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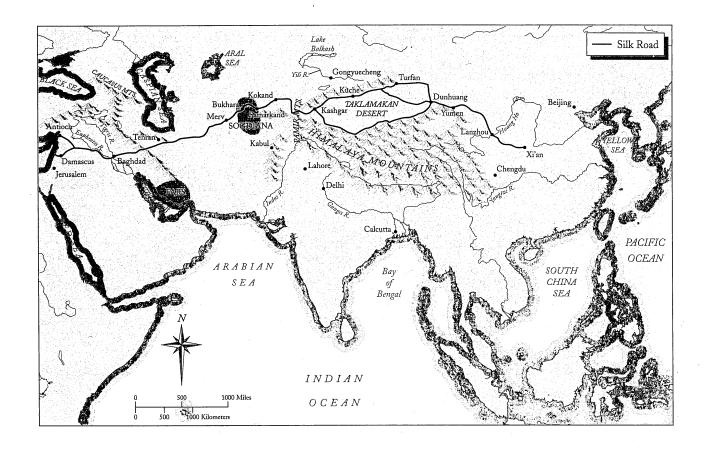
How Business Was Conducted on the Chinese Silk Road During the Tang Dynasty, 618–907

PART I: THE RESOLUTION OF AN INTERNATIONAL DISPUTE ON THE SILK ROAD, ca. 670

VALERIE HANSEN

In 1966, the first year of the Cultural Revolution, Chinese archeologists discovered a group of affidavits in a tomb in the Astana graveyard, some ten miles east of Turfan. Offering a needle-sharp close-up of the Silk Road trade, these documents highlight the legal system officials of the Tang dynasty (618-907) devised to handle commercial disputes between their subjects and peoples from other lands with equally complex legal systems. These innovations facilitated the commercial exchanges of the Silk Road and indeed may have contributed to the surge in trade in the seventh and eighth centuries, when the Tang state poured resources into Central Asia to support its officials and armies posted there. At the time Turfan was probably the largest oasis on the Silk Road with a population of forty thousand; today it lies in the Xinjiang Autonomous Region of northwest China.

Since 500, Turfan had been the capital of the independent oasis kingdom of Gaochang. Soon after the founding of the Tang dynasty in 618, the emperor tried to persuade the rulers of the oasis states ringing the Taklamakan Desert to accept his overlordship. He signed treaties with those who agreed and sent armies to con-



The Silk Road trading route

quer those, like the king of Gaochang, who did not. In 640 Tang armies invaded the kingdom, and Turfan became one of more than three hundred prefectures in Tang China, fully subject to all the provisions of Chinese law.

Turfan was on the overland trade route skirting the northern edge of the Taklamakan Desert, now usually referred to as the northern Silk Road. Going through Dunhuang and Kashgar, the northern route connected the Tang capital of Chang'an (modern Xian in Shaanxi province), a thriving metropolis of 500,000, with its major trading partners, the city states of Sogdiana, a region straddling modern-day Uzbekistan and Tajikistan. As on the Chinese side of the Pamir Mountains, trade routes connected the oases where people naturally settled.

The residents of Sogdiana spoke Sogdian, an Iranian language distinct from, but related to, Middle Persian, and were called Sogdians. They inhabited the easternmost edge of the Iranian world, whose center lay far to the west in the Fars region of Iran. The Sasanian empire (224–651) ruled the region of modern-day Iran and Iraq, but its control did not extend all the way to the city states of Sogdiana, which were ruled by independent kings. Samarkand and Bukhara were among the most important city states in Sogdiana at the time.

Many Sogdians were true international merchants, who knew the cities and cultures of both the Iranian and Chinese worlds. Sogdian traders were active in China in at least the fourth century, if not before, and their pace of emigration increased dramatically after the mid-seventh century, as refugees fled before the advancing Islamic armies.

Sogdians brought with them their own law, which drew on the ancient texts of Zoroaster, who may have lived sometime around 1000 B.C. Zoroastrian teachings held

that truth-telling was the highest good of all,² and rulers were obliged to implement justice in their realms in the hope that they could increase the forces of good in the world. Little is known about Sogdian law because the Sogdian legal code is not extant and only a few contracts in the Sogdian language survive.³

Sogdian law probably overlapped considerably with that of the Sasanian empire. The Sasanian law code is not extant, but the basic principles of Sasanian law are preserved in the seventh-century casebook *The Book of a Thousand Judgments*, and a ninth-century encyclopedia. The Book of a Thousand Judgments presents short judgments on different topics: the maintenance of religious shrines, inheritance, marriage, and various types of contracts. Although Sasanian law recognized oral agreements, in most cases the parties to a contract drew up written agreements, which were signed in front of witnesses and placed for safekeeping in the Office of Registry.

The Astana Documents

Almost all the documents found at Turfan were buried in the Astana graveyard. With the exception of a single Sogdian-language contract,⁷ the documents are written in Chinese, the language of administration of the Tang dynasty and also the local scribal language even before the Tang conquest. The Astana graveyard contains over three thousand tombs dating from the third to the eighth centuries. In 1915, Aurel Stein reported that all the graves had been disturbed, both by grave robbers and earlier explorers.⁸

Even so the region's dry climate has preserved a startling array of items—desiccated corpses, elaborate silks, painted wood figurines, and over two thousand documents written mainly in Chinese—making it one of the most important archeological sites on the Silk Road. Of the 465 tombs excavated between 1959 and 1975, 202 produced documents. The presence of documents testifies to the unique practice of the Turfan people who buried their dead in shoes, hats, and belts made from recycled paper, which often had writing on one or both sides.



Recycled paper coffin. 769 A.D. This papier mâché coffin made from recycled documents was placed over the body of a dead official who could not afford a more elaborate funeral. When dismantled, the coffin produced 55 documents, all dating to 769, the year the official died. All came from the government office that oversaw the provisioning of long-distance horses used by government officials.

