbean region, and the plantations in the South. Change in the lifeways of immigrants from the west coast of Africa in the context of cultural interaction is another topic to be debated. This includes social and economic change and the resulting change in lifestyle among African-Americans. None of these topics can be effectively examined without collaboration among specialists of various fields related to historical archaeology (e.g., Deetz 1996, Singleton 1985, Suzuki 2005).

From these discussions, it becomes clear that the possibility of future interdisciplinary collaboration is not only between archaeology and history, but also between archaeology and many other disciplines. These disciplines could include humanities and social sciences such as folklore, sociology, economics and economic history, historical demography, as well as medical sciences and their related disciplines such as public health, genetics, paleopathology, and immunology. Other disciplines that deal with the formation of modern society, such as city planning and history of philosophical thought, including monetary philosophy, may also be relevant. In other words, the amount of information embedded in historical archaeological materials is enormous. We do not yet know the range of possible future contributions of historical archaeology. In this context, we need to keep in mind that, among scholars in many disciplines, archaeologists will be the first ones to excavate, record, analyze, or process all the material remains even if the data are more relevant to other disciplines.

We all know that archaeological remains often require special care at the time of excavation. The lack of adequate care may result in the loss of information. In the worst scenario, the excavators may not recognize the importance of certain artifacts or other remains, and the materials may be discarded. The history of archaeology in various parts of the world indicates that archaeologists do not necessarily know the value of all of the archaeological remains at the time of excavation. Given this situation, it will become

necessary for historical archaeologists to collect or record a wide variety of archaeological data, even if the data are not directly relevant in the context of their own project goals.

This situation is very similar to the issue of the preservation of written documents. In the case of diplomatic and administrative documents, scholars have actively debated what should be preserved, and to what extent. The issue is closely related to similar discussions in other disciplines: for example, the preservation and evaluation of everyday commodities in material culture studies, the definition of art objects in art history, and the denotation of texts in literature. Put another way, it is not only selfish but also risky for historical archaeologists to determine the value of excavated materials on their own. Collaboration with specialists from appropriate fields may sound reasonable, but archaeologists cannot always predict the types of artifacts buried in each site. It is also important to emphasize that many excavations of historical sites are rescue excavations, and thus they are conducted under significant constraints, often in terms of both time and money.

In order to avoid these potential pitfalls, I suggest that we need to develop a new field that I would name "Archaeography." The primary goals of this new field should be to record and preserve various kinds of archaeological data for future use. For example, in the process of my own project on coins, I created a database that can be used by non-archaeologists for future research. The published version of my work provides detailed discussion on the analytical methods. I believe that these efforts are necessary in order to keep the field of archaeo-numismatics open to non-archaeologists.

Needless to say, I do not intend to suggest that the accumulation of raw data will automatically enable us to provide adequate historical interpretations. In this regard, Japanese historical archaeology has a lot to learn from anthropological archaeology and historical archaeology in America, in which problem-oriented research and deductive approaches have been emphasized. However, an over-emphasis on specific project goals could also result in neglecting archaeological remains that are not directly relevant to these goals. We need to remember that, in order to reconstruct the past, we must deal with a wide range of material remains that reflect various human actions and behaviors. And these materials can be obtained only through archaeological excavations.

If the need for "archaeography" is widely recognized, this will lead to an exponential increase in the amount of data available for historical archaeology. Some scholars may think it is unrealistic to preserve or record such a large amount of data. Just as historians cannot record everything for future use, neither can archaeologists preserve everything. Nevertheless, I would like to point out that the accumulation of accurate data and finding relevant interpretations for these data are at the core of historical studies. In this regard, historical archaeologists cannot avoid this critical issue. Individual historical events are encoded in archaeological and historical data in a different manner. We need to develop

effective methodological devices to decode these different lines of evidence, and then synthesize them as a whole. As the first step, archaeologists should be held accountable for the evaluation and care of the archaeological materials that they excavate.

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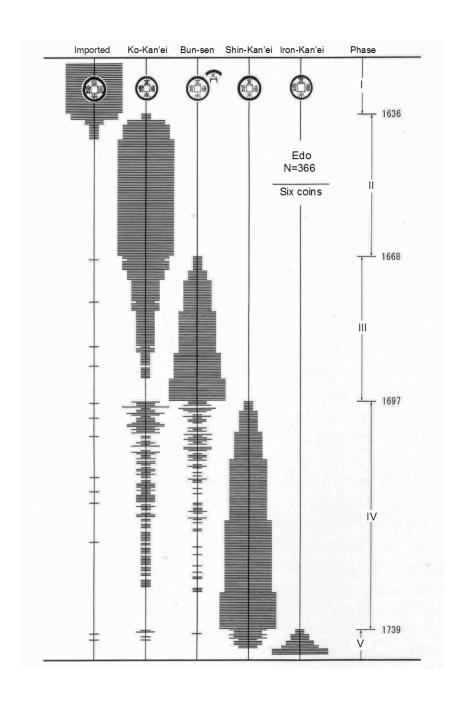


Figure 1. Seriation Diagram of 366 Sets of Six Coins Excavated from Archaeological Sites within the City of Edo (modified from Suzuki 1999, p. 135).

