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8.3 Monetary Studies

1. Monetary Theory

During the two to three centuries of the Qing Dynasty, European theories of political economy made a quantum leap upward, but during that time China remained very backward in such matters.

Even by Qing times a natural economy still held an important position in Chinese society, and intellectual life reflected this fact. Though Huang Zongxi (1609-1695) was not a pure objectivist, he forcefully stressed the importance of grain and cloth. His advocacy of the abolition of gold and silver in favor of copper cash has, however, something of a tinge of objectivism to it, since gold and silver more effectively represent the functions of money. He stated:

There are seven advantages to abolishing gold and silver: The little people will have strength enough to supply themselves with grain and cloth, and so their families can easily have a sufficiency of them. This is the first advantage. If coins are cast to make up deficiencies with surpluses from elsewhere, those who cast them will not earn interest, and commodities will not be lacking or exhausted. This is the second advantage. If gold and silver are not hoarded, there will be neither excessively poor nor excessively rich families. This is the third advantage. Frivolous offers being inconvenient, people will find it hard to leave their villages. This is the fourth advantage. Officials will find it hard to surreptitiously hide bribes. This is the fifth advantage. When thieves open chests to steal, their burden will be heavy, and they will be easy to trace. This is the sixth advantage. The way will be opened for cash coins and paper money. This is the seventh advantage.¹

Practically all of this had been said before. He was not discussing money in its own terms, but from some other angle. And yet even so he did not advocate the abolition of money. Nor would he make any positive use of it. Rather he would passively resist it. Actually he would have been better able to reach his goal if money were abolished. Though he was concerned with the livelihood of the little people, and hoped to avoid the extremes of wealth and poverty, if these were not empty words they were empty thoughts. He wanted to keep the little people from being able to leave their villages, and yet this would have profited only the feudal landlords.

In fact he was speaking from the perspective of

¹*A Plan For the Prince*, "Fiscal Plans, 1."

the feudal ruling class. His first sentence was "A latter-day Sage King who wishes to pacify and enrich the Empire must abolish gold and silver." He made this statement after recalling the history of the transition from a natural economy to a monetary economy. He initially cherished the memory of the ancient grain and cloth economy, but because it was too

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unsuited to the needs of the time, he had no choice but to concede the use of money. However, he hoped to use coins to ward off gold and silver. His reason for doing so was that gold and silver were entirely engrossed by rich merchants, large traders, border officials and crafty clerks. Landlords supposedly could not even think of doing so. Nor had the feudal rulers any way to exert control over these metals.

New World silver flowed into China on a large scale during the qianlong period, providing an additional stimulus to China's monetary economy. The newly risen commercial capitalists were supporters of a monetary economy. Perhaps we may say that Zheng Xie was their spokesman. Though he himself might not have been willing to acknowledge the point, he was unwilling to serve as a functionary of that feudal ruling class, and was even unwilling to leave Yangzhou, that most developed center of commercial capitalism. There he led the life of a seller of paintings. In qianlong 23 [1758], he found excuses to console himself by writing:

Whenever anyone brings a gift of food, I would rather it were silver. What the gift-giver bestows may not be what the recipient likes. If ready silver is given, my heart rejoices, and the books and paintings are all fine. If presents are things wrapped with a cord, to return them for credit is like going back on one's word. Age and bodily frailty cannot compensate for gentlemen making useless statements.²

Though he was not being very serious, so blatantly materialistic an attitude toward money is rarely encountered in Chinese history. It may not, however, have been all that rare during the qianlong period, since Yuan Mei also wrote: -

In remote antiquity, the emperors and kings left words behind that in all human affairs place must be yielded to the haughty.³

The price of silver fell and the prices of goods

²*Zheng Banqiao's Collected Works* (Zhonghua shuju edition), p. 193.

³*Song of Coins*.

rose during the qianlong period, but when people referred to prices they were often unclear about their relationship to money. For example, in qianlong 10 [1745], Yang Xifu wrote:

The greater the number of households, the greater the amount of grain they will need, and so prices will also gradually increase.

He continued:

How could fine goods be employed when one's virtue has not even been assured.⁴

This statement of his not only does not pay notice to the factors of production, it does not even refer to the monetary factor. Hence both theoretically and in terms of the actual circumstances of the time, it is flawed. Theoretically, of course a larger population would demand more food, but it could also produce more food, and demand more money. After the tianbao era [742-756] of Tang, the population fell,⁵ and prices rose. After jianzhong times [780-784], the population increased,⁶ and yet prices fell. These things occurred because of changes in production and in the price of money.

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One important reason for the rise in prices during the qianlong period was the fall in price of silver.

Those dealing with the coinage during early Qing were only concerned with maintaining a fixed exchange price between silver and copper cash. They paid little attention to the prices of silver and of copper cash themselves. At most they discussed the advantages and disadvantages of using coins and silver. To maintain the exchange price between the two they often changed the weight of the standard coin so as to make the copper cash rise and fall in parallel with silver. They wanted only to maintain a fixed exchange price between copper cash and silver. No one advocated maintaining a fixed exchange price between money and commodities.

⁴ *Qing History Draft*, 95, "Biography of Yang Xifu."

⁵ In tianbao 14 [755] there were 8,914,709 households and 52,919,309 people (*Universal Record*, "Food and Money, 1"). In guan'ge 2 [764], there were only 2,933,125 households and 16,920,386 people (*Old Tang History*, 10, "Annals of Emperor Daizong").

⁶ In jianzhong 1 [780], there were 3,085,076 households (*Old Tang History*, 12, "Annals of Emperor Dezong, first part"). During the changqing period [821-825], there were 3,944,595 households (*Universal Statutes*). The *Old Tang History* figures for household numbers at the end of yuanhe and the beginning of changqing are not complete.

The Governor of Shandong, Aliai, was perhaps the first to raise this demand. He called for decreasing or increasing the weight of the copper cash in parallel with rises and falls in the price of copper, so that the purchasing power of the copper cash would not change. This was an idea for "rectifying the copper cash system." In qianlong 13 [1748], he stated:

Rice becomes expensive because births increase by the day. The pursuit of secondary activities becomes ever more common. The various textiles are spread thinner, and do not increase, but the price of coins increases, especially as compared with grain. . . . So as to compensate for this . . . first, the coin regulations ought to be changed. The coinage is to copper as the child is to the mother. If the price of copper is to be kept level, then coins must be made heavier. If copper becomes more expensive, the coins must be reduced in weight. . . .⁷

The number of men who discussed monetary questions during the jiaqing and daoguang periods gradually increased. There was a greater leakage of money out of circulation then. Silver tended to become more expensive, and copper cash cheaper, and this placed a heavier burden on the people, while making the government's fiscal situation more difficult. As a consequence some people began to advocate paper money.

The proposal of Cai Zhiding in jiaqing 18 [1813] was one example of this, but Wang Liu (1776-1843) of the daoguang period was an more important representative of this view. He wrote *Simple Words on Coins*,⁸ in which he specifically proposed "circulating paper money, banning copper utensils, and minting large coins."

The paper notes would have seven denominations ranging from 1-string to 1,000-strings, and there would also be three denominations of copper cash, 1-cash, 10-cash and 100-cash. For transactions of 1-string and above, people would use paper money. For lesser amounts they would use coins. Silver would no longer function as money, but merely as raw material for ornamental objects.

The people would be permitted to exchange their silver with the government for paper bills. Those

⁷ *Qing Emperor Gaozong Veritable Record*, 323.

⁸ Wang Liu's original given name was Zhongliu, and some people write his later name, Liu, with the slightly different homonym used in Zhongliu. He published the single *juan Simple Words on Certificates* in daoguang 8 [1828]. Later he destroyed the printing blocks and rewrote the work, changing its name to *Simple Words on Coins*. This work may also have been revised, with the final version being carved on boards in daoguang 17 [1837]. There is also a *Continued Edition* and an *Additional Con-*

making such exchanges for paper money would be allowed a 10 percent premium for silver. Money shops handling issue of the paper notes would also be allowed a 10 percent discount. This was what Wang Liu called a 20 percent profit given to the people.

The 1,000-string and 500-string large Certificates would have aphorisms written on them by master calligraphers, making them look like hand scrolls, so that some people might treasure them as works of art.

At the time of issue of the bills, official salaries would be doubled, and once they were in circulation, salaries would be increased several fold again. Circulation of paper money lay at the heart of his plan. He enumerated a number of advantages to their circulation.⁹ For example, foreign coins would

tinuation.

⁹The number of great advantages to circulating paper money cited by Wang Liu increased over time. In *Simple Words on Certificates* he mentioned twelve great advantages, but in the *daoguang 17 Simple Words on Coins*, "Discussion on Coins and Certificates, 1," he raises 22 advantages of circulating paper money. Elsewhere he says there are 30 great advantages. The 22 great advantages are as follows:

"Any other objects used as money are limited in quantity. Only certificates are unlimited in quantity. If one needs a million, then a million are made. The same is true of 10 million. Thus they constitute a source of wealth whose source cannot be blocked. This is the first great advantage.

"The sovereign right to profit from all goods is concentrated above, and distributed below, thus unifying the state. This is the second great advantage.

"The masses will be inconvenienced by the circulation of paper money. Foreign coins will disappear of their own accord, without their having been banned, thus avoiding the squandering of wealth abroad. This is the third great advantage.

"Seagoing vessels carrying raw and processed opium go off privately each year with tens of millions of Chinese silver. If we use paper money, then they will have no way to gain profit, and will stop this activity of themselves, thereby removing the misfortune of opium. This is the fourth great advantage.

"The people now mostly use cash bills and bills of exchange. Whenever a money shop closes down, none of its bills are any longer of use. If we now circulate our own certificates, then defaults by money shops can be abolished. This is the fifth great advantage.

"The masses suffer from the weight and constriction in supply of silver. Hence they are happy to use private bills. If we exchange these for public certificates, then we will be in accord with what the people's hearts desire. This is the sixth great advantage.

"Once paper money has been put into circulation, we can then ban the manufacture of silver utensils, and acquire copper at

disappear without their having been banned, the ca-

a substantial price. When the copper supply is large, we can mint coins of three denominations: 100-cash, 10-cash and 1-cash, and bring the art of coin making to its apogee. This is the seventh great advantage.

"The state land tax would be entirely collected in certificates, and so there would be no additional meltage and wastage to send off. ["Meltage and wastage" was the surtax charged to allow for the supposed extra expense caused by recasting the broken pieces of silver paid in as taxes before sending the silver to higher levels of government. It was in fact an arbitrary surtax designed to supplement the earnings of local functionaries. EHK] This is the eighth great advantage.

"The inscription on a bill will clearly state its denomination. Even if someone desired to raise or lower its face value, they would not be able to do so, thus halting the depredations of corrupt clerks. This is the ninth great advantage.

"The certificate's value having been fixed, merchants will not be able to raise or lower it, and thus false impressions on the people's minds will be removed. This is the tenth great advantage.

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"Wicked people spread evil teachings, and nurture rebellious schemes, and do so entirely by entangling men's minds with hopes of financial profit. If the state is not lacking in wealth for its needs, and has a reserve for emergencies, then wicked schemes and rebellious ambitions will cease. This is the eleventh great advantage.

"Frontier quarrels invariably arise from struggles over silver. If that is now exchanged for certificates, there will be nothing for people to covet from each other, and thus frontier disputes will be eased. This is the twelfth great advantage.

"Whatever amount of silver exists in the Empire will all come in and be exchanged for certificates, and thus the silver may be offered for casting into utensils and plates. This is the thirteenth great advantage.

"Silver comes in various forms: pure silver, broken pieces and foreign coins. Paper money will restore uniformity, in accord with the customs of the Empire. This is the fourteenth great advantage.

"Rich families who have been hiding silver in holes in the ground, keeping it from use for generations, will upon hearing of the change in the laws, exchange all of it for paper money, and thus eliminate this evil practice constricting circulation. This is the fifteenth great advantage.

"The styles of the bills ought to be changed to follow earlier practice, and they should be divided into several denominations. The large and small certificates should have maxims printed on them to encourage literacy among the people and thus forward in a small way the education of the people. This is the sixteenth great advantage.

"In places where the circulation of goods is impeded, paper money will be used to buy up goods. This must stabilize prices, and thus lead to the circulation of goods in general. This is the

lamities caused by opium could be eliminated, the depredations of corrupt functionaries could be abolished, border quarrels could be ended, prices could be stabilized, hydraulic works could prosper, land could be opened.

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I must point out that Wang Liu was a scholar who specialized in monetary problems, and that this was something rarely encountered in Chinese history. His plan was not something hastily written, but the result of more than thirty years of thought. His *Simple Words on Coins* was a revision of his *Simple Words on Certificates*, and he also brought out a *Continued Edition* and an *Additional Continuation* as supplements. He had studied the statements on circulating paper money since Song and Yuan times, and made these into "Earlier Discussions on the Rectification of Names," which he made a part of his book, and to which he added his own comments. He had also corresponded with famous scholars in and out of office, to explain or debate what he was advocating.

Among the measures he recommended there are some which look preposterous, or are the sort of self-deceptions which allow one to then deceive others. These were limitations imposed by the level of his knowledge, but he had thought things through carefully. He had not only considered a number of

seventeenth great advantage.

"There will be offices to manufacture certificates, and men to manage the work. Because there will be enough to meet fiscal needs, hydraulic works will prosper, and new land will be opened, thus broadening the paths of production. This is the eighteenth great advantage.

"Whenever it is necessary to mount relief operations or encourage construction, there will be no need to make use of contributions from rich households, and thus extortions by officials will be stopped. This is the nineteenth great advantage.

"The state having planned for great affluence, contributions having been permanently halted, then the obstacles on the road to purity in service will have been cleared. This is the twentieth great advantage.

"In matters of transport, river conservancy and salt, there are everywhere traces of accumulated abuses, but there are those who dare not discuss them for fear that there will not be enough money to meet the expense of their correction. With the circulation of paper money, there need be no concern over this, and thus the accumulated abuses in the myriad of activities can be eliminated. This is the twenty-first great advantage.

"In all matters involving taking things away from the people, the government can be stingy. In matters involving giving things to the people, the government can be generous. Thus a humane administration practicing a variety of activities can be carried on. This is the twenty-second great advantage."

domestic issues, but had also given his attention to matters of foreign trade. He knew that paper money could only have efficacy domestically. The international currency would have to be silver. Hence he would permit merchants leaving the country to exchange paper money for silver. Upon their return, they would exchange their silver for bills. [In fact, Wang thereby anticipated twentieth-century mechanisms for control of foreign exchange, a real if dubious honor. EHK]

As a consequence, he virtually developed a completely fleshed out theory. He believed very deeply in this theory, and promoted its spread with a religious intensity. *Simple Words on Coins* was a very loosely organized book, but from beginning to end it was clothed in his advocacy. And so, rather than considering it a work of scholarship, it would be better to say that it was a partisan pamphlet. It is not very long, but made rather large waves in the world of economic theory of the time.

It is said that scholar-officials often treasured and preserved this book.¹⁰ Obviously no small number of men approved of the book, including some at court,¹¹ but once they saw that Cai Zhiding had been dismissed from office, these men dared not openly support Wang.

A very large number of people also opposed him. Bao Shichen did not entirely agree with him. Xu Lian and his younger brother Xu Mei were altogether opposed to him. Xu Mei even wrote a 30,000 character *On Certificate Money* as an itemized rebuttal. Wang Liu considered his opponents to be laymen who held no responsibilities. In reply he asked:

Those who manage public affairs in the prefectures and districts, the clerks who cannot transcend illegal practices, must have their salaries increased, for if their pay is not made more generous, how are they to have their burdens eased so that they can cease their wicked practices? As for the river

¹⁰Xu Lian, *Ancient Balance Pavilion Posthumous Works*, "Discussions on Certificate Money," daoguang 26 [1846].