By the third century A.D. Silk Road craftsmen had learned how to make paper, invented five hundred years earlier in China. The paper used in government documents and private materials was not discarded but recycled in various forms. Sometimes it found its way into funerary garments. The side with writing was often painted black to obscure the writing, but fortunately for historians, the characters sometimes remained visible. By laboriously piecing together the fragments of paper in these garments, archeologists have managed to reconstruct a wide variety of sources. Yet much from Astana was lost, as well, as this type of painstaking archeology was the exception in China during the Cultural Revolution.

Nine pieces of paper relate to the Silk Road dispute about an unpaid loan from a central Asian merchant to his Chinese partner. They range in size, with the largest measuring over fourteen inches long and eleven inches wide. Too large to have been soles for shoes, the most common type of funeral good at Turfan, they are clearly from a sewn paper garment. Needlemarks are visible in some of the photographs (see page 48, where two rows of needlemarks run along the bottom edge of the document). Could they have been part of a paper shirt? We will never be certain because none of the publications about the site either describes the paper artifacts found in tomb 61 or explains from which objects the documents were recovered.¹¹

Seven of the nine documents concerning the dispute have writing on the reverse, including name lists for corvée duty and affidavits from other cases. The remaining eleven documents in the tomb (those having nothing to do with the loan dispute) are also either name lists or affidavits, an indication that the tomb's contents were all made from paper discarded by a government office, quite likely a single court. Some of these documents are dated 665, and the tomb includes an epitaph dated 673, so we know that the dispute occurred sometime between 665 and 673, when the tomb was sealed.

The Documents' Improbable Survival

In 665, government clerks used fresh sheets of paper to draw up name lists and to record affidavits for the Silk Road dispute. Scribes writing rapidly used a modified cursive—meaning different strokes in a single character are connected, but no strokes connect one character to another. These drafts must have been discarded since the reverse was subsequently used to record the testimony of the parties to the dispute.

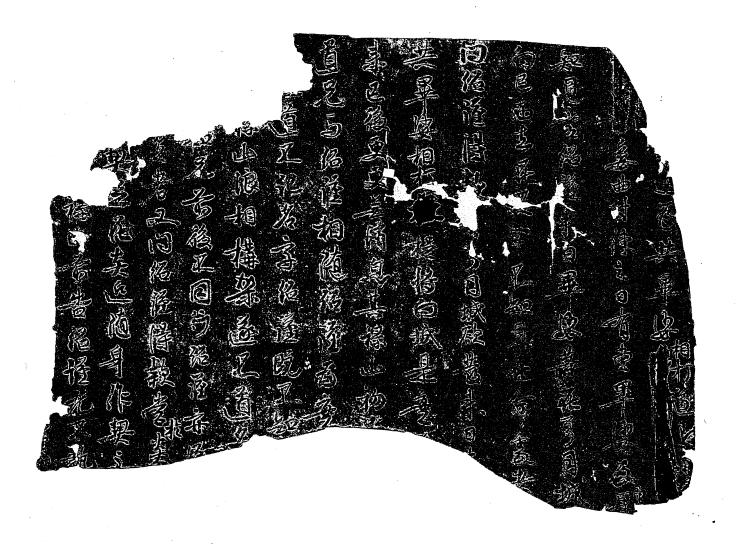
With writing on both faces, the paper could no longer be used by clerks and was probably sold as refuse. It then came into the hands of someone making funerary garments, who cut it into pieces (for a shirt?) and sewed them together. Placed in the tomb of the deceased in 673, the recycled documents remained underground in the Astana graveyard for more than one thousand years, until archeologists discovered them. They have since been dismantled and transcribed. This complicated sequence of events has resulted in unique documents; their large chunks of continuous text make them unusually informative, but also frustrating because of the many gaps at the places where they were cut.

The Facts of the Case

In 670 a Sogdian merchant brought a suit in Turfan against a Chinese merchant, Li Shao-jin. The merchant's Chinese name, Cao Lushan, provides important clues about his identity. The Chinese assigned Cao as a family name to those Sogdians from Kabudhan, or Gubdan, the region north of the Zerafshan River (which runs through Samarkand).



One page of a Silk Road document recording an international trade dispute. Ink on paper. ca. 665–763 A.D. The first page of a recycled paper document recording the legal proceedings involving the family of a deceased Central Asian merchant and his former Chinese partner. The dispute concerns a camel load of silk jointly claimed by the two parties. The document was likely a discarded draft recording testimony at a trial.



The seventh page of a Silk Road document recording an international trade dispute. Ink on paper. ca. 665–763 A.D. The last large section of the draft of the trial proceedings is part of an affadavit about the final meeting of the Sogdian merchant who was later killed with his Chinese partner in Gongyuecheng. Two rows of needlemarks at the bottom edge of the sheet suggest that it was later sewn into the lining of a garment, perhaps a shirt.

Lushan was the Chinese transliteration of the common Sogdian first name, Rokhshan, which means "bright" and is the masculine equivalent of the English name "Roxanne." In addition to Rokhshan and Merchant Li, the case involved two other Sogdian merchants, Cao Guoyi and Cao Bisuo. Their common surname of Cao indicates that their home region was the same as Rokhshan's, but not necessarily that they were related.

The three Sogdians and the single Chinese merchant were all residents of Changan. According to Tang law, each subject of the empire had to be listed on a household register where he or she lived.¹³ These men, who traveled frequently to the different trading oases of the Taklamakan Desert, probably did not spend much time in the Tang capital, but their wives and children lived there year-round. Sogdians resided in certain districts in the capital, often near a fire altar, where they could attend Zoroastrian rites.

Rokhshan brought the suit on behalf of his deceased elder brother, Yam-yān, transcribed in Chinese as Yanyan, meaning "favor of the god Yama." Yama was the Indian god of the dead who presided over the underworld. Rokhshan accused Merchant Li of borrowing 275 bolts of silk from his elder brother Yam-yān, but failing to repay him. Merchant Li denied the charges, and to make matters even more difficult Yam-yān had died several years earlier. None of the parties to the case lived in Turfan, but Rokhshan may have brought the suit there because between 670 and 679 it was the seat of the Anxi Protectorate, an administrative district including Kuche, where Yam-yān had disappeared. 15

According to Rokhshan's affidavit, Li Shaojin and Yam-yān had formed a partnership in Gongyuecheng (modern-day Almaligh), which lies in the Yili River basin close to modern China's border with Kazakstan. Having no common language, the two men must have communicated through interpreters. Merchant Li then proceeded to borrow 275 bolts of silk from Yam-yān.

