The Emergence and Spread of Coins in China from the Spring and Autumn Period to the Warring States Period

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Introduction

It is widely believed that bronze coins appeared in China during the Spring and Autumn period and that their circulation expanded rapidly during the Warring States period. The following developmental chronology has been posited for explaining such a process:

- 15th century B.C.E. The Shang period
- 11th century B.C.E. The Western Zhou period
- 6th century B.C.E. The Eastern Zhou period (The Spring and Autumn period)
- 4th century B.C.E. The Eastern Zhou period (The Warring States period. Figure 1)
- 221 B.C.E.–206 B.C.E. The Qin period
- 206 B.C.E.–220 C.E. The Han period.

As regards the emergence and spread of coins, there are two main interpretations of the above chronology. The first interpretation uses a method of gathering examples of commerce through the medium of money (non-consumable goods). It explains this process through historical texts handed down through the generations, and thus determines that there was rapid growth in the monetary economy during the Warring States period (Yoshida 1933; Quán 1941; Makino 1950; Miyazaki 1964; Kageyama 1984; Huáng 2001 etc.). Furthermore, archaeological studies have uncovered bronze coins dating to the Warring States period. However, making an argument about the development of the monetary economy entirely based on historical texts or excavated coins is logically limited because the whole is more than the sum of its parts. Moreover, the question

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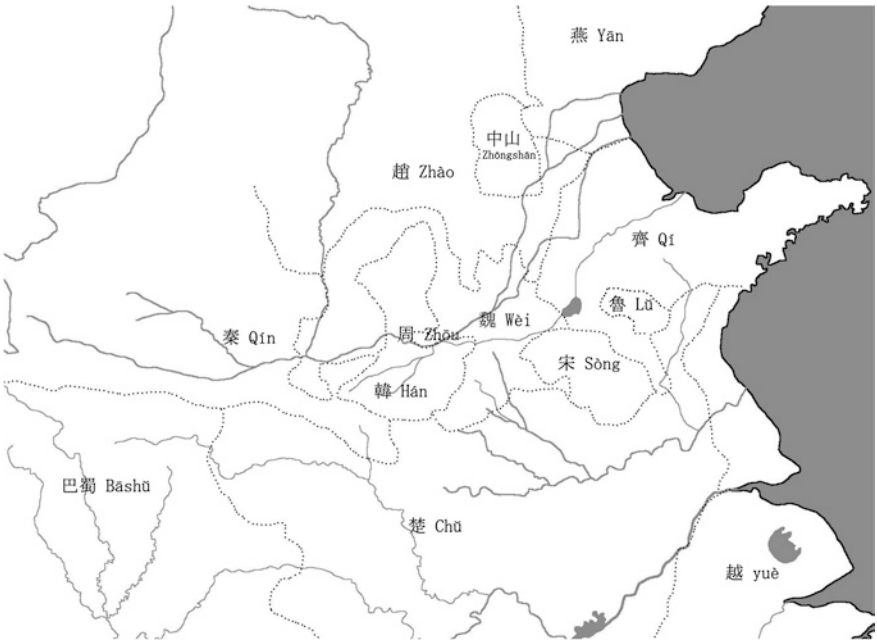

Fig. 1 The seven Warring States (Qin, Han, Wei, Zhao, Qi, Yan and Chu) and other states in 4th century B.C

of exactly when certain written materials were compiled and then handed down is unclear, and many so-called 'pre-Qin documents' are more likely the product of the Qin and Han periods. In fact, few historical texts address the use of coins during the Spring and Autumn period, and the details of these recorded events are unclear. However, even so, this interpretation method at least should allow us to glimpse the monetary economy's development process during the Warring States period.

The second interpretation focuses on tracking transitions in the vocabulary used to describe the exchange of goods during certain periods, which then allow us to delineate major turning points in the historical exchange of goods (Kakinuma 2011). Unearthed written documents, i.e. primary documents not rewritten in the process of being handed down, are used for this purpose. The lexical approach suggests that during the pre-Qin period, the exchange process steadily reduced or changed the quality of the ritualized gift-exchange economic feature. During the Spring and Autumn period, we see a reduction in the examples of words linked to gift exchange. In addition, the lexical approach suggests that the monetary economic feature began strengthening during the Warring States, the Qin and the Han periods. For instance, the character *mǎi* (買) meaning redeem and recompense had already been appearing engraved on oracle bones and tortoise shells in the Shang period. From the end of the Spring and Autumn period to the beginning of the Warring States period, *mǎi* finally started to mean "to buy." During the Qin period,

the character *mài* (賣. to sell) also began to appear. In general, spoken language precedes written language, but even so, this lexical shift can provide some clues to the development of the monetary economy to some extent. That concepts of atonement and debt give rise to those of buying and selling is also a common linguistic phenomenon in many ancient Indo–European languages (Benveniste 1969), as well as in ancient Japanese (Fukuda 1889).

So, what characterized the monetary economy's structure during the Spring and Autumn and Warring States periods? Many previous scholars have concentrated on the emergence of bronze coins. As a result, data are available on the minting sites, casters, and shape and weight distribution of these coins (Mǎ 1988, 2002; Emura 2000, 2011; Huáng 2001). This chapter also explains these points in detail. However, the 'emergence of money' and 'the emergence of bronze coins' are not necessarily the same. First, only a few bronze coins from the Spring and Autumn period have been excavated; their shape and size are much varied, and their mode of use is unclear. Many researchers have firmly fixed the notion that 'bronze coins are money', but no historical data show this to be valid for that period. Some Spring and Autumn period coins, i.e. *Kòngshǒubù* (空首布. introduced below), were cast with the character *huà* (化), but it is clear that *huà* meant money after the Warring States period. During the Spring and Autumn period, however, the character only seemed to signify "precious goods," and not money as such. In fact, during the Spring and Autumn period, huà referred to a medium indispensable to international and domestic political dialogue (Ogura 2003). Some historical texts, such as *Hanshu* (漢書) and *Guanzi* (管子), include examples of bronze coins being used as money in the Spring and Autumn period, but these histories seem highly idealized, at best.

In contrast, a significant number of coins—which can be regarded as "money" in a sense—existed during the Warring States period, even though few written documents concerning bronze coins exist. However, we only have details on coins from the Qin. Second, money then was not limited to bronze coins. In the Warring States, Qin, and Han periods, hemp and silk textiles and gold functioned as money (Kakinuma 2011). This chapter examines the previous two points, which show that the 'emergence of money' and 'the emergence of bronze coins' are not necessarily identical phenomena. In short, observing the coins themselves does not provide understanding of their backgrounds and factors of emergence. Rather, we should ask why the coins began to be used as money even though certain goods, such as gold and hemp and silk textiles, already functioned as money. Moreover, it is widely noted that a unified system of bronze coins were in circulation after the Warring States period, but why? And how did these bronze coins influence the Qin economy as a whole? In order to supplement our understanding of the emergence and spread of coins as money, this chapter explores and attempts to answer the following questions:

(1) Why did bronze coins come in a variety of forms during the Warring States period?
(2) How did hemp and silk textiles, gold, and bronze coins function as money?

(3) Why did multiple monies emerge at the end of the Spring and Autumn period and then rapidly expand during the Warring States period?
(4) How did such multiple monies change after the middle of Warring States period?
(5) How did a changing monetary economy influence the economy's structure as a whole and vice versa?

The answers to these questions are extremely important historically, economically and sociologically. As will be mentioned below, these questions provide suitable references when investigating modern monies. Much research has been done in regard to questions (1), (2) and (4), and although previous studies in European languages have been limited, e.g. Tierry (1997), Peng (2000) and Scheidel (2009), considerable relevant research has been conducted in Chinese and Japanese. As a result, our understanding of the monetary economy in the Warring States, Qin and Han periods has rapidly and dramatically changed along with the relatively recent and rapid increase in the excavated historical texts available. For instance, we now have statistics detailing excavated cowry shells prior to the Warring States period (Kakinuma 2011) and excavated bronze coins in the Spring and Autumn and Warring States periods (Mǎ 1988, 2002; Huáng 2001; Emura 2011), as well as the results of all-inclusive analyses of excavated and non-excavated historical texts concerning bronze coins, gold and hemp and silk textiles (Kakinuma 2011). In contrast, very little data are available to suggest possible answer to questions (3) and (5). Thus, this chapter first responds in detail to questions (1) and (2) on the basis of previous research. Next, to answer question (3) despite the lack of data, this chapter submits a hypothesis that accounts for the many possibilities and circumstantial evidence without any contradiction. Finally, while introducing the previous research concerning question (4), the chapter addresses question (5).

Origins of Coin in China

'Why did bronze coins come in a variety of forms during the Warring States period?' In answering this question, this section will examine how the situation before the Warring States period is related to the establishment of bronze coins during the Warring States period. What has to be first verified here is that a culture that valued cowry actually existed in ancient China since the Shang and Zhou periods, and that this is closely related to the emergence of coins during the Warring States period. Next, we must verify that the four types of bronze coins—knife-shaped, spade-shaped, cowry-shaped, and round-shaped—supposedly extant during the Warring States period actually existed, and examine the difference origins of these coins. This chapter will explore the origins of bronze coins through examining these facts and answer the question of 'why did bronze coins come in a variety of forms during the Warring States period?'

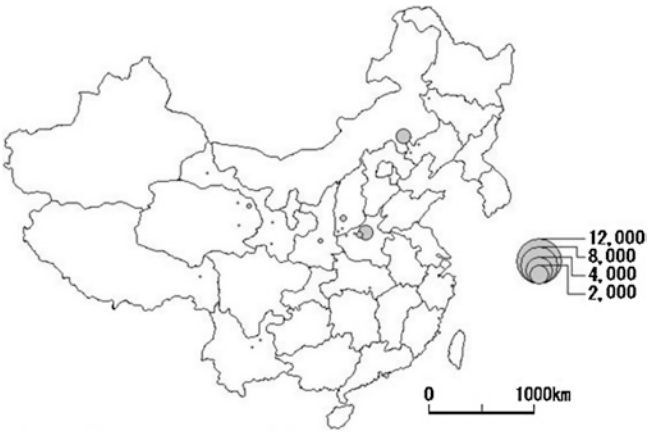

Fig. 2 Excavated cowries of the pre-Shang period (Kakinuma 2011)

Cowry as Gift: A Gift Economy in Ancient China

Cowry culture existed in the Central Plain since the Shang and Zhou periods, and cowry itself is considered as the oldest Chinese money (Hamada 1912; Wáng 1921; Yoshida 1933; Gibson 1940; Zhèng 1958; Sekino 1962; Zhū 1984; Huáng 2001; Yáng 2003 etc.). However, the common view that 'cowry is money' is, in fact, incorrect. This misunderstanding results from the misrepresentations of human memory in regard to the origin of Chinese money within the Chinese tradition itself, which had echoed far into modern historiography. Kakinuma (2011) explains as follows.

In reality, cowry originates in tropical and subtropical zones. These brightly patterned marine shellfishes were collected in the South China Sea, and were highly valued by the Shang. Huge numbers of cowry shells have been excavated from burial sites of the Shang and Zhou periods (Figs. 2, 3, 4 and 5). Furthermore, inscriptions on bronze vessels of the time describe kings providing their vassals with cowries, for which the vassals then engraved bronze inscriptions in commemoration. This is often termed as *the cowry-gift form of bronze inscriptions*. There are numerous theories concerning the cowry import route, but according to the current leading theory, the route led from the South East coast via *Huáiyí* (淮夷. people near the *Huái* river) to the Central Plain. Cowry shells were then mainly processed into '𠙵', a cowry necklace. However, the number of cowries that comprised a necklace was unfixed. The king would redistribute these necklaces, and proclaim the glory of the recipients' clans. Cowries symbolized 'life and rebirth', and by offering cowry shells to his vassals, the king strengthened and maintained ties among his subject clans. It therefore appears that many elites—the Shang royal family, their relatives, and those bound in friendship to Shang nobles—adhered to this custom of gift giving.

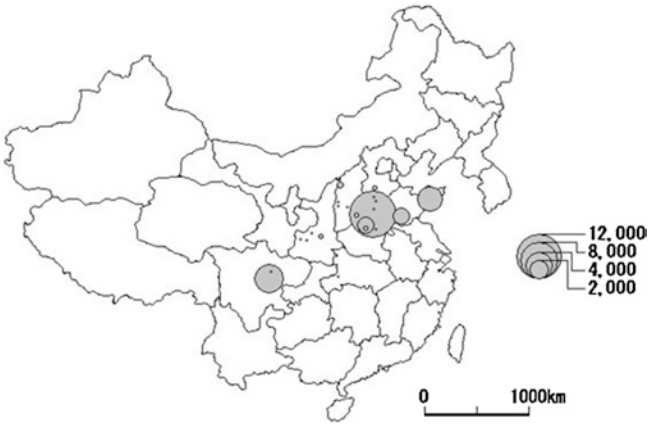

Fig. 3 Excavated cowries of the Shang period (Kakinuma 2011)

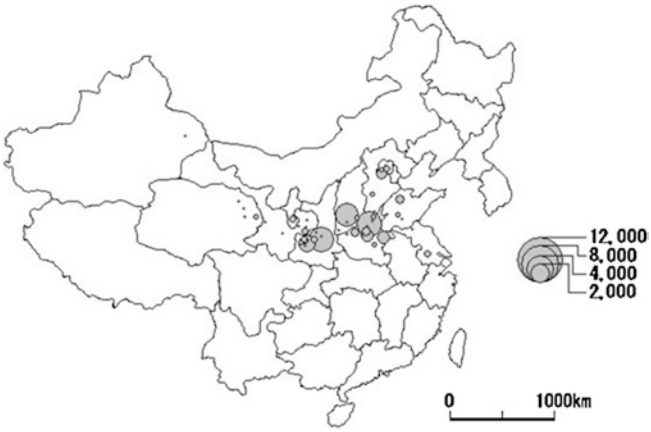

Fig. 4 Excavated cowries of the Western Zhou period (Kakinuma 2011)