¹¹In his own preface to *Simple Words on Coins*, Wang Liu writes: "I have placed it before the world, and the Policy Adviser, Mr. Gu Nanya, believes that it is an urgent duty at the present day for the Empire to get to discuss it. The Executive, Mr. Chen Shishi, says he is willing to see paper money circulate. The Minister, Mr. He Xiancha, has deeply assented to this theory. Ma Shen'an examined it, and considered the plan unusual and solid. Bao Shenbo [Bao Shichen. EHK] of the Ming Fu said it had no superior in finely judging matters so as to enrich the state and people. Wu Zhonglun, a brilliant economist, said it was obviously in the first rank of economics books. It may, therefore, be seen that under the vast Heavens, there is no lack of men who have heard of my theories and assent to them as comrades."

conservancy work and the expenses for sea dykes, how is the deficit in their financing to be overcome? . . . If one tries to think of some alternative to certificates as a strategy for rationalizing the finances, can the agricultural land taxes be increased? Can the excise taxes be added to? Can mining taxes be raised? Can contributions be relied upon? In carrying out the northwest hydraulic projects, can one avoid spending the requisite capital? In using the sea transport of the southeast, can one avoid worrying about what comes after?¹²

If he had merely proposed some measures to effect a monetary reform, then it would not be worth our while

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here to get deeply enough into it to introduce a critique of his work. What he advocated, however, was linked to theoretical questions. He treated the circulation of paper money as a kind of universal panacea, just as had Guo Zizhang during the Ming Dynasty on the subject of circulating coins. Each supposed that their remedy could solve all problems of their times, could profit both state and people, enriching both state and people.

Wang believed that Ming fell because of the abolition of paper money. He believed that circulation of paper money could cause no harm to anyone, and that it could be profitable for everyone. His faith in paper money very much resembled that of John Law in the eighteenth century. If he had known that his contemporaries, the French St. Simonians, had the idea of uniting the people to exploit the planet, he would certainly been able to tell them that circulation of paper money could realize that idea. He wrote:

If paper money is circulated, then between Heaven and Earth, there is no profit greater than this.¹³

He added:

Raise the power to profit of the Empire and entirely place it in the grasp of the Superior. Afterward you may bestow grace on all the people within the Four Seas.¹⁴

It is obvious that Wang Liu's explanation of the basic nature of paper money was not a profound

one. On the one hand, he did not deny that paper money had no intrinsic value. Unfortunately, he also said that it was an independent source of profit that was inexhaustible. Actually, however, since paper money had no intrinsic value, then it must be a reflection of the value of other real forms of wealth. If these real forms of wealth do not increase, then no matter how much the quantity of paper money increases, the real wealth for which it stands cannot have increased, and so the amount of real wealth which each unit of paper money represents will decline as the quantity of money increases.

If, when the issue of paper bills is increased, the amount in each person's hands increases in the same proportion, then prices will increase by the same amount, and no one will be harmed, but no one will profit either. If not all prices increase in proportion, then some people will profit, and others will be harmed. There is no change that can profit everyone. [Peng here reflects the key insight concerning money of the Austrian School. EHK]

Wang Liu himself believed that his methods would profit both state and people, but the first people to gain benefits would have been the officials who received salary increases. Those who would receive the greatest benefit would after all be the rulers who held control over money. For the people to exchange their silver for paper money would yield them no profit to speak of. Of course if the paper money circulated smoothly, the monetary system could become more uniform, and foreign silver dollars might perhaps be eliminated. If, by circulating paper money, progress got under way, and production was increased, this would not be without benefit for the people, but this was only a hope and not a sure thing. Wang Liu seems to have realized this, but his ideas were confused. He wrote:

Only if certificates are circulated can the state have all the wealth of the masses of the Empire. Moreover, everyone will immediately obtain a profit of 20 percent. This is a plan [903]

to make a miraculous and everlasting source of wealth.¹⁵

If the wealth of the masses of the Empire was going to entirely revert to the state, how could these masses immediately obtain a 20 percent profit? Was this some sleight of hand trick? He even says that "Though I speak of 20 percent, actually it is possible that the people will get a profit of 100 percent." This second form of profit would have been

¹²Wang Liu, "Letter to Chen Fuya Discussing Paper Money." Cf. *Hezi Garden First Drafts* (daoguang year dingyou [1837], Yihai Hall Collection edition).

¹³Wang Liu, "Letter to Bao Shenbo of the Ming Fu Discussing Paper Money." Cf. *Simple Words on Coins*, "Letters in Reply to Friends."

¹⁴*Simple Words on Coins*, "Discussions of Coins and Certif-

icates, 2."

¹⁵*Simple Words on Coins*, "Discussions of Coins and Certificates, 8."

nominal, an empty one. Only the first one would have been real. The more cool-headed Bao Shichen pointed out, "If you have all the wealth of the masses of the Empire, even though you have it in a principled way, to write about it is rather inelegant. It would be better to consider this further."¹⁶

Wang Liu was a nominalist. He not only considered paper money to be something useless, he also believed copper to be useless as well, something which could not feed the hungry or clothe the cold.¹⁷ He was simultaneously also a quantity theorist. He had stated:

That which makes goods expensive is the scarcity of goods and the plenitude of money. Now, because certificates would be exchanged for silver, money would not thereby be made plentiful, and goods would not thereby be made scarce. How could goods prices jump?¹⁸

He was here recognizing that money's value was determined by its quantity. That is why he says that so long as the quantity of paper money remains unchanged, its value can also remain unchanged, and prices cannot rise. He had also considered how much money China required then. Bao Shichen told him that annual state income was around 40 million ounces. He then stated that the quantity of certificates manufactured could be as much as the state budget for thirty years -- 1.2 billion ounces, or 1.2 billion strings. Bao Shichen said that was too much, and himself only advocated making twice the amount of the annual budget. Assuming 1 ounce as equal to 1 string, that would only come to 80 million strings.

This did not represent a difference between the estimate by the two of the amount of money in circulation in China, but rather a divergence between the two as to what should constitute money. Bao Shichen advocated using cash coins and paper money, but not silver.¹⁹ He also states elsewhere that cash coins and paper should each constitute half of the money supply. Then the entire country's money supply would only be 160 million strings.

That would definitely have been insufficient. Wang Liu seems to have placed his main emphasis on paper money. The quantity he proposed was not

too large, since his large certificate would be a kind of certificate of public debt, having something of the nature of a demand bond, and could probably not take much part in circulation.

Though Wang Liu was a nominalist, he was not a thoroughgoing one, since he still wanted to use coins. Moreover, he changed the title of his book from *Simple Words on Certificates* to *Simple Words on Coins*, and he acknowledged that "certificates really are supplementary to coins."²⁰ This amounted to recognizing coins as real, and certificates as empty; coins as primary, certificates as secondary. Furthermore, paper bills could

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be exchanged for hard money. If this was indeed the case, he cannot be said to have been [or remained] a full-blown nominalist, and the system he advocated would still have been just a variant of a copper cash standard. Of the three coins he called for, the large coins would not have been full value money, but the small coins would have been. He would have limited cash holdings to less than 1,000 strings, presumably per household.

Normally, of course, not every household would have a store of copper coins, nor would it have the ability to keep one, but if paper money were to depreciate in value, then it would be necessary to do so, the ability to hoard coins would be present, and such hoards would have to consist of small coins. The whole country at that time contained some 80 million households.²¹ That would have required 100 billion strings. If popular faith in the paper money had been only slightly shaken, they could have taken advantage of the method of redeeming them for ready cash to return all of the paper notes to the state treasury.

This was something that Wang Liu had not anticipated. He must have been certain that such a phenomenon could not have occurred. He surely believed that the quantity of copper cash required would not have been large, and this is the flaw in his theory. He had written to Bao Shichen:

Once certificates are in use, we wish them to be heavily demanded by the people. Why might we suspect that certificates will be heavily demanded, and coins lightly demanded? Certificates will be what is normally used. Coins will be used for small change. The procedure will be simple to apply, easy to carry out. There is no need to be constrained by

¹⁶"Letter to Bao Shenbo of the Ming Fu Discussing Paper Money." Cf. *Simple Words on Coins, Continued Edition*.

¹⁷"Discussions on Certificate Money: Thirty Questions and Answers on Certificate Money." Cf. Zheng Zhenduo, *Selected Writings of the Late Qing*.

¹⁸*Ibid.*

¹⁹Bao Shichen, "Letter to Zhang Yuanfu." Cf. *Simple Words on Coins, "Letters in Reply to Friends."*

²⁰*Simple Words on Coins, "Table of Contents."*

²¹*East China Continued Record* says that in daoguang 15-16, the population was a little more than 400 million. Assuming five persons per household, there would have been 80 million households.

the Song theory that coins and Account Notes should each constitute half of the money supply. In particular, we need not add silver to the system.²²

He did not realize that even if paper money could be circulated smoothly, demand for copper cash would remain very large, since everyday exchange would mostly be for amounts less than 1 string.

Though Wang Liu's opponent Xu Mei published a monograph of his own, it was merely a criticism of Wang Liu's proposals. He put forward no new theory of his own. Wang Liu lived during the period before the Opium War, and believed that issuing paper money could solve the difficulties which he observed then. Xu Mei's *On Certificate Money* appeared just after the end of the Opium War (1846), a period of even greater difficulties, but he said that paper money could not solve these difficulties. Since paper money was not profitable for the people, the state would be unable to reap the profits anticipated:

If 90 or 100 percent of the people's silver is taken away from them, and they are given yards of paper in return, the state would indeed profit, but how could the people profit? Since the people would not profit from them, the certificates would certainly not circulate, and the 90 or 100 percent profit will definitely not be obtained.²³

This reveals very clearly the exploitative character of the paper money system Wang Liu so energetically advocated. Xu Mei analyzed the relationship between the quantity of paper money and its price. He discussed the expenditure methods the government should follow in its fiscal policy:

... Only by increasing the number of certificates would it be done. If they are not increased, then there would not be enough to meet state needs. If they are increased, then the certificates in the Empire will indeed be sufficient for that purpose,

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but if more are put out, then certificates will be lightly demanded, and there will still not be enough to meet state needs.²⁴

This is the conclusion he reached from summarizing the experience of the Song, Yuan and Ming Dynasties in the circulation of paper money. He pointed out the contradiction between the development of

fiscal policy and the stabilization of paper money. If paper money is not increased, the government cannot meet the fiscal demands on it. If its issue is increased, the red ink can be erased temporarily, and superficially it appears that the state's requirements can be met. If, however, the amount issued exceeds the quantity needed for the circulation of goods, the certificates will fall in value, prices will rise, and the consequence will be that there will still, as before, not be enough to meet state needs. His "if more are put out" must be explained as meaning if more are put out than the amount normally needed.

Xu Mei's elder brother, Xu Lian, seems also to have been a bullionist. He believed only that the quantity of paper money could be reflected in its purchasing power, but that this was not the case for gold and silver:

For all other commodities used as money, changes in their demand [literally, lightness and heaviness] occur. Only for gold and silver is this not so. . . . There have been changes in their supply down through the ages, but the heavy demand for these two commodities has not changed since antiquity. A trifling amount is [not] considered too little to bother with. Millions or tens of millions is not considered too much. As for pieces of paper money, if piled up by the millions, they are cheap; if piled up by the tens of millions, they are still cheaper.²⁵

He added:

If more certificates by the million or tens of millions are issued to the Empire, then the Empire will demand them lightly. If more gold and silver by the million or tens of millions are issued to the Empire, the Empire is certain not to demand them lightly. And so it can be seen that the level of price of commodities is determined by the commodities' intrinsic values, and is not something that men can reverse.²⁶

This attitude is almost identical to that of Aristotle. Aristotle believed that the value of other commodities could fall if their quantity increased, but that silver used as money could not fall in price when its quantity increased because no matter how much there was of it, people would still want it. Xu Lian believed that paper money lacked intrinsic value, but that gold and silver did have intrinsic value, and that this value was not influenced by their quantity. He does not mention, however, how gold and silver acquired their value.

Though Wu Jiabin was not necessarily a bullion-

²²Wang Liu, "Letter to Bao Shenbo of the Ming Fu Discussing Paper Money."

²³Xu Mei, *On Certificate Money*, "Enumeration of the Profits From Certificates, Discussion 1."

²⁴*Ibid.*, "Manufacture of Certificates, Discussion 7."

²⁵Xu Mei, *On Certificate Money*, "Enumeration of the Profits From Certificates, Discussion 1."

²⁶*Ibid.*, "Manufacture of Certificates, Discussion 1."

ist, he placed extraordinary emphasis on copper cash. In fact, because he placed so heavy an emphasis on copper cash, he did not hesitate to oppose the use of silver. He said that ordinary people could exchange their surplus grain and cloth for the goods made by artisans by means of copper cash. If silver were required, it could be bought with copper cash. He advocated maintaining the status of copper cash as full value money. In daoguang 25 [1845], he stated in his *Discussions of the Coin Laws*:

I say that in using coins, their weight ought to be used in regulating them. The weight of the coins cast ought to be determined by the price of copper. If coins are cheaper than copper, then there will occur the misfortune of private destruction of coins. If coins are more expensive than copper, then there will occur the misfortune of private coining.

[906]

In every age there had been people who expressed the same idea, but what these earlier thinkers had mainly expressed was the notion of sparing neither copper nor labor. None of them had expressed themselves as clearly as had Wu Jiabin. He clearly stated that a coin's nominal value and its intrinsic value should match. This thesis shows that he believed that Chinese copper cash, at least those of his own time, had nominal values which did not correspond to their actual values.

This is a complicated problem, one very difficult to clarify in a single sentence: The question of whether or not Chinese copper cash were a full value money down through the ages. It is also problematical whether it is even worthwhile raising this question, given the handicraft manufacturing methods prevailing under a feudal society. Taking into account such factors as the cost of the minting process itself, the material even in gold coins sometimes does not correspond to their nominal values.

Ma Ang opposed nominalism from the angle of the origins of money. China's Legalists or nominalists had generally treated money as something made by kings or as something determined by laws. Though some had said it originated with the merchants, they did not focus directly on the doctrines of the Legalists in raising this point. Ma Ang was the first to do so. In his "Theory That the System of Ancient Money Spades Began With the Merchants of Various Regions During the Spring-Autumn and Warring States Eras," he stated:

The molding of copper into money began in the Spring-Autumn Era. It was not begun by the rulers of states, but by commoner merchants. The people found it convenient, and because convenient, circulated it. The rulers issued no orders prohibiting its private casting. Thus, prior to Qin, it

was circulated and cast by the people, and not by order of the rulers.²⁷

There were other quantity theorists during the daoguang period, Zhu Zun and Wei Yuan, for example. In daoguang 26 (1846), the Censor Liu Liangju memorialized memorialized setting out a method for establishing uniformity between silver and copper cash. The government called on the governors-general to memorialize on the subject. Zhu Zun sent up a communication which said:

Goods are made cheap by a dearth of coins. If coins are few, they are heavily demanded. If they are heavily demanded, then cast more of them, and distribute them to cause them to become lightly demanded. Goods become heavily demanded because coins are many. If coins are many, they are lightly demanded. If they are lightly demanded, then make laws to gather them in and cause them to become heavily demanded. The alternation of lightness and heaviness of demand, of constraint and of loosening, belongs to the officials, and the sovereign power is held by the one above.²⁸

These words had been uttered by men in every age.

Wei Yuan was a thoroughgoing quantity theorist:

Commentators say that mulberry paper money circulated during Song and Yuan, but in both cases, though it circulated at first, in the end it became subject to abuses. Why was this? The multitude of goods mutually regulate each other through lightness and heaviness of demand. Should gold fill the Empire, and become as common as dirt, then gold and dirt will exchange at the same price. It was not that the goods of the Empire were expensive, but that mulberry paper money was in large supply. It was not that the amount of mulberry paper was excessive, but that the state was impoverished.²⁹

This argument of Wei Yuan's closely resembles that of the Frenchman of the previous century, Charles Louis de Secondat

[907]

Montesquieu (1689-1755). Montesquieu had said that if, since the discovery of the West Indies, the gold and silver of Europe had increased twenty fold, then prices should also have increased twenty fold.³⁰

²⁷ *Money Spade Inscription Investigations*, "Theories."

²⁸ *Qing History Draft*, 208, "Biography of Zhu Zun."

²⁹ *Yuan History Newly Compiled*.

[911]

³⁰ *De l'esprit de lois* (1747).

Wei Yuan was not, however, merely a quantity theorist, and did not concede that the inflations of the past had occurred because too much paper money had been issued. He said that the state's poverty was their cause. This was a defense of the ruling class's inflationary policies. Of course if production had grown sufficiently, the quantity of goods would have been able to match even so great an increase in the money supply, and the rise in prices would not have been able to occur. On this point at least his words were not without reason.