At the time of their parting, the two merchants agreed to meet in Kuche, some 200 miles to the south. Accompanied by his nephew, Yam-yān was leading two camels, four cattle, and one donkey that carried his wares: various goods worth 200 bolts of silk in addition to saddles, clothing, bows, and arrows. He never arrived at his destination. One witness speculated that he died at the hands of bandits who wanted his cargo of weapons and saddles.

Not surprisingly, the Chinese merchant never paid back the 275 bolts of silk he had borrowed from the dead man. In his initial affidavit, when asked whether he had received the loan, he testified, "At Gongyuecheng I never obtained the bleached silk from the Sogdian. Nor did I expect to go to [gap in text] with the Sogdian and then return to Kuche. Inasmuch as I was not in partnership with him, I genuinely don't know." His speech of denial has a curiously modern ring. Court officials asked him again and again whether he had received the loan, yet he steadfastly maintained that he had traveled alone.

Then the court officials confronted him with the testimony of two Sogdian merchants who had witnessed the original loan of the 275 bolts of silk at Gongyuecheng. Although the copy of the contract belonging to the deceased Sogdian partner had disappeared, and although the Chinese merchant must have destroyed his copy, the two Sogdian witnesses vouched that Merchant Li had indeed borrowed the silk. According to Tang law, their testimony had the same legal standing as a copy of the contract.¹⁶

Ruling in Rokhshan's favor, the court ordered Merchant Li to pay back 275 bolts of silk in addition to interest. We have no way of knowing whether the Chinese partner ever paid Rokhshan back, because the documents come to an abrupt stop.



Contract for loan of silk. Ink on paper. 661 a.p. This contract records the loan from a moneylender of thirty bolts of silk to a borrower who agrees to pay four bolts, or 13.33 percent interest, each month until the time of repayment. This rate was higher both than prevailing rate in Turfan, usually 10 percent each month, and the government-stipulated rate of 6 percent per month. The text of the contract appears on the right, the names of the signatories on the lower left. Nothing appears below the first name, that of the moneylender, but the borrower, the guarantor, and the witnesses all draw their fingerjoints below their names to indicate their acceptance of the terms.

Typical Contract Terms

Only the affidavits and the judge's decision have survived, not the original contract. But we can reconstruct what typical contracts might have looked like on the basis of other contracts excavated from the Astana graveyard. Of the 250 contracts excavated from Turfan, more than 40 are loan agreements. Most loans were for small sums, such as a few pecks of grain, several bolts of silk, or between 2 and 40 silver coins. One agreement dated 661 covers a loan of 30 bolts of silk from a money lender named Zuo Chongxi to a man named Long Huinu. After giving the date, this contract reads

Long Huinu, resident of Anxi canton, receives thirty bolts of bleached silk from Zuo Chongxi, resident of Chonghua canton. The monthly interest will be four bolts of bleached silk. If the interest is not paid monthly, a fine of one bolt of bleached silk will be paid to Zuo each month. If Zuo needs the silk on a given day, then it must be returned to him promptly. If the borrower absconds, then it is up to his wife and children and those whose names follow below to redeem his debt.

Officials have government law, and common people follow private contracts. The two sides agree to make this contract, and they draw their finger joints as a sign of good faith.

Zuo, the owner of the silk, Zuo [no finger joint marks]
Long, the person who receives the silk [finger joint marks]
Guarantor Long Xu [finger joint marks]
Witness Wei Zuo [finger joint marks]
Witness Fan Shide [finger joint marks]
Guarantor Kang Wenxi [finger joint marks]

All parties to the agreement drew their finger joints, except for the lender Zuo. They drew lines next to each joint of their index finger, an act equivalent to signing with an X in the West.

Many Turfan contracts follow the same format and include the same phrases. The identity of the guarantors is unknown, but two of the witnesses, both Sogdian merchants resident in Changan, later testified on Rokhshan's behalf, so the agreement had at least four participants: the borrower, the lender, and two witnesses.

The monthly interest of 13.33 percent, or four bolts on a loan of thirty bolts, stands out as unusually high. In the Silk Road case, we can assume that Yam-yān would have charged Merchant Li a lower rate of interest since Li was borrowing a larger amount of silk, but otherwise the missing contract would have followed this format.

A monthy interest rate on private loans of 6 percent (raised to 7 percent in 742) was stipulated by the Tang statutes, as reconstructed by Niida Noboru.¹⁹ This was less than the prevailing rate in the surviving Turfan contracts, which usually call for 10 percent each month and sometimes more, as we saw in the contract above.²⁰ The state did not require registration of contracts for loans, but it did require contracts for the sale of livestock and slaves to be registered with market officials. The government's penal code, the *Tang Code*, also contains a few provisions about contracts. One limits the total interest charged to the value of the principal.²¹ The terms of the Turfan contracts, except for interest rates, are fully consonant with prevailing Tang legal regulations.

Had the Silk Road case been governed by Iranian law, Merchant Li should have given

something, whether property, slaves, or goods, as security when he borrowed 275 bolts from Rokhshan. Iranian judges emphasized the lender's obligation to maintain the property or goods provided by the borrower as security on a loan. When Merchant Li and Rokhshan drew up their contract in 670, Turfan had already been under Tang rule for thirty years, so it seems unlikely that the contracting parties would also have drawn up a Sogdian-language version of the contract.

Other extant documents from Turfan are in Chinese but have Sogdian signatories. Some Sogdians, particularly those born in Turfan, must have spoken good Chinese and been able to read it. For those who, like Yam-yān, did not, the Chinese courts provided interpreters.²²

The Value of Silk

The dispute between Cao and Li reveals much about silk prices. Most of the silk traded along the Silk Road during the Tang dynasty was not multicolored luxury silk but plain white silk, a common medium of exchange. Silk, bronze coins, and silver specie were the three main types of currency in circulation in the Tang.