The cowry-related inscription continued into the Western Zhou period. There is an even greater amount in the Zhou than during the Shang, which may suggest that such inscriptions were used as a method of controlling newly conquered areas. The Zhou defeated the Shang in c.1050 B.C.E. and killed the Shang king. The Shang went on repeated expeditions to many districts and became impoverished. Now, this did not happen because the Zhou was completely superior to the Shang in terms of economy and technology. In fact, it is evident from its bronze vessels that the Shang possessed an advanced culture by the beginning of the Western Zhou period, and the Zhou likely needed to obtain the products of that advanced culture. Thus, after the Zhou conquered the Shang, they did not appear to kill all of the Shang. Instead, the Zhou regarded the Shang as worthy of employment, and attempted to maintain harmonious relationships with them in order to secure their

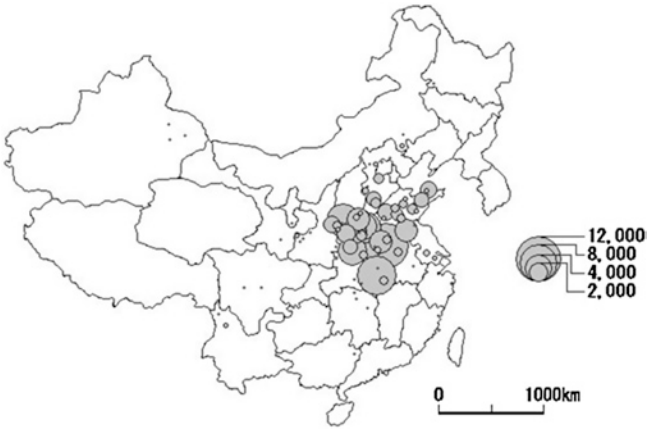

Fig. 5 Excavated cowries in the Spring and Autumn and Warring States periods (Kakinuma 2011)

abilities. Consequently, the Zhou also adopted the Shang's cowry culture, praying for the prosperity of a certain clan in the Shang culture by bestowing cowry shells. Until the middle of the Western Zhou period, the number and quality of *the cowry-gift form of bronze inscriptions* reveals the result of this process. However, after the late mid-Western Zhou period, the Zhou people had confidence in their own cultural strengths. They gradually removed the Shang theocracy and began to construct their own political regime (Shirakawa 1955). After that period, the Zhou also engaged in many ritual reforms (Rawson 1989, 1999; von Falkenhausen 1997; Li 2006). Moreover, they began to offer official posts through *title-conferring rituals* (册命), which included bestowing suitable gifts such as flags and arms for generals and warriors (Yoshimoto 1991; Matsui 1995). However, we do not see cowries bestowed in these inscriptions. As a result, the Shang elites who had originally enforced theocracy, dispersed into various areas throughout China; thus, awarding cowry was no longer within the official purview. By this time, the Zhou found help from the Shang unnecessary, so instead of cowry-shell necklaces, the Zhou bestowed other valuables and properties in *title-conferring rituals*. This clearly led to a sharp decrease in the inscriptions that recorded the transference of cowry-shell gifts.

However, cowry culture prevailed in various local regions even after the disappearance of *the cowry-gift form of bronze inscriptions*. In other words, although no bronze inscriptions regarding cowry could be found from the late mid-Western Zhou period, many cowries were still found in various regional tombs from the same period (Figs. 2, 3, 4 and 5). Many people belonged to the Shang culture complexes that still remained, and cowry culture accompanied their gradual dissemination. This was especially evident during the Eastern Zhou period in the Chu state, where a new, unique cowry culture emerged. The Chu people had lived in the middle part of the Chang Valley (長江), from the

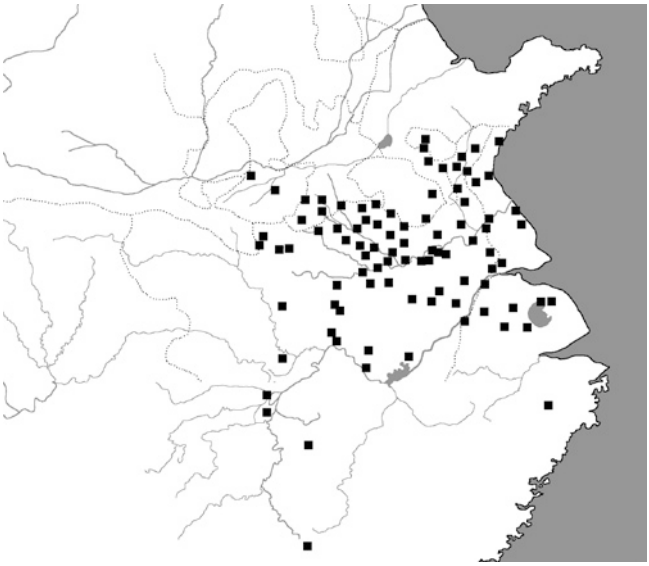

Fig. 6 Sites of excavated cowry-shaped bronze coins in the Warring States period

Shang period, and were quite powerful. They sometimes collided with the people who lived in the Central Plain, such as the Shang and the Zhou. However, since the Shang's way of telling fortunes was quite similar to the Chu's during the Warring States period, the Shang royal family might have escaped or expanded into the Chu during the Western Zhou period. In short, the Chu in the Warring States period seem to have inherited the Shang culture to some extent. In reality, cowry culture existed in the Chu from the Spring and Autumn to the Warring States period. Although the Chu neither minted bronze inscriptions regarding cowry nor used cowry as a means of rule, they recognized cowries as valuable and buried it in their tombs (Fig. 5). In addition, cowry-shaped bronze coins began to be used during the mid-Warring States period (Fig. 6). Under these circumstances, people gradually forgot the cowry's significance as a symbol of life and rebirth and recognized it only as something valuable from the past. In the meantime, the monetary economy began to flourish during the Warring States period. Therefore, in a kind of historical revisionism, people misunderstood valuables from the past as being money *per se* on the basis of their relatively new worldview of 'valuables as money' in the monetary economy. This resulted in the belief that cowry shells from the Shang and Zhou periods equaled money. This phenomenon is reminiscent of a kind of Lévi-Straussean *bricolage* (Lévi-Strauss 1962), for it appears that historical texts during the Warring States period began to regard cowry as money. Such a lack of historical knowledge caused the aforementioned misunderstanding regarding the emergence of money.

The previous three paragraphs are based on my research (Kakinuma 2011). So, did the Chu use cowry shells as money during the Warring States period? Perhaps, but it is more likely they used cowry-shaped bronze coins after the mid-Warring States period. As previously mentioned, cowry-shaped bronze coins obviously have their origin in the Shang's cowry culture. The coins seem to have been customarily cast of bronze because of a custom, during the end of the Western Zhou period, of using unprocessed bronze ingots when exchanging goods (Matsumaru 1992). There are various opinions concerning from what time were they minted (Zhào 1996), but in my opinion, they have not been excavated in Hanzhong (漢中) district where the Qin robbed from the Chu in 312 B.C.E. on the one hand, they have been excavated in Yunmeng (雲夢) district where the Qin robbed from the Chu in 278 B.C.E., thus they seems minted between 312 B.C.E. and 278 B.C.E. Concerning people who minted these coins, it should be noticed that there were '' inscriptions on 94 % of the cowry-shaped bronze coin (Lǚ and Méi 1994). The meaning of '' is still arguable, and there are various interpretations (Zhào 1996). In my opinion, this might be an ancestral form of bèi (貝. shell) or huò (貨. money). At any rate, the fact that 94 % of the cowry-shaped bronze coins have the same mark suggests that,—heedless of whether the cowry-shaped bronze coin was first manufactured by the state or by merchants—the state was a driving force behind the beginning of its large-scale circulation. Thus, there seems be a unified bronze coin in the Chu (Emura 2011). *Biographies of Upright Officials* (循吏列傳) chapter of the *Shiji* (史記) also says that the Chu central government actually attempted to mint bronze coins in the 6th century B.C.E., and its failure to do so caused serious confusion in the market. Even though the dating of this event seems too early to have actually have been possible—and thus seems legendary in some aspects—the account also seems to be based to some extent on historical facts. Additionally, the area of circulation was limited to the north eastern part of the Chu state and the surrounding subordinate states. Emura (2011) has explained that this is because these cowry-shaped coins were minted after the middle of the Warring States period, i.e. after the transfer of the capital city of the Chu from the West to the East. However, some cowry-shaped bronze coins have been excavated from the Western part of the Chu. There is also another possibility that the Chu noblemen suspended use of these coins in the West following to the transfer of the capital city to the East. Thus, the reason why the area of circulation was limited to the north eastern part of the Chu state may be that the use of cowry-shaped bronze coins was not restricted to a single state, and instead used as a means of payment and exchange between the Chu state and the northern and Eastern subordinate states of the Chu. However, this is a problem that must be addressed elsewhere.Unlike in other states, the Chu state also created gold-plated money due to the fact that there was abundant quantities of gold in the Chu district. It appears that the name of a city was printed on the surface of the gold plate, which was then torn into sizes suitable to the value of a commodity. Gold did not initially circulate widely, but as the Qin began encroaching on Chu territory at the end of the Warring States period, gold also began circulating in the Qin (Inaba 2007). Although the connection between the cowry-shaped coin and gold plate remains

unclear, we can conclude that both of them differed greatly in value, and no fixed parity has been confirmed.

On the other hand, almost no silver—in either coin or commodity form—was used in the Warring States including the Chu. The ancient Chinese rarely buried silver. This situation completely differs from that of the Ming and Qing China. Therefore, it is often asked: 'Why was not silver used in ancient China?' This presupposes that silver has always been a form of money. However, it is clear from material evidence that silver was only used for a relatively short period of Chinese history. Thus, we must instead inquire as to the reasons why silver came to be used as money in the Ming and Qing China. Several solutions are already attempted answers to this question (Von Glahn 1996 etc.).

According to the examination above, Chu cowry-shaped bronze coins were just one type of Warring States money in existence. This medium was based on two Western Zhou customs derived from the Shang period that centered on cowry and bronze ingots were used. Then, where exactly did the various bronze coins in use among the Central Plain states originate during the Warring States period?

Knife-Shaped and Spade-Shaped Coins

As discussed in the previous *section*, the Chu cowry-shaped bronze coin was based on the cowry culture in the Shang period. In this sense, it is a bronze coin of the oldest cultural origin. However, it began to be used in the middle of the Warring States period. On the other hand, the first bronze coins that emerged on the Chinese continent were one of the spade-shaped coins (*Kòngshǒubù* 空首布), and one of the knife-shaped coins (*Jiānshǒudāo* 尖首刀). Even though some scholars have claimed that another type of the knife-shaped coins (*Qídàdāo* 齐大刀)—which will be explained later—should be the oldest (Wáng 1979; Zhū 1984), it has been widely argued recently that *Kòngshǒubù* is, in fact, older (Zhèng 1958; Zhāng 1997; Huáng 2001). These two coin types were not inherited from the Shang or the Western Zhou culture, and only began to be circulated in the northern part of China during the Spring and Autumn period (Fig. 7).

The larger spade-shaped coin *Kòngshǒubù*, on the other hand, seems to have been modeled on a bronze shovel or spade. It was circulated in the region around Luoyang from the middle of the Spring and Autumn period forward (Zhāng 1997; Wáng 1998; Huáng 2001). The shape of a farming tool may have been selected because the economy of the outskirts of Luoyang concentrated on agriculture, and therefore farming tools served as symbols of wealth creation. Conversely, the likely reason for spade-shaped coins not emerging in other areas was that their economies were not centered on farming. Significantly, however, the spade-shaped coins had a variety of shapes and inscriptions. For example, the inscriptions on a certain type of flat-shoulder spade-shaped coins amount to over 200 different types of signifying numbers, zodiac signs, famous objects and place names (or not place names but the names of furnaces). These coins were excavated near Luoyang, and the scale

Fig. 7 Sites of excavated *Kòngshǒubù* (*triangle*) and *Jiānshǒudāo* (*filled square*)

of circulation was apparently not large. In other words, *Kòngshǒubù* of about 200 types of inscriptions circulated side by side in the narrow district near Luoyang. Because of this, one has recognized that approximately 200 varieties of inscriptions serve as marks of the furnaces or casters in the private sector, i.e. merchants and craftspeople (Emura 2011). Certainly, we have more inscriptions than numbers of cities near Luoyang, so some of different inscriptions seem to have been minted in the same city. However, in another bronze-casting institution named *Wùlègōngmíng* (物勒工名) during the Han period, the names of government casters were minted on bronze vessels. It is thus possible likewise that the names of casters who worked for the government or the symbol of national casting studios were minted on spade-shaped coins. This would mean that casters of bronze coins were not always private-sector merchants or craftspeople. Instead, even though the inscriptions were varied, but because the coins' shapes are very similar, it seems that all spade-shaped coins were minted on the basis of government standardization.

As regards knife-shaped coins *Jiānshǒudāo*, the blade and back of the blade are clearly distinguishable, and the coin moreover retains the original form of a bronze knife. It is known that they were distributed in the southern part of the Yan and the northern part of the Zhao in the latter part of the Spring and Autumn period and there are various theories concerning those who made them, e.g., minorities near to the state of Yan (Zhū 1984; Huáng 2001), by the Yan (Shí and Wáng 1987), by both groups (Wáng 1998), or by tradesmen and craft persons acting on their own initiative (Emura 2011). Even though it seems difficult to select one of their interpretations—as has been done with spade-shaped coins—knife-shaped coins also seem to have been minted in various casting institutions on the basis of government standardization, and the various minted inscriptions not only include people in the

private sector, but also government officials. Because bronze coins were valued according to weight, at least before the mid-Warring States period, the coin shape was not influential in the monetary system. As knife-shaped coins originated in the north, the knife shape likely reflects the nomadic economy of the north. That is, the Yan economic zone (as explained below) did not then center on farming (Hara 2004); instead, the nomadic Rong (戎) people, or originally 'one of arms', skilfully stole wealth by force. They evidently saw the knife as a symbol of military power and wealth, and so created a knife-shaped coin. Indeed, in other nomadic economic zones, weapons were also seen as symbols of wealth. For example, before the middle of the Warring States period, the Qin did not have a big agricultural economy (Hara 2005), but did have a close relationship with a faction of the Rong. In this situation, Qin legal documents show that criminals paid penalties with valued shields and armour. In reality, Qin criminals could pay penalties with different forms of money, e.g. coins, hemp or gold, but the original form of fines should be shields and armour (Tomiya 1998; Hara 2005). Therefore, the knife-shaped coin was regarded as bronze money within the context of a nomadic economy.