Though Xu Lian and Xu Mei opposed circulating paper money, they did not oppose nominalism in principle. It was not until the xianfeng period that Wang Maoyin (1796-1865) clearly pointed out the errors of nominalism.

Wang Maoyin was no opponent of paper money. While serving as Circuit Investigative Censor of Shaanxi in xianfeng 1 [1851], he put forth "A Memorial Requesting Circulation of Certificates and Setting Forth Ten Requisites For a Certificate Law," in which he called for issuing 10-ounce and 50-ounce denomination paper bills. He would only have used paper money to supplement silver, and would not abandon silver in favor of paper. He also wanted limits imposed on the size of a paper money issue, saying "circulate them gradually; limit them with a system." He wrote:

There is no fixed amount of certificates, and so issuing them without limit seems to offer a source of great profit. It is not understood that if their issue is excessive, their value will cheapen excessively.³¹

At the beginning of xianfeng 3 [1853], giving as his reason that "silver bills cause losses for merchants; silver houses cause losses for the state," he opposed the issue of paper money. This would have been paper money not redeemable for cash. In the 11th month, the government was going to begin casting large coins with face values of 100-cash, 500-cash and 1,000-cash. Most people then believed that so long as a high face value was established for a coin, no matter how much its weight was reduced, its purchasing power would not be affected. He criticized this idea as follows:

Those who argue this way also say that once the state has established a system, then if a coin is given a face value of 100, then it will be 100. If it is given a face value of 1,000, then it will be 1,000. Who would dare to disobey? This is a sincerely held view, but though the officials can determine a coin's value, they cannot limit the values of goods. The peo-

ple would not dare to use a coin with a face value of 1,000 as a 100-cash coin. They would not find it difficult to price at 1,000 a good with a value of 100.³²

This passage distinguishes very clearly between money's face value or nominal value and its purchasing power. What Wang Maoyin means by the value of a coin is its face value. By value of a good he means the price of a commodity or the coins' purchasing power. Though the government can determine the nominal value of money, it cannot determine its purchasing power. This is a correct view of things.

These are the most important of those who discussed monetary theory prior to the Opium War. There was not much that was original in them. For example, concerning [908]

money's origins, there were two theories. One held that it was set up by the officials. Lu Zhi, Yang Yuling and Su Che had held this view. Lu Zhi said money had been made by the officials. Yang Yuling said that it had been systematized by the monarchs. Su Che said it had been made by the state. All had the same idea.

The other theory held that money had originated in the exchanges of merchants. Sima Qian and Ye Shi held this view.

No one, however, had contrasted these two theories, analyzed them, or gone deeply into them. Proponents of the origins through legal determination theory did not criticize the origins through exchange theory. Nor did the exchange theorists explicitly oppose the legal determination theory. The two were like the well water which does not intrude into the river water --each was content to mind its own business. For several millennia each spoke for himself, and took no notice of the other's ideas. Only Ma Ang of the Qing Dynasty made the attempt, but he did not go deeply into the problem.

As for the problem of the relationship between the purchasing power of money and its quantity, ever since the *Guan Zi* had stated "when goods are numerous, they are cheap; when few, they are expensive," for more than two thousand years those who approved of this statement could do no more than repeat it. He Shangzhi of the Southern Dynasties said: "If money's quantity is great, then goods are heavily demanded." Liu Zhi of the Tang Dynasty was also unable to transcend the idea that if something is numerous it will be lightly demanded, if scarce it will be heavily demanded. Li Gou of the Song Dynasty also stated: "If coins are numerous,

³¹ *Memorials of Expectant Executive Wang*, 1.

³² *Ibid.*, 6.

then they will be lightly demanded," and "if coins are few, they will be heavily demanded." Yuan Xie said of paper money, "if it is numerous, it will be cheap; if scarce, then it will be expensive." Xia Yuanji of the Ming Dynasty also said, "if certificates are many, then they will be lightly demanded; if scarce, they will be heavily demanded." Right on down to Zhu Zun of the Qing Dynasty we keep on seeing these same old words.

During this period of more than two millennia, there were also some views arrived at independently. For example, Liu Zhi of the Tang Dynasty raised the question of the relationship between the purchasing power of money and the size of the population. Shen Gua of the Song Dynasty had an idea concerning the velocity of circulation of money. Xu Heng of the Yuan Dynasty proposed that monetary inflation was a debt owed to the people. Chen Zi'ang of the Ming Dynasty denied that paper money was money. Aliai of the Qing Dynasty advocated stabilizing the purchasing power of copper cash. All of these were merely flashes of illumination, and none of them captured general attention. No one erected an organized theory on the foundations set down by his predecessors.

So far as monetary theory was concerned, China remained in a state of arrested motion for two millennia or more. Not only was Chinese monetary thought not high in character, it was not quantitatively wide.

What was the reason for this? Conservatism in thought, intellectual inertia, the rulers' failure to promote progress, the slighting of economic problems by the scholar-officials were all factors. I suspect, however, that these were all superficial causes, because Europe during the feudal age was also like this. It was not until the beginning of the capitalist age that the study of monetary theory began to progress there.

The real reason for China's lack of progress was that monetary problems are not of central importance in a feudal society [as Marxists use that term. EHK]. The livelihood of the scholar-official class was not greatly threatened by monetary depreciation. The foundation of their livelihood lay in the land, and the greater part of the gain from land [909]

was not in money.

Capitalist society replaces landlords with capitalists as the rulers. The income of capitalists is entirely in money, and monetary problems come to be seen as the central economic problems. What causes changes in the purchasing power of money is a question of the first importance for capitalists. Hence they need scholars to study these questions.

2. Late Qing Monetary Thought and the Monetary Reform Movement

Chinese intellectuals gradually came to be concerned with foreign affairs after the Opium War. Particularly after the first Sino-Japanese War of 1894-5, the old theories could no longer fit the new complicated situation. Capitalist culture and scholarship began to be introduced into China. Among those who exerted themselves along these lines were Huang Zunxian, Yan Fu, Kang Youwei, Zheng Guanying and Liang Qichao. These men had all gone abroad, and some had even received their educations in capitalist nations. Yan Fu, for example, was among the first to have gone abroad to study. They all wanted to introduce the capitalist system to China.

Huang Zunxian (1840-1905) was an early representative of this group. He had lived in Japan, and had come into contact with the new ways. At the beginning of *guangxu* he wrote a *Japan National Record*¹ It contained a "Treatise on Food and Money," which in its discussion of monetary questions expressed his approval of paper money. He spoke of the advantages of paper bills:

During Tang there were Flying Tickets. During Song there were Certificate Vouchers. Now there are banks and coin shops scattered among the marketplaces, and people clamor to exchange their precious things for empty pieces of mulberry paper. Those who carry on trade within the Four Seas carry lengths of such tickets, and though they be ten-thousand *li* across the seas, they rely exclusively on these to obtain what they desire, with there being no difference from what would be the case if they had carried specie with them.

He added:

Of late, goods have been used excessively and wastefully. The value of coins has been such that they have become more lightly demanded by the day. The quantity of coins has become greater by the day. Lightly demanded and numerous, it has become difficult for them to reach afar. Their fineness has varied, as has the quality of their minting, and their weights. When the people have exchanges to make, cheaters take advantage of such differentials to market their counterfeits, thereby making convenient use of gold and copper increasingly complex. The substitution of mulberry paper money enables the substitution of the light for the heavy, the simple for the complex, and so people will compete to take advantage of its convenience. Even the capital

¹The *Japan National Record* was written at the beginning of *guangxu* [1875], and was reprinted by the Zhejiang book Store in *guangxu* 24 [1898].

of a man of middling means is sufficient to set up a business in the market to exchange silver for paper money, and so how much more sufficient is the strength of the state for doing so. Would not the state be as superior in this as a duck is in taking to water?

As for the characteristics of paper bills, he says that mulberry paper money might serve as a substitute for specie, by which he meant that paper money should not be used as specie.

[912]

Evidently what he wanted was an exchange ticket or warehouse receipt, and not a paper money. In other words, he did not consider paper money to be true money. Hence he called for 100 percent specie backing for it:

If there is gold, silver and copper corresponding to the mulberry paper in circulation, then the latter is a convenience for the people. If, lacking gold, silver or copper backing, it rests on some empty promise, and is manufactured recklessly and without limit, it is easy to see the abuses that will arise.

Among those late Qing intellectuals who had contact with foreign affairs, I suspect none had a deeper understanding of monetary questions than Yan Fu (1853-1921). He wrote no specialized books or essays on money. His views are scattered within the notes to his translation of *The Wealth of Nations* [translated with the Chinese title *Yuan Fu* --The Origins of Wealth].² We learn from these notes that he had read the important contemporary English studies in economics. He was not in complete agreement with the views of Adam Smith. At times he even puts forward supplementary ideas of his own.

For example, in his notes to the section "On the Origins of Money," he points out the four advantages of metal money: portability, incorruptibility, divisibility and value which does not abruptly change. Of course he did not think these up on his own. They had been stated by other contemporary English economists. He believed that increased output from the mines would make it difficult to preserve the fourth advantage. This comes out in his view concerning the value of money and commodities. He believed that the value of goods was entirely determined by the relationship between supply and demand. Therefore he did not altogether approve of Smith's labor theory of value:

Smith takes the labor of producing goods as their true value. The height of the value depends on the difficulty and amount of the labor. Though his words are plausible, as the saying goes, even the wise are not always free from error.

An object has no fixed value; its value is solely dependent on the interplay of supply and demand. If supply is small and demand great, it is hard to obtain, and hence is expensive. If supply is great and demand is small, it is easy to have, and hence is cheap. If something is hard to obtain, it does not necessarily contain a great deal of labor. If it is easy to own, it does not necessarily contain little labor.

One *mu* of land in a remote location could not be sold for a price of several pieces of gold, but if it was in the middle of the capital city, people would compete to buy it even at a price of 10,000 in gold. How could labor make a difference in this case?

The fruit from a tree, if it faces the sun and so becomes large and sweet, will fetch a good price. Fruit which is in the shade, and hence is small and sour, will be rejected by people. What difference can labor make in this case?

Value, therefore, is a straightforward matter. [This is a neat pun. "value" and "straightforward" are homonyms in Chinese, both pronounced *zhi*. EHK] Two nominally similar things are matched and numbered. If it is only a matter of the labor they contain, then things stand in isolation, and their value would not vary over time. This is why no later scholars have followed Smith's theory on the true value of goods. (Notes to "On the Difference Between the True Value and Market Price of Goods.")

Such a point of view was probably influenced by the thought of the epoch after David Ricardo. Actually, labor value theorists do not deny the influence of supply and demand.

Yan Fu believed that money was merely a symbol of value, and was not in itself intrinsically valuable:

[913]

Money is what is used to name wealth, but is not true wealth. If the link between that which is nominal wealth and that for which it is exchanged is lost, then these three articles are no different from so many parcels of dirt. (Notes to "On the Origins of Money.")

Hence in discussing money's value, he comes close to quantity theory. In his theory of its intrinsic nature, he belongs among the nominalists. Nevertheless he provides a deeply penetrating explanation of the true significance of changes in price. He knows that to look solely at the quantity of money is of no particular significance. You must compare the people's income with the prices of articles of daily necessity:

For example, we may discover that during early Ming times, the price of a ton of iron was £6 in England, and the price of

²The *Origins of Wealth* was translated in Guangxu 27 [1901]. Quotations here are based on the 1933 Commercial Press edition of *Collected Famous Translations of Yan*.

a ton of lead was £5. Now the former costs £5, and the latter £20. This, however, is only to speak in terms of money, and not in terms of real value. If you wish to obtain the real value, then you must learn that during the last 500 years English wages expressed in wheat have allowed the people's livelihood to steadily improve, and because of the steady increase in the quantity of gold and silver, prices have increased nine fold. Using this as the basis for evaluation, although iron has diminished in price by just £1, its current price is only one-tenth its original level. Although lead is four times its previous price in terms of iron, in real terms it is cheaper by one-fourth than its former level. Therefore, those who look only at the nominal situation and forget the reality, are not worthy to speak with concerning planning for the state. (Notes to "Explaining Wages.")

He also wanted to employ various doctrines to regulate the people's income and tax burdens so as to stabilize their standard of living. He believed that both China's land taxes and official salaries at that time were irrational. Food prices had increased, but official salaries had not changed. How then could men be held responsible for maintaining their incorruptibility in office?

The state has maintained the Yuan and Ming system of salaries. Times are different, and the world has changed. It has already been 500 years, and the use of this intermediary has not changed. [Yan Fu uses the term "intermediary" *-yi-zhong-* to refer to the intermediary of exchange, in this context meaning money.] Therefore, in discussing proclamations on official pay, if today's officials are to be incorrupt, it must not be a matter of depending solely on the men. Nevertheless, if we now speak of establishing good order, to not begin with the determination of the land tax and official salaries, will make it impossible even for a Sage to accomplish anything. (Notes to "On Money.")

His measures for determining the land tax and official salaries were to link them to a price index. Official salaries and taxes would rise and fall along with this price index. Though such a view would not have been considered unusual in England then, its introduction into China was very progressive. The Chinese intellectuals were then in the midst of a debate on the official salary system.

In addition he also had things to say about the inability to maintain a gold-silver bimetallic system and about the advantages of paper money.

It was in *guangxu* 21 [1895] that Kang Youwei (1858-1927) sent up his third memorial setting forth methods for rescuing the state. His first proposal was on paper money. He too was a proponent of issuing paper money. He believed this was a way to collect the wealth of the nation, and that in an emergency great amounts of money could be

raised.³ In *guangxu* 31 [1905], he wrote *A Rational Form of Wealth For Saving the State*.

[914]

In it was a section "On Monetary Systems." In *guangxu* 34, the book's title was changed to *An Argument For a Gold Standard to Save the State*,⁴ and it was published. This was a work of about 70,000 characters, which can only be said to have dealt with monetary systems. It was not a work on monetary theory. Kang devoted more space to historical narrative than to theoretical analysis, but he did touch upon some theoretical questions.

For example, the first subheading, "Theory That Monetary Systems Come Out of the Inability to Complete Exchange of Goods in the Market," discusses the question of the origins of money. Kang Youwei obviously did not believe that money was the creation of the monarchs or of the laws, but rather that it was produced spontaneously:

Those who made exchanges in the market were, on the smallest scale, single individuals who were unable to complete their business, and on the largest scale, were those carrying out the business of the state. . . . However, goods were too various and heavy, and were inconvenient for what people felt appropriate. Moreover, goods were often coarse and heavy. To reckon equivalences between them was certain to be difficult to accomplish. If it was desired to divide them, it was not possible to do so. And yet it was also not possible to give up equality of exchange. Thus it was necessary to think of how to obtain a substitute article to use as an intermediary of exchange. If an intermediary substitute good was possessed, one could assure both sides in an exchange equal returns, which was something especially desired among men. And so money arose. As men became more numerous and wiser, as exchange became more complicated, it became necessary to create new methods for profitable use by the former peoples, and under no circumstances could use of money cease.

He believed that money arose as a medium of circulation and measure of value. His statement that its use "could not cease" undoubtedly referred to its use being a result of natural law, a matter of necessity. He also discussed the nature of paper money. He knew that paper money represented gold, silver, copper and iron cash, that metal money was "real metal," while paper money was "nominal metal," and that the reason why people trusted paper money

³Record of Four Private Memorials.

⁴*An Argument For a Gold Standard to Save the State* was published by the Guangyi Book Store in *xuantong* 2 [1909], 12th month. The author's preface states it was completed in *guangxu* 34 [1908].

was that it was backed by metal money. If the metal money was insufficient, the paper money could not be maintained. If there was no metal money at all, the paper money could not circulate. If the metal backing was abundant, then the quantity of paper money could be multiplied, just as a man's shadow could expand as his body became broader:

The ancients used real metal in planning rationally for wealth, and so established limits. Those who nowadays plan for wealth are good in using empty metal, and thus have no limits at all. Nevertheless, there is nothing impressive about using the empty to back the empty, and so their money does not circulate. To circulate it must rely upon the real. To use the real for the real, provides no premium for expansion, and so the money supply cannot proliferate. Thus the empty must be utilized. Therefore it is the case that without the real, paper money cannot be established, and without the empty it cannot be circulated.