Silk circulated mainly in the form of bolts, woven to a standard length of forty feet and a width of one foot eight inches.²³ Silk's value fluctuated less than that of the bronze coins, whose weight also made them inconvenient. One string, or one thousand coins, weighed as much as four kilograms.²⁴ In the seventh century silver coins, minted by the Sasanian empire and, after 651, by their Islamic successors, circulated widely throughout western China. For reasons not yet understood, the people of Turfan stopped using Iranian coins after the year 700 and began to use Tang bronze coins instead.²⁵

The Tang government collected taxes in kind, requiring households to pay in labor, cloth (often silk), and grain, according to each household's assessed annual obligation. In the mid-eighth century, the government's annual tax receipts included 27 million bolts of cloth, 250 million pecks of grain, and only two million strings of coins, a clear indication of silk's importance as a medium of exchange.²⁶

What was the value in 670 of 275 bolts of silk? No reliable price tables exist, but contemporary contracts from Turfan provide a rough sense of silk's purchasing power. In 673 a camel cost forty bolts of silk, and in 731 an eleven-year-old female slave commanded the same price. The loan of 275 bolts probably sufficed for Merchant Li to buy a load of goods and maybe some animals to carry it, but it was a small transaction in contrast to the government's regular expenditures. A single garrison in Dunhuang in 745 cost the central government an annual subsidy of 15,000 bolts of silk.²⁷ Most of this was for salaries for soldiers and officials, who then spent their money in local markets, purchasing goods from merchants like Li and Yam-yān.

Conclusion

The dispute between Cao and Li over 275 bolts of silk is but a single example that survives because of extraordinary circumstances. Even so, it reveals much about the conditions facilitating Silk Road trade. Scholars of European history, Avner Greif among them, have devoted much energy to reconstructing the various institutions in Europe during the eleventh, twelfth, and thirteenth centuries that facilitated long-distance trade. Coalitions among merchants, courts at annual fairs, and an unwritten merchants' law all played an important role in creating an environment that encouraged merchants to invest money in long-distance ventures with other merchants they did not know personally.

Most people, whether in China or the West, do not think of traditional China as having an active legal system. Yet the dispute between Merchant Li and Rokhshan demonstrates the willingness of the traditional Chinese courts to intervene in a private dispute, a willingness well-documented by a series of secondary studies published in recent years.²⁹

This judge accepted a case in which there was no written contract, and in which three of the four parties involved were not Chinese, suggesting that Tang judges were willing to adjudicate almost any dispute. Like their counterparts in Europe, merchants in China required some reassurance before they would do business with or extend credit to someone they did not know personally. At the time of their partnership, Merchant Li and Yam-yān did not even share a common tongue. The readiness of the Turfan judge to hear Rokhshan's case on behalf of his deceased brother illustrates the extent to which the Tang legal system supported the enforceability of contracts, even of private oral agreements. No wonder so many merchants chose to engage in long-distance trade on the Silk Road.

PART II:

RECORDS FROM A SEVENTH-CENTURY PAWNSHOP IN CHINA

VALERIE HANSEN AND ANA MATA-FINK

Hardly any business records from China survive from before the nineteenth century. Imagine, then, the amazement of the Chinese archeologists who found pages from a seventh-century account book of a pawnshop. Written in Changan, the capital of the Tang dynasty (618–907), the pages from the account book made the twelve-hundred-mile journey to Turfan in the arms of a tomb figurine, which was buried in the Astana grave-yard in northwest China. The fifteen sheets of paper, which record some fifty-four transactions (the last sixteen are in fragments), are the earliest recorded examples of pawnshop loans yet found in China. Although sparse, the information they provide permits us both to reconstruct the workings of a single pawnshop and to sketch some broader conclusions about credit and interest rates in traditional China.

The Account Book

Each entry is devoted to a single transaction and follows a fixed format: item pawned, name of borrower, date, amount of money loaned, date the money was returned, address of borrower, and occasionally his or her age. The staff of the pawnshop recorded the loans on pieces of paper ranging between ten and twelve inches high and six or seven inches wide. Once the pawned item was returned, the staff crossed out the returned item with a bold mark in the shape of a seven. They then discarded the paper (unusually, with writing on just one face), probably by selling it to a used paper vendor, who must then have sold it to the workshop that made the tomb figurines.

Pawned items were usually clothing or pieces of cloth (see appendix for translation of the tickets). The account book names the specific article of clothing and gives its condition, color, and fabric. Almost all the items of clothing are called "old," sometimes even "tattered," but we should view these designations with skepticism: pawnshop clerks labeled almost everything pejoratively in order to assign the lowest possible value.³² Only two transactions involved other goods: Borrower 26 received 150 coins against four strings of pearls, and Borrower 12 collected 70 coins for a bronze mirror.

There is no obvious correlation between the items pawned and the money received: Borrowers 2, 6, and 28 received between 40 and 100 coins for a single shirt. The single largest transaction was for 1,800 coins: Borrower 19 put up five items (two skirts, an overgarment, a scarf, and one other garment) to obtain this large loan, but none of the other borrowers received more than 200 coins for any individual article of clothing. The amount of the loans ranges from 20 to 1,800 coins, with an average of 172.5 coins. If we leave the largest loan of 1,800 coins out of our calculation, the amount loaned is approximately 116 coins per transaction.

Price data from this period is scarce, but the official histories record that in 665, a year with a good harvest, one could buy a peck, or approximately 5.5 quarts, of rice for five coins. (A very rough estimate in today's prices would put the cost for the same amount of rice at \$10.) Most records of government expenditures use one thousand coins, or a string, as the unit of reckoning, with but a single recorded loan exceeding a single string.