Incidentally, some believe that the Yan economic zone had few cities (Figs. 12 and 13), and the knife-shaped coin *Jiānshǒudāo* did not circulate in the context of expansion in the Yan district's commercial cities. Therefore, *Jiānshǒudāo* circulated in the context of the enlivening of the Central Plain's economic activities (Emura 2011). However, *Jiānshǒudāo* have not been excavated from the Central Plain, so they are unlikely to have been used as monies in the area directly connecting the Yan and the Central Plain. Thus, it is more reasonable to suppose that circulation of knife-shaped coins began in the Yan district. In addition, there were many types of knife-shaped coins that existed after the circulation of this initial shape expanded over time, but these still remained confined between the Yan state and the Zhao state. In other words, the circulation of knife-shaped coins did not reach Luoyang and Guanzhong in the Warring States period. This reason will be explained in detail later.

The use of spade- and knife-shaped coins intensified with the arrival of the Warring States period.

The spade-shaped coin generally changed in spare from an empty-neck (*Kòngshǒubù*) to a flat-neck spade. This coin was minted in the cities of the Yan, Han, Wei and Zhao, and the place name was cast on the coin surface (Fig. 8). The style of writing varied, and in some cases, one city produced multiple varieties of the same coin. There were, however, some exceptions. For example, large bridge-foot spade coins (橋形方足布) had a high bronze content, and most were cast with the name of the Wei capital. Some were even cast showing the exchange rate with gold, so that they seem minted according to government guidelines. As Wei was exposed to Qin military attack during the Warring States period, this coin may have been especially issued so that Wei could procure war funds in the form of coins from its cities, and the city may have subsequently been ordered to issue the coin (Emura 2011). Nevertheless, most of the coins still have inscriptions of the place name. We can therefore conclude that in the Yan, Han, Wei and Zhao, a variety of spade-shaped coins with different inscriptions competed with each

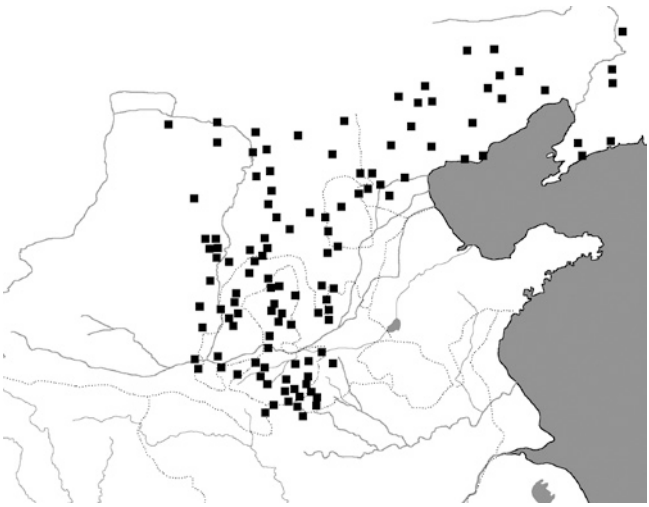

Fig. 8 Sites of excavated spade-shaped coins in the Warring States period

other. Since *Kòngshǒubù* first appeared in the Central Plain (as already explained), this means that the circulation of spade-shaped coins moved steadily northwards, which produced variations one after another. This situation conveys that throughout the Warring States period, spade-shaped coins were used as money that linked the Central Plain to the Shanxi and the Shanxi to the Yan.

Conversely, the knife-shaped coins did not have varied in terms of forms and inscriptions as much as the spade-shaped coins did (Fig. 9). In the Yan region, the numerous knife-shaped coins with the *míng* (明) character were intensively minted, and these coins were generally deemed to be the standard money through which the Yan could procure war funds from its cities (Emura 2011). This type of coin is generally referred to as the *Yānmíngdāo* (燕明刀). After the mid-Warring States period, a certain type of large, knife-shaped coins were also minted in the Qi, which are referred to as *Qídàdāo* (齊大刀). The coins were cast with the name of the state Qi, and were minted in cities to procure war funds for the central government, similar to the case of *Yānmíngdāo*. In the knife-shaped category, extremely large numbers of coins were inscribed with *Qídàdāo*, and hence, were deemed to have been issued by the Qi state (Zhū 1984; Emura 2011). As mentioned above, *Kòngshǒubù* and *Jiānshǒudāo* were not always minted in the private sector either, but both the Yan and the Qi issued unified bronze money in a way that was much more obviously governmental than the way in which *Kòngshǒubù* and *Jiānshǒudāo* circulated. So, why did the Qi and Yan states attempt to standardize knife-shaped bronze coins in their respective states in the middle of the Warring States period? In Yan, knife-shaped coins circulated alongside spade-shaped coins, and both circulated well outside the borders of the state. But why was this the case? Did knife-shaped coins and spade-shaped coins differ in terms of their usage? These problems will be examined below.

Fig. 9 Sites of excavated knife-shaped coins in the Warring States period: *Qídàdāo* (*cross*), *Yānmíngdāo* (*filled circle*), and *Qímíngdāo* (*filled square*)

To summarize this section, we examined the cowry-shaped coin of the Chu and then the spade- and knife-shaped coins of the Han, Wei, Zhao, Yan, and Qi. The next coin shape we will examine is the round coin.

The Round Coin

The two types of round coins that existed in early China were the round-holed coin and the square-holed coin, both made after the middle of the Warring States period.

The character *yuán* 垣 (possibly a city name) appears on some of the round-holed coins with a high bronze content, pointing to the involvement of the Wei state (Emura 2011). As regards the shape, one theory bases its origins on a thread-spinning instrument (Zhū 1984), and another bases it on round jade stones that were used as ceremonial utensils for rulers (Wáng 1979). However, nothing about these theories is definite. Inasmuch as the round shape's origin lies in the agriculture and weaving-based Wei economy, the theory that the coin's shape was based on a thread-spinning instrument is persuasive. At the same time, however, it is a fact that much ceremonial importance was placed on jade stones at the time.

The square-holed round coin is deemed to have originated from the cosmological view that relied upon the theory that 'heaven is round, earth is square.' This cosmological view is exemplified in the *Lǚshì Chūnqiū* (呂氏春秋), which was edited by Lǚ Bùwéi (呂不韋) in the Qin in the end of the Warring States

period. A comparatively large volume of these coins has been excavated from the Qi, Yan and Qin.

The square-holed coins of the Qi basically have the character '  ', generally interpreted as a form of the character '  ' and understood to mean the name of a place, a unit of weight or a sign of good omen. My view is that the character in question means cowry necklace since it combines '  ' (cowry neck ornament) and '貝' (shell). Thus, the coin and its character were probably indirectly passed down from the Shang's cowry culture. The knife-shaped coin also existed in the Qi, but its relationship with the square-holed coin is unclear. Some scholars regard the square-holed coin as new money after the knife-shaped coin (Zhū 1984), whereas some regard it as one of concurrent currencies, and it was a small money compared with the knife-shaped coin (Wáng 1979). At any rate, almost only one type of the square-holed coin has been found; hence, it seems to have been introduced and minted by the government.The square-holed coins of the Yan appear to have come in large, medium and small sizes with the accompanying characters 明三, 明化, and 一化, respectively. They are generally believed to be coins produced by the Yan state, circulated to replace *Yānmíngdāo* coins. The '明三' coins were handed down through the generations. The '一化' coinss were mostly excavated to the east of Beijing. The '明化' and '一化' coins are deemed to have been made by reducing the weight of the *Yānmíngdāo* coins' at the end of the Warring States period when the Yan state's power was declining (Emura 2011). The details of the relationship among the three are unclear, but these coins can be understood as a bronze money only circulating in the Yan (Emura 2011).

In the Qin, several different types of square-holed coins existed, but most were the *banliang* coin (*Bànliǎngqián* 半兩錢), minted by the Qin during the Warring State period in 336 B.C.E. (or 335 B.C.E.). This coin is, of course, inscribed with the characters *banliang* (半兩). Prior to this date, very few coins existed in the Qin. Some scholars said there are several types of coins before the *banliang* coin, but it is not sure whether it was money or not, and the quantity of them are also absolutely small. However, the Qin state minted the *banliang* coin while centralizing its power around a single, state-authorized coin, and thus promoted a standard money by excluding the coins of other states. The characters *banliang* expressed its nominal weight, i.e. 12 *zhū* (銖), which was equal to around 8 g. 12 was a sacred number for the Qin state. In reality, the *banliang* coin did not always weigh 8 g. Indeed, the government of the Western Han prescribed its official weight at under 4 g. However, the government regarded all *banliang* coins to be of equal value, even though some people in the private sector regarded those with different weights and qualities as distinct coins. As a result, only coins with *banliang* were circulated, and a new system of exchange emerged: the value of goods was measured by multiplying the number of coins (Kakinuma 2011).

In this section, we examine round coins, most of which appear to have been used in each state as a standard bronze coin since the middle of the Warring States period. This context differs from those of the cowry-shaped and spade-shaped and knife-shaped coins.

Features of Multiple Types of Bronze Coins

In this section, we will confirm that a variety of coins existed alongside each other during the Warring States period. This examination consists of the following four features:

First, regarding the origins of the shapes of Warring States period bronze coins, the following were identified: (1) cowry; (2) farming instrument (shovel or spade); (3) knife; (4) jade stone or thread-spinning instrument and (5) 'round heaven, square earth' (the cosmological view). Of these (1), (2) and (3) are the oldest. Then, along with the great unification by the Qin Empire, the circulation of the coins in (5) expanded all over China. There are several reasons for the influence of each region on the different shapes of coins. Furthermore, coins were likely minted from bronze due to the fact that bronze ingots were customarily used as means of exchange at the end of the Western Zhou period.

Second, the origins of bronze ingots and coins cannot be completely discerned from economic reasons alone. Similar to the case of pre-19th-century Europe—when metal monies functioned basically as a means of store of value (Hicks 1967)—the ancient Chinese attached great importance to bronze ingots or coins as a means of store of value. However, ingots or coins cannot necessarily be said to have originated as a form of payment in a purely economic sense. As we have discussed above, the concepts of 'buy' and 'sell' were not clearly demarcated during the Western Zhou period. On the contrary, exchange during the Shang and Zhou periods should instead be described in terms of 'ceremonial exchange', which was a relationship closely connected with a form of atonement exemplified in the cowry gift. Therefore, there is room for verification regarding theories that deem the origin of money as an inevitable product of economic exchange between one Homo economicus and another (Marx 1872; Menger 1923 etc.), as payment for labour (Lucassen 2007 etc.), or as sacrifice in religion (Laum 1924; Aglietta and Orléan 1998). Indeed, it seems more plausible to propose multiple origins for the concept of money in early China, one of which was derived from ritualized gift exchange. This is completely different from the case of Lydia, in which coinage was invented to make a large number of uniform payments of considerable value available in a portable and durable form for the use of the the king himself. Furthermore, the purpose of Lydian coinage was the payment of mercenaries (Cook 1958). Kraay (1964) and Crawford (1970) have similar opinions on this issue. Crawford has made it particularly clear that the use of early coins as a medium of exchange was an accidental consequence of coinage, and not the reason for coins themselves (Crawford 1970). This was certainly the case in China as well, and the circulation of bronze coins expanded rapidly during the Han period due to the fact that it was intended to facilitate both poll tax payments and those given to mercenaries (Kimura 1955; Adachi 1990; Kakinuma 2011). Some round shaped coins in the Warring States period also could have the same function. However, this does not appear to be the reason for the origin of coins, but instead the reason for expanding circulations

of coins in the later period. It is therefore difficult to consider the appearance of bronze ingots or coins during the Spring and Autumn period as primarily a means of governmental or economic payment.

Third, we can conclude that bronze coins emerged at the Spring and Autumn period, and that their usage rapidly expanded during the Warring States period. Because the names of cities and casters were minted on some coins, these coins look as if they were minted by private merchants or craftspeople in each city. However, this does not actually mean that all coins were minted without any relationship to the government. In fact, the shapes of coins were limited, and all the coins unearthed thus far seem to have been minted on the basis of government standardization. In those days, most of the states were composed of several *yì* (邑), i.e. garrison cities, so the cities probably obeyed orders from the central garrison city to mint coins and to place certain inscriptions on the surfaces of the coins. In other words, even though bronze coins were not always minted in a central studio in the capital city, a garrison city or a person in the private sector was not necessarily permitted to mint coins without any governmental regulation. Moreover, after the middle of the Warring States period, each state seemed to make attempts to integrate standardized coins into their economies based on their forms, weights and inscriptions. This is clearly the case in several kinds of knife-shaped coins (*Yānmíngdāo* and *Qídàdāo*), as well as round coins that possess either a round hole or a square hole. Similar to the standardization of carriage ruts, weights and measures, this indicates the presence of a relationship between the standardization of account and value and the reduction of 'transaction costs (Coase 1937)'. For instance, the Qin integration of bronze coins into the *banliang* coin in 336 B.C.E. or 335 B.C.E. However, other states did not integrate bronze coins into their economies prior to the great Qin unification in 221 B.C.E. Furthermore, such an integration of coins into the economy does not signify the unification of money in a state as a whole, even in the case of the Qin. This is due to the fact that there were multiple monies in existence, which included coins, as well as gold, and hemp and silk textiles.

Fourth, coins in different shapes circulated in different economic zones, which did not necessarily correspond with state boundaries (explained below).

Multiple Monies in the Warring States Period

When investigating the monetary economy during the Warring States period, is it sufficient to focus on the circulation of bronze coins? Since preceding studies commonly assume that money must be made of metal, they tend to focus largely on bronze coins despite the fact that historical texts provide limited evidence about them. However, the recently increasing number of excavated texts that concern money also depict the economic life of ordinary people. According to these texts, the economy of the Warring States, Qin and Han periods was primarily composed of not only coins, but also gold, and hemp and silk textiles (Kakinuma 2011).

What, then, was the nature of the relationship between these various forms of money? Or, as we asked above in question (2) of the introduction, 'How did hemp and silk textiles, gold, and bronze coins function as money?'