He added:

Pieces of gold and silver are the substance. Paper money is their shadow. The shadow may be larger than the substance which casts it. The public debt is the extended shadow, and the banks are the spirit behind it. The banks use gold as their basis, to serve as their backing for the issue of paper money. The state issues instruments of public debt to the banks, and the banks give paper money to the state to buy this debt. The banks acquire the public debt to serve as the backing for paper money, and may issue paper money in exchange for real metal.

[915]

This latter passage is simply an introduction to the methods of the Bank of England.

Kang Youwei was not the first to talk about banks. As early as xianfeng 9 [1859], Hong Rengan (1812-1864) discussed the advantages of setting up banks and issuing bank notes in his *A New Financial Policy*:

This matter is of great profit to the merchants, the gentry and the people. It is more convenient than carrying wealth along in one's comings and goings. One may have 10,000 in metal on one's person without others realizing it. If it is deep in a river, then it is lost to one's self, but if it is deposited in a bank, the wealth still exists. Even if one encounters thieves, it would be hard for them to suddenly carry it off.

In guangxu 18 [1892], Zheng Guanying (1841-1918) wrote *Words of Warning to a Flourishing Generation*, containing two chapters on "Banks," in which he strenuously promotes establishment of banks. He enumerates ten advantages of having banks:

The rise and fall of banks is implicitly linked to the basis of the state. Above and below, far and near, their voice reaches everywhere, gathering in the state's wealth, and accumulating the state's profit. The response is a vibrant one. A shortage of money does not appear. This is the first advantage.

If the state has a great enterprise afoot, like building a railroad, establishing a shipyard or any of a variety of industries, it may by such means raise funds. This is the second advantage.

If a nation has military or relief obligations, or the need to provide emergency aid which arises unexpectedly, with a single call, a way to manage the situation can be established. This is the third advantage.

When the state borrows, it need not pay heavy interest. The banks themselves have fixed regulations. There are no abuses in having things go through their hands. This is the fourth advantage.

If the state's debts accumulate steeply, and its repayments are not sufficient, it can remit funds to other places without drawing up bills as evidence for such remittance, and use the entire country as its collateral. This is the fifth advantage.

All of China's affluent families, silver houses and money shops may temporarily be incapable of keeping circulation lively. The banks may have the power to move aside a number of obstacles so that trade in the market is not harmed, but rather is broadened. This is the sixth advantage.

If the public funds of the provinces are deposited in banks, each of the Maritime Customs official silver houses will annually receive interest of several hundred thousand ounces, and when the funds are required, they will be paid out, just as though they had been kept in the treasury, except for the annual receipt of interest which can be applied to public purposes, and not be secretly taken over by profiters. This is the seventh advantage.

Officials will amass salaries honestly. The people will store up capital from their toil. Deposits will generate interest without any further worry. This is the eighth advantage.

Chinese merchants who go abroad may remit funds. If corporations are founded, they will not fall under the control of foreigners. This is the ninth advantage.

If there is not enough silver on the market, they can circulate bills of exchange based on their reserves to supply the deficit. This is the tenth advantage.

He had noticed that foreign banks were not under Chinese supervision, and that Chinese merchants were being discriminated against by foreign banks. This led him to still more forcefully advocate establishing banks:

As of now, the silver bills used by foreign merchants do not have their backing verified by either Chinese or foreign officials. They are made solely at the whim of their issuers,

without regard to quantity. I have heard that over a million in Hong Kong & Shanghai Banking Corporation bills are circulating in Guangdong province, and that this bank has already obtained a book profit of over 2 million. Though it has Chinese merchants as shareholders, it has no business dealings with Chinese merchants. Even if borrowers have shares in substantial Chinese corporations, it does not accept these as collateral. It only accepts as collateral the goods or shares of foreign corporations. Western merchants exert the authority, and Chinese merchants lose their profit. Chinese merchants aid in the accumulation of capital, but foreign merchants receive the increase.

[916]

Zhang Jian (1853-1926), in his book *A Fair Debate On Changes in the Laws* has two chapters on "Circulating a Gold Pound and Changing the Coin Laws" and "Establishing Banks and Using Paper Money."

Liang Qichao (1873-1929) wrote no small amount on money. In *guangxu* 23 [1897], he wrote an essay, "On Rises and Falls in Gold and Silver," which was chiefly devoted to a criticism of Yang Yizhi's "Memorial Requesting Manufacture of Gold and Silver Coins." In this essay Liang pointed out that China could not use a secondary money as an instrument for making international payments. This was correct. He also in passing raised the question of money's nature:

Now money will not feed the hungry or clothe the cold, but if one carries it, one may obtain clothing and food. It is really only a number which stands for clothing and food. If everyone so uses it, it becomes a true number. Such a substitute number [perhaps Liang's version of the French term *numéraire*, meaning "enumerator." EHK] must be extremely simple to exchange, light and convenient. Then, given human nature, people will accumulate ever more of it.

This passage is not very clear. His term substitute number would seem to mean something like an instrument for making purchases. But as he gives great weight to money's ease of exchange, lightness and convenience, evidently he gives precedence to its role as a medium of circulation. Though Liang liked to flaunt his scholarly rationality, his discourse has plenty of points of self-contradiction. For example, he denied that China could mint a less than full intrinsic value shilling to use for making foreign payments, but at the same time argued that the odd left-over amount in a large sum could be so used. Actually such a remainder could not be so used.

In *guangxu* 30 [1904], he wrote *The Chinese Monetary Question* solely to criticize the introduction to J. W. Jenks' "A Discussion of China's New Dollar Law." This critique was over 10,000 charac-

ters long, and mostly dealt with practical questions. In *xuantong* 2 [1909], he wrote "A Discussion of the Monetary System," "A Short History of the Reckless Minting of Copper Dollars By the Provinces," and "A Discussion of the Aftermath of the Memorials on Rules for a Monetary System and a Board of Revenue and Finance."

The abovementioned men stood in the first rank in the world of Chinese thought during late Qing, but if we wanted to find out from their writings and statements what insights they had on monetary theory, the task would be hopeless. They did not touch upon the highest and deepest theoretical questions. They did not even develop further those theories already present in China. What they accomplished was merely the preliminary labor of introducing some new knowledge on monetary system problems, such as the problem of what monetary standard to adopt, the problem of free coinage, the problem of the relationship between a primary and a secondary money, the problem of the law that a bad money drives out a good money, and the problem of the functions of money. In China's past, either these questions had not been raised, or they had not been raised clearly.

These men were merely attempting to introduce some common textbook knowledge from the capitalist nations of Europe, the United States and Japan. In fact, they themselves were not necessarily clear on these problems. Liang Qichao, for example, never went sufficiently deeply into either theoretical or practical questions.

[917]

He knew that a nation could not use law to compel the circulation of gold and silver in the market, but he supposed the state could enforce a given gold-silver exchange price.⁵ This was self-contradictory. In this respect he had evidently fallen behind Yan Fu.

The aforementioned reformers or innovators of that time in their discussions on money and credit merely wanted to introduce the capitalist money and credit system into China, so that China could adopt such a system. Hence most of their writings and discussions revolved around the question of the reform of the monetary system. They did not cry out in vain. Their proposals led in late Qing to the rise of a fervent monetary reform movement. A number of people did not stop at empty discussions, but directly promoted specific measures. Even the Qing Dynasty's government was driven to study the question of the reform of China's monetary system.

Reform of the monetary system did not just begin after the first Sino-Japanese War. Wang Liu had loudly called for reform even before the Opium

⁵"A Discussion of the Monetary System."

War. In xianfeng 3 [1853], the Reviewing Policy Advisor Zhang Xiangjin memorialized a request that gold implements long stored in the Inner Palace be minted into gold coins to be put into circulation throughout the Empire alongside silver. In xianfeng 4 [1854], 8th month, the Governor of Shaanxi, Wang Qingyun, advocated using all three metals, with gold and copper to supplement silver, since silver was scarce and expensive. He did not call for minting gold coins, but merely the circulation of pieces of uncoined gold, with 1 ounce commuting 20 ounces of silver. Later, the Acting Governor of Shaanxi, Dai Ling, also supported this plan.⁶

That, however, occurred during time of war, when the money in circulation was insufficient, and the intent was to use gold as a supplementary money, rather than to advocate a gold standard. The ideas behind these men's reforms were old fashioned, not differing much from the ideas behind early Qing or pre-Qing reforms. They cannot be lumped in with the late Qing monetary reform movement.

In the last years of the tongzhi period [early 1870s], a number of large European nations adopted the gold standard. Silver fell in price, Chinese money steadily fell in price against foreign money, and the foreign trade deficit grew year by year. In the view of people then, this was extremely unprofitable for China. For this reason the number of people calling for reform of the monetary system steadily increased. Especially in the aftermath of the First Sino-Japanese War, the burden of China's foreign debt and indemnity payments grew invisibly because its debts and indemnity obligations were expressed in terms of gold. Hence advocates of monetary reform all took adoption of a gold standard as their goal.⁷

⁶*Qing Dynasty Investigation of Literary Remains Continued.*

⁷*Ibid.*, "Investigation of Coins," guangxu 23 [1897] memorial of the Policy Counsellor Yang Yizhi: "A telegram has arrived from the Inspector of the River and Maritime Customs, Liu Qixiang, stating that on that day the English gold pound's value was equal to one [sic] Shanghai standard ounce and 2 shillings 4 pence. The next day, word was transmitted from He De of the Investigation of General Taxation Office, that recently the pound's value had increased from 7 ounces to a little over 8 ounces . . . Both of these statements indicate that the value of the pound has continued to increase. Thus China's tax income and expenditures have both suffered losses. The loss in paying off debts has been especially large. . . . In former years I have made calculations for each nation. . . . The coins of all nations can circulate, but only gold coins are found especially convenient. . . . During the tongzhi period, a pound was equal to 3.33 Chinese Shanghai standard ounces. In the Spring of guangxu 13, a pound

In guangxu 21 (1895), the Prefect of Shuntianfu, Hu Yufen, proposed one of the Self-Strengthening Movement reforms. He advocated setting up offices in the ports of each province to mint gold, silver and copper coins, and that the Board of Revenue establish a modern bank to issue

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paper bills.

In guangxu 22 [1896], Sheng Xuanhuai also memorialized a request to reform the monetary system. He wanted to establish a silver dollar general office in the capital, with branch offices in other provincial cities, and begin to mint silver coins. Each of these dollars would contain 1 capital standard ounce of 90 percent fine silver. The government should then consider minting gold coins and small silver coins to circulate together with the large silver dollars. Use of Original Treasure small ingots would be banned. Modern banks would simultaneously be opened in the capital and in Shanghai.

A number of other people called for monetary reform, for example Yang Yizhi, Peng Gusun and Hu Weide, but none of them proposed concrete methods for carrying it out.⁸ It was not until after the Eight Power invasion of China in guangxu 26 [1900], when an indemnity of several hundred million ounces payable in gold was assessed by the powers, and the price of silver fell still lower, making China's burden become still heavier, that it became indispensable to establish a way to stabilize the foreign exchange price of the nation's money. It was only then that various specific plans were proposed.

The first of these was in the *Simple Words on the Coinage* by the Expectant Daotai of Jiangsu, Liu Shiyan, which appeared in guangxu 29 (1903). He advocated the adoption of a gold coin standard, with the minting of \$5, \$10 and \$20 gold coins, along

was equal to 4.165 ounces. . . . Now a pound is equal to a little over 8 ounces."

In his memorial requesting minting of gold and silver coins, Mr. Yang supposed that the English shilling only weighed 0.15 ounce, and was equal in use to 0.44 ounce of uncoined silver. He supposed our country could mint 0.15 ounce of raw silver into a Chinese shilling of the same size and weight as the English shilling, and that used for purchase of ships and repaying indemnity it would be discounted as equivalent to 0.44 ounce of silver.

At the time, Liang Qichao raised an objection, saying that the English shilling was limited to making payments of 19 coins or less. For payments of 20 coins or more, the pound sterling was used. (Cf. "On Commercial Affairs," *Journal of Current Affairs*, 39.)

⁸*Qing Dynasty Investigation of Literary Remains Continued.*

with silver and copper supplementary coins, as well as the establishment of a national bank to issue paper money. The standard coin (meaning a \$1 gold coin) would not need to be minted. It need only to have its value fixed as equal to 1 treasury ounce of silver. The \$20 gold coin would weigh 0.62 treasury ounce, and be 903 parts fine.⁹ He did not make clear

⁹The contents of Liu Shiyao's *Simple Words on the Coinage* is as follows (*Qing Dynasty Investigation of Literary Remains Continued*):

1. Establish a three-level coinage, with gold as the standard, and a fixed exchange rate with the coinages of other nations.
2. The whole country's system of coinage must be under one institution. . . . An office should be established in the capital with a monopoly over the minting of the three levels of the coinage which would circulate in all provinces. The mints previously established in the provinces should cease operations simultaneously.
3. I request that there first be established an assay office next door to the mint in the capital, and that an excellent chemical analyst be invited to become its head. All coins minted would be required to have their fineness assayed by this office, and to prominently display its mark.
4. First negotiate a median gold-silver exchange price with each nation with which we engage in commercial intercourse. There will be a three-level coinage, with a unit of gold in the primary position. Under this gold standard, \$1 must contain the equivalent in gold of 1 treasury ounce of silver. This is the most important consideration in fixing the gold-silver exchange price.
5. Set up a nationwide investigatory police force to guard against private coining.

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Appended was a description of the three-level coinage:

1. Gold coin 20-fold gold \$20 0.625 treasury ounce, 903 parts fine, copper 100
\$10 0.312 treasury ounce
\$5
Gold unit (This coin need not be coined.)
Silver coin 10% 0.5 ounce silver 0.2 ounce 0.1 ounce
white copper 5% 0.05 ounce
purple copper 2% 0.02 ounce 0.01 ounce
ordinary copper-coins 0.005 ounce 0.002 ounce
0.001 ounce
2. Set a time limit to collect copper Circulating Treasure coins, and remint them into 0.001 and 0.002 ounce copper coins for popular use internally.
3. Issue paper money to stand in place of gold dollars:
 - a. Bills for everyday use in denominations of \$1, \$5, \$10, \$20, \$50, \$100, \$200 and \$500, to a total of \$90 million.

what should be done if the gold-silver exchange price changed.

The second of these was "On China's Silver Price as a Determinant of its Gold Price," by the Inspector General of the Imperial Maritime Customs, Sir Robert Hart.¹⁰ He advocated adoption of a gold exchange standard. The government would establish a central mint to turn out 1-ounce, 0.5-ounce, 0.25-ounce and 0.1-ounce silver coins, as well as copper coins to be placed into circulation. The standard gold unit coin would not need to be minted. It would only be necessary to maintain an exchange price of 8 ounces of the new silver coinage to 1 English gold pound. The silver coins might, however, be freely coined, so that this would become a bimetallic gold-silver coin exchange standard.

The third of these was the plan of Jenks. In *guangxu* 29 (1903), the United States Congress established an International Exchange Commission to

- b. Internal market exchange bills. c. Foreign market exchange bills. d. National savings gold bills. e. National debt bills.

4. Establish a national bank with local branches to put the new system of money into circulation.

¹⁰The content of Hart's proposal is as follows (Cf. Jin Guobao, *The Problem of the Chinese Monetary System*):

1. The central government to establish a mint under its own control to coin the new money; all the existing provincial mints to be closed, so that weight and fineness might become uniform.

2. The prices of the new coins to be set at treasury standard 1-ounce, 0.5-ounce, 0.25-ounce and 0.1 ounce, all to be silver coins. Copper coins to weigh 0.01 and 0.001 ounce. The exchange price between silver and gold to be permanently fixed. All new coins to be at the rate of 8 ounces to 1 English gold pound.

3. An experienced foreigner must be invited to head the central mint. All provincial minting machinery must be sent to this central mint.

4. The silver coins' fineness will be 90 percent for the 1-ounce and 0.5-ounce coins, and 80 percent for 0.25 and 0.1-ounce coins.

5. This new mint must permit the people free coinage. The old coinage may continue to circulate temporarily, but after a fixed date, it will no longer be allowed to circulate.