Only two of the entries mention interest. Most entries simply note that the loan was repaid, without recording the amount of interest paid. In the two exceptions, the borrowers made initial payments toward their debt, which required the bookkeeper to distinguish





Sample entries from the Changan pawnshop records, ca. 662–689 A.D. Four sample pawnshop loan records. The horizontal and diagonal strokes indicate that the loans were paid off and the pawned items retrieved. The red character on the bottom of the far left line reads "here," an indication that the torn white silk garment of a child was placed in the shop—and not in another storage-place—when pawned.

between repayment of principal and interest payment. For example, in Transaction 25, Cui Ji borrowed 100 coins on the nineteenth day of the first month; four and one-half months later he made a partial payment of 49 coins, of which 40 went toward the principle. The 9 coins toward interest works out to an interest rate of 5 percent a month. Borrower 28 paid the same interest rate on the money he borrowed, so it seems likely that the other borrowers paid an equal rate. During the Tang dynasty (618–907), government offices were permitted to make loans at 5 percent a month.³³

The age of the borrowers ranges from fifteen to sixty, with the average twenty-eight years old.³⁴ Interestingly, borrowers under thirty tended to borrow more money (averaging 365 coins each—or 160 if the loan of 1,800 coins is excluded) than those over thirty (averaging 92 coins each). The small amount of the loans suggests that the borrowers were ordinary city dwellers, an impression confirmed by the two borrowers whose occupation is given. Borrower 24 belonged to a dyer's household; Borrower 29 was a hairpin master.

Of the twenty-nine borrowers whose names are recorded, nineteen had distinctly male names and ten female names. Men are called by their surname and given name. With two exceptions, the family names are those used by Chinese; Cao and He were among the surnames assigned to Sogdians from the region of Samarkand, and the two men might have been Sogdian.

The women have surnames but no given names. Instead they are referred to by their position within the family: "woman" (niang), "old woman" (po), or "younger sister" (mei). Evidence from central Asia in this period reveals that women often borrowed money, sometimes against pledges; Professor Deng Xiaonan of Peking University suggests that husbands may have sent their wives, and sometimes their children, to pawnshops and moneylenders to spare themselves embarrassment.³⁵

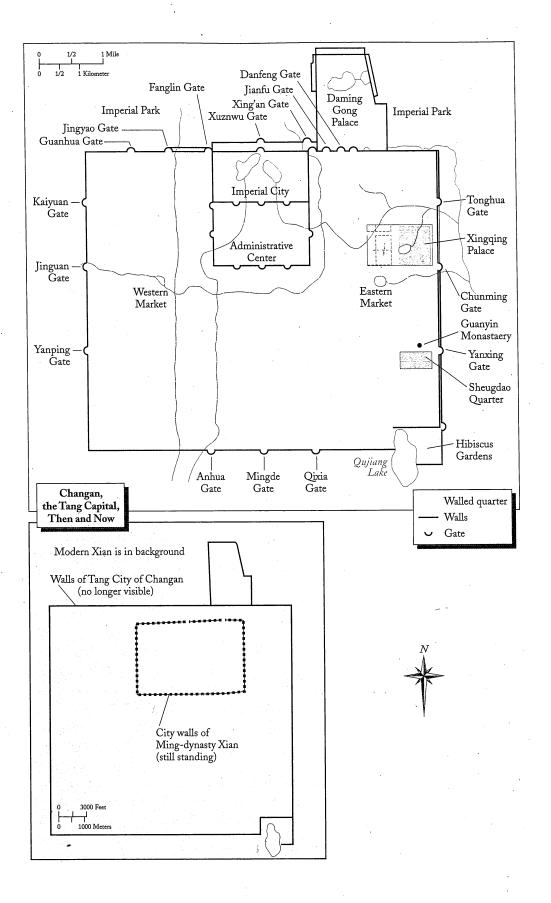
Slight variations occur among the entries. A few have a character or two written in red. These say "here" or "in the outer storage area" or "in the light storage area," indicating where items were stored in the shop. Most of the entries carry no mark indicating the consent of the borrower, but the ledgers of Borrowers 23 and 33 have finger joint marks. (As was the custom in Tang-dynasty China, the borrower usually drew three lines next to the joints in the right index finger, a sign that he or she accepted the terms of the loan.) Five other transactions carry the signatures of Borrowers 1, 9, 13, 19, and 25. All but one of these transactions was for more than 100 coins, so the pawnshop employees may have required borrowers to sign before giving out larger loans.

The Date and Provenance of the Materials

The pawnshop accounts bear no date and no address, but the information from the other documents and artifacts in tomb 206 makes it possible to date them to the late seventh century and to identify their city of origin as Changan.

When, in 1973, the archeologists first excavated the tomb that produced the figurines, they immediately noticed that some figurines were crudely manufactured while others were of very high quality. They suspected that the unpainted figurines were made locally in Turfan, while those with painted faces came from a metropolitan center. The tomb had been opened twice: once, in 633, when the husband Zhang Xiong had died, and a second time, in 689, when his wife Lady Qu was buried next to him.

Both husband and wife had dated epitaphs. A prominent statesman from a powerful family, Zhang advocated that the Gaochang king cooperate with the Tang dynasty and accept tributary status. The king refused his counsel, and, at the time of his death, Zhang





Tomb figurine from Lady Qu's burial. Astana Graveyard, Turfan, China. Pottery, silk and paper. Seventh century, A.D. Manufactured in Changan, the capital of Tang Dynasty China, and shipped to Northwest China for use as a funerary offering. The arms of this figurine were made from reused scraps of paper pawnshop tickets.

had a simple funeral. In 640 Tang troops conquered Gaochang. By 689, the year of Lady Qu's death, Zhang Xiong's stature had risen considerably. His wife was given a lavish burial suitable for the spouse of a prescient statesman.

While the rougher wooden items dated to 633, Turfan archeologists surmised, most of the high-quality artifacts in the tomb date to Lady Qu's burial in 689. These figurines have painted faces typical of manufacture in the capital. In addition, the dancer's dress is made from an extremely high-quality silk that skillfully incorporates the Iranian pearl roundel motif. The sophistication of the figurines suggests that they were manufactured in Changan and then shipped to Turfan for Lady Qu's burial.³⁷

The pawnshop account book confirms the view of the archeologists that the higher quality items buried in 689 were manufactured in Changan. Several of the entries give the addresses of the borrowers: Yanxing gate, Guanyin monastery, and possibly Shengdao quarter. ³⁸ Places with these names did not exist in Turfan, but these three places were located close to each other in Tang-dynasty Changan. Yanxing gate was the southernmost gate on the east wall. When one entered the city through that gate, Shengdao quarter lay to the south, and the Guanyin monastery, named for Guanyin, the Buddhist deity of compassion, immediately to the north. Changan had a monastery by that name only between 662 and 711, so the earliest possible date for the account book is 662.³⁹

The tomb was closed for the second time when Lady Qu was buried, so we can conclude that the account book was composed in Changan between 662 and 689.