During the Warring States, Qin and Han periods, the three-tiered price system consisted of (1) the fixed official price; (2) the *píngjiǎ* (平賈), or the official price that varied monthly or yearly in each prefecture (縣), and (3) the actual price. In this system, bronze coins were mainly used as a measure of all commodities' value. Officials needing to sell commodities or perform value analyses used the fixed official price prescribed by law. When this price differed substantially from the actual price, officials were required to adopt the *píngjiǎ*, which was based on the actual price. Besides the fixed official price and the *píngjiǎ*, the actual price was used primarily by non-officials (Fig. 10). Therefore, the value of bronze coin was not based on the gold or textile standard system. Thus, these monies coexisted within the partly regulated freedom of competition that occurred during the Warring States, Qin and Han periods (Kakinuma 2011).

To further add to the complexity of these issues, the usage of bronze coins, gold, hemp and silk textiles also differed in the fact that these valuables did not only have economic values, but also had other specific values. For instance, although it is widely stated that gold was more important than bronze coins in regard to gifts and rewards (Katō 1926; Fujita 1996 etc.), the relationship between gold and bronze coins was actually much more complicated. In fact, bronze coins and gold circulated through different channels—especially when used as gifts and rewards—whereas they commonly functioned as economic liquidities (Kakinuma 2011). For example, during the Western Han period, bronze coins served as prizes for meritorious services in war and as gifts for immigrants, at funerals and even for farewells. Gold also served as a reward for meritorious services in war, as gifts for foreign states and as a means of exchange for foreign residents in the state. Gold was also expected as a form of retirement allowances for public officers. Silk functioned as a means of exchange for foreigners and as gifts for foreign states, and it also functioned as governmental payment for social welfare and solatia (compensation or consolation), as well as payment for public officers below the middle class. In short, the monetary system during the Warring States, Qin and Western Han periods worked primarily on the basis of economic principles, institutions and customs. To put it another way, the turnover rate and circulation velocity of various monies were determined by the complex relationships between the economy, institutions and customs considered both independently and separately. Consequently, the increase and decrease in certain forms of money may not have affected the overall demands for other forms of money. This is due to the fact that various forms of currency had not only overlapping but also irreplaceable functions (Fig. 11). Kuroda (2008) called this monetary phenomenon as *complementarity among monies*. It therefore became difficult to replace some forms of money with other types even in a shortage of certain forms. Conversely, when turnover rates and circulation velocity changed because of complex relationships among the economy, institutions and customs, we can infer a related regional imbalance among the complementary monies (Kakinuma 2011). The mechanism of multiple

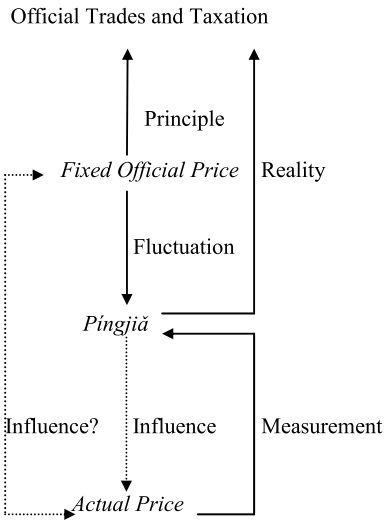

Fig. 10 Price systems during the Qin and Han periods

Fig. 11 Complementarity among monies

monetary economies can be found not only in ancient China, but also medieval China (Kakinuma 2009, 2010a, b, 2012).

In any event, the monetary economy of ancient China appears close to the ideal vision submitted by Hayek (1976) and Vaubel (1977) in the sense that concurrent currencies competed and no fixed parity of monies existed. Moreover, bronze coins, gold, and hemp and silk textiles were not fixed, but temporal forms of money. After the end of the Warring States period, Emperor Wu (武帝) of Western Han attempted to control this plurality. He determined that all of them could serve as means of governmental payment, e.g. taxes, official salaries and as a means of purchasing salt and iron from the government. However, the people did not blindly accept state control, and the situation therefore remained unchanged due to the fact that there was no single, uniform (or generalized) money. However, the monetary economy of the Warring States, Qin and Han periods did not simply get destroyed or substituted for the existing customs, institutions or traditional commodities. On

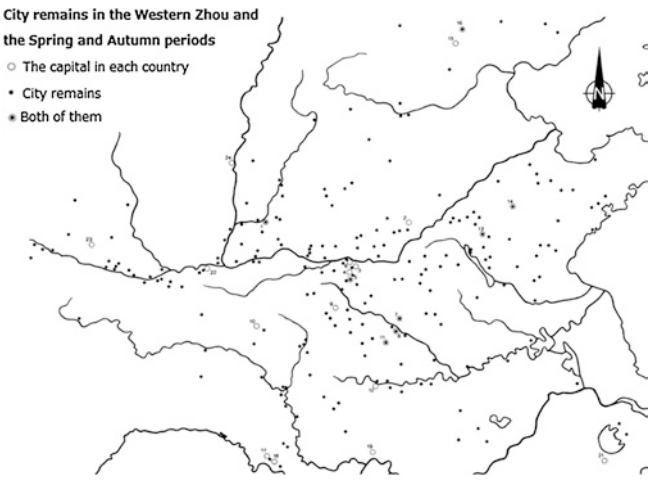

Fig. 12 City remains in the Western Zhou and the Spring and Autumn periods (Emura 2000)

the contrary, the monetary system during those periods was inclined to entwine further with such cultural features. Although the social meaning of money in the modern monetary economy has been noted (Zelizer 1994), such a meaning is even more important in ancient China given that its economy was more deeply embedded within society and its institutions.

Emergence and Spread of Coins in the Warring States Period

Let us now move on to the third question asked in this chapter's introduction: 'Why did multiple monies emerge at the end of the Spring and Autumn period and then rapidly expand during the Warring States period?' This question can probably be posed in a different way: Why at the end of the Spring and Autumn period? Why during the Warring States period? First, we should consider the possibility that the ancient Chinese imitated bronze coins from ancient Mesopotamia or India. It is widely stated that Chinese bronze culture spread from central Asia. However, no evidence exists of a strong cultural connection between western Asia and the states of the Spring and Autumn and Warring States periods considered here. Schaps (2007), a scholar of Greek history, confirms this point. Therefore, the possibility of the Chinese imitating coins from western Asia should be historically and archaeologically rejected. Next, we should consider internal reasons for the initial usage of bronze money during the Spring and Autumn period. Hume (1742), de Montesquieu (1748) and Kant (1784) all hypothesized a certain crucial condition for the innovation and growth in general: competition among political and legal

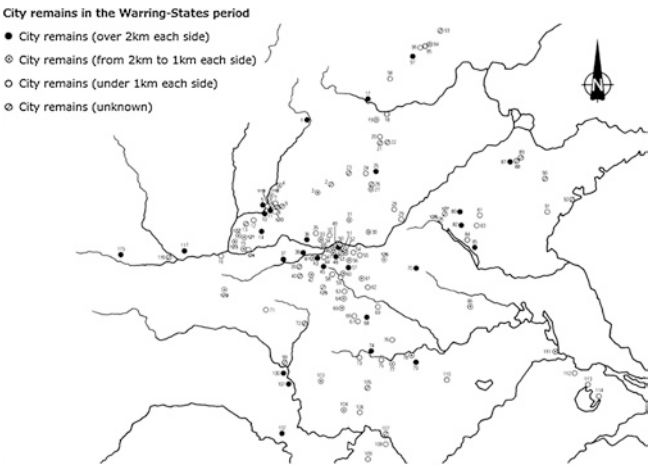

Fig. 13 City remains in the Warring States period (Emura 2000)

organizations for developing rules within which people move about and compete with a certain freedom. In ancient China, multiple monies emerged and expanded from the Spring and Autumn period to the Warring States period, i.e. the period of political divisions. Therefore, this hypothesis seems consistent with historical reality. This study will now attempt to describe why multiple monies emerged and expanded after the Spring and Autumn period, and will then re-examine the Hume–Montesquieu–Kant hypothesis.

Creation of Information and Distribution Networks Before the Warring States Period

As background to the emergence and spread of multiple monies during the Spring and Autumn and Warring States periods, we should first examine the creation of information and distribution networks.

Before the Shang period, certain information and distribution networks came into existence. For instance, a particular precious stone was widely exchanged as a ritual gift not only in the Central Plain but also in Hongkong and Sichuan (Dèng 1994). Cultural exchanges had proceeded in the Central Plain, so its culture had rapidly expanded especially during the *Èrlǐgāng* (二里崗) Culture period, often termed the *Èrlǐgāng* impact. Indeed, the previous discussion about cowry shells also indicates frequent cultural exchanges between districts during the Shang period. As mentioned above, the Shang king presented cowry shells to the subject clans on one hand; on the other hand, the subject clans contributed specialties or human resources to the king. Through this reciprocity, many kinds of information

from each district accumulated in the Central Plain. Now in ancient times, salt, one of the most basic human needs, could be obtained only in the Shanxi district and the coastal area. Thus, people in the inner districts had to depend on its import. Miyazaki (1940) observed that in ancient Chinese, merchants were widely called *gǔ* (*kâ*) 賈 because salt was the oldest commodity, and its exchange came to be called *gǔ* (*kâ*) 鹽, originally meaning 'salty'. Later on, commodity merchants came to be called *gǔ* (*kâ*) 賈. Whether true or not, this thesis does demonstrate the inevitability of exchanges in ancient China.

However, in the Shang period, ancient China was dotted with garrison cities. Under the governance of the capital garrison city (大邑), there were several big garrison cities (大族邑), each having many dependencies (小族邑), with those dependencies having yet more dependencies (屬邑). In addition to this Shang hierarchy of garrisons, there were also many independent garrison cities (Matsumaru 2001). These cities underwent repeated alliances and ruptures, and the roads between them were unsafe. Sometimes the Shang king went hunting in order to proclaim his prestige and power. However, the hunting grounds were small in size, and limited only to a day's trip from the capital (Matsumaru 1963). In short, outside the environs of the Shang capital peace and order were unstable.

In contrast, the Western Zhou widely appointed a ruler to each garrison city, and each became a sort of 'feudal' lord. Regrettably, historians in a later period produced the notion of 'feudal', and previous historical texts were not based on strict historical fact. Thus, many recently have attempted to explain the actual situation on the Western Zhou period on the basis of primary historical evidence, i.e. bronze inscriptions minted during that period. According to these recent researches, many garrison cities existed not only in the Shang period but also in the Western Zhou period, and the Western Zhou 'state' was composed of many garrison cities in the Yellow river Valley. During this process, the political, economic and environmental information from local regions began to steadily gather in the Western Zhou's central government, and a distribution network became ready for exchanges.

At the end of the Western Zhou period, however, the government gradually lost its centralized power, and the lords in each district, or even in each garrison city, became independent. This meant a disconnection of information and distribution networks similar to that which occurred in the Shang period. In the Spring and Autumn period, lords competed with and conquered one another; about 300 cities were conquered by more powerful lords (Gù and Shǐ 1938). However, these battles turned out to be wars of attrition. Then, since the feudal lords wanted to avoid war, they maintained peace among the states by establishing a confederacy and appointing powerful lords as leaders (Yoshimoto 1991). Hegemonies consequently emerged, which were exemplified in the Qi of the Shandong region and the Jin of the Shanxi region—both states during the Spring and Autumn period. A united nations of sorts was set up with these hegemonies at the center so that people from different states (including political messengers who maintained the confederacy) could move safely anywhere throughout the confederacy. Information increasingly spread throughout the area. In brief, from this period onwards, many roads connecting main garrison cities were partly opened to traffic, and the information and distribution networks began to expand further.

Guest Culture in the Warring States Period

In the early Warring States period, the movement of human resources became rampant. Although transport was limited to foot and horseback and inter-city travel was not easy because of cost, safety and the differences in the roads' ruts, some major merchants and intellectuals regularly traversed states despite the obstacles. Many of them were warmly welcomed as *kè* (客), i.e. *guests*. *Guests* were also called *lǚ* (旅), i.e. travellers, and formed what we might call patron–client relationships with highly ranked men or kings through a certain ceremonial etiquette. There were also people known as *jì* (寄) or *jī* (羈), i.e. lodgers, who would not get through a certain rite of passage as a *guest*. For instance, when an official foreign messenger arrived at the Qin, and he asked for an interview with the king, he had to prepare and present a precious stone *yù* (玉) to the Qin king. Later on, he would be called a *guest* (Yúnmèng Shuìhǔdì Qínmù Biānxiězǔ 1981: no. 573). *Guests* and lodgers were generally called *lǚrén* (旅人), i.e. journeyman.[1]

[1] In Greece during this period, there existed close to 1,000 *polis* (Greek city states). Outside the polis were the *berber* (βάρβαροι, non-Greek) and the *xenoi* (ξένος, Greeks who were outside the *polis*' authority). Inside the polis were citizens, *metoicoi* (resident foreigners), slaves and women. For example, for Athenians, those who were Greek outside Athens were called *xenoi*, and those who were non-Athenian in Athens were called *metoicoi* (μέτοικο). According to Herman, the term *xenoi* had two meanings, 'an unacquainted foreigner' and 'a visitor, or a foreigner with whom they share mutually hospitable relations'. Since the time of Homer, the term customarily held the latter meaning, in particular amongst the *xenia*. *Xenia* was a practice particular to the social elite and referred to the 'bonds of affection that connected people from a different society or community'. It was a 'ritualised friendship' formed with mutual vows, the shaking of hands, favours and appeal. Participants exchanged goods and services with one another and provided mutual assistance. Each polis (e.g. polis A), would select a person from among the foreigners living in a foreign state (e.g. polis B) and call him the *proxenos* (πρόξεινος). The citizens of polis A would treat him as having relations with all citizens of polis A based on the ritualised friendship, and when citizens of polis A visited polis B, the *proxenos* was responsible for their care (Herman 1987). The similarities and differences between this special human relationship and the guest culture of ancient China have become points of discussion in our meetings. Certainly, the two are both 'relationships with foreign companions based upon a custom of reciprocity' and can be seen to contribute directly and indirectly to the construction of information networks between cities. Also, when the two parties of a *xenia* relationship came into conflict with the polis to which they belonged, they would agonise about whether they should prioritise their personal relations with the *xenia* or the profit of various kinds for the polis. This debate was the same for the guests of state in China. For example, at the end of the Warring States period, Hán Fēi (韓非), one of the Han royalty viewed as an excellent lawyer, was in the Qin as a *guest*, but the Qin king feared that Hán Fēi would ultimately submit policies to profit the Han. Because of this, the Qin killed Hán Fēi. The Qin king later attempted to promulgate the order for *guests* to leave (逐客令) because of the likelihood that guests would place greater importance upon their native state's profit. However, in contrast to the *xenoi* who resided in the foreign state, the guests stayed only temporarily in the state. Also, in contrast to the *xenia* relationships being affectionate, based on one-to-one meetings, many guests in the political field gathered around the high prestige and economic power possessed by a lord, and thus, if the lord lost his prestige or political power through morally deviant acts, the guests suddenly took flight to distance themselves from the lord. For example, when Mèngcháng jūn (孟嘗君) was the prime minister of Qi, he hosted as many as

In terms of political science, however, a globalized world can negatively affect states. Some of the elite classes may resent paying heavy government taxes and so escape to another state. Possibly, the state may lose so much financial power that it faces difficulties in public investments and other areas (Lasch 1995). When people harbour resentment against their state, they have two options. According to Hirschman (1970), these are 'exit' and 'voice'. The first option is to 'exit' from disagreeable conditions and the second is to 'voice' in favour of reform. When escaping from disagreeable conditions and accessing more desirable conditions is relatively simple, 'exit' becomes the obvious choice.