6. After this mint goes into production, foreign money and raw silver should no longer be permitted to circulate. Those holding raw silver must exchange it for new coins.

7. Foreign merchants will only be permitted to use the new coins. All foreigners holding gold coins must exchange them for the new money according to the legally fixed price.

8. Gold coins obtained in exchange should be kept on deposit as backing for repayment of foreign debts, and for reminting into gold coins.

study the stabilization of exchange rates between nations using gold and nations using silver. Jeremiah W. Jenks was one of these commissioners. In 1903 he wrote "A Detailed Discussion of China's New Dollar Laws" and "An Annotated Explanation of China's New Dollar Laws" in which he made a 17 point proposal.

He too favored a gold exchange standard, with an amount of gold equivalent to 1 ounce of silver as the monetary unit. The people might freely seek to mint gold coins in multiples of this unit. Silver coins would be minted simultaneously. A gold-silver exchange price ratio of 1:32 would be maintained. The government would establish a credit office in London to buy and sell gold bills of exchange so as to preserve this ratio. He called for the Chinese government to invite some foreigner to serve as officer in charge of the currency, vested with full powers. This

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aspect of his proposal was fiercely attacked in China, both at court and elsewhere. It was believed to be damaging to national sovereignty.¹¹

The fourth of these was the proposal in *guangxu* 33 (1907) by the Ambassador to England, Wang Daxie, to adopt an empty or nominal gold standard, and to raise the face value of silver coins by 20 percent for use in making foreign payments. The Board of Revenue and Finance believed that Wang did not understand the fundamental principle behind money, and proposed four alternative procedures. A first alternative would have raised the price of the silver dollar by 20 percent, and then fix its price against gold. A second alternative would have first fixed the gold-silver exchange price, and then raised the price of the silver dollar by 20 percent. A third alternative would have used paper money in place of silver dollars after putting the second alternative into effect. A fourth alternative would have been to issue gold exchange paper money to sop up the silver on the market, and redeem these on demand with silver.¹²

Wang Daxie supposed that once a gold standard had been adopted, China could employ an overvalued silver secondary coinage to repay all indemnities

and railroad debts.¹³ Obviously, he was a nominalist, since he supposed that the price of money could be determined at the discretion of the government.

The fifth of these proposals for reform was Vissering's plan for a gold exchange standard. During late Qing, the government invited the Dutchman G. Vissering to make an inquiry, and he subsequently wrote "A Simple Discussion of the Reform of the Chinese Monetary System."¹⁴ He advocated a three-stage reform. The first stage would fix a gold unit as the money of account, establish a bank to issue gold denominated paper bills, and accumulate a gold reserve. The second stage would determine token coins and the weight and fineness of a new secondary coinage. The third stage would gradually call in the old silver coins, uncoined silver and standard coins.

These late Qing advocates of reform all in various ways wanted to adopt a gold standard. Why then was it finally decided in *xuantong* 3 [1910] to adopt a silver standard? Naturally, the reasons for this were many and complex. Opponents of a gold standard, like Zhang Zhidong, believed that it was because foreign prices and standards of living were high that foreigners could employ a gold standard. The poor people of China only spent 10 or 20 cash per day on food and drink, and even the coastal cities used silver. Gold's price was too high for it to be suitable for China.¹⁵

¹³*Ibid.*, *guangxu* 33 [1907] Board of Revenue and Finance memorial: "The aforesaid high official originally memorialized: 'The general tendency is for the nations using gold to daily increase in number, and for the price of gold to daily rise. Therefore, states using silver must change over to use of gold. Japan is the latest nation to adopt gold. Its ratio of gold to silver [923]

is only 1 to 28. Its silver coins are 20 percent higher in market price than the equivalent weight in uncoined silver. If we take the Japanese silver coins as our model, and reckon up the amount our state must pay out in foreign indemnities, railroad debts and for military expenditures, then we can save 20 percent on all these, which would annually come to 17 or 18 million in silver. Because the Chinese population is 400 million, we should mint 800 million silver coins. Since the silver coins would be higher than uncoined silver by 20 percent, if we mint 100 million silver coins annually, then we can earn a seignorage of over 14 million. Since 800 million would be the permitted quantity of silver coins, 20 percent of that would be the quantity of paper money, and a seignorage of 14 million can be obtained for that too."

¹⁴*Chinese Currency.*

¹⁵In *guangxu* 30 [1904], 7th month, Zhang Zhidong's "Memorial Against an Empty Gold Standard" stated: "When we investigate the flourishing state of the commerce of foreign

¹¹For Jenks' 17 point recommendation, cf. *Gold Standard in International Trade: Report on the Introduction of the Gold-Exchange Standard into China, the Philippine Islands, Panama, and other Silver-Using Countries and on Stability of Exchange* (1904). Among the most ardent opponents of Jenks' proposals were Liu Shiyao and Zhang Zhitong. In *guangxu* 30 [1904] Liang Qichao wrote the *The Chinese Monetary Question* as an introductory critique of this work.

¹²*Qing Dynasty Investigation of Literary Remains Continued*, "Investigation of Coins."

On the surface, this statement was very reason-

nations, we see that their prices are high, and their people well off. For their daily expenditures even a century ago they mostly employed silver or gold and silver together. For the past century the European nations solely employing gold have begun to gradually increase in number. For the past thirty years, each of these nations has gone over solely to the use of gold. Their merchants daily grow more numerous, their expenditures daily grow broader, their goods daily more expensive. The price of one thing, the expense of a single meal are rarely just a few foreign silver dimes in cost. A median person's daily needs are no less than 1 foreign silver dollar. Therefore it is convenient for them to employ gold.

"This is not the case for China. Our people are poor and our goods are cheap. Laborers obtain tiny wages. The mass of the people eat meagerly. Hence daily necessities are reckoned in petty cash. Each poor person daily consumes no more than 10 or 20 cash. A person of middle standing daily consumes only 60 or 70 cash. . . . The great ports on the seacoast and on the Yangtze still use uncoined silver and silver dollars, and the local money of the interior whether the business engaged in is large or small always reckons in terms of copper cash. Even for exchanges among great clans, prices are reckoned in uncoined silver, but use copper cash as their standard money.

"In general, Liang-Guang, Yunnan, Guizhou and the ports near the mouth of the Yangtze use silver for 70 or 80 percent of their business and copper cash 20 or 30 percent of the time. Ports upstream on both sides of the Yangtze use silver and copper cash in equal amounts. In the districts of the interior on both sides of the Yangtze, silver is used 10 percent of the time and copper cash 90 percent of the time. In the provinces on either side of the Yellow River, 99 percent of the time copper cash are employed, and silver only 1 or 2 percent of the time. Considering China as a whole, silver and copper are still in joint use, and places using copper are ten times more numerous than those using silver. Generally, state budgets in China are reckoned in terms of silver. The people still mostly express prices in copper cash.

"Though foreigners label China a silver using nation, it is actually still a copper using nation. . . . Evidently the situation in China is such that if it is desired to circulate gold coins, not only is there no gold to mint, but even if we had the gold, there would be no obligation to do so. . . . In my humble opinion, at this time we have only got the two moneys, silver and copper, in hand which we have previously used, and we should seek a strategy for smoothing their circulation. Afterward, we can seek to fix a silver-copper exchange price, and set a limit to the number of cash an ounce of silver is worth. . . . After twenty years, . . . if there is indeed a need to add a gold coinage, we can then consider methods for making the attempt. . . . After fifty years, . . . when China has become a silver using nation, we can then surely add a gold coinage as well." (*Complete Works of Duke Zhang Wenxiang*, 63, "Memorials, 63, "Memorial on the Inappropriateness of Empty Determination of a Gold Price and Change to Use

able: The Chinese price revolution was still in progress. In reckoning their everyday expenditures, the people had only raised themselves up from the standard coin to the copper dollar. At most they had shifted from copper to silver. Opportunities for using gold were quite rare. However, a gold standard does not require the use of gold coins. The aim of a gold standard is stability of foreign exchange, and not to have people use gold coins.

West Asian nations like Persia were using gold coins during China's Spring-Autumn era (sixth century B.C.), and China itself had for the most part used gold as a basis for calculations from Warring States times through the two Han Dynasties. The standard of living of the Persians and Chinese during those times could not have been very high. England

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adopted a bimetallic gold and silver standard in Southern Song Emperor Lizong's baoyou 5 (1257), but most Englishmen would go a lifetime without ever seeing a gold coin. Adoption of a gold standard would merely have nailed the value of Chinese money to the value of gold. The people could have continued to use silver coins or copper dollars and copper cash without necessarily raising their standard of living.

Not only did opponents of a gold standard then not understand monetary theory, even its advocates were all amateurs. The gold unit advocated by Liu Shiyan was after all based on the silver ounce, and he believed that this was the most crucial point. He seems to have had the idea of maintaining the gold-silver exchange price so that silver coins would become a true money. How can one call this a gold

of a Gold Coin.")

Qing Dynasty Investigation of Literary Remains Continued, guangxu 33 [1907]: "Once Jenks advocated a gold exchange standard, supporters of that position arose one after the other. Zhang Zhidong memorialized to fervently oppose it. Liang Qichao condemned it in bare but eloquent words. Considered dispassionately, though its opponents were not willing to accept it, the situation within which China found itself was such that the test could not be lightly attempted either. The gold exchange standard would require taking up the obligation of keeping up the value of foreign exchange certificates. Advocates of this system recognized this cost, and said the profit from the rise in price of the silver coins would be sufficient to cover this. They did not realize that our nation's silver coinage had not yet been unified, that the practice among our people of using raw silver and copper dollars was of long standing, and could not easily be changed over the short run. This supposed profit was theoretical in nature, whereas as the foreign exchange deficit was not something that could be avoided."

standard? Wang Daxie supposed that an overvalued silver secondary money could be used to pay foreign debts, which is a really fantastic notion.

As for the foreigners, though they were knowledgeable on monetary questions, they harbored evil intentions, and nourished the idea of committing aggression against China. That is why Jenks wanted China to invite a foreigner in to manage China's currency system. This was the most important object of Zhang Zhidong's vehement opposition. Even a gold exchange system itself evoked Chinese suspicion, because all of the places which were then adopting a gold exchange system were colonies.

Though these aggressors had some grasp of monetary theory, it was only book knowledge, and not practical knowledge. Some of them had examined the circumstances in China, but only superficially so. Jenks, for example, had merely collected the opinions of some foreign residents in China, such as American diplomats resident in China, foreigners holding positions in the Maritime Customs, and the reports of some foreign missionaries. He made his report to the U.S. Congress on the basis of these opinions.¹⁶ What he had obtained was merely some scattered and fragmented technical material. He had no comprehensive understanding of Chinese society. He even harbored the improper aim of turning the Chinese monetary system into an adjunct of his own country's monetary system, and intentionally muddled several technical questions so as to cover up such political ambitions.

As for the Chinese scholars, they had no profound understanding of monetary problems. Having examined some foreign phenomena superficially, and having been taken in by the plans of those would-be aggressors, they changed them into systems of which they were excessively credulous. They expended a great deal of ink debating the questions of the monetary unit and the kinds of coins to be used, supposing that determining on a monetary system was enough in itself to enrich a nation. A number of people supposed that reform of the monetary system was one way to increase annual income. They believed that the quality of a monetary system lay in the unit and kinds of coins selected. This was to turn things upside down. They

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¹⁶Cf. *Gold Standard in International Trade: Report on the Introduction of the Gold-Exchange Standard into China, the Philippine Islands, Panama, and other Silver-Using Countries and on Stability of Exchange, Submitted to the Secretary of State, October 22, 1904, by the Commission on International Exchange* (Washington, D.C.: Government Printing Office, 1904), pp. 41-282.

did not know that the key to a stable monetary system does not lie in the size of the monetary unit, nor does it lie in the kinds of coins, but in the fiscal policies adopted and in general economic stability. If you do not pay attention to political and economic factors, you will not have a stable economic foundation. Different people will make isolated proposals, but none of them can do anything to resolve the problem.

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3. Monetary History

There were notable developments in scholarship during the Qing Dynasty. Some have called the more than two centuries of the Qing Dynasty China's literary and artistic renaissance. [It was Liang Qichao who characterized mid-Qing as China's literary renaissance. EHK] In the area of scholarship at least, this can be affirmed.

We can take the textual verification movement as representative of Qing Dynasty scholarship. The textual verification school had an especially intimate relationship with historiography, and so had a stimulative effect on the discipline of history.

Most historical works after Tang were compiled in official bureaus. Such official histories were often not up to the level of those written by individuals, but of these official histories, the *Ming History*, compiled during early Qing, was comparatively good. This was no accident. However, the section on coins and certificates in the *Ming History* occupies not quite half a *juan*, and contains a total of less than 4,000 words. Evidently, monetary history was not taken very seriously at that time.

An Office of the *Three Encyclopedias* was established during the qianlong period, and it compiled the *Three Encyclopedias Continued* and *Imperial Dynasty Three Encyclopedias*. These advanced the study of monetary history a step. In substantive terms, these works made no original discoveries, being entirely composed of material copied out from the original *Three Encyclopedias*, except for supplementing the original works with later historical materials.

The *Universal Statutes Continued* had three *juan* on "Coins," running from Tang to Ming, with a total of 27,000 characters. The *Qing Dynasty Universal Statutes* has one *juan* on "Coins," running from the beginning of Qing to the pacification of the Muslim

frontier during the qianlong period, for a total of 10,000 characters. The *Universal Record Continued*'s section on coins runs from Tang Emperor Muzong's changqing 1 [821] to late Ming, for a total of 2,709 words. The *Qing Dynasty Universal Record* section on coins has around 6,000 characters. The *Investigation of Literary Remains Continued* has a 5 juan "Investigation of Coins," running from Southern Song Emperor Ningzong's jiading 7 [1214] to the end of Ming, containing about 64,000 or 65,000 characters. The *Qing Dynasty Investigation of Literary Remains* has a 6 juan "Investigation of Coins," holding 80,000 characters.

Evidently each of these books has as detailed a treatment of coins as the original works on which they were modeled, but the period encompassed by the *Three Encyclopedias* of the Qing Dynasty are of comparable length, and their contents are both complex and simple. One need only study the *Investigation of Literary Remains* category to gain an approximation of the contents of the others. The value of the historical materials they contain must be acknowledged, but in that respect the *Compendia of Statutes or Abstracts of Laws* of the several dynasties have the same kind of value.

Of private writings, there are the "Treatise on Food and Money" in Wan Sitong's (1638-1700) *Ming History Draft*, the "Treatise on Food and Money" in Wei Yuan's *Yuan History Newly Compiled* and the "Treatise on Food and Money" in Ke Shaomin's *New Yuan History*, all of which have sections on coins. In this field, however, there is nothing in particular worth mentioning. The *Yuan History Newly Compiled* and the *New Yuan History* are simply not as confused as the official histories, and that is all. They are without any creative [925] developments.

With the flourishing of the textual verification movement during Qing, scholars did not much care to write books. Instead they preferred to compose essays in the form of reading notes. Such essays dealt with all sorts of topics, frequently including monetary history, as for example Gu Yanwu's (1613-1682) *Record of Daily Knowledge* and Zhao Yi's (1727-1814) *Notes on the Twenty-two Histories*. These two men used historical material to verify their opinions, and this indeed represented progress over the empty narratives of the Ming writers. The flaw of the textual scholars lay in the fragmented nature of their work, their lack of fully formed views, and their inability to get to the heart of a problem.

Even in terms of their use of primary sources, we cannot say that they collected all the relevant detail. For example, we have essays from both Gu

Yanwu and Zhao Yi solely devoted to the gold question. The section on "Gold" in *Record of Daily Knowledge* gives only a few examples to prove that Han mainly employed gold, and that after the Xiaoliang Dynasty gold was rarely seen in history. As an explanation for this, Gu merely quotes a statement by Du Gao to the effect that during Han times there were not yet any Buddhist temples, and so gold was very cheap. Obviously Gu Yanwu also believed this explanation. He hardly offers any explanation of his own, except that to his conclusion he adds the sentence: "Alas! How remote was the time when it was the thing to be frugal!" This seemingly was the point of that 1,000-character note.