The Origins of Chinese Pawnshops

The Turfan account book dates to the late seventh century, while the earliest literary evidence of pawnshops, whether in the official histories or in contemporary fiction, dates to the fifth century, when a prince pawned a fur cushion, and an ordinary man pawned a bolt of cloth. Pawnshops appear to be have been relatively common by the seventh century, when a princess supplemented her income by running a pawnshop in addition to owning farms.⁴⁰

The rise and spread of pawnshops coincides with the introduction of Buddhism to China, and indeed the first pawnshops were located in Chinese monasteries.⁴¹ The concept of a loan against a pledge may have originated in India.⁴² As L. S. Yang, the author of the classic study about pawnshops, has noted, the monasteries did not charge interest, because the loans were a form of charity that produced merit both for the monastery and its donors. The monasteries probably did not even write out tickets, because borrowers always paid them back "for fear of divine retribution."⁴³

The direct ancestor of modern banks, the monte di pietà (literally "mount of piety") of Italy, provides an interesting parallel. In 1462, the Franciscans founded these pawnshops in Italy with the explicit goal of giving ordinary people an alternative to usurers, many of whom were Jewish moneylenders. Members of the Franciscan order solicited contributions from the wealthy by arguing that a single contribution to the monte di pietà did as much good as seven separate contributions for the different needs of the poor. Like Chinese monasteries, they initially did not charge interest.⁴⁴

Since nonmonastic pawnshops did not have the same advantages as monastic pawnshops in China, historians have always assumed they must have charged interest. For this reason it seems likely that the pawnshop of the extant account book was privately run, though located in the vicinity of the Guanyin monastery.

Conclusion

The significance of Chinese pawnshops should be obvious. During the Tang dynasty they provided credit to all levels of society from the poorest to the richest, and they continued to do so in later centuries. As in Europe, pawnshops were a forerunner to banks, and borrowers could, through repeated transactions, obtain large loans against relatively small amounts of collateral. "In the middle of the eighteenth century," L. S. Yang remarks, "pawnshops almost functioned as commercial banks because they made loans on commodities like grain, silk, and cotton." The origins of Chinese pawnshops lay in Buddhist monasteries, and they remind us that the innovation of making a loan against a pledge was not unique to the Western world.

translation above), as Antonin Deloume argues in Les Manieurs d'Argent à Rome: Les Grandes Compagnies par Actions, le Marché, Puissance des Publicains et des Banquiers jusqu'à L'empire, Étude historique (Paris, 1890), 120, or participes ("shareholders"), as argued by Ferdinand Kniep, Societas Publicanorum vol. 1 (Jena, 1896), 204, and Paul Viard, Le Praes (Dijon, 1907), 105.

74. Cic., Pro Lege Man. 2, 6: aguntur bona multorum civium.

- 75. Gaius, D. 3, 4, 1, 1.
- 76. Cicero, Ad Fam. 13, 9, 2: constat ex ceteris societatibus.
- 77. D. 47, 2, 31, 2.
- 78. D. 3, 4, 1: habere res communes.
- 79. D. 37, 1, 3, 4: was entitled to the bonorum possessio.
- 80. D. 46, 1, 22.
- 81. Edicts were the civil law created by Rome jurisdictional magistrates, in particular by the praetors. They mainly concerned causes of actions and remedies against actions.
- 82. Both the content and the record of proceedings of the edict quod cuiuscumque universitatis nomine vel contra eam agatur (D. 3,4) are tailored toward the collegium, not the societas publicanorum. See Otto Lenel, Das Edictum Perpetuum. Ein Versuch zu seiner Wiederherstellung, 3rd ed., (Leipzig, 1927), 101; and Basil Eliachevitch, La personnalité juridique en droit privé romain, (Paris, 1942), 324.
- 83. Livius (43, 16, 2) mentions adfines, "shareholders," with respect to 169 B.C.
- 84. D. 3, 4: Quod cuiuscumque universitatis nomine vel contra eam agatur, and D. 47, 22: De collegiis et corporibus.
- 85. Herbert Felix Jolowicz, Roman Foundations of Modern Law (Oxford, 1957), 129, note 2 on D. 3, 4, 1 pr. versus D. 3, 4, 1, 3.
- 86. For a more detailed discussion, see Malmendier, Societas publicanorum.

CHAPTER 3. HOW BUSINESS WAS CONDUCTED ON THE CHINESE SILK ROAD DURING THE TANG DYNASTY, 618–907

Part I: The Resolution of an International Dispute on the Silk Road, ca. 670

- 1. The Greeks called the Iranian prophet Zarathustra Zoroaster, the name we use in modern English.
- 2. Stanley Insler, The Gāthās of Zarathustra (Leiden: E.J. Brill, 1975).
- 3. Three Sogdian-language contracts were found at the site of Mount Mugh: a marriage contract dated 710, a contract for the rental of a mill, and one for the sale of a plot of land. They have been published in a Russian edition, which gives a Sogdian transcription and the Russian translation. Vladimir A. Livshits, *Iuridicheskie dokumenty i pis'ma. Sogdiiskie dokumenty s gory Mug* 2 (Legal documents and letters). Sogdian Documents from Mount Mugh 2 (Moscow: Izdatel'ctvo Vostochnoi Literatury, 1962) 21–26, 47–48, 56–58. The only English-language study is Ilya Gershevitch, "The Sogdian Word for 'Advice,' and some Mugh Documents," *Central Asiatic Journal* 7 (1962): 77–95.

A single contract dated 639 for the sale of a slave girl was found at Astana. A full scholarly transcription of this contract has been published by Yutaka Yoshida, Takao Moriyasu, Xinjiang Uighur Autonomous Museum. "Kikusei Kōshōkoku jidai Sogudobun jo dorei baibai monjo." Nairiku Ajia gengo no kenkyū 4 (1988): 1–50. For Professor Yoshida's translation of the contract, see Yoshida Yutaka, "Appendix Translation of the Contract for the Purchase of a Slave Girl Found at Turfan and Dated 639," T'oung Pao LXXXIX (2003):159–161.