Footnote 1 (Continued)
3,000 *guests*, but attracted the envy of the king. After being stripped of his rank, Mèngcháng jūn's guests disappeared Afterwards, due to the great efforts of Féng Huān (馮驩), one of Mèngcháng jūn's guests, he was reinstated as prime minister, and once again 3,000 guests gathered in his halls. Mèngcháng jūn meant to scold his guests, but Féng Fuān stated: 'It is natural that those with wealth and rank will have many followers and that the poor will have few. It is natural too that when you lost your rank, your esteemed guests took their leave. Therefore, it would do no good to resent your guests or reject them in vain' (see *Record of Mèngcháng jūn*). This differs from the *xenia*. However, on the other hand, there also existed during the Spring and Autumn and the Warring States periods the principle of communication known as *Rènxiá* (任俠), chivalry. This required that 'civilians depend upon their own swords, set up groups, adhere to the groups staking their lives in a single pledge, and, especially, endeavour to save their friends and family irrespective of life, death, and personal interests'. These requirements sometimes encompassed unlawful acts. This mindset is what underlies at least a part of modern gangs, the mafia and the *yakuza*, but in the Spring and Autumn and the Warring States periods, many possessed this mindset (Miyazaki 1934; Masubuchi 1996). That is not to say it was a value supported by everybody at the time, but rather that it was one principle of communication alongside family, rank and money. This value's importance depended upon the person, but those who made little of the traditional clan system in ancient China looked upon *chivalry* as important (Kakinuma 2011). Among the Chinese *guests* of state, too, there were many who viewed this ethos as important. For example, the abovementioned Féng Huān assisted Mèngcháng jūn, who had lost his title and all of his guests. For doing so, Féng Huān gained favour. In the Spring and Autumn and the Warring States periods, many assassins, starting out as guests of state, tried to attain retribution for their murdered lords (see *Record of Assassins* in *Shiji*). This kind of human relationship rooted in chivalry also involved foreigners. For example, in the last years of the Spring and Autumn period, the son of Fàn Lí (范蠡) of Yue was deemed a criminal in the Chu. Fàn Lí sent a dispatch to his old friend, Zhuāng Shēng (莊生) of the Chu, and a large sum of money. Zhuāng Shēng, not touching the money, decided to secretly save his friend's son without compensation. Fànlí had known that Zhuāng Shēng did not want his money, but Fàn Lí's emissary had doubted Zhuāng Shēng. When Zhuāng Shēng found out, he refused to save Fàn Lí's son (see *Biography of the Yue*). This indicates that a chivalrous relationship existed between Fàn Lí and Zhuāng Shēng. This story has a strong legendary element, and there are doubts about whether the incident actually occurred in the Spring and Autumn period. Yet, because it is recorded in the Han dynasty's *Shiji* and there were probably other original sources before the Han period, it is certain that the story and its contents were viewed as important from the Warring States period to the Han period. This was an interpersonal relationship similar to *xenia* and, in this, there can be seen a resemblance between China and Greece. At the very least, chivalry differed from *xenia* in that (1) it was not limited to foreigners; (2) it encompassed a mindset powerful enough that people would stake their lives; and (3) those involved were inclined to refuse an exchange of money. Please refer to Schap's paper for more information regarding the *xenia*.

However, when 'exit' is not possible, then people often choose to 'voice' their protests against disagreeable conditions. For a state to accomplish development from within, it must prevent exits and properly assimilate peoples' voices (Hirschman 1970). Therefore, capable human resources that leave for another state and become *guests* deliver their home states a painful blow.

In reality though, people moved to and from different states in ancient China, i.e. there were not only 'exit' but also 'enter'. Moreover, *guests* sometimes brought vital information, and therefore, were welcomed with open arms. In the mutual 'entering', fighting sometimes broke out around the *guests* and the vital information they had. For example, the Four Lords of the Warring States enlisted as many as 3,000 *guests* and sent them to extend information networks. Among these, Mèngcháng jūn (孟嘗君) clarified his position and made his voice heard, saying 'Do not pursue my *guest* going on his way. Warmly welcome an arriving *guest* (see *Record of Mèngcháng jūn* in *Shiji*)'. The *guests* used the motto 'die for one who knows thyself'; they made considerable effort to communicate intelligence, information and policies that would be acceptable to the lords. When Xìnlíng jūn (信陵君) dwelled in the Wei, he controlled an information network using his *guests* greater than the king and even knew the movement of the enemy's army (see *Record of Xìnlíng jūn* in *Shiji*). Moreover, Lǐ Sī (李斯) realized that 'Getting a reputation as a wise man, or not, depends on location', and he studied under the great scholar *Xún Zǐ* (荀子). Afterwards, Lǐ Sī declared, 'Now is the time when lords who own ten thousand chariots compete, and their *guests* hold the key to success…'. In other words, now is the time for *guests* (see *Record of Lǐ Sī* in *Shiji*). Then, he went to the Qin. The Qin had two successive prime ministers; one Qin and the other a foreign *guest*. In other states, a person from State A also sometimes became a prime minister of State B, for instance, Tián Dān (田单), Wèi Rǎn (魏冉) and Chūnshēn jūn (春申君), but this happened only when State B expected diplomatic assistance from State A. Conversely, a man of ability, even an exile from another state, could become one of prime ministers in the Qin, for example, Bǎilǐ Xī (百里奚), Fàn Jū (范雎) and Shāng Yāng (商鞅). In this sense, the Qin regarded *guests* very highly, more so than other states, and Lǐ Sī probably noticed such a phenomenon.

Of course, there were also *guests* who were not so worthy of praise, or who did not have advantageous policies for the king. Some even attempted to entrap the state. For instance, the Wu rose because of assistance from a *guest* named Wǔ Zixū (伍子胥) from the Chu, and fell because of a *guest* Bó Pǐ (伯嚭), also from the Chu. The paragon-like role played by Confucius, who was one of *guests* in many states in the Spring and Autumn period, was re-evaluated after the end of the Western Han period (Fukui 2005), but was not popular with lords or kings in the Spring and Autumn period. This is a typical example of a *guest* who did not advocate advantageous policies for the king. Furthermore, the Qi state declined during the period of a prime minister Hòu Shēng (后勝) due to the fact that he took a bribe, and permitted his *guests* to work in the Qin. Later on, the Qin also gave issued many bribes to them, and asked them to become double agents dwelling in other states. Consequently, they leaked fake information to Qi, and Qi was

finally destroyed. This is an example of a *guest* who attempted to entrap the state. Because of this, the *Shiji* makes a critique that the Qi king did not know how to use *guests*. Thus, lords or kings needed to have an insight—or a kind of intelligence—into the quality of *guests* and the information they brought.

However, by hiring more *guests*, rulers could confirm sources and facts, thus decreasing the uncertainty of information. Of course, many *guests* sought only profit for the state because if a state fell rapidly, they would lose their advantages, reputations and means of economic support. Furthermore, in the case of the Qin, a *guest* could meet the king only through an influential man's introduction. If a *guest* caused any trouble, the introducer had to take responsibility (see *Record of Fàn Jū*). This also seemed to reduce the uncertainty of information. Thus, in the Warring States period, lords who retained the services of distinguished *guests* rose to prominence one after the other. Conversely, lords who restricted the 'voice' and 'entry' of *guests* generally saw a decline in their positions. Restricting the entry of *guests* meant the king regarded only natives very highly, stiffened the movement of human resources, dramatized their rent seeking and reduced information from other states. The Qin, who ultimately unified China, continued to appoint many *guests*. Even though some *guests* attempted to entrap the king and he attempted to banish all *guests* at the end of the Warring States period, he finally decided against doing so. There were at least two reasons: (1) the Qin state had obviously developed on the basis of many *guests* suggestions, and (2) the banishment of *guests* from the Qin directly or indirectly helped other states to profit. Lǐ Sī, who opposed promulgation of the 'order for *guests* to leave', expressed this fact. As a consequence, the Qin finally, in actual fact, unified all other states (see *Biography of Lǐ Sī* in *Shiji*).

As a result, since there were many *guests* who came and went in states, the information and distribution networks have been constructed. According to this construction, the expansion and spread of information of specialties in each district occurred, and merchants came and went based on distribution networks.

Commercial Innovations in the Warring States Period

Based on the workings of *guest* culture, commercial innovation emerged from networks of information and distribution. Let us first look at geographical propositions in the Warring States period.

There are multiple economic zones in China during the Warring States, Qin, and Han periods (Fig. 14). According to *Account of Money-Making* (貨殖列傳) in *Shiji*, Chinese continent firstly can be divided into at least four economic zones; the "West of the Mountains," the "East of the Mountains," Jiangnan (江南), and north of the area between Longmen (龍門) and Jieshi (碣石). These zones respectively produced different specialties. Although *Shiji* was edited in the Western Han period, its geographical understanding must reflect the geographical situation not only in the Western Han, but also in the Warring States period. This is because the geographical situation would not have dramatically changed during the short

Fig. 14 Multiple economic zones in the Warring States, Qin and Han periods

time separating the Warring States period and the Western Han period. According to *Account of Money-Making*, we can divide the previous four economic zones into smaller zones. In the "West of the Mountains," Guanzhong (關中) was a grain-producing area, Bashu (巴蜀) produced rouge, ginger, mercury, copper, iron, bamboo, and lumber, etc. There was also a borderland buttressing the Xiqiang (西羌) people, which included Tianshui (天水), Longxi (隴西), Beidi (北地), and Shangjun (上郡). In addition to this, there were other areas in the south and West of Bashu, which specialties were different from the Bashu, but its actual situation in the Warring States period is unknown. For the purposes of this study, I recognize Guanzhong, Bashu, and Xiqiang as different economic zones, and refer to them as the "Guanzhong economic zone," the "Bashu economic zone," and the "Xiqiang economic zone" respectively. The area I call "East of the Mountains" can be divided into four areas; Qi (齊) which mainly produced hemp and silk textiles, salt, and fish, Hedong (河東), Henei (河內), and Luoyang (洛陽) which mainly produced grains, and hemp and silk textiles. Zou (鄒) and Lu (魯) mainly produced hemp and silk textiles, and Liang (梁) and Song (宋) mostly produced grain. The Qi not only produced grains and hemp and silk textiles but also many other products, such as salt and iron, whereas the other districts (Hedong, Henei, Luoyang, Zou, Lu, Liang, and Song) simply mainly produced grain, hemp and silk textiles, or all of the above. Thus, this study refers to Qi as "Shandong economic zone", and distinguishes Qi from other districts in the west, which I refer to as

the “Luoyang economic zone.” Jiangnan can be divided into three areas; Xichu (西楚) which produced fish and salt, Dongchu (東楚) where produced salt, copper, and fish, and Nanchu (南楚) which produced leather, fish, and lumber. There were few people and transactions between them in Xichu and Dongchu, and there is no major difference between Xichu and Dongchu except the presence of copper in the latter. Thus, this study does not divide the Xichu and the Dongchu, and categorizes them into a “Wu economic zone”, and refers to the Nanchu as the “Chu economic zone.” Finally, I will focus on north of the area between Longmen (龍門) and Jieshi (碣石), as well as on the area between Yang (楊) and Pingyang (平陽), which were transit areas between the Han Chinese and nomads. Wen (温) and Zhi (軹) were also transit areas to Shangdang (上黨). The area between Zhao (趙), and Zhongshan (中山) was barren but also functioned as a transit area to different areas. Yan produced fish, salt, jujubes, and chestnuts, and also functioned as a transit area to northern lands. All of these areas were transit areas, but only the Yan produced various products in addition to its position as a thoroughfare. Hara (2004) has also pointed out the features of the Yan, and I accordingly refer to the Yan as the “Yan economic zone”, whereas other districts can be delegated into the “Shanxi economic zone.”

According to the previous discussions, it is obvious that there were many economic zones in the Chinese continent during the Warring States period (Fig. 14). Next, let us move on to examining how the development of information and distribution networks influenced to the relationship among the previous economic zones. Except for some legendary giant merchants such as Fàn Lí (范蠡) and Zǐ Gòng (子貢), most trademen initially performed their activities within various small economic zones. They focused on how to manage goods within a narrow sphere of activities. For example, Bái Guī (白圭)—an early Warring-States period figure considered the progenitor of tradesmen in China—exploited grain and hemp. He purchased grain during the harvest season by trading hemp and silk textiles at low prices, and then sold them at high prices during the agricultural off-season. Purchasing goods when they are cheap and selling when their value rises is a classical example of how seasonal variance of harvest products affects economic behavior (hereafter A-type commerce). In contrast, during the early Warring States period, commercial activities and the building of infrastructure progressed under government leadership, and *guests* began frequently coming and going between states. Therefore, accessing information on products from each economic zone became easier than it had been prior. Moreover, because the quantity of information gradually increased and uncertainty and deviation were reduced by comparison among *guests*’ information, economic and monetary developments accelerated. In theory, a seller knows the quality of his commodities, but a buyer does not know them in detail. Such a situation is termed ‘asymmetrical information’, and the seller can take advantage of the buyer’s ignorance and sell commodities at too high a price. Thus, the buyer is cautious, calculates his risk and attempts to obtain the commodities at a cheaper price than the seller expects. As a result, the buyer refuses to pay reasonable prices for all commodities even when they have good qualities, and then the qualities of all commodities

deteriorate (Akerlof 1970). According to this economic theory, as soon as the asymmetry of information and the uncertainty decrease, exchange of commodities in the private sector seems become highly active. In fact, this situation gave rise to a new method of trade that focused on regional price variance (hereafter B-type commerce). Incidentally, one considers that the extensive commerce of the Yan in ancient China did not base itself on the exchange of surplus agricultural products, but rather on the diversity of value products, as well as the transmission of information by people in diverse environments (Hara 2004). This can be seen as one of the origins of B-type commerce. Moreover, from the end of the Warring States period onwards, new technologies such as iron manufacturing also developed in some regions. Subsequently, these production centers flourished, as did the locations of consumption and transit trade (this process is hereafter referred to as C-type commerce). Typical examples of C-type merchants were Guō Zōng (郭縱) and Zhuó Shì (卓氏).