The section on "Han's Abundance of Gold" in the *Notes on the Twenty-two Histories* is substantially the same. Zhao Yi gives a rather larger number of examples of gifts of gold during Han than does Gu Yanwu, but he is still merely picking up whatever comes to hand, and has exerted no special effort to go beyond that. As for the reasons for the growing scarcity of gold in later days, he first says that the gold producing areas were becoming played out, and next says that after the spread of Buddhism into China, images came to be gilded. Like Gu Yanwu, he does not realize that the weight standards of Han were not the same as those after Tang. Neither of them realized that 60 or 70 chests of Wang Mang's gold only amounted to one-third of the same nominal measure of Liu Jin's gold.

Of course when scholars collect material, they cannot get hold of all of it. Primary sources are inexhaustible. Other scholars or men from later times can very easily add new items to the store. The problem lies in the conclusions reached. If a very small number of pieces of evidence can lead to a correct conclusion, that shows the writer's perspicacity as an investigator. If the conclusion is incorrect, then no matter how abundant is the material, the value of the work cannot transcend the value of the material itself. If it is only because of the insufficiency of the material that an incorrect conclusion has been reached, then it is necessary to seek out still more material.

After the qianlong and jiaqing periods, the textual verification school became interested in money. It devoted more energy to study of the coins themselves, and scholars became unwilling to work solely from documentary sources. As a consequence, the accomplishments of the Qing Dynasty in numismatics far exceeded

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its accomplishments in monetary history.

After the Opium War, a section of the intelligentsia gradually lost faith in everything about their own country, and began to devote attention to things

foreign. At first, this involved technical matters, like firearms, steamships and railroads. Slowly it broadened to culture in general. These men became intoxicated with Western studies and wished to use Western learning to reform China's contemporary situation. Few inquired into the history of China, since it was only when they still believed in their own country, when they were still proud of everything about it, that they could imagine how their own ancestors managed to keep things going under painful circumstances to leave behind them this heritage. Since they now felt themselves to be inadequate in all respects, they could only feel that the past was dead, and they turned their backs on it. Who would want to study it?

Under such circumstances, as the power of imperialism grew broader and more onerous, historiography, which had since antiquity been especially well developed in this country, instead became a dead end. Eventually, it even became necessary to depend on translations of foreign books for information on various aspects of this country's cultural history.

After the First Sino-Japanese War, those interested in monetary questions came to believe that Japan's strength came largely from its strengthening of its monetary system, and this led to the rise of a monetary reform movement in China. This was not without its good aspects. After a long period of self-intoxication, it was necessary to take this opportunity to draw in a breath of fresh air from the outside. Naturally, there remained a minority who maintained an unsubmissive attitude toward the foreigners so as to preserve the self-respect of the nation, and remained in all respects self-satisfied. So complacent and conservative an attitude was utterly unable to solve these problems.

In the course of their study of foreign countries, the Westernizers could discover that there had been foreigners who had felt an interest in Chinese history. J. Edkins, for example, had written a book on Chinese monetary history.¹

There were several monographs on monetary history during late Qing, such as Jiang Fu's (1866-

1911) *Chinese Monetary History*, Liu Yinglan's *History of the Evolution of Chinese Money*² and Liang Qichao's "A Short History of the Reckless Minting of Copper Dollars By the Provinces." Jiang Fu was a specialist in bronze and stone inscriptions and not an economist. I have only seen quotations from his *Chinese Monetary History*, and have not seen the entire work. Perhaps it belongs within the sphere of numismatics. Liu Yinglan's *History of the Evolution of Chinese Money* was printed in Japan in xuantong 3 [1910]. I have no details on its contents. Liang Qichao's "A Short History of the Reckless Minting of Copper Dollars By the Provinces" was written in xuantong 2 [1909]. It was a monograph on monetary history.

Evidently this sort of book was still in an embryonic state. No one had any idea of what monetary history ought to include. Some conservatives adopted the style of the sections on coins in the traditional treatises on food and money.

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Those who were a bit more progressive discussed the question of monetary systems to some extent. A very few could synthesize historical monetary problems with contemporary economic problems and the question of the people's livelihood in a way which was both analytical and broad in scope.

²Japan: Shukosha edition, xuantong 3 [1910], in 2 juan. Cf. Zhao Fengtian, *A History of Economic Thought During the Last Fifty Years of Qing* (Harvard-Yenching Institute, August 1939), Volume II, chapter 8, "Increasing Annual Revenue."

4. The Development of Numismatics

Though numismatics appeared very early in Chinese history, no pre-Song works have survived. Even Hong Zun's *Record of Coins* is very short, containing in all only between 20,000 and 30,000 characters, and 90 percent of which consists of quotations from his predecessors. His own notes only come to some 2,000 characters. He himself had only collected some 100 coins.

There were no particularly important developments during Yuan and Ming either. This state of affairs was maintained right down to early Qing, when there were still some books on coins that were so purely fictitious, as to be absurd. For example, at the beginning of the shunzhi period [1644], there was Zhu Duoli's *Ancient and Modern Coin Catalog*

¹J. Edkins' works on Chinese monetary history are *Chinese Currency* (Shanghai, 1901) and *Banking and Prices in China* (Shanghai, 1905). The former work contains 151 pages, divided into five chapters: 1. Chinese Currency; 2. Bronze; 3. Silver; 4. Gold; 5. Concerning the Eighteen Works on Chinese Currency. Though the entire work is arranged chronologically, it is not an organized historical work, but rather is a collection of 130 essays. S. W. Bushell and Terrien de Lacouperie also studied Chinese money, but their focus was on coins. Morse's writings also touched on Chinese monetary problems.

and during the kangxi and yongzheng periods, Zhu Feng's *Ancient and Modern Record of Queries*. Even the several works produced during early qianlong times were rather brief. For example, Zhang Duanmu's *Register of Coins* could only serve as a continuation of the *Record of Coins*, supplementing that work with additional material which had appeared since Hong Zun's time.

In qianlong 15 (1750), Liang Shizheng received an imperial commission to lead the compilation of a *Register of Coins*, and completed the task within a year. This was the first official book on Chinese coins. It was 16 *juan* long, and recorded 567 coins, but the last two *juan* were entirely devoted to tokens and charms. Qing Dynasty numismatists have had for this *Imperially Sanctioned Register of Coins* [928]

only words of high praise, with no one daring to raise any criticism of it.

Actually, it is a book without the least value. The compiler himself said that for the section on high antiquity the theses of the *History of the Circuits* had been adopted, but criticized Hong Zun's *Record of Coins* for naming coins which may not have originally existed. And yet the credibility of this work falls short of that of the *Record of Coins*. Aside from the one improvement of attributing the Hanxing Cash to Li Shou, all the other errors are preserved, and new ones are added, as for example reading the Yi Four and Six *huo* as *tiancan* and explaining the character *sheng* on Southern Song coin tokens as an official title, supposing them to have been minted by the Three Offices [*sansheng*]—the Secretariat, the Chancellery and the Department of Ministries.

Its illustrations were said by the compiler to have been drawn from items stored within the Inner Court. Among the contributors were painters like Dong Bangda and Qian Weicheng, who should have been capable of capturing a likeness, but the literatus painters of Ming and Qing introduced distortions into their paintings and did not seek to depict a likeness. Probably because they were very far removed from the original coin, they depicted the character *yuan* ring coins as having square holes.

At about the same time, there was a work, *Investigations of Coins*, of unknown authorship, and only 40-50,000 characters long. Though an improvement over the *Register of Coins*, its contents were for the most part copied from historical works or coin catalogs. It placed its treatment of ancient coins after its treatment of coins by historical period, which upset the clarity of organization of the entire work. Moreover, it identified knife and spade coins with the legendary Three Emperors and Five Rulers, viewed the ant-nose coins and Bright Moon coins as charms,

and listed the character *yuan* coin, *baohuo*, Yongguang, general circulation Spring Money and Taiping Xingbao coins as of unknown date. The work is said to have originally been illustrated,¹ but the woodblock edition² contains no illustrations.

Nevertheless, development of the school of textual verification during the Qing Dynasty could not but have some influence on Chinese epigraphy and numismatics. Textual verification studies began during the shunzhi [1644-1662] and kangxi [1662-1723] periods, but numismatists for a time remained outside its sphere of influence. They retained the subjective intuitionist attitude toward scholarship of the Ming Neo-Confucians: They did not consider the coins themselves to be important; they did not seek truth in practical facts; they were not serious or faithful to reality, but merely understood how to copy things.

By the qianlong [1736-1796] and jiaqing [1796-1821] periods, textual verification gradually spread more widely into the world of scholarship, and historiography, philology, restoration of ancient books, law systems, and epigraphy began to uniformly become better developed. Numismatists frequently participated in such work. In fact, there were Qing epigraphers or textual verification scholars who were also numismatists. This was true of Zhang Tingji, Chen Jieqi and Wu Dacheng. Those who specialized in coins no longer relied on empty conjectures in doing their research, but instead sought out the coins themselves. Hence their accomplishments were greater. Jiang Deliang, Weng Shupe, Chu Shangling and Ni Mo were among the earliest of these.

Jiang Deliang (alternate name Qiushi, 1752-1793) was born and raised in a Yangzhou intellectual family, which originally came from Anhui. He ranked second on the list in the Palace Examination of qianlong 45 (1780), and later served as a censor. He was a painter of flowers, but loved to study coins even more. He was also an excellent philologist, and so [929]

made a definite contribution to the deciphering of coin inscriptions, as for example of the *ming* knife, the *huoren* small spade, the *lin* and Two-zai. He wrote a *Coin Register* in 24 *juan*, which had illustrations as well as text, but was not published, and the manuscript for which has not survived.³ Ni Mo had

¹Ni Mo, *Ancient and Modern Coins Outline*, cites a manuscript copy in the Pan Yi Hall, and says it was illustrated, but that these illustrations were not copied into the printed version.

²Commercial Press Compendium of Collectanea edition.

³*Ancient and Modern Coins Outline* says Jiang Qiushi's

borrowed it for several months for examination, recorded its table of contents in his *Ancient and Modern Coins Outline*, and also quoted some of its text. In addition to getting some translations from ancient text orthography right, it was unusual that Jiang linked the term *qian* to an agricultural tool. Of course there are some errors even in his translations, as in reading Anbang as Anyi. He was also taken in by some forgeries, like the *ci* spade, the character *yang* Inaugural, the Mingde Original Treasure, the Shunzhi reverse *chuan* and *wu* coins. The *juan* on "Western Coins" in this *Coin Register* is the earliest record of modern foreign coins by a Chinese.

Weng Shupe's (alternate name Yiquan, 1765-1809) *Collected Investigations of Ancient Coins* is the Qing Dynasty's most important numismatic work. It may also be said to be a work of general nature. Its author expended several decades worth of intellectual energy to complete this 200-300,000 character book, which raised Chinese numismatics to a new level. The book is divided into eight *juan*, the first six providing an historical narrative about coins running from high antiquity down to the Ming Dynasty. The seventh deals with foreign coins and those of unknown date. The eighth deals with commercial tokens, charms and suppressed coins.

Still in manuscript form at the time of the author's death, it was edited by Liu Xihai during the daoguang period, and then placed before the numismatic world. The book's strongest point is its abundance of material. The author copied out material on coins from ancient works, relying especially on the material preserved in the *Yongle Encyclopedia*. Of course this was only the labor of gathering source material, but performing that job is one of the important tasks of science, and one which may not be stinted. Next in importance, Weng was the first person to devote effort to the variant forms of coins. This was his personal contribution. If his written sources were copied from books, material on variant forms could only be obtained through study of the

coins themselves. Evidently he placed equal weight on books and the coins themselves. It is no wonder that the numismatic world viewed *Collected Investigations of Ancient Coins* as a comprehensive summary of all known by numismatics.

Collected Investigations of Ancient Coins does, however, have its flaws. First, Weng recorded too few knife and spade coins, and in dating them he adhered to the old catalogs, and so had them begin with Suirensi, the legendary ruler who discovered fire. Weng states that the ancient catalogs made this claim, and that they might not have been entirely without a basis for making it. So conservative a mode of thought was also manifested in the way he treated commercial tokens, charms and amulets. He clearly understood that these things were not coins, and it was only because the old catalogs down through the ages had recorded them that he retained them. Actually the whole organization of the book was identical to that of other coin catalogs.

Second,

[930]

though Weng's research methods were relatively progressive, they were not completely so. He said that his method for studying Northern Song matching sets was "to distinguish their inscriptions, forms, color, substance and sound, and make fine distinctions in terms of these five qualities." In fact this was his method for investigating coins in general. He has here omitted one crucial factor, the weight of a coin. In *Collected Investigations of Ancient Coins*, the main thing was to discuss a coin's inscription and size, its weight being viewed as relatively unimportant. Particularly for the knives and spades, he almost never records weights.

This flaw is not found merely in this work. What is more important is the influence it had on later works. Because Weng Shupe was so revered by later numismatists, the research methods he promoted were also taken seriously. Later numismatists solely concentrated on inscriptions, form, color, substance and sound, and also neglected the weight of coins.

Dai Xi even considered it pedantic to study coins' sizes and weights. Actually, however, the *Collected Investigations of Ancient Coins* does not entirely omit discussions of coins' weights.

Third, though the book contains 200-300,000 characters, most of it is material copied from earlier writers. The author's own notes only come to 80-90,000 characters, and most of these are devoted to descriptions of variant forms, but since there are no illustrations, they make for rather dull reading. Of course methods for photo offset printing of photographs were not available then, and Weng himself had said that illustrations were hard to reproduce in a printed book. Their absence must, nevertheless, be

Coin Register had 24 *juan*. The first *juan* dealt with Qing Dynasty coins. The second through the fifth were on ancient knives and spades. The sixth through the seventeenth dealt with coins from Zhou through Ming by period. The eighteenth was on unusual items. The nineteenth was on miscellaneous items. The twentieth was on tokens, the twenty-first on counterfeits, the twenty-second on foreign coins, the twenty-third on Western coins, and the twenty-fourth on coin molds and paper money. The work was fully illustrated, and there was an analysis of each item. Ni Mo also states that after Jiang Deliang's death, the manuscript was given by Song Baochun (Zhishan) to Chu Shangling's elder brother, Pengling, to publish, and that it was later lost.

considered a flaw. Aside from enumerating variant forms, Weng provides no particularly good analysis, nor does he make any discoveries. Neither did he establish a nomenclature for variant forms.

In his preface Weng also emphasized the expensiveness and scarcity of ancient money, and provided several money prices of goods. Unfortunately he did not develop his investigation of coins' purchasing power further. That numismatists do not concern themselves with money's purchasing power is common both within China and abroad, but it ought not to be this way. In fact only numismatists hold the objects most necessary for studying money's purchasing power. This cannot be considered a flaw in *Collected Investigations of Ancient Coins*. We cannot make so high a demand of a person from that time. Basically, money can be investigated from two perspectives, the cultural and the economic. Numismatists tend to emphasize the cultural angle and neglect the economic one.

Chu Shangling (alternate name Wei yuan) was from Laiyang in Shandong. He said that he had spent forty years collecting and studying coins, and wrote *Record of Auspicious Metal I Have Seen*, in sixteen *juan*. The blocks for it were carved in jiaqing 24 (1819), and it was printed the following year. It was fortunate that he was able to supervise the publication of his own work, which neither Jiang Deliang nor Weng Shupeï had managed to do.

Chu's book had 1,210 coin illustrations and a text

[931]

of over 70,000 words. Its greatest contribution was to place the knife and spade coins in Spring-Autumn and Warring States times, and disprove the attribution of them to the age of the Three Emperors and Five Rulers as was done in the old days.

Chu Shangling had progressed to the study of excavated coins. The methods he used were fundamentally scientific. Some of his judgments are very plausible. His quotations from Liu Shilu (Qingyuan) are mostly plausible. Though Liu Shilu's essay *Decipherment of Xia Ransom Metal Inscriptions* is not worth summarizing here, some of his better ideas have been preserved in *Record of Auspicious Metal I Have Seen*.

Nevertheless, this book is not without shortcomings or errors. It is arranged chronologically, but the first *juan* on Zhou official coins includes three *baohuo*, a *dong Zhou*, a *yuan*, a *chang yuan yi suo*, none of which (except for the *dong Zhou* ring coin) are Zhou coins. He places the shovel-shaped coin after the flat-handle spades, even though he acknowledges that "from the fineness of its copper, and its seal script inscription, it would appear to precede the aforementioned spades."