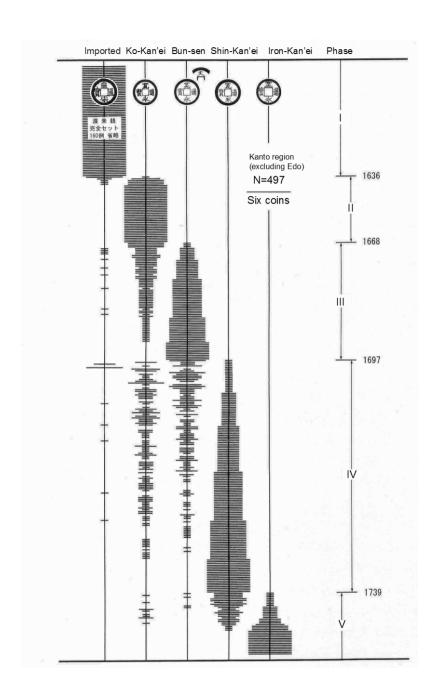


Figure 2. Seriation Diagram of 497 Sets of Six Coins Excavated from Archaeological Sites in the Kanto Region (excluding the City of Edo) (modified from Suzuki 1999, p. 138).

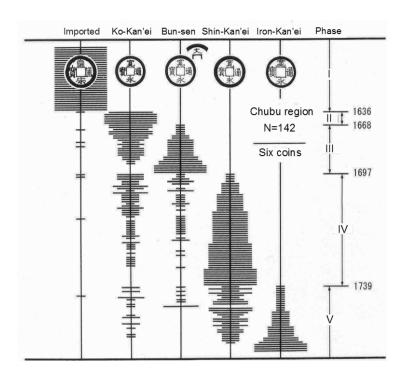


Figure 3. Seriation Diagram of 142 Sets of Six Coins Excavated from Archaeological Sites in the Chubu Region (including Tokai and Hokuriku) (modified from Suzuki 1999, p. 140).

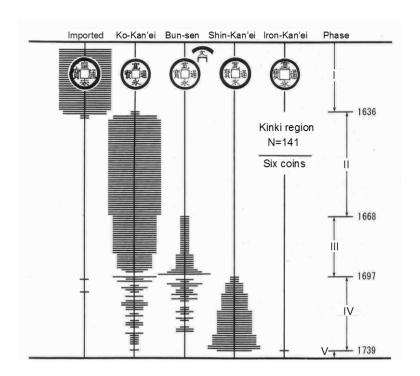


Figure 4. Seriation Diagram of 141 Sets of Six Coins Excavated from Archaeological Sites in the Kinki Region (modified from Suzuki 1999, p. 141).

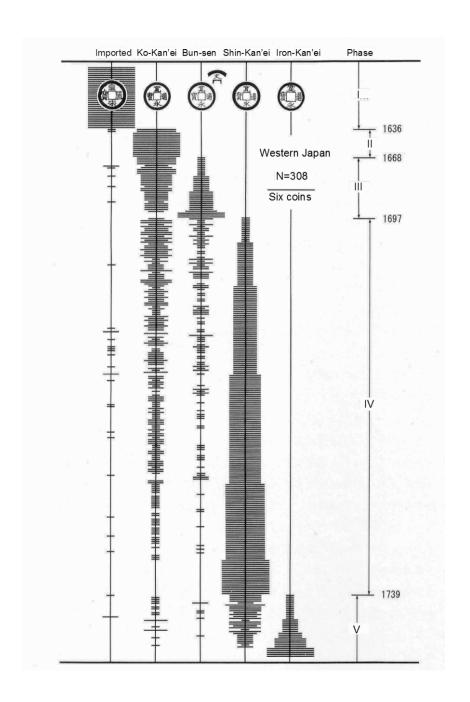


Figure 5. Seriation Diagram of 308 Sets of Six Coins Excavated from Archaeological Sites in Western Japan (Chugoku, Shikoku and North Kyushu Regions) (modified from Suzuki 1999, p. 143).