Nevertheless, B-type commerce was not limited to the Yan economic zone, and in fact, various products also circulated in the Qi, located in the Shandong peninsula (Hara 1994). Except in the Yan and Qi, *Account of Money-Making* in *Shiji* contains an account of tradesmen from various economic zones who succeeded with this method after the middle of the Warring States period. For instance, Luǒ (倮) connected between Xiqiang and Guanzhong, and Qīng (清) connected between Bashu and Guanzhong. On the basis of a detailed analysis of *Account of Money-Making*, Luoyang and Guanzhong were very fertile regions where farming and weaving flourished. Even though Luoyang's soil was reputedly poorer than Guanzhong's (see *Biography of Liú Hóu* in *Shiji*), both areas were richer than any other land in terms of farming and weaving. Before the mid-Warring States period, Guanzhong originally had many forests, and many natives made a living by hunting and gathering, but after the law reform by Shāng Yāng, the people dwelling there soon began to engage in farming and weaving (Hara 2005). Conversely, according to *the Account of Money-Making*, lumber, bamboo, fish, salt, hemp, precious stones, lacquer, red lead and metal were produced in the neighboring economic zones of Shanxi, Shandong, Wu, Chu, Bashu and Xiqiang. These commodities were not only articles of luxury but also necessities for abodes, farming tools, weapons, and seasonings. They were exchanged for the farming products and hemp and silk textiles in Guanzhong and Luoyang. In this way, knowledge of the specialty products of each economic zone accumulated, and merchants gathered information in Guanzhong and Luoyang. These areas became the foothold for delivery to each economic zones. There are actually many discoveries of commercial city sites in the Luoyang district from the Western Zhou period to the Warring States period (Figs. 12 andoke 13). Luoyang was also called the center of the Qi, the Qin, the Chu and the Zhao (see *Account of Money-Making*). Furthermore, *Account of Money-Making* also says 'when the lord Wén gōng (文公), Dé gōng (德公) and Mù gōng (穆公) in the Qin had their own capital city in Yong (雍), there were many merchants connecting Long (隴) and Shu (蜀). On the contrary, when the lord Xiàn gōng (獻公) built his capital city in Lìyì (櫟邑), the city was a long way from the northern Rong, and strongly connected to the eastern states,

i.e. the Wei, Zhao and Han'. Both capital cities were located in Guanzhong, Long and Shu were located in Bashu economic zone, and the northern Rong was located in Xiqiang economic zone. Moreover, the fact that many merchants concentrated there made Guanzhong a focal point among several economic zones (Fig. 14).

As a result, focal areas connecting more than two economic zones developed as commercial areas. *The Account of Money-Making* contains plenty of examples. For instance, Fàn Lí (范蠡) regarded the city of Tao (陶), connecting the Shandong and Luoyang, as 'the center of the world, and the place where roads connected to in all directions and people do commercial activities'. Another commercial giant near Tao was Zǐ Gòng (子貢). Another example is the Lu state, located between the Shandong, Luoyang and the Shanxi, where people began to be merchants, more than in Luoyang, after the fall of the Lu's central government, where the people originally regarded frugality very highly. Moreover, Shanxi merchants traded with the Shanxi or the nomad Xiongnu (匈奴) in the northern part of China. There were also many merchants who traded between Wu and Luoyang, or Chu and Luoyang. On the contrary, once the traffic connections were interrupted between these commercial cites and the Luoyang, these cities sustained serious economic damage.

Monetary Innovations in the Warring States Period

In conclusion, the establishment of information and distribution networks resulted in an economy based on multiple forms of bronze money. Strictly speaking, grains and hemp and silk textiles started to be used as money in A-type commerce, and later on, multiple forms of bronze coins started to be used by government agents or merchants who were engaged in B-type commerce. Although no historical texts exist to verify it, the hypothesis seems consistent with the circumstantial evidence. This will be explained below.

As mentioned above, multiple economic zones existed in China before the Warring States period. However, these zones were not connected to each other, and the greatest economic activity took place in the area around Luoyang. The Eastern Zhou dynasty was centered on Luoyang, and cowry shells, bronze vessels and bronze ingots all circulated in the vicinity. These items did not circulate to facilitate the exchange of commodities, but were a form of ritualized gift exchange introduced by the Zhou government. At the same time, there were numerous farmers and weavers in villages near Luoyang producing grain and hemp and silk textiles according to the season. Under this background, the traditional premise of neo-classical economics, that people who own goods that others do not have will exchange them for items they lack, does not seem tenable. In contrast, people with almost the same products sought to exchange them because individuals supplied or demanded the same product but at different times. Kuroda (2003) calls this type of exchange the 'exchange of time', whereas he calls the traditional type based on the premise that a person does not possess what they want from each other as the

'exchange of goods' (Kuroda 2003). The concept of 'exchange of time' does seem to fit the actual situation in ancient China. For example, the exchange of grain and hemp and silk textiles at that time was extremely fluid. As mentioned above, Bái Guī, an early Warring-States period figure who is considered the progenitor of tradesmen in China, purchased grain by using hemp and silk textiles as money during the harvest season when grain was valued at low prices, and then sold grain at a high price during the agricultural off-season. This 'exchange of time' does not tend to expand geographically. As a proverb from the Western Han period puts it, 'Do not sell lumber further than c. 40 km. Do not sell grain further than c. 400 km'. Looking at these exchanges, it is difficult to decide whether it was grain or hemp and silk textiles that functioned as money, because monetary functions changed according to the season when the exchange occurred. In fact, although the range of circulation of hemp and silk textiles was wider and hemp and silk textiles were sometimes preferably recognized as money, at least grain has not been seen as money except during wars when people even cannot eat grain (Kakinuma 2009). The seasonal circulation of grain and hemp and silk textiles in local markets was characteristic of the farming and weaving-centered Luoyang economic zone, but such a pattern also seemed to have occurred in the Guanzhong economic zone from the middle of the Warring States period.

The result of such trends was the expanded exchange of goods. If people wanted to buy luxury goods or land, they would need to exchange enormous amounts of grain or hemp and silk textiles. As this was not convenient or even possible, cowry shells, bronze vessels or bronze ingots were generally used instead. Examples of these exchanges are recorded in bronze inscriptions. Because cowry shells, bronze vessels and bronze ingots were valuable, they were essentially used as means of exchange for any high-value item. William Skinner has pointed out that the stratification of markets was an integral part of traditional Chinese society and commerce (Skinner 1964–1965). Skinner's model is composed of multiple layers of markets, such as standard, intermediate, and central market town, and is based on analyses on modern Chinese society. There were also multiple layers of markets in ancient China, such as a lower market for daily goods and an upper market for luxuries or land. Furthermore, Kuroda (2003) has claimed that monies did not seem to be completely interchangeable between these two market tiers. This is first due to the fact that the supply and demand of commodities like grain or textiles in local markets alter radically according to season, whereas other commodities in more inter-regional markets are much less dependent on seasonality. Secondly, lower markets tend to favor lower value monies for lower value exchanges, which means that lower value monies tend not to flow back to upper markets. Thus, markets function smoothly under a system of different but concurrent currencies on the basis of market tier (Kuroda 2003). This also seems to have been characteristic of the Spring and Autumn and Warring States periods. The quantities of grain and hemp and silk textiles circulating in lower or rural markets were also insufficient, and—excluding the portions used by farmers themselves and government stocks and salaries—additionally limited the potential flow to the upper markets.

On the contrary, all bronze coins are the product of the custom of using bronze ingots as ritualized gifts and beginning to appear in higher markets. Most of the products exchanged in lower markets were made in the locality, whereas in the higher market, both exchanged products and the merchants tended to have a more inter-regional character. This is because uncommon products could not achieve the levels of circulation received by common products. Under these circumstances, bronze coins started to be used as a means of exchange linking economic zones, permeating places located in areas of contact between such economic zones. In reality, bronze coins, except unified state coins such as *banliang* coins minted after the mid-Warring States period, were excavated in more than two economic zones, and it is confirmed that similar shapes of bronze coins were also served to bridge gap between more than two economic zones—for example, Shanxi-Yan (knife-shaped and spade-shaped coins); Shandong-Yan (knife-shaped and spade-shaped coins); Shanxi-Luoyang (knife-shaped and spade-shaped coins); Shandong-Luoyang (knife-shaped coins) and Chu-Luoyang (cowry-shaped bronze coins). The people of those areas consequently required a money that could be used for those transactions. Strictly speaking, the earliest use of coins can be observed near the capital city of the Eastern Zhou, i.e. Luoyang. Later on, the Han, Wei, Zhao, and Yan started to use spade-shaped coins, and the Zhao and Yan began to use knife-shaped coins. This also meant that neighboring states started to use the same type of coins. The Shandong economic zone and Shanxi economic zone in particular became transit areas towards the center of commerce, i.e. Guanzhong and Luoyang after the Western Zhou period. People residing in Shandong and Shanxi consequently required a money that could be used for those transactions. In Yan, too, there was a need for inter-regional money for trade with Shanxi and Shandong. Although there was no direct trade between Chu and Guanzhong or Luoyang, the people of Chu are also believed to have used cowry-shaped bronze coins for trading with the subordinate states located in the northern part of the Chu state and indirectly accessing the wealth of Luoyang and Guanzhong via this trade. Consequently, among neighbouring states, not only were grain, hemp and silk textiles and the specialties of other regions used for direct exchange, but also bronze coins were minted in order to connect with different regional economic zones. In other words, since small-scale economies inhabit small-scale monetary areas and have many transactions with foreigners, they have a strong interest in establishing a competitive money acceptable to foreigners. Therefore, cowry-, spade-, and knife-shaped coins (and a part of square-holed round-shaped coins) were all circulated in order to link at least two economic zones. In addition, according to the analysis of coin materials, it is possible that mineral resources, including copper and tin, were transacted between Qi-Yan, Wei-Chu, and Wei-Qi (Hirao 2001), which can also be seen as evidence of transactions between economic zones.

Incidentally, square-holed round-shaped coins tended to circulate in each state, and they could be used as a means for governmental payment. For instance, the *banliang* coins of Qin have not been excavated very much near Luoyang and eastward because they were originally minted by the Qin government not as a means of exchange between different economic zones but as unified bronze coins within

the state (Kakinuma 2011). Round-holed round-shaped coins in Yan and Qi at the end of the Warring States period seem to have the same function. In short, they were minted after the expansion of other bronze coins, and the reason for their being minted needs to be distinguished from that of the coins used as means of payment between economic zones.

This study has looked at how certain information and distribution networks were established during the Spring and Autumn period, and how bronze coins were utilized under the particular circumstances of the Warring States period. Certainly, there were many wars at the time and people in villages also needed to pay for costly rituals; these political and social factors hindered economic development and market expansion. However, it is also certain that there were monetary innovations based on those information and distribution networks. Sima Qian (司馬遷) exactly indicated this phenomenon in *Account of Money-Making*: "Laozi (老子) said, 'The most beautiful world would be one in which states look at each other and listen to the voices of chickens and dogs, and people are satisfied with their existing food, clothes, customs and work and do not come and go between states.' However, this is totally impossible (after the legendary Xia 夏 period)."

From Open and Competing States to Closed and Unified States?

We will now turn our attention to the fourth question presented in the introduction, namely "How did such multiple monies change after the middle of Warring States period?" There is a plenty of existing research on this question. In recent years in particular, successive excavations of written sources (including legal documents) have been conducted in relation to this question. There has also been comprehensive research based on both previous studies and excavated written sources (Kakinuma 2011; Emura 2011). According to these findings, the states began to close themselves from each other in the middle of the Warring States period. With regards to the Qin state in particular, the *Banliang* coin, which was the standard bronze coin, made an appearance in 336 B.C.E. (or in 335 B.C.E.), after which there was a ban on the circulation of all coins that differed in weight and shape from this one (Kakinuma 2011). From the beginning, the *Banliang* coin was widely accepted for not only public but also private economic circulation (Kakinuma 2011). It was also adopted as a means for state-level account settlement such as tax payment, fines, and wage payments (Kimura 1955; Adachi 1990; Kakinuma 2011). It therefore circulated widely within the Qin state. In 221 B.C.E., as a result of the unification of China by the Qin, the *Banliang* coin became the standard bronze coin of the entire state, and an ordinance was issued in 210 B.C.E. in order to reinforce this system once more (Kakinuma 2011). In other words, rather than being the natural result of free competition and the screening of multiple bronze coins, the standardization of coins and the expansion of their distribution in each state during the Warring States period was first initiated by state leadership.

Each of the states began to standardize their bronze coins against a backdrop of intensifying wars. Moreover, as we have examined in *section* "Introduction", the volume of coins in circulation indicated by the amount of excavated bronze coins increases from the middle of the Warring States period, which marked an intensification of war. So what was the relationship between "the intensification of war" and "the standardization and increase of bronze coins?" Some studies have pointed out the close relationship between war and monetary innovation, but there are no historical sources from ancient China that clearly affirm this point.

However, in the case of the Qin at least, the following points can be made: (1) Law reforms were enacted in the Qin around 350 B.C.E. by Shāng Yāng, and the principal aim of these reforms was to cultivate "people that plowed and fought (耕戰之士)" (a people mainly engaged in agriculture and war). (2) After Shāng Yāng's law reforms, the Qin began planning the aggressive expansion of its territory. (3) As part of Shāng Yāng's law reforms, a comprehensive peerage system was established, covering not only noble families but also extending to the general population. (4) The principal means of rewarding good service in war after Shāng Yāng's reforms was gold, houses, or farmland, and in the early Western Han period, this means was replaced by coins and gold (Kakinuma 2011). (5) *Banliang* coin were minted all at once in 335 B.C.E. (or in 336 B.C.E.) as part of national policy, and the *banliang* coin was adopted as the means for account settlement on a state level. (6) For many years, the Qin was economically dependent upon the six eastern states (Yamada 2000). Taking into consideration the six points above, the reason for "the standardization and increase of bronze coins" was found in "the intensification of war."