Some of his errors are perpetuations of those made by his predecessors, as when he takes the *baohuo* for a coin of King Jing of Zhou, the Yong'an iron coin for a coin of Juqu Mengxun of Northern Liang, a Small-spring Value-one for a Goose-eye cash of Emperor Fei of Liu-Song, Wang Mang's Spade-spring for a coin of Emperor Wu of Liang, a Tianfu Tranquil Treasure for a coin of Shi-Jin, a Taiping Xingbao for a Liao coin, a Zhiping Sagely Treasure for a coin of Xu Shouhui, and a Tianding Circulating Treasure for a Dali state coin. He even accepts some coins which simply did not exist, such as a Five Phoenix.

Not all of his coin depictions are based on the coins themselves. For example, of Wang Mang's ten spades, he does not depict the "7" on the Adult-spade-seven-hundred in its archaic form as "TT," and does the same with the "9" "TTTT" on the Secondary-spade-nine-hundred.

Nevertheless, the *Record of Auspicious Metal I Have Seen* has still not lost its high numismatic repute. It is very difficult for a numismatic work to be entirely without error. The errors he carried over from his predecessors are still less his responsibility, since a single person cannot resolve all suspect or difficult points.⁴

Ni Mo (alternate name Yucun, 1750-1825) was from Anhui. He passed the Metropolitan Examination in jiaqing 4 (1799), and served as a district magistrate. He was born before Jiang Deliang and Weng Shupeï, but his work as a collector and student of coins was influenced by the two of them. His *Ancient and Modern Coins Outline* in 34 *juan* is almost identical in its topical arrangement to Jiang Deliang's work. Its arrangement is very confused.

⁴Ding Fubao states that the essence of Jiang Deliang's *Coin Register* is extracted and recorded in *Record of Auspicious Metal I Have Seen*. (Cf. *Encyclopedia of Ancient Coins*, "Introduction.") This caused Chu Shangling to hide the truth to avert suspicion. Ding Fubao was probably basing this inference on the words of Ni Mo. He himself had never seen Jiang's book. How could he tell that Chu's book had selected the essence from it? Jiang Deliang died in qianlong 58 [1785], while *Record of Auspicious Metal I Have Seen* was revised in jiaqing 5 [1800], so in chronological terms the latter could have taken material from the former, but the latter does not have the *huoren* spade, it reads the character []^a as [],^b and does not have an Anbang knife. Nor does it contain the errors found in Jiang's work. For some common translations, like *ganjing*^c and *lu*,^d Chu Shangling quotes Liu Shilu, unless this is an intentional cover up. Actually, Chu Shangling was not very fond of copying material, whereas Ni Mo did like to do so. The tables of contents and arrangements of the Chu and Jiang books also differ. Chu omitted Qing coins and Western coins. It appears that this case is worth further inquiry.

Its two main divisions are into text and coin illustrations. The first *juan* concerns material on the early Qing coinage, such as material on the price of coins, private minting and melting down, the price of copper and coin policies. The *juan* from number 27 on deal with the origins and circulation of paper money, catalogs down through history, coin systems over time, an appendix on ancient coins, names of ancient and modern coin collectors, and a summary of the *Coin Outline*.

All of this is copied from old written sources or from Weng Shupe's *Collected Investigations of Ancient Coins*. Much of it is outside the scope of numismatics, but has value as primary source material. The first 26 *juan* contain coin illustrations, but also include coin molds and various amulets, the Horse coins and various rare and unusual ancient objects.

The coin illustration portion also includes simple [932]

captions, which mostly add nothing new. Knives and spades are mostly explained according to the old theories. He found making mistakes and accepting counterfeit coins hard to avoid, as for example, taking the Yong'an iron coin for a Western Xia coin, and mistaking both the Southern Tang large Inaugural and the Min Inaugural for Tang coins. He also records fake coins, like the Hundred Metal, the Dading equals-hundred, Six-grainer, Taihe Monetary Spring, the character *yang* Inaugural, the Kangding Original Treasure, the Xianchun reverse 9 and reverse 10, the Taiping Original Treasure, the character *qin* Hongwu coin, and the One-hundred Cash Diminished Coin Token.

In general Ni Mo's work was not as good as *Record of Auspicious Metal I Have Seen*, but it includes over 4,000 illustrations, and so variant forms are rather numerous. There are 195 *ming* knives, including one *Qi ming* knife. The Korean Changping Circulating Treasure is present in over a hundred forms.

Also worthy of note are the Western coins among the foreign coins, in which respect Jiang Deliang's work was being imitated. Gold, silver and copper coins are included, with silver coins the most numerous. There are Spanish King Charles silver dollars, Doubloons, Horse Swords, U.S. silver dollars, as well as a number of early German silver dollars. There are also some brand labels from ingots, which were then accepted according to their weights. There are Spanish and Portuguese gold coins, as well as Dutch ducats. Most of the copper coins are Russian. *Ancient and Modern Coins Outline* was completed at the beginning of daoguang [1821], but was not printed by Ni Mo's descendants until the guangxu period [1875-1908]. The printing block carver did not understand foreign writing, and

so Western coins were often printed with their inscriptions reversed, making them hard to read.

The most important numismatists during the daoguang period [1821-1851] were Cai Yun, Dai Xi, Liu Xihai and Ma Ang.

Cai Yun's (alternate name Tiegeng, 1764-1824) *Habitual Conversations*, in six *juan*, was completed in daoguang 1 [1821].⁵ The text, which is not illustrated, makes substantial use of textual verification methods, is not a fully worked out and organized piece of writing, but rather takes the form of notes from reading. Its contents include discussions of weight standards, spade coins, knife coins, ring coins and round coins. His use of textual verification is not limited to the coins themselves, but also includes statements on coins in ancient literary works.

Some of his analyses are creative, as for example concerning the Western Han Five-*fen* and Three-*fen* coins, which he does not explain in terms of their own sizes or weights, but through comparison with the Twelve-grainer (i.e. Half-ounce). This is very perspicacious. Of course it is inevitable that there are also places where his explanations are arbitrary and far-fetched. For example he explains both the word *bu* in the *Book of Odes*' "holding a *bu* to trade for silk" and the *Mencius*'s "spades [*bu*] which are in hamlets without men" as metal moneys rather than as meaning cloth. Another such example is his interpretation of the inscription on the Demon-face coin as the character *jin*, as in the Central Chinese state name of Spring-Autumn times. He rather idiosyncratically rebaptizes it as Jin money.

Dai Xi's (alternate name Chunshi, 1801-1860) *Collected Words on Ancient Coins*⁶ was completed in daoguang 17 [1837]. It too took the form of reading notes, but Dai made a great effort to be interesting. The writing was lively and some of his explanations are worth noting. For example, he says that "because coins in collections can fill in the gaps in history, they are precious. Therefore, unusual coins which can be verified rank first; those which cannot be verified rank next; amulets rank last."⁷ Though

⁵At the end of the book is a postface by Guo Quan and Lu Jun, dated daoguang dinghai (7th year) [1827], Summer, 5th month.

[941]

⁶This book of Dai Xi's originally existed only in a manuscript copy. It was written out by him personally in the thin-gold calligraphic style, and probably was illustrated. The presently existing woodblock edition was not printed until tongzhi 11 [1885] from the copy made after his death by Bao Kang and Hu Yizan, and which was edited by Wu Dacheng.

⁷*Collected Words on Ancient Coins*, 3, "The Great Qi Cir-

the unverifiable coins of secondary importance [933]

are worthy of discussion, it ought to be said that the importance he ascribes to the debased amulets is correct. At least this is the case when speaking of money.

He was the discoverer of the famous Great Qi Circulating Treasure, and was the first to record the Wanli Mined Silver, but his powers of judgment and observation concerning coins were not necessarily higher than those of men in general. He treated the Great Qi Circulating Treasure as though it was a coin of Huang Chao, and did not notice that its construction resembled that of the Great Tang Circulating Treasure. He also mistook such thin and small Annamese coins as the Jianwen Circulating Treasure, Tianshun Circulating Treasure, Chenghua Circulating Treasure and Hongzhi's Treasure for Ming Dynasty coins.

Since late Qing, numismatists have often linked Liu Xihai's (alternate name Yanting) *Ancient Spring Collection* with Weng Shupe's *Collected Investigations of Ancient Coins*, but this is inappropriate. The only similarity between the two is that neither was circulated in print. Weng's book had a text, but lacked illustrations. Liu's book had illustrations, but lacked a text. There are over 4,600 illustrations in *Ancient Spring Collection*, including several dozen coin mold illustrations. The importance of the coin illustrations to numismatics is evident. Liu Xihai had collected coins for forty years, and had a number of fine specimens. This was especially true of his Song iron coins, which are not found in the old catalogs. The coins included in *Ancient Spring Collection* were not limited to items from his own collection, but included the holdings of various collectors of the time.

However, just as Weng Shupe said,

he merely made rubbings of their inscriptions, and set them out in fascicles, but had not one word of redaction. His reward was to get to examine other collectors' holdings. There were no small number of things to give pleasure to the eye, but this was not to make a book. It merely matched the general run of printed catalogs of recent generations.

Weng Shupe was here not speaking of *Ancient Spring Collection*, but his words would have been an appropriate criticism of that work as well.

Liu Xihai had revised *Collected Investigations of Ancient Coins*, and it must contain nearly 10,000 characters worth of his notes. Judging from these notes, we can only say that Liu Xihai was a collec-

tor. His discussion was limited to matters concerning the exchange and sale of coins, as for example in what month of what year and from whom he had bought a certain coin, or that a certain coin was in the possession of such and such a man. None of this contained anything of importance for numismatics. His other work, *Verses on the Admirable Shade Pavilion Discussions of Coins*⁸ in two *juan* cannot be said to have been a numismatic work either. Though a quotation from some written source is placed after each poem, including some from Weng Shupe, no textual research was performed, nor does it contain any original ideas.

He breaks up the character for "ax" into "metal" and "money," and reads the inscription "weight one ounce twelve grains" as "weight one ounce thirteen grains." His illustrations include one of a character *yang* Inaugural, and among his coin molds is a Qi knife bronze mold, both of which are unreliable.

Ma Ang's (alternate name Bo'ang) *Money Spade Inscription Investigations*, in four *juan*, was printed in daoguang 22 (1842). It is a monographic treatment of knife and spade coin inscriptions, and is not a genuine numismatic work, but the inscriptions on knife and spade coins are something that numismatists should investigate, and so everyone ranks it alongside other numismatic works.

[934]

Evaluations of this book differ. Some say that it falls short because of its dubious explanations.⁹ Others say its author was better than the average for his generation, that he was broad in learning and seminal in thought, and could speak for a whole school of thought.¹⁰

Ma Ang did indeed take his own road, and he did make some discoveries, but his conclusions were often too clever by half, ending in a blunder. Most people supposed that one of his contributions was to assign the coins to the states which minted them, but actually Chu Shangling had already spoken of this before him. He said that Chu Shangling had been insufficiently precise, but Ma's own errors arose precisely from his interpretations of inscriptions.

He said that the ancient cowry money was a minted money rather than natural cowry shell, and believed that the ancient form of the character for cowry, 𧇧, was a combination of the characters

⁸*Verses on the Admirable Shade Pavilion Discussions of Coins* appeared after *Ancient Spring Collection*. There is a postface by Zhang Kaifu, dated daoguang 18 [1838]. Its blocks were carved in xianfeng 5 yimao [1855].

⁹Bao Kang, *Examination of Explanations of Ancient Cabinets of Coins*.

¹⁰Luo Zhenyu, *Song Cottage Daily Notes*.

meaning "half" and "ounce." He said that the Demon Face coin was minted by the state of Qin, and its inscription combined the three characters meaning "equals half ounce." He also stated that the ancients made 6 grains equal to 1 *jin* [meaning metal], and that the term *jin* in ancient documents, like the term *yi*, meant a weight of 6 grains. He interpreted the archaic character [f] as [j],⁸ and [h] as [j],¹ meaning "jointly." The Anyang knife becomes the Yanyang knife, the Construct the Nation knife becomes the Communicate to the Nation knife, the graph [j] becomes [j],^k the *yihuo* becomes the *yanhuo*, Ge City becomes Hu City, Taoyang becomes Miyang, Zhongdu becomes Zhongwu, Yu 1-ax becomes Wei ax 1 *jin*, *jing* 1 ax becomes Zhao ax 1 *jin*, the character [l] becomes [l],^m and [l] half becomes [l].ⁿ

There were a number of other numismatic works during the first half of the nineteenth century. Wu Wenbing's *On Coin Illustrations* of jiaqing 5 [1800] had six *juan*, and Qu Mufu's *Record of Coins Supplemented* of jiaqing 11 [1806] had twenty *juan*. The latter of these was a supplement to Hong Zun's *Record of Coins*. Before long, Qu went on to compose *Record of Coins Continued Compilation* in twenty *juan*. There was also Sheng Zilü's *History of the Springs*, in sixteen *juan*. I do not know in what year it was written. The woodblock illustrations in these works were not faithful to reality, and their contents were not remarkable, mainly having been copied from other works.

Meng Yigang's *Spring and Spade Unified Record* came out in daoguang 5 [1825]. It set out a group of forged Tang and Song Treasure Certificates.¹¹ It was wildly inaccurate and incoherent, and

¹¹The book contains illustrations of such things as Emperor Gaozong of Tang's Great Tang Treasure Certificates in 1-string and 10-string denominations; Emperor Wuzong's Great Tang Legal Tender Treasure Certificates in ten denominations from 1-string to 10-strings; Emperor Xuanzong's Great Tang Army Record Treasure Certificates, in denominations of 10-cash, 100 and 1-string; Emperor Yizong's Great Tang General Circulation Treasure Certificate 10-string and 100-string denominations; Emperor Zhaozong's Great Tang General Circulation Treasure Certificate 5-string, 50-string, 55-string and 100-string denominations; tianyou year-period Great Tang Convenience the People Treasure Certificate 1-string, 10-string, and 100-string denominations; Emperor Jingzong's Great Tang Treasure Certificate 10-string and 100-string denominations. There are also a Great Zhou General Circulation Treasure Certificate and a Great Song Convenience the People Treasure Certificate.

The author was probably cheated by forgers over all these notes, but later men have been induced to believe in them, as, for example, Wang Xiaotong's *History of Chinese Commerce* and E. Kann's *Chinese Paper Currency*, both of which quote

has badly deceived later writers. He bragged that he had "seemingly had miraculous aid." He mistook a Japanese *Shinko kaiho* for Tang Emperor Zhongzong's Zhou Interegnum Empress Wu coin, also without evidence. He was, however, the first to record the character *xi* and character *gong* Kangxi coins, along with their Manchu inscriptions. He also mentions the Great Qi Circulating Treasure, saying it was a coin of Huang Chao's Qi state. If the publication date of Meng's book is reliable, then this citation is even earlier than the one in *Collected Words on Ancient Coins*.

The development of numismatics after the middle of the eighteenth century was linked to the excavation of coins from the earth. There is not much recorded on excavation of coins in China before the Qing, because previous numismatists did not pay much attention to this source.

It was not until the development of textual verification studies that researchers began to pay attention to the coins themselves, rather than to empty talk. The reason Chu Shangling's *Record of Auspicious Metal I Have Seen* has value is precisely because it was just at that time that excavated coins were becoming very numerous, and he realized that inscriptions and provenances of coins could be determined on the basis of places where they were excavated.

For example, prior to Yuan and Ming, the hollow-socket spade [935]

had never been mentioned by anybody, but the number excavated during the qianlong and jiaqing periods steadily increased. On the basis of their copper content and inscriptions, Chu Shangling determined that the hollow-socket spades were all earlier than the flat-handled spades, and since many of them were being unearthed in Zhongzhou rather than elsewhere, with some also being unearthed in the area to the right of the mountains near Zhongzhou, he decided that they were Wei coins. Because the *pingyang* small spades were excavated along the Changzi-Dunliu circuit, he decided they were cast by Pingyang in the state of Zhao. The *zhongdu* small spades were also excavated along a line from Xiangyuan to Dunliu on the right of the mountains, and so he decided they were Jin spades.