- Anahit Perikhanian, Farraxvmart ī Vahrāmān The Book of a Thousand Judgements (A Sasanian Law-Book) (New York: Mazda Publishers in association with Bibliotheca Persica, 1997).
- Jamsheed K. Choksy, "Loan and Sales Contracts in Ancient and Early Medieval Iran," Indo-Iranian Journal 31 (1988): 192.
- 6. Choksy, "Loan and Sales Contracts," 193.
- 7. See note 1, above.
- 8. Aurel Stein, Innermost Asia: Detailed Report of Explorations in Central Asia, Kan-su, and Eastern Iran (Oxford: The Clarendon Press, 1928), 646.
- 9. Valerie Hansen, "Introduction: Turfan as a Silk Road Community," *Asia Major* Third Series XI.2 (1998): 1–6; Zhang Guangda and Rong Xinjiang, "A Concise History of the Turfan Oasis and Its Exploration," *Asia Major* Third Series XI.2 (1998): 13–36.
- Jonathan Bloom, Paper Before Print: The History and Impact of Paper in the Islamic World (New Haven: Yale University Press, 2001); Tsien Tsuen-hsuin, Science and Civilisation in China, vol. 5, Chemistry and Chemical Technology Part I: Paper and Printing (New York: Cambridge University Press, 1985).
- 11. Chinese archeologists have yet to publish a detailed site report of the Astana excavations, which were conducted from 1959 to 1975 and overlapped with the tumultuous years of the Cultural Revolution.
- 12. Xinjiang Weiwuer zizhiqu bowuguan and Wuhan daxue lishi xi, eds., *Tulufan chutu wenshu* (Excavated documents from Turfan), vols. 1–4 (Beijing: Wenwu chubanshe, 1992–1996), vol. 3: 242–247. These documents are the subject of one Chinese article: Huang Huixian, "Tang Xizhou

Gaochangxian shang Anxi duhufu diegao wei lu shang xun wen Cao Lushan su Li Shaojin" (An explication of the document entitled, Draft "Die" report from Gaochang sub-prefecture, Xizhou prefecture to Anxi Protectorate recording the testimony from both sides of those in the dispute in which Cao Lushan sued Li Shaojin, Tang dynasty). In Tang Zhangru, ed., *Dunhuang Tulufan wen-shu chutan* (Wuhan: Wuhan daxue chubanshe, 1983), 344–363. The Japanese scholar Arakawa Masaharu has also studied this document in depth: "Tō teikoku to Sogudojin no kōeki katsudō (Sogdian trading activity with the Tang empire)," Tōyōshi kenkyū 56 (1997): 171–204, analysis of this document on pp. 185–92.

Huang explains that this is probably a draft of a document because it lacks the seal of the subprefecture, those testifying did not give their fingermarks, there are a few mistaken characters, and the opening lines appear to be from another document.

- Wallace Johnson, The T'ang Code, vol. 1, General Principles (Princeton: Princeton University Press, 1979); The T'ang Code, vol. 2, Specific Articles (Princeton: Princeton University Press, 1997), 121–127.
- 14. Yoshida Yutaka of Kobe City Üniversity of Foreign Studies has published several preliminary studies of Sogdian names and their Chinese transliterations, all in Japanese. Professor Yoshida has graciously provided me with their English equivalents, personal communication, August 2003.
- 15. In 670, the Tibetans took Kuche, which had been the seat of the Anxi Protectorate General since 649. From 670 to 679, Turfan was the seat of the Anxi Protectorate. I concur with Huang that Cao's death probably occurred before the disturbances of 670. Anxi, which could refer to either Kuche or Turfan, is used inconsistently—perhaps because those taking down the deposition were describing events before the change in name? These places are shown in map 8 in Denis Twitchett and John K. Fairbank, *The Cambridge History of China*, vol. 3, Sui and T'ang China, 589–906, Part I (New York: Cambridge University Press, 1979), 281.
- 16. Valerie Hansen, Negotiating Daily Life in Traditional China: How Ordinary People Used Contracts (New Haven: Yale University Press, 1995), 6–7.
- 17. The titles of the contracts (but not the contracts themselves) have been translated into English. See the Table of Contents in Tatsuro Yamamoto and On Ikeda eds., *Tun-huang and Turfan Documents Concerning Social and Economic History* (Tokyo: The Toyo Bunko, 1987).
- 18. Tulufan chutu wenshu 3: 211; transcribed in Yamamoto and Ikeda, Tun-huang and Turfan Documents, contract #69.
- 19. Lien-sheng Yang, Money and Credit in China: A Short History (Cambridge: Harvard University Press, 1952), 95.
- 20. Hansen, Negotiating Daily Life, 35, 43.
- 21. Johnson, The T'ang Code vol. 2, 464-65.
- 22. See, for example, another document from tomb 61 in which the courts provided an interpreter for a servant girl who spoke Tocharian, a distinct Indo-European language spoken largely in Kuche. *Tulufan chutu wenshu* 3: 239.
- 23. Denis Twitchett, Financial Administration Under the T'ang Dynasty (New York: Cambridge University Press, 1970), 70–71, 294 n. 36.
- 24. Eric Trombert, "Textiles et tissus sur la Route de la soie: Eléments pour une géographie de la production et des échanges." In La Serinde, terre d'échanges: Art, religion commerce du Ier au Xe siècle. XIVes Rencontres de l'Ecole du Louvre (Paris: La Documentation française, 2000), 108.
- 25. Jonathan Karam Skaff, "Sasanian and Arab-Sasanian Silver Coins from Turfan: Their Relationship to International Trade and the Local Economy," *Asia Major* Third Series XI.2 (1998): 67–115.
- 26. Trombert, "Textiles et tissus," 108.
- 27. Trombert, "Textiles et tissus," 111, citing Pelliot document 3348 verso 2B.
- 28. Avner Greif, Paul Milgrom, and Barry R. Weingast, "Coordination, Commitment, and Enforcement: The Case of the Merchant Guild," *The Journal of Political Economy* 102.4 (1994): 745–76. The bibliography includes citations to Greif's earlier articles on related topics.
- 29. See, for example, Kathryn Bernhardt and Philip C. C. Huang eds., Civil Law in Qing and Republican China (Stanford: Stanford University Press, 1994).