This is to say, after Shāng Yāng's reforms, the Qin aggressively waged war and sought to expand its territory. As a result, it became necessary for the Qin to pay out large sums to its soldiers in reward for military service. The means of payment for these occasions were either grain and hemp and silk textiles in the lower market or gold, houses, and farmland in the upper market. For highly valuable service, gold, houses, and farmland were particularly common rewards. Under such circumstances, regions where grains, hemp and silk textiles, and gold were distributed as money increased. However, preparing the grains, hemp and silk textiles, and gold and making lump-sum payments whenever there was war could potentially prove extremely difficult. Furthermore, gathering together such quantities of materials and redistributing them all in totality would plunge the market into chaos. Quantities of gold, houses, and farmland were also limited. In response to this, as the war intensified, the Qin conferred peerages for valuable service in war not only to members of noble families, but also to commoners. The *Shiji* and *the Shang jun shu* (商君書) also make explicit reference to this. Thus, the Qin organized a peerage system (*jué* 爵) that included around 20 ranks extending from the sovereign to the lower-caste. Such a system is a rarity in world history. Even though, according to Nishijima, the theory that peerage systems originated in the need to reward good service cannot explain why peerages were conferred not only upon nobles, but also upon commoners (Nishijima 1961), it is plainly evident from historical sources that, before the early Western Han period, peerages were

primarily conferred upon those who contributed to the state (Momiyama 1985, 1995). Let us then reconsider the reason why peerages were conferred to commoners in addition to nobles. Why were they willing to accept it? Unlike grains, hemp and silk textiles, gold, houses, and farmland, peerages conferred honor, and according to Miyake (2006), their rise and fall corresponded to the upper limits set by the quantities of rewards and gifts bestowed by the state. Thus, the peerages represented a bundle of rights (Miyake 2006). In other words, the Qin gave rights that could be used to gain honor and profit in the future and also increased privilege by using peerages as means of rewarding good service. This represented an alternative to giving people gifts directly and thus prevented dramatic increases and reductions in material properties. For this reason, in my opinion, peerages were conferred not only to nobles but also to any commoner who fought in war. The Qin's *banliang* coin is also considered to have a similar significance. That is to say that although the *banliang* coin was not immediately used for rewarding good service in the Warring States period, the government minted the coin actively and exclusively, and it was indeed a measure for state-level account settlement (tax payment etc.) in the Qin and Han periods. This brought about two major results. First, the Qin had previously economically relied upon the six eastern states, but by minting the *banliang* coin as the nominal money, the Qin, both in name and reality, now ceased to be an economically underdeveloped state and achieved economic independence (Kakinuma 2011). Furthermore, some years later, the Qin gained control of Bashu, which offered a supply of bronze (as discussed later), and the circulation of the Qin's money expanded almost instantly. Second, the *banliang* coin allowed the Qin government to gain "time." This also signifies that much like Marx criticized Say's law (Marx 1872), there was no great need for people to use the coins to purchase commodities as soon as they got the coins. Thus, by adopting the coin as an alternative means of payment to grain and hemp and silk textiles, those who were paid would not immediately have to purchase grain or hemp and silk textiles, which generated a time lag between sales and purchases. This time, a lag prevented sudden imbalances in the supply and demand of grain and hemp and silk textiles. In short, the increasing in warfare after the mid-Warring-States period resulted in an increase of prizes for meritorious services in wars. As a result, it incurred imbalances of supply and demand of grains and hemp and silk textiles. Under these circumstances, the rank system directly or indirectly functioned as an adjuster of the imbalances. Whether governmental officials noticed this mechanism or not, they did begin to substitute ranks for grains, gold, and hemp and silk textiles.

To what extent did the warring states advance their national isolation policies? Is it correct to say that in standardizing their money, the states completely isolated their economies from others? Here we need to focus particular attention on the fact that it was better for all *guests* and merchants (who preceded such innovations) to satisfy their lord's interests in order to survive. By being employed by a specific lord, they could ensure that their ideas became reality. Thus, as the competition between fellow *guests* intensified, they inevitably began to contribute to the establishment of autocratic rule. In fact, the Chu's *guest* Wú qǐ (吳起) and the

Qin's *guest* Shāng Yāng initiated legislative reforms for despotism against those with vested interests. As a result, many states subsequently regulated information and distribution networks and the circulation of commodities with taxation.

Powerful merchants who were leaders in B-type commerce also had to adjust to this trend. As stated previously, the prerequisite of B-type commerce, which came of age during the Warring States period, was the existence of fixed information and distribution networks. However, both of these networks had many flaws. The feudal lords of the time would repeatedly form and then break off alliances, and it was difficult to know the reliability of information coming from friendly states, let alone from enemy states. In addition, the size of wheel tracks in roads varied between states, and this presented an obstacle for commercial horse transportation. Furthermore, each state imposed different taxes on its markets. Thus, merchants in B-type commerce needed helps by lords.

In actual fact, among merchants who were making a living in B-type commerce, Zǔ Gòng received the patronage of the lord of the Wei (衛), and he was also treated with equal courtesy by the lords of other states. Bái Guī also placed great importance on "the powers for protecting what needs to be protected." Luǒ (倮) and Qīng (清) were also highly valued by the lord of the Qin. The Kǒngshì (孔氏) increased profits by giving gifts to feudal lords, and this was known as "the business method of giving gifts to leisured lords." Thus, B-type commerce at this time entailed massive "transaction costs". For this reason, traders in each state were forced to work together and carry out their trades under the various types of political and military patronage offered by state leaders, and only the major merchants who could profit under this system would prosper. The fact that almost all of the major merchants who feature in *Account of Money-Making* had ties with leading figures in government is partly due to this. Although an open and competitive relationship between fellow states was a more desirable situation from the point of view of major merchants, they ultimately needed to ingratiate themselves with state leaders in order to reduce transaction costs overall.

However, all the warring states did not completely seclude themselves. *The Account of Money-Making* details how states had closed their borders by the end of the Warring States period, and opened their gates at the beginning of the Western Han Dynasty. This is clearly mere exaggeration. Completely closed-off states would spell the death of B-type commerce merchants, and state leaders—who depended upon the economic power of B-type commerce merchants—would also be negatively affected to a considerable degree. In fact, *Mencius* reveals that state leaders in the Warring States period wanted to attract merchants. He says: "Now if your Majesty will institute a government whose action shall be benevolent … this will cause … all the merchants … to wish to store their goods in your Majesty's market places" (*Liánghuìwáng I* 梁惠王章句上) and "all the traders of the kingdom will be pleased, and wish to store their goods in his market-place" (*Gōngsūn chǒu I* 公孫丑章句上). Also, the merchants and people with vested rights during this period included those who lent grains to people (*Account of Mèngcháng jūn* and *Account of Money-Making*). There were also Western Han merchants that gave loans of grains to lords who had difficulties raising war

funds (*Account of Money-Making*). Many such merchants seemed to have existing during the Warring States period, and some of them also apparently had debts repudiated. This is what happened to Lord Mèngcháng jūn (孟嘗君). Similar examples can be found in Medieval Europe, where Edward III forced the Peruzzi family and the Bardi family into bankruptcy, and Charles V and Philip II forced the Fugger family into bankruptcy. However, such a comparison could also signify that they generally had a strong influence in the city. Merchants of the Han, the Wei, and the Zhao in particular were very powerful, and they would not have silently overlooked the implementation of closed-state policies. With regards to the previous theories on cities in the Warring State period, there is a theory that merchants were in the majority (Utsunomiya 1950), a theory that farmers were in the majority (Miyazaki 1962) and a theory that political cities controlled both merchants and handicrafts (Kageyama 1984). However, the theory that each city operated treated merchants in unique ways currently holds sway (Emura 2000). Cities with dense transport routes, such as those of Han, Wei and Zhao, gained military and economic independence against the backdrop of the economic capabilities of merchants. Many of the cities in other areas (other than state capital cities), however, were underdeveloped agrarian cities (Emura 2000). Thus, the powerful merchants of Han, Wei and Zhou surely would not have sat idly by while closed-state policies were implemented. In fact, coins bearing the city names of Han, Wei and Zhou existed at the same time, signifying the cities' economic independence (Emura 2000). As mentioned before, coins bearing the city names does not always indicate that the coins were minted in private sector, but shows that each city at least had own casters based on a certain economic development and division of labor inside the city. Also, many of the major merchants featured in *Account of Money-Making* were from Zhou, Han and Wei. Thus, after the establishment of the Qin Dynasty, they became the target of governmental regulations and were relegated and banished to remote regions. In other term, this signifies that there were hardly any substantial regulations targeting such merchants before the great unification by the Qin. There was a similar situation in the Qin, and Lǚ Bùwéi (呂不韋) entered the Qin via the Zhou. According to the laws of the Qin, if individuals from other states sought to enter the state, officials at the border station would fumigate the entire horse and carriage of an individual in order to exterminate parasites (Yúnmèng Shuìhudì Qínmù Bianxiezu 1981: no. 549), as well as issue a pass to the *guest* desiring to carry out business in the state (Yúnmèng Shuìhudì Qínmù Biānxiězǔ 1981: no. 184). There are also bronze-made tallies called *Èjūnqǐjiē* (鄂君啓節) among the excavations of written sources from Chu, suggesting that around the seventh year of King Huái (懷王) in the Chu (322 B.C.E.), the King of Chu levied tolls on roads and waterways, and that the envoys of the lord of the È state carried tax-exemption tallies and traded in the Chu's capital (Fujita 2005). Although there were undoubtedly differences in degree, the states did not implement a blanket ban on B-type commerce, and major merchants continued to carry out their commerce under a certain level of economic regulation. Keeping balance with the major merchants, state leaders aimed to prevent the exit of human resources, goods and

information. They did this by permitting a certain number of major merchants to trade and also mutually reinforcing close-state policies, with the Qin also restricting the freedom to take coins out of the state.

What was the exact relationship between the liberalized conditions of B-type commerce and the previously mentioned domestic standardization of bronze coins? Put another way, how did B-type commerce merchants carry out trade as each state issued their respective standardized bronze coins? Knife-shaped, spade-shaped, and round-shaped coins continued to exist alongside one other in Yan, the Qi, the Han, the Wei and the Zhou. But in the Qin, bronze coins were standardized and there was even an order issued to banish coins of other states. At a glance, it would seem that the Qin had ceased B-type commerce with other states. However, as already mentioned, the Qin did continue trade with its neighbors. This being the case, we cannot help considering the possibility that the money used for the Qin's B-type commerce would have been neither Qin coins nor the coins of other states, but instead gold and hemp and silk textiles. In other words, we should consider the *banliang* coin to have been a local money after 336 B.C.E. (or 335 B.C.E.) that circulated and stagnated as demand for local money fluctuated. Moreover, we should consider hemp and silk textiles and gold as inter-regional monies that persistently guaranteed universal value. Lǚ Bùwéi, who entered the Qin around this time, did in fact count his fortune in gold. A Law of the Qin further suggested that if *guests* who lived in the Qin committed crimes in the Qin, they should have to pay fines in coins instead of hemp and silk textiles as punishment (Yúnmèng Shuìhǔdì Qínmù Biānxiězǔ 1981: no. 460). This implies that if *guests* who had just arrived from abroad committed crimes in the Qin, they conversely could not help paying fines in hemp and silk textiles as punishment. This also means that hemp textiles (not coins) were inter-regional monies during the Qin.

Why the Qin Was Able to Unify China While Others Did Not: An Economic Hypothesis

In the preceding section, I answered the question "How did such multiple monies change after the middle of Warring States period?" With all of the aforementioned observations in mind, I would like to pose an answer to one last question: "How did a changing monetary economy influence the economy's structure as a whole and vice versa?" This is the last of the five problems to which I alluded in the introduction. Until this point, I have particularly discussed the fact that multiple economic zones existed in the Warring States period and that there was a rise in individuals (such as wealthy merchants) who tied them together, but have not yet concentrated on what effects these aspects had on the political trends of the Warring States period. I clarify this point in the last section below. In posing this question, however, I do not want to say that the unification of the six states by the Qin was necessarily a cause of their economic development. To begin with, there are various definitions to the term "economic development." This term can mean a

rise in real per-capita income, the state's total assets (stock), or annual productivity (GDP), and so on. At any rate, for the Qin to gain supremacy over other states, it was necessary for them to skillfully accumulate and use their assets and mobilize their army effectively. For these reasons, economic development was not necessarily the only important aspect. However, according to the previously mentioned the Hume–Montesquieu–Kant hypothesis, which considered innovation to be a consequence of free movement and competition between states, there was also a possibility that the state implemented these characteristics would have assumed economic innovation and power. So, were there such states in end of the Warring States period? The answer is that none of the involved states achieved a position of complete and long-term national isolation. As shown below, the Qin, and the Zhao in particular, fulfilled roles that concatenated more than three economic zones, making them exemplars of how to co-opt economic distribution for their own gain. This section will finally explain the ultimate significance of such a process.