Chu Shangling said that all the Qi knives came from his home town, and so he decided they formed the Qi monetary system. He also listed the five excavations he had personally witnessed. The first of these occurred in qianlong 51 (1786), when over 100 items were unearthed at Zhaowangzhuang,

Meng.

south of Changyang city. Most of these were three-character knives, but some had four characters. The second excavation occurred in jiaqing 6 (1801), when several dozen Jimo knives were excavated at the old city of Gaoyu, northeast of Jimo. These included several Anyang knives. The third excavation was in daoguang 1 (1821), when several dozen Qi knives, including several Jimo and Anyang knives were unearthed at Yanjiacun west of Songyang city. The fourth excavation occurred in daoguang 2 in Taishangzhuang, east of Jimo city, where several dozen Jimo knives were unearthed. The fifth excavation was in daoguang 3, in Zheshangzhuang, south-east of Changyang city, where several hundred Qi knives turned up.

In the course of thirty odd years, there were five excavations within a hundred *li* radius of his home town of Laiyang, Shandong. He also states that occasionally *chengbo* knives showed up among these. These are all highly valuable excavation reports. Hitherto some people had believed the *ming* knives were turned out by the Lü dynasty of Qi, but since a full thousand of them were unearthed at this time from an abandoned well and a crumbling wall in Yizhou, in the Hejian region, and Chu Shangling had never seen any turn up in his home town region in Lü territory, he decided they were Yan knives.

Dai Xi mentions the excavation during the qianlong period of a Taiping Hundred-cash and a Dingping one-hundred in Linping, Zhejiang.¹² Before then, these two coins were very rarely seen. As a consequence, people had to depend on Gu Xuan's thousand year old description of these two coins as having some sort of tortoise reverse, some sort of wave-like line. After this unearthing of two pots of them, these two kinds of coins spread throughout the southeast, allowing Weng Shupe to describe them on the basis of personal observation. However, the ones Weng saw were not good specimens, and so his description was inexact.

The Xiaojian Four-grainer of Liu-Song was also once scarce. At the end of daoguang a jar of them was unearthed in Piling.¹³ This coin then spread

everywhere. Lü Quansun collected several hundred of them, and made rubbings of 54 variant forms. He bound these into a fascicle and in xianfeng 2 [1852] presented this to Chen Jieqi. This was the source of the presently existing *Rubbings of the Xiaojian Four-grainers Unearthed At Piling*.

From xianfeng on, the chief numismatists were Tang Yuhun (alternate name Xiyuan), Li Zuoxian (Zhupeng) and Bao Kang (Zinian). [936]

Tang Yuhun wrote *Collected Investigations of Coins and General Investigation of the Standard Coin*. The latter was a part of the former, and was solely devoted to the monetary system of the Qing Dynasty up until the daoguang period. It has both text and illustrations. The author states that the illustrations were based on rubbings, but the Qianlong Treasure Tibet coins from Tibet are copied as thin, square-holed round coins, and their inscriptions are incorrect.

Li Zuoxian's *Ancient Money and Exchange* was carved onto printing blocks in tongzhi 3 [1864]. As it assembled nearly 6,000 coin illustrations, which exceeded the number in *Ancient Spring Collection*, it was taken seriously by both contemporaries and later generations. Some even consider it the most important Qing Dynasty numismatic work. This is too high an evaluation. It is hardly worth mentioning so far as its text goes. In addition to some short explanations attached to the illustrations, most of the first four *juan* were copied from other books.

The important point about this book is the relatively large number of illustrations it contains, but that it is no higher in substance than its predecessors is evident from its contents, from the presence in it of forgeries, and from the technique of its printing block carving. It contains some other unverified items irrelevant to coins, unusual objects which have been altered, amulets formally made, charms, amulet astrological tokens, religious medals, designs without inscriptions and *damage* coins. These comprise almost one-fourth of the illustrations.

Of the genuine coins illustrated, a number are minor variants. For example, there are over 300

¹²Collected Words on Ancient Coins, "Taiping Hundred-cash, Dingping one-hundred" article.

¹³Bao Kang, *Examination of Explanations of Ancient Cabinets of Coins*: "The Xiaojian Four-grainer has on one face a leek-leaf script inscription, and on the other a small seal script inscription. They were extremely difficult to obtain. Those interested in coins all said that just one of them would cost 20-30,000 cash. At the end of daoguang, a jar of them was unearthed by Nan Zhonghu. Yao Xian obtained several hundred of them, and gave them away as gifts. All sizes were mixed together. Some had one side's inscription in reverse order, some read from the

left, some from the right, and some had one character right side up and one upside down. Some had one side with horizontal inscriptions above and below the hole, and some with the inscription on either side of the hole. Some had one side upside down, and one side in the standard form. Others had both sides in the standard form, with four stars, four rings, or four ring marks. The inscription Xiaojian appears in four variant forms: identically on both sides, in reverse order, horizontally, and in standard form. The inscription Four-grains also appears identically on both faces, or repeated above and below the hole. There

ming knife reverses, occupying four or five *juan*, and many of them are duplicates. Though there are some small variations in calligraphy among them, pre-Qin knives and spades were not inherently uniform.

This book also contains no small number of forgeries. Among the knife coins, for example, it has character nine and *Qi huo* knives. It has square-holed round coins like a Weight Twelve-grainer, a Taiyuan Monetary-spring, a Tianyou Original Treasure, a Deyou Original Treasure, a Jingyan Circulating Treasure, a Qianheng Circulating Treasure (Liao) and a Taiping Original Treasure. None of these ever existed, but the author accepted them without suspicion. He took the character nine knife as a unique specimen, and was quite pleased with himself about it. There were a number of year-periods during Ming when no coins were minted, but he filled in the gaps with fakes, among which were Annamese coins. Imitations and recut coins are still more numerous.¹⁴

Because of the praise it received at the time of publication from his friends, posterity has not distinguished between the good and the bad in it, and so this book has caused great harm. The notable point about its illustrations is the relatively large number of variant forms, something worthy of welcome by scholars, but this book was printed from carved woodblocks, and the coin illustrations were not well cut, not even being up to the level of earlier works. Important distinctions of detail as well as the artistic quality of the coins were lost.

For example there are circles on the reverse of the Construct-the-Nation knife, and there were two forms of the edge design on its obverse. Most have continuous edge border lines, but some have broken lines. Because Li Zuoxian and the woodcarver did not pay attention to this point, these differences are not reflected in the two examples of the Construct-the-Nation knife in this book. Some inscriptions on Chinese coins have artistic value, but in this book all inscriptions are carved

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identically. Li Zuoxian also wrote a *Continued Coin Discussions*, which not only did not contain anything original, but was not even willing to absorb other people's good ideas. For example he denied any connection between the hollow-socket spade and actual spades used as coins. He also disagreed with the decipherment of the characters for *ax* and *qiong*.

are as many as 54 unique variants."

¹⁴Zheng Jiaxiang, "False Specimens in *Ancient Money and Exchange*," *Encyclopedia of Ancient Coins*, "Introduction: Counterfeit Coins," points out numerous recast and recut coins.

Bao Kang's (alternate name Zinian, 1810-?) writings were *Examination of Ancient Cabinets Compiled Drafts*, *Examination of Explanations of Ancient Cabinets of Coins*, *Large Spring Illustration Record* and *Coins and Exchange Continued*. *Compiled Drafts* is made up entirely of essays written as colophons, as well as complimentary verses composed as prefatory material for other men's works, and is of no great value. *Examination of Explanations* is very similar to Dai Xi's *Collected Words on Ancient Coins*, and deals with things he had personally seen and heard, as well as old customs and traditions concerning romantic incidents. *Large Spring Illustration Record* includes the large coins of the xianfeng and tongzhi periods, along with Xinjiang coins and Qing Dynasty local mint coins. *Coins and Exchange Continued* is a continuation of Li Zuoxian's *Ancient Money and Exchange*.

Bao Kang has been taken more seriously, simply because his powers of discrimination were better than average. He was proud of this himself. And yet he expressed no suspicion of the character nine knife, and he said that the character *yang* version of the Huichang Inaugural was the most scarce variant. Evidently his judgment was not without flaw. His research methods and the contents of his books were old fashioned. He took the Treasure *de* Office Xianfeng coin for a coin produced by the Hunan Changde mint, and mistook the place name Ye'erqiang [Yarkand] for Wushi. He was the first to record the character *yong* Longfeng Circulating Treasure (in *Coins and Exchange Continued*), but he supposed it to be an imitation of Han Lin'er's Longfeng coin. However, right up to the present, no one has learned the origins of this coin. Its inscriptions bears some points of similarity to Hongwu coins, but its level of manufacture is not up to that level.

Coins continued to be unearthed in very large numbers after the daoguang and xianfeng periods, but finds of hitherto unknown coins grew ever fewer. As a consequence, later numismatists could only perform piecemeal supplementary work. There were some specific discoveries, but no epoch-marking works were written. Hu Yizan (alternate name Shichā) and Wu Dacheng (alternate name Qingqing) are representative figures of that period.

There were three types of Qing Dynasty numismatic-works. ..

One type was the general history, presenting a complete narrative running from ancient times to the time of writing, and which sought to make a complete selection of materials. Weng Shupai's *Collected Investigations of Ancient Coins* was of this type. Of the pre-Qing coin catalogs and treatises, most belonged to this category, differing only in their degree of complexity.

Another type was the historical monograph or monograph on a single dynasty, like Tang Yuhun's *General Investigation of the Standard Coin*, which deals only with Qing coins up to the daoguang period. Other monographs dealt with one type of coin, as did Bao Kang's *Large Spring Illustration Record*, which focused only on large coins. Still others had a particular point of emphasis, as did Ma Ang's *Money Spade Inscription Investigations*, which dealt solely with the inscriptions on knife and spade coins.

The third type of work took the form of reading notes, and dealt only with what a particular individual fancied, and made no attempt to organize the material, as for example, Cai Yun's

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Habitual Conversations and Dai Xi's *Collected Words on Ancient Coins*. Cai Yun went more deeply into textual verification than did Dai Xi. *Collected Words on Ancient Coins* was written in a more lively style than *Habitual Conversations*. Since it sought to be interesting, it concentrated on historical anecdotes, but like a great many other such works, its contents were fragmented, and did not constitute a well-articulated whole.

In any event, the very fact that Qing Dynasty numismatic works could be divided into such categories is itself a sign of progress. The second category in particular revealed the presence of a tendency toward specialization which was giving numismatic studies ever more depth.

I must point out that these men of the first three quarters of the nineteenth century were all from official circles, and all could also paint and compose poetry. They were often acquainted with each other. Even those who were not acquainted, could take advantage of their common tastes to become known to each other. Those who lived in the same area frequently met to show off their new acquisitions, have discussions, or exchange rubbings, making this a flourishing age for numismatics. Such circumstances had not been present in earlier times, and they had a very great stimulative effect upon numismatics.

This class of men wrote books not for profit, but rather produced them as a form of recreation. To some extent their writings served as gifts for their friends, and so the books often contained praise for each other's work. The collection and exchange of coins played a large role in their lives. That is why even if they had other formal professions, they were still willing to exhaust all their energies in the study of coins.

Such enthusiasm, added to their wealth and the leisure they enjoyed, should in principle have raised this science to a very high level, but because their research methods were still not entirely scientific,

because their knowledge was insufficiently broad, and their logic was insufficiently strict, a great many of their conclusions were misleading, and their accomplishments fell short of the ideal. They even committed some unnecessary errors.

Of course mistakes in textual verification and wrong conclusions were sometimes unavoidable, and may be forgiven. The coin catalogs frequently contained fakes. Hardly a single catalog was able to avoid these. It was merely a question of how many such errors a catalog contained. In this respect, the later ones generally were superior, not only because methods had improved, but because reference materials were becoming ever more numerous. Hence we should remember the difficulties faced by our predecessors.

Nevertheless, some errors should have been avoidable. For example, the officially-compiled *Imperially Sanctioned Register of Coins* interprets the character *sheng* on the coin tokens circulated in Lin'anfu during Southern Song as an abbreviation of *Zhongshusheng*, or Secretariat of the central government. This shows that these academicians thought only about serving as officials and were unwilling to keep up with their studies. Actually, surviving Song Dynasty written sources contain numerous references to the "reduced hundred" [*shengmo*]. To cite another example of needless error, Tang Yuhun had clearly never seen the Qianlong Treasure Tibet coin, but he insisted on providing a grotesque picture of it in *General Investigation of the Standard Coin*, and actually labeled it as having been drawn from a rubbing. Obviously he had an insufficiently strict attitude toward scholarship.

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That period was not entirely lacking in criticism and counter criticism. For example, Chen Jieqi criticized some of the inscription decipherments in *Ancient Money and Exchange*. Li Zuoxian also got into some debates, and published Chen Jieqi's critiques along with his own in *Continued Coin Discussions*. This was a good custom. This excellent custom was one reason why Qing Dynasty numismatics enjoyed so notable a degree of development.

Nevertheless, Chen Jieqi was, after all, primarily an epigrapher, and so he used copies of the inscriptions on knife, spade and ring coins. Decipherment of these texts was his first priority. Recording of weight standards was his second priority. Illustrations were his third priority.¹⁵ Such standards might not have been entirely appropriate even for bronze utensils, and were unsuitable for coins. However,

¹⁵ *Continued Coin Discussions*, "Eastern Zhou Coins."

Bao Kang in *Continued Compiled Drafts* says that to discuss weight standards, one must determine which coins were the first to be minted, since as minting goes on, the coins become lighter and smaller. This was altogether inferred from examination of texts on weight systems, and cannot be said to have been a balanced view.

Qing and pre-Qing coin catalogs were all illustrated with woodblock prints, which invariably diverged from the forms on the original coins. This was an obstacle to the study of small variations. Ni Mo's *Outline of Ancient and Modern Coins* has a section on "Western Coins." Because the carver did not understand foreign script, he almost entirely miscopied the original shapes, and there is no way to make them out from the illustrations. Li Zuoxian's *Ancient Money and Exchange* suffers from the same limitation.

As a consequence, once photo offset printing became available, the woodblock coin catalogs of the old days became almost entirely dispensable.

Of course Qing Dynasty works on numismatics were not limited to those mentioned above. For example, the very title of Liu Shilu's mid-century *Decipherment of Xia Ransom Metal Inscriptions* is itself an error. Zhang Chongyi's *Coin Record New Redaction* contains a number of counterfeits. In addition, *Record of Spring Treasure Seen* was mainly copied from other books.

A number of book titles are listed by most coin catalogs, but they do not evaluate their contents, merely feeling obliged to record any they have heard of. Hence a number of books without any value have continued to be introduced, but not criticized. This sort of situation has not been limited to numismatics, but was a universal phenomenon in Chinese scholarship of the past: There has been a love of enumeration, without weighting, exercise of selectivity, or critical analysis. A work of great value has frequently been treated as being of the same importance in history books as an utterly valueless book, and has occupied an equal amount of space.

The development of Qing Dynasty numismatics cannot be separated from the large number of collectors and their energy. Some collectors kept in touch with the authors of books proposing theories about coins. They participated in research and debates on the subject. Some of them had a degree of scholarly attainment perhaps not inferior to that of men who had written books. It is merely

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because they did not write that they are unknown to posterity. Their contributions were often contained in the works of their friends. For example, the inscriptions *lishi*, *qiong* and *chun* were deciphered by Hu Yizan. Chen Jieqi said that the character nine

knife was a complete fake. The character *yi* was recognized by Liu Xinyuan.

Though numismatic books were very numerous during the Qing Dynasty, a number of numismatic questions remained without explanation. For example, not a single person did a thorough job of studying the Chongzhen coins of the Ming Dynasty. At most they were content to set out the various reverse inscriptions, but they did not seek to explain what they each actually meant.

Modern Chinese historical researchers tend toward the two extremes, and to not see the middle. Numismatics shares this trait. Most people either like the near contemporary gold, silver and copper coins and paper money, or they like ancient knife and spade coins. The great majority of objects between these two times are not taken up so enthusiastically. In particular, there are very few who specialize in the study of Ming Dynasty coins. If numismatics is truly to be studied as a science, then attention must certainly be paid to those weak segments before this science can gain full and evenly balanced development.

a. 開 b. 黃 c. 甘井 d. 溫 e. 陽 f. 春 g. 合
h. 春甘 i. 合陽 j. 8 k. 王 l. 開 m. 陽 n. 陽分