Part II: Records from a Seventh-Century Pawnshop in China

30. See Part I of this chapter for a more general discussion of the Astana graveyard. Ana Mata-Fink wrote a paper about the pawn tickets for Valerie Hansen's lecture class, "The Silk Road," taught in fall 2002 at Yale. The translation of the tickets and the tables are Mata-Fink's; the introductory essay is by Hansen. The authors would like to thank Angela Sheng for checking their translation.

Photographs and transcriptions of the tickets have been published in Xinjiang Weiwuer zizhiqu bowuguan and Wuhan daxue lishi xi, eds. *Tulufan chutu wenshu* (Excavated documents from Turfan), vols. 1–4 (Beijing: Wenwu chubanshe, 1992–1996), vol. 2: 328–40. Because of the

difficult circumstances under which the Astana excavations were conducted, and the incomplete publication of all the data, we cannot be certain which figurines contained the tickets. The editors of the published photographs do not report that the pawnshop accounts came from a figurine, but Chen Guocan, the author of a fine article in Chinese about these documents, does. See Chen Guocan, "Cong Tulufan chutu de 'zhikuzhang' kan Tangdai de zhiku zhidu" (A look at the pawn shop system of the Tang based on excavated "pawn tickets" from Turfan), in Dunhuang Tulufan wenshu chutan (ed. the research group working on Wei, Jin, Nanbei chao, Sui, and Tang materials, History Department, Wuhan University) (Wuhan: Wuhan University Press, 1983), 316-43.

31. Given the pace of archeological excavation in recent years, the earliest example of anything is cer-

tain to be superseded.

32. "To prevent possible dispute at the time of redemption, depreciating adjectives were added freely to the description of the pledge." Lien-sheng Yang, Money and Credit in China: A Short History (Cambridge: Harvard University Press, 1952), 72. Professor Yang provides a succinct overview of Chinese pawnshops, pp. 71-75. For a longer study in English, see T. S. Whelan, The Pawnshop in China (Ann Arbor: Center for Chinese Studies, The University of Michigan, 1979), which abstracts Yang Zhanyu's Zhongguo diandang ye (Shanghai: The Commercial Press Ltd., 1929).

33. Tang liudian (Taibei: Wenhai chubanshe, 1962) 6:45b-46a; Chen, "Cong Tulufan," 333-34.

- 34. A digit is missing in borrower 18's age, so she could be anywhere between eleven and nineteen
- 35. Deng Xiaonan, "Women in Turfan during the Sixth to Eighth Centuries: A Look at Their Activities Outside the Home," Journal of Asian Studies 58.1 (1999): 85-103.

36. Chen, "Cong Tulufan," 335.

37. It is also possible that the pawnshop account book was sent to Turfan and the figurines made there. Angela Sheng, personal communication, April 2002.

38. Chen Guocan suggests that two entries, both missing characters, can be reconstructed to say Shengdao quarter, which was a district in Changan. Chen, "Cong Tulufan," 328-31. The other place names mentioned in the accounts do not appear on reconstructed maps of Changan, but it seems likely that these are local place names.

39. Chen, "Cong Tulufan," 329.

- 40. Yang, "Buddhist Monasteries," 177, citing Jiu Tangshu (Beijing: Zhonghua shuju edition) 183: 4,740.
- 41. Lu You (1125-1200) appears to have been the first observer to link pawnshops with monasteries. See his Lao xue'an biji (Beijing: Zhonghua shuju, 1979) 6:73

42. Jacques Gernet, Buddhism in Chinese Society: An Economic History from the Fifth to the Tenth Centuries, trans. Franciscus Verellen (New York: Columbia University Press, 1995), 170.

- 43. Lien-sheng Yang, "Buddhist Monasteries and Four Money-Raising Institutions in Chinese History," Harvard Journal of Asiatic Studies 13 (1950): 174-91, at 177. The four institutions described in the article are "the pawnshop, the mutual financing association, the auction sale, and the sale of lottery tickets" (174).
- 44. Chiara Frugoni, Books, Banks, Buttons and Other Inventions from the Middle Ages, trans. William McCuaig (New York: Columbia University Press, 2003), 55-59.
- 45. Yang, Money and Credit, 74. He gives the example of someone who put up 1,000 taels of silver to buy rice, then pawned it, and used the new loan to buy even more rice. If one repeated the transaction several times, one could eventually obtain four or five thousand taels.

CHAPTER 4. THE ORIGINS OF PAPER MONEY IN CHINA

1. To give some sense of the scale of this amount, around this time the cost of the typical annual rice consumption of an able-bodied adult (692.6 liters) ranged between 9.5 and 14.6 guan in Sichuan large coin iron currency. The region's population in 1080 was 1.8 million households.

2. Some indirect evidence suggests that these privately issued huizi already existed in the Northern

Song, but conclusive proof remains elusive.

3. The "Inaugural Treasure" (yuanbao) of this title referred to a Chinese standard silver ingot weighing 50 liang (1.88 kgs.), and thus alluded to the fact that the new sovereign currency was backed by silver bullion.

CHAPTER 5. PAYING IN PAPER: A GOVERNMENT VOUCHER FROM THE SOUTHERN SONG We thank an anonymous collector for making the Lizhou certificate available to us for study. We thank Valerie Hansen and Paul J. Smith for their advice and suggestions. We thank participants in the 2003 Yale International Center for Finance Conference on Financial Innovation for their input.

1. Valerie Hansen, The Open Empire: A History of China to 1600 (New York and London: W. W. Norton, 2000), 271.

THE ORIGINS

OF VALUE

The Financial Innovations
That Created Modern Capital Markets

EDITED BY WILLIAM N. GOETZMANN AND K. GEERT ROUWENHORST

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