After the middle of the Warring States period, the Zhao developed into an area that connected the three economic zones: the Luoyang, Shanxi, and Yan. This development was based on the use of both spade shaped and knife shaped coins. King Wǔlíng (武靈王) of the Zhao had secured the economic connection of these zones by capturing Zhongshan (中山) through the employment of Hu dress and horseback archery. The land of Zhongshan was infertile, but due to the fact that there were three main trade routes that connected East to West, South to North, and South-West to North-East (Lù 1986), this area was a focal point of commerce and trade. As a matter of fact, a fusion of the cultures of the north and middle states can be observed here. Jade goods produced in Hetian (和田) were gathered in Zhongshan, where diamond sand necessary for their manufacturing could be located (Zhōu 1979). There, animals (symbols of the northern peoples) were preferred as the design of the jade goods. King Wǔlíng accordingly secured the diagonal route that tied Handan (邯鄲), the capital of Zhao, to Dai (代), and aspired to obtain three treasures: the dog from the North, jade from Hetian, and horses from Dai (Hashimoto 2006). This was inextricably linked with the previous Zhao strategy. Namely, King Wǔlíng stressed on the capture of the North (see *Biography of Lords in Zhao*), which was in contrast to his various predecessors who had emphasized capturing the South. Using Hu dress and horseback archery, King Wǔlíng won over and enveloped the different people of the North through both military strength and diplomacy. It was by gaining supremacy over the North-Western regions, such as Zhongshan, Yunzhong (雲中), and Jiuyuan (九原) that he was able to unite the economic zones of Luoyang, Shanxi, and Yan. Thus, Handan, the capital of Zhao, was transformed into a commercial city on a grand scale, and became the place where Lǚ Bùwéi, the wealthy Han merchant, temporarily stayed to trade. As previously described, in the outskirts of the city, technical reforms also occurred consecutively, such as in the iron industry, and new fortunes made (C-type commerce). The people that amassed these fortunes combined the material goods, technology, and human resources from multiple economic zones with new ways of doing things, and, for that reason, were the entrepreneurs (Schumpeter 1949) of their day. They also brought great profit to the Zhao. Nonetheless, Zhao's

downfall was caused by: (1) their alliance of the six states against the Qin failed and, surrounded by enemies on all sides, were forced to scatter their soldiers (diplomatic failure); (2) by the end of the battle of Changping (長平), which lasted for 2 years, Zhao lost more than 400,000 men mainly due to the massive tactical failure by the supreme commander Zhào Kuò (趙括) (military failure); and (3) the trade routes of Guanzhong and Luoyang became unsafe due to their military defeat (economic failure). Concerning the detail of the previous discussions on the Zhao economy, please also refer Kakinuma (2013).

In contrast, in the Qin region, especially after the reforms by Shāng Yāng, there occurred continuous economic growth. From a subjective viewpoint, the main factors were: (1) the reforms Shāng Yāng implemented in the middle of the Warring States period, and (2) conquer of Bashu by the Qin.

The aforementioned reforms of Shāng Yāng are generally appraised as having been political measures for constitutional rule, the wealth and military strength of the state, and for the centralization of power. However, this is not the point. Indeed, there were those who imposed political measures for constitutional rule in other states as well, such as Lǐ Kuī (李悝) of Wei, Shēn Bùhài (申不害) of Han, Wú Qǐ of Chu, and Zōu Jì (鄒忌) of Qi. Moreover, recent research suggests that during the latter part of the Warring States period, the land ownership systems of Chu were also both weak and fragmented (Chén 1996). This suggested that the despotic power of the Chu central government may have been expanded. Although many of the positions of provincial governorship in the Qi, Han, and Zhao were held by those of royal descent (Ōta 2007; Shimoda 2008), they were unable to keep a hold on the position for more than three generations at a time. (see *Biography of Lords in Zhao* and *Zhànguó Zònghéngjiā Shū* excavated from Mawangdui). Thus, the problem is what is the significance of Shāng Yāng's reforms, which other states did not have. Moreover, as mentioned above, conquer of Bashu by the Qin could also regard as one of factors of economic growth in the Qin. Although, Qin methods of controlling Bashu have been discussed (Hisamura 1956; Kim 1997; Kudo 2006 etc.), on the other hand nobody has paid attention that the control of the Bashu resulted the connection among three economic zones, yet. Thus, the main theme of this study is explaining that the reforms of Shāng Yāng and the control of Bashu both have the following significance regarding "the security and connection of economic zones."

What has to be noticed here is that, whether or not they were intended to be included in the reforms of Shāng Yāng, water transportation and cattle plowing were highly developed after the reform (see *Biography of Lords in Zhao*). Among other things, water transportation meant that the Qin transferred their capital to Xianyang (咸陽) and began to use the neighboring Wei River (渭水). Although it was not necessarily a result of the revised laws, cattle plowing meant that the Qin increased agricultural production by endeavoring to spread cattle plowing and the recently developed iron farming tools. Reference to these can be found in the revised laws pertaining to "Male Plowing, Female Weaving."

"Male Plowing" was a policy that promoted cereal cultivation by pronouncing that the occupation of males should center on agriculture. "Female weaving" was a

policy that encouraged families to become self-sufficient in making their clothing by pronouncing the occupation of females to be weaving. Thus, the Qin switched from a system that had respected both the traditional hunter-gatherers and agriculture into a system that only attached importance to agriculture and promoted land cultivation (Hara 2005). The agricultural population adjoining the capital, Xianyang, exploded. However, those that could not acquire high-quality land were forced to move to infertile land. In the Qin state at this time, less than 20 % of all the land was suited to agriculture (see *Shāng Jūn Shū*). In spite of this, there is nothing to suggest that the Qin confronted a so-called Malthusian trap (limitations food supply when faced with an increasing population) or a Ricardian trap (limitations of land when faced with an increasing population). The cause lies in the fact that, in 316 B.C.E., the Qin conquered the fertile Bashu, expelling the criminals there and cultivating the land. From c.237 B.C.E. until c.232 B.C.E. they cultivated the Zhengguo-canal (鄭国渠) and secured the extensive agricultural land neighboring Xianyang. In contrast to the Qin, the Wei and the Han seems have viewed overpopulation as a problem (Yoshimoto 1997). Shāng Yāng by himself also recognized that this Malthusian and Ricardian difference would introduce a difference between national powers (see *Shāng Jūn Shū*).

The female weaving policy was also promoted by the Qin. Its existence can be confirmed from Qin legal records made after the reforms of Shāng Yāng (Kakinuma 2011). The economic significance of this policy has, until now, not been specifically discussed, but is nevertheless considered to have had an immense influence on the financial affairs of general farming families at the time. According to *the Instructions to Maximise Agricultural Productivity* (盡地力之教), the reform proposal submitted by Lǐ Kuī of Wei in the early Warring States period, the average Wei farmer's harvest was 150 dan per annum, the tax 15 dan, food necessary to sustain five people was 90 dan and, because of this, the remaining 45 dan was worth 1,350 coins. However, 300 coins was necessary to pay for festival, and 1,500 coins was necessary to pay for clothing. This means that coins were obviously not enough to live. Moreover, because of medical and funeral costs and tax, farmers were constantly indebted (see *Treatise on food and money* in *Hanshu*). The point of this observation is not to figure out if these historical records reflect that coins had permeated the lives of farmers, or to show that Lǐ Kuī only expressed the value of grain in coins to simplify disputes, but that there was a premise that farmers purchased their clothing and that this expense consumed the majority of a family's finances. At that time, there were men in the society who could not marry due to poverty and ones who created their own clothes from felt (Hara 1994). The cause of both results was the high cost of clothing. It can be said that this was a problem that was shared by all of the other various states except Qi, Lu, and Yan, which treated hemp fabric as a special product. However, the female weaving policy meant a reduction in these enormous fees. As such, the life of the average farmer improved, and those who spent their surplus household income not only at lower but also at upper markets began to appear. These points reveal why the Qin promoted the female weaving policy with such force.

Aside from the reforms of Shāng Yāng, there was one more cause for the economic growth of the Qin: their conquest of Bashu in 316 B.C.E. This is because this finally reduced the transaction costs of merchants.

Strictly speaking, Bashu district can be separated to two parts, i.e. Ba and Shu, and the Shu was conquered by the Qin in 316 B.C.E., and officially became the formal administrative prefectures after the turmoil of 285 B.C.E (Kudo 2006). The specific period in which Ba was reorganized as prefectures is unclear, but some historical texts take it be as early 314 B.C.E. In fact, each district in Bashu, such as Shu in the southern part of Sichuan, Ba in the eastern part of Sichuan, and heights in the western part of Sichuan each have their own respective environmental features, and the Qin flexibly governed them in a way suitable to each district (Kim 1997). In this sense, the Qin's conquest of Bashu did not begin and end virtually simultaneously in 316 B.C.E., but was gradually carried out with flexibility.

As a result, while on the one hand the Qin, as the largest state in the Guanzhong economic zone, placed importance on the production of grains and textiles, on the other hand they successfully seized control of Bashu in 316 B.C.E., thereby retaining two independent economic zones within their borders. The reasons why the Qin conquered the Bashu within a short period are as follows: (1) The Qin adjoined the uncivilized Bashu (geographical coincidence). (2) There was a big rebellion in Bashu in the mid- and late- Warring States period (political coincidence). (3) The Chu also adjoined Bashu, and attempted to conquer Bashu before the Qin. But when the Qin invaded Bashu, the Chu main force had already got through the main area of the Bashu, and was located in South of Bashu, i.e. Yunnan (雲南). Thus, the Qin easily invaded the main land of Bashu (military coincidence). In addition, the Qin also focused attention to the trade with Dai district inside Shanxi economic zone and endeavored to import horses. Many people among the Zhao and Qin were actually famous for their rearing of horses. It is known that, from the mid-Warring States period to the beginning of the Western Han period, Guanzhong acquired an enormous profit from Dai and Bashu (see *Stratagems of the Warring States*, and *Biography of Liú Hóu*). The Qin built a system to conduct safely and within their own borders a wide array of commerce (B-type commerce) that exchanged their grain and textiles for other goods quickly with other economic zones. As a result, it became the case that government officials and merchants could safely come and go as they pleased in between two or more economic zones—a fact that caused drastic reductions to "transaction costs." Before this dramatic change, the various Warring States' governing classes were creating mutually beneficial economic ties with wealthy merchants, and merchants could not help asking governing classes to assists in defending them during interregional trades. However, after the conquest of Bashu, merchants did not need the help of the governing classes anymore, if simply due to the fact that the road between Bashu and Guanzhong became safer. Furthermore, the Qin assumed control of the western half of the Chu in 278 B.C.E., and came into possession of the gold located there. From then on, the means of payment in the Qin for penalties relative to the offender's total assets, changed from armor and shield to gold (Inaba 2007). Due to this, the four economic zones, Guanzhong, Bashu, Chu, and

Xiqiang were incorporated into the Qin state. The Qin broke out of the "passive monetary economy" stage, in which it had relied on the import of necessary materials for minting coins from other states. It was therefore able to achieve economic independence. Due to the fact that the "transaction costs" of wealthy merchants had decreased, they gained the ability to increase their profits. It was often the case during the Warring States period that if a wealthy merchant were to come up against a person of political power, they would relocate to another state (a so-called "exit"). However, the wealthy merchants of the Qin and Han empires were not given that chance. They had no choice but to conduct their business under centralized political control that placed the Emperor inexorably at its peak. This was likely the reason that, after the Qin and Han Empires, the merchants began actively seeking to acquire political influence. Otherwise, they could be unilaterally restricted by political pressure. This is the reason why there was a strong conflict between commerce-restriction policy and big merchants in the Western Han period. I intend to conduct further research on this point in another paper.

Conclusion

This study has primarily attempted to answer the five questions mentioned in the introduction. By answering these questions, this study also examined the origins of bronze coin use in the Spring and Autumn period, and its expansion in the Warring States period. Comparing to other world cultures, the variety of inscriptions of the bronze coins in ancient China is perhaps the most enormous and complex. Thus, some take the coins to be the product of private mints. However, the variety of basic forms of bronze coins is limited to an array of minor variances in form, such as the cowry-shaped, the spade-shaped, knife-shaped, round-holed round-shaped, square-holed round-shaped coins. Therefore, there seems to be some sort of overarching principle that regulated these forms of these coins. These shaped coins are loosely modeled after symbols particular to each economic zone. For instance, cowry-shaped coins were derived from cowry shells and bronze ingots, which were used as ritualized gift in the Shang and the Zhou period. They basically began circulating as a means of economic exchange in the upper market after the Spring and Autumn period. In that period, there were multiple economic zones where produced various specialties and resources. There were also lands suitable for farming near Luoyang in which grains, textiles, and salt were exchanged in the lower market. Multiple commodities in the upper market were also imported from other economic zones and mediated by several means of payment, such as bronze coins and gold. This is the reason why most of bronze coins in the Spring and Autumn period and the Warring States period are excavated from the areas of contact between economic zones. Such monetary and commercial innovations between economic zones are rooted in the development of information and distribution networks. Both of them had gradually been constructed before the Shang period, as well as disconnected by several times along the way. These

innovations developed in the Spring and Autumn period and the Warring States period due to mediations required by the free movement of *guests* between states. As a result, each state began minting its own bronze coins after the middle of the Warring States period. The Qin not only attempted to mint their own bronze coins, but also eliminate the coins of other states as well. However, this does not always mean each state attempted to adopt a policy of seclusion. The bronze coin in the Qin was fairly stable and used for commercial activities inside the Qin, and they were not used for economic transactions with foreign states. However, they also used textiles and gold as money in such situations. Bronze coins, gold, and hemp and silk textiles do not have fixed rate. They not only had economic-liquidities as their common function, but also had different circulation channels (especially when used as gifts and rewards). In other words, the turnover number and circulation velocity of various forms of money were both independently and separately determined by the complex relationship between economy, institutions, and customs. These monetary and economic innovations rapidly revitalized commercial transactions in each state. This is especially the case as regards the expanding economic power in the connected economic zones of Zhao and Qin. Although the Zhao had made crucial military and diplomatic mistakes and ultimately declined in the end of the Warring States period, the Qin ended up successfully conquering Bashu. This resulted in a sharp of the transaction costs set for Qin merchants.

So, what about the monetary economy during the Qin and Han periods? After the great unification by the Qin, the differences in ruts, weights, measures and bronze coins were reconciled. In addition, hemp and silk textiles and gold also circulated as concurrent currencies without an absolute fixed rate (Kakinuma 2011). But how did merchants prosper under such circumstances? During the Warring States period, the merchants based their business transactions on various kinds of information supplied by *guests*. And, when the interests of merchants and heads of states clashed, the former could exit to other states. Conversely, under the controls and institutions of the Qin and the Han dynasties, the merchants may have reduced their transaction costs, but were not allowed to exit the dynasty. Alternatively, they may have preferred participating in the Qin and Han political realms. The Rajan–Zingales hypothesis (2003) supports this logic: economic competition with other countries weakens established interest groups that try to maintain the status quo. Furthermore, according to the governmental constraint theory (Silber 1983), under the restrictions and regulations against them, these merchants possibly developed and innovated very well. This, however, is a problem for consideration in another paper.

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