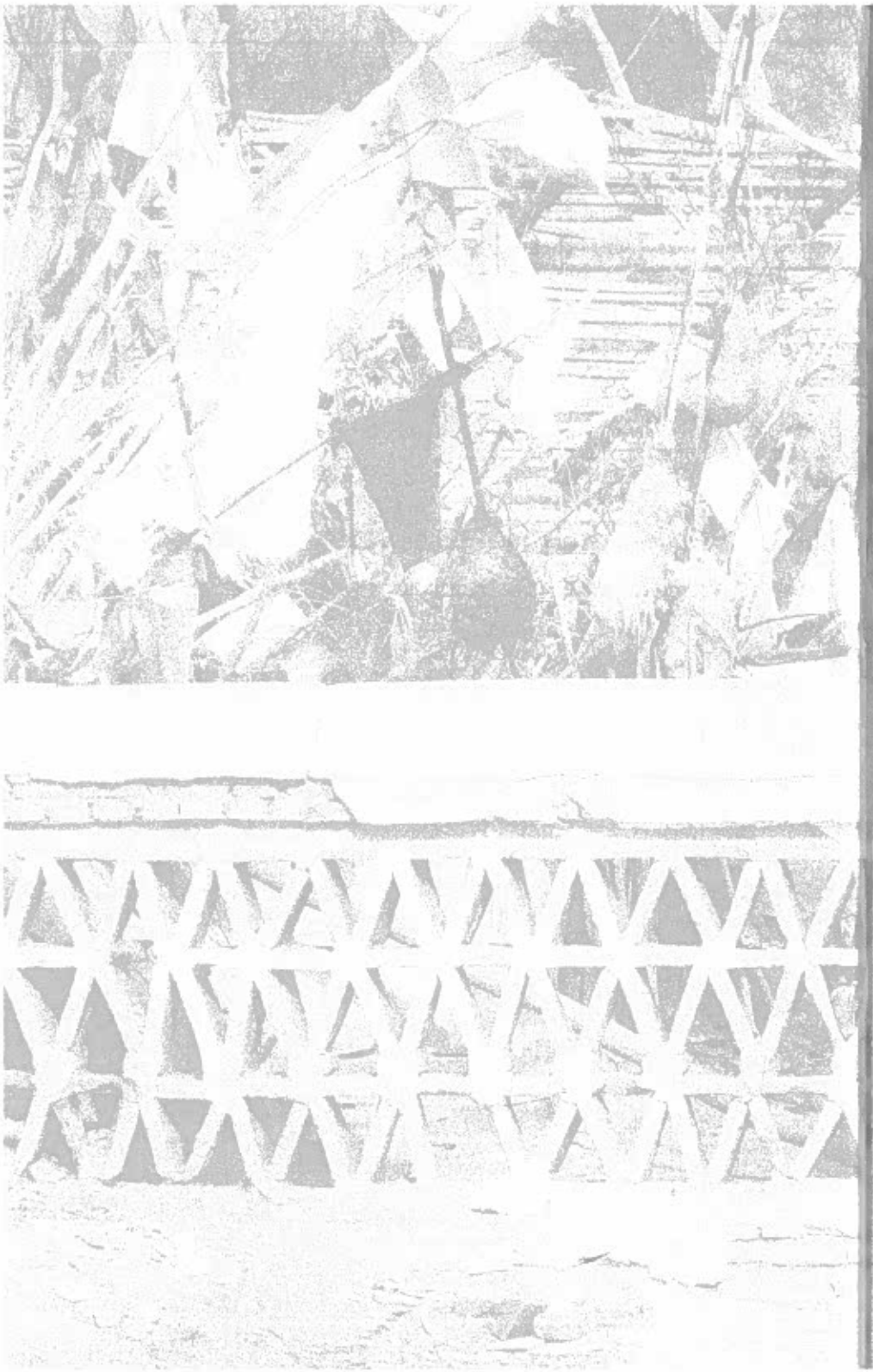
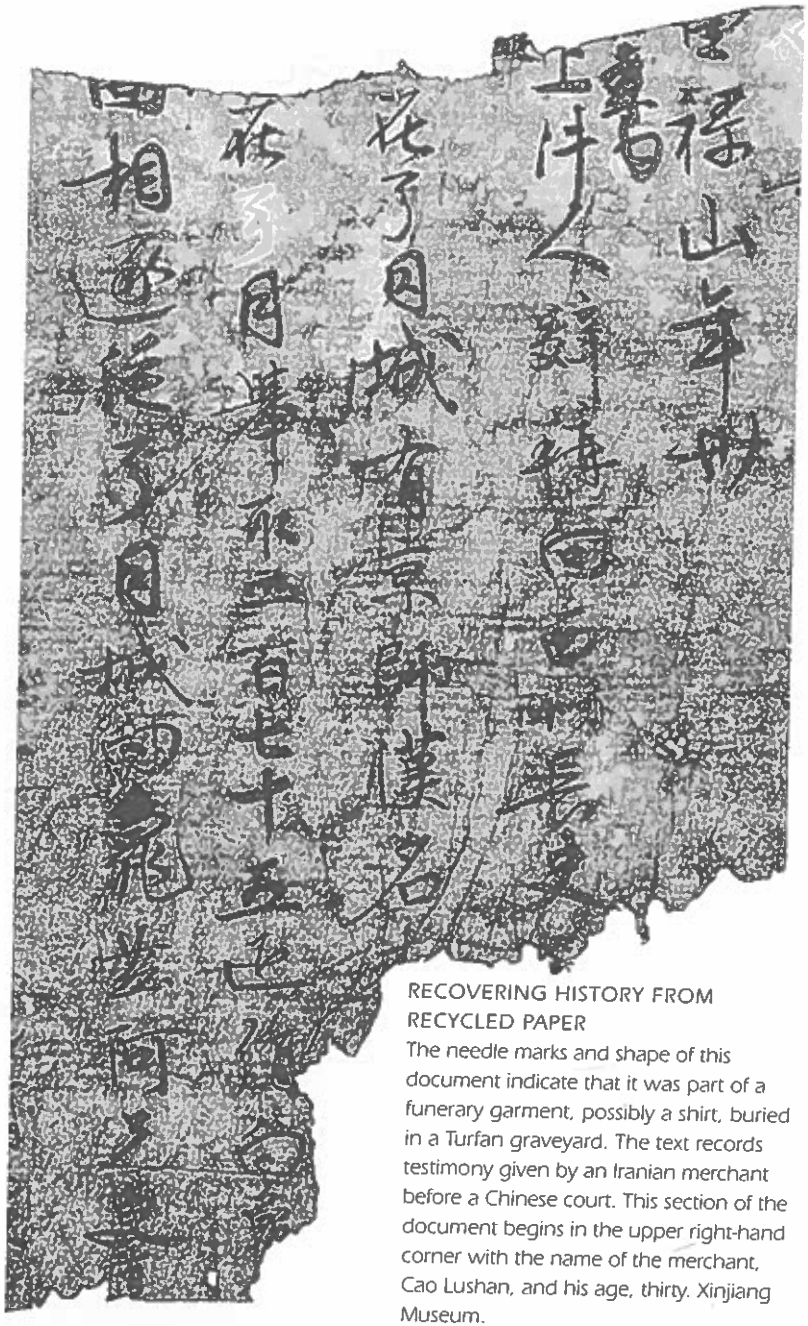


The SILK ROAD

A NEW HISTORY

Valerie Hansen

OXFORD



RECOVERING HISTORY FROM RECYCLED PAPER
The needle marks and shape of this document indicate that it was part of a funerary garment, possibly a shirt, buried in a Turfan graveyard. The text records testimony given by an Iranian merchant before a Chinese court. This section of the document begins in the upper right-hand corner with the name of the merchant, Cao Lushan, and his age, thirty. Xinjiang Museum.

Introduction

The document on the facing page illustrates the subject of this book. It is a court record of testimony given by an Iranian merchant living in China sometime around 670 CE. The Iranian requested the court's assistance in recovering 275 bolts of silk owed to his deceased brother. He testified that, after lending the silk to his Chinese partner, his brother disappeared in the desert on a business trip with two camels, four cattle, and a donkey, and was presumed dead. The court ruled that, as his brother's survivor, the Iranian was entitled to the silk, but it is not clear whether the ruling was ever enforced.

This incident reveals much about the Silk Road trade. The actual volume of trade was small. In this example, just seven animals carried all of the Iranian merchant's goods. Two were camels, but the other five were four cattle and a donkey, all important pack animals. The presence of Iranian merchants is notable, since China's main trading partner was not Rome but Samarkand, on the eastern edge of the Iranian world. Further, the lawsuit occurred when merchants along the Silk Road were prospering because of the massive presence of Chinese troops. This court case occurred during the seventh century, when Chinese imperial spending provided a powerful stimulus to the local economy.

Most revealing of all, we know about this lawsuit because it was written on discarded government documents, which were then sold as scrap paper, and finally used by artisans to make a paper garment for the deceased. About 1,300 years later Chinese archeologists opened a tomb near Turfan and pieced together the document from the different sections of the garment. As they connected the different pieces of paper, the testimony of the different parties was revealed.

In recent decades archeologists have reassembled thousands of other documents. What has emerged are contracts, legal disputes, receipts, cargo manifests, medical prescriptions, and the poignant contract of a slave girl sold for 120 silver coins on a particular market day over one thousand years ago. The

writings are in a multitude of languages including classical Chinese, Sanskrit, and other dead languages.

Many of the documents survive because paper had a high value and was not thrown out. Craftsmen also used the recycled paper to make paper shoes, statues, and other paper mache objects to accompany the dead on their journey to the afterlife. Because recycled paper documents were used to make these funeral objects, guesswork is required to piece them together. The Iranian's affidavit, for example, was cut with scissors and then sewn to make a paper garment for the dead, leaving part of the record on the cutting room floor. Skilled historians have used the shapes of the fragments and tell-tale needle holes to reconstruct the original documents.

These documents make it possible to identify the main actors, the commodities traded, the approximate size of caravans, and the impact of trade on the localities through which goods passed. They also elucidate the broader impact of the Silk Road, particularly the religious beliefs and technologies that refugees brought with them as they sought to settle in places more peaceful than their war-torn homelands.

The communities along the Silk Road were largely agricultural rather than commercial, meaning that most people worked the land and did not engage in trade. People lived and died near where they were born. The trade that took place was mainly local and often involved exchanges of goods, rather than the use of coins. Each community, then as now, had a distinct identity. Only when wars and political unrest forced people to leave their traditional homelands did these communities along the Silk Road absorb large numbers of refugees.

These immigrants brought their religions and languages to their new homes. Buddhism, originating in India and enjoying genuine popularity in China, certainly had the most influence, but Manichaeism, Zoroastrianism, and the Christian Church of the East, based in Syria, all gained followings. The people living along the Silk Road played a crucial role in transmitting, translating, and modifying these belief systems as they passed from one civilization to another. Before the coming of Islam to the region, members of these different communities proved surprisingly tolerant of each other's beliefs. Individual rulers might choose one religion over another and strongly encourage their subjects to follow suit, yet they still permitted residents to continue their own religious practices.

Among the many contributors to Silk Road culture were the Sogdians, a people living in and around the great city of Samarkand in today's Uzbekistan. Trade between China and Sogdiana, their homeland, peaked between 500 and 800 CE. Most of the traders named in the excavated documents came from Samarkand or were descended from people who did. They spoke an Iranian

language called Sogdian, and many observed the Zoroastrian teachings of the ancient Iranian teacher Zarathustra (ca. 1000 BCE, called Zoroaster in Greek), who taught that telling the truth was the paramount virtue. Because of the unusual conditions of preservation in Xinjiang, more information about the Sogdians and their beliefs survives in China than in their homeland.

Unlike most Silk Road books, which concentrate on art, this book is based on documents—documents that explain how things got to be where they are, who brought them there, and why Silk Road history is such a dazzling array of peoples, languages, and cultural cross-currents.

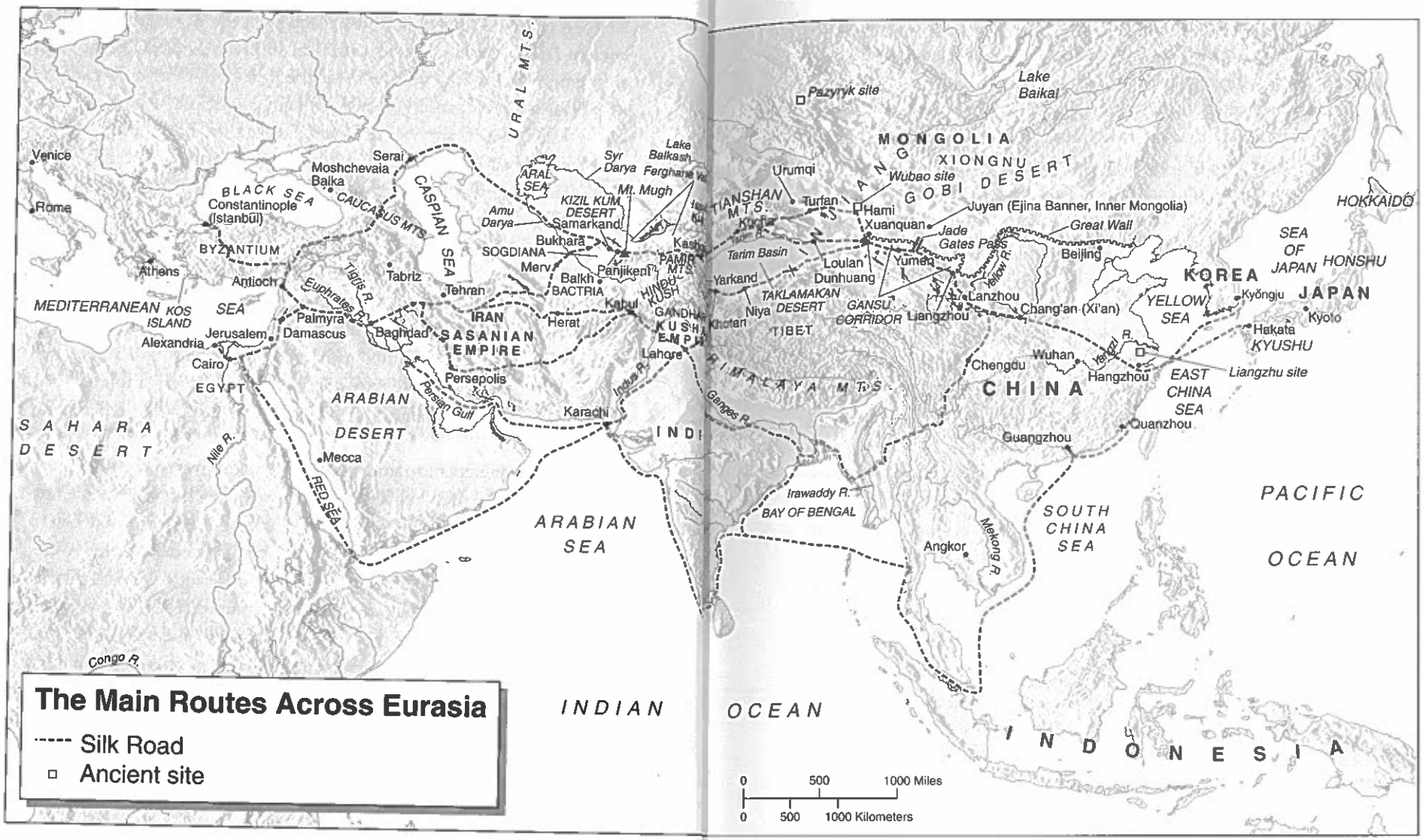
Not all documents discovered along the Silk Road from 200 to 1000 CE (the main focus of this book) were on recycled scrap paper. Some were written on wood, silk, leather, and other materials. They were recovered not only from tombs but also from abandoned postal stations, shrines, and homes, and beneath the dry desert—the perfect environment for the preservation of documents as well as art, clothing, ancient religious texts, ossified food, and human remains (see color plate 1).

These documents are unique because many were lost, found by accident, and written by people from a wide swath of society, not only the literate rich and powerful. These documents were not consciously composed histories: their authors did not expect later generations to read them, and they were certainly never intended to survive. They offer a glimpse into the past that is often refreshingly personal, factual, anecdotal, and random. Nothing is more valuable than information extracted from trash, because no one has edited it in any way.

Most of what we have learned from these documents debunks the prevailing view of the Silk Road, in the sense that the "road" was not an actual "road" but a stretch of shifting, unmarked paths across massive expanses of deserts and mountains. In fact, the quantity of cargo transported along these treacherous routes was small. Yet the Silk Road did actually transform cultures both east and west. Using the documentary evidence uncovered in the past two hundred years and especially the startling new finds unearthed in recent decades, this book will attempt to explain how this modest non-road became one of the most transformative super highways in human history—one that transmitted ideas, technologies, and artistic motifs, not simply trade goods.

"Silk" is even more misleading than "road," inasmuch as silk was only one among many Silk Road trade goods. Chemicals, spices, metals, saddles and leather products, glass, and paper were also common. Some cargo manifests list ammonium chloride, used as a flux for metals and to treat leather, as the top trade good on certain routes.

Another common trade item was paper, invented during the second century BCE, and surely a far greater contributor to human history than silk, which was



used primarily for garments.[1] Paper moved out of China via these overland routes first into the Islamic world in the eighth century, and then to Europe via its Islamic portals in Sicily and Spain. People north of the Alps made their own paper only in the late fourteenth century.[2]

The term "Silk Road" is a recent invention. The peoples living along different trade routes did not use it. They referred to the route as the road to Samarkand (or whatever the next major city was), or sometimes just the "northern" or "southern" routes around the Taklamakan Desert.[3] Only in 1877 did Baron Ferdinand von Richthofen coin the phrase "Silk Road." He was a prominent geographer who worked in China from 1868 to 1872 surveying coal deposits and ports, and then wrote a five-volume atlas that used the term for the first time.

His map, reproduced in color plate 2–3, depicted the route between China and Europe in Roman times as a trunk route. Von Richthofen read Chinese sources in translation and was the first European geographer to incorporate data from the dynastic histories into a map of the region. The orange line shows information from the classical geographers Ptolemy and Marinus; the blue line, from the Chinese histories.[4] In many ways his Silk Route resembles a straight railway line

cutting through Eurasia. In fact, von Richthofen was charged with designing a potential railroad line from the German sphere of influence in Shandong through the coalfields near Xi'an all the way to Germany.[5]

Gradually the term gained acceptance. Sven Hedin's 1936 book about his Central Asian explorations carried the title *The Silk Road* in its 1938 English translation. In 1948 the *Times of London* included the following question in its "Fireside Questions for the Family: A Test of General Knowledge": "From where to where do, or did," the Silk Road run? The answer: "China borders by various routes to Europe."[6] The term has shown considerable staying power as a designation for overland trade and cultural exchanges across Eurasia.

From its inception, the Silk Road was shown as relatively straight and well traveled, but it never was. Over a hundred years of archeological investigation have revealed no clearly marked, paved route across Eurasia—nothing remotely like the Appian Way of Rome—but instead a patchwork of drifting trails and unmarked footpaths. Because there was rarely a discernible route, travelers almost always hired guides to take them along a particular section, and they frequently shifted to another path if they encountered obstacles.

These meandering trails converge at oasis towns—the towns this book explores. When flying over this region today one merely has to identify the highest peaks to locate the principal sources of the streams nurturing the main Silk Road cities of ancient times. Because the documents are largely from these towns, this book is organized around seven ancient Silk Road sites—six in northwest China and one to the east of Samarkand—that form the chapters of this book.

These towns were semi-independent city states ringing the Taklamakan Desert. The rulers, whether on their own or on behalf of Chinese dynasties, strictly supervised trade and played a major role as the purchasers of goods and services. This produced a paradox: once the trade passed through totally wild regions and entered one of these oasis communities, it was suddenly highly regulated.

This was especially true when the Chinese stationed troops in Central Asia—primarily during the Han dynasty (206 BCE–220 CE) and the Tang dynasty (618–907 CE). The central government made massive expenditures to supply these armies with grain and uniforms and to pay thousands of soldiers. Bolts of silk took on another important function during the Tang dynasty, which was unable to mint enough bronze coins to cover the expenses of the central government. The authorities recognized three commodities as currency: bronze coins, grain, and bolts of silk. Since they often suffered coin shortages, and since grain rotted, most of these payments were in bolts of plain-woven silk, shown in plate 5A.

Many of the military subsidies to the northwest were paid in silk, and bolts of silk circulated widely in the Western Regions as a result. When the soldiers made many purchases at local markets, trade boomed. But when rebellion threatened the emperor and he summoned all troops back to central China, trade fell off markedly.

Even with the Chinese military presence, there was no documented traffic between China and Rome during the years of the Roman Empire. Contrary to popular belief, Romans did not exchange their gold coins directly for Chinese silk. The earliest Roman gold coins found in China are Byzantine solidus coins, including many imitations, as shown in plate 4a. They come from tombs dated to the sixth century, long after Emperor Constantine (reigned 312–37 CE) moved the empire's capital to Constantinople.

Geographically, the Silk Road goes through an astonishingly diverse landscape, much of it treacherous. Beginning in Xi'an and traveling westward, travelers first traversed the Gansu Corridor. This is a 600-mile (1,000 km) route running mainly east-west between the Qinghai Mountains on the south and the Gobi Desert of Mongolia on the north. After reaching the oasis city of Dunhuang, in Gansu Province, they had to decide whether to take the northern route or the southern route around the Taklamakan Desert, which converged in Kashgar. If both routes were impassable, those making the trip could take a central route right through one of the most inhospitable deserts on earth.

After passing through Dunhuang, travelers entered the region called Xinjiang, literally the "New Frontierlands," a term used by the Qing dynasty when it conquered this area in the eighteenth century. Before that, the Chinese called this region Xiyu, meaning "Western Regions," an area spanning parts of Uzbekistan and Tajikistan to the west and the Chinese provinces of Gansu and Shaanxi to the east.[7] Modern Xinjiang encompasses most of the Silk Road routes in western China.

Here modern tourists will see the breathtaking vistas of modern Xinjiang, and comprehend why there was not one Silk Road but multiple routes. The first daring peoples to traverse this region learned how to cross deserts in the winter when the sun was not too hot, and where to cross mountain passes in the summer when the snow was light. Above all, they learned to skirt the edge of the desert, pausing to drink, rest, and learn about the route ahead. At each oasis community they might stop for days, weeks, or much longer, in order to plan the next step.

Travel was painfully slow. In 1993 a British officer and explorer named Charles Blackmore led an expedition on foot through the Taklamakan. His men and camels managed to cover 780 miles (1,400 km) across the Taklamakan between Loulan and Merket, southwest of Kashgar, in fifty-nine

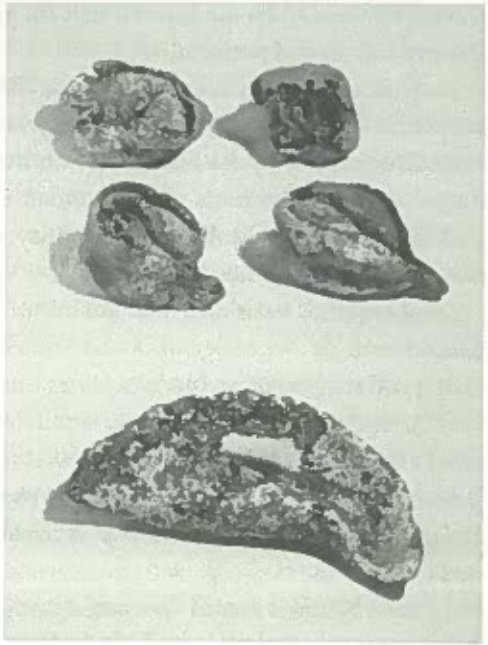
days, averaging just over 13 miles (21 km) a day. Walking over the dunes in the sandy part of the desert was strenuous, and they did not always make ten miles (16 km) in a day, but walking on the flat pebbled surface, they reached as much as 15 miles (24 km) per day.[8] These rates give a good approximation of what travelers in previous centuries endured.

Once across the desert, travelers faced towering peaks separating the Taklamakan from all points west and south. It is here that the earth's largest mountain ranges crash together in a Mardi Gras of snow and ice—the Pamir Knot—where the Himalayas, Tianshan, Karakoram, Kunlun, and Hindu Kush meet. Once through, travelers descend west to Samarkand or south toward India.

Few individuals traversed all of Central Asia, covering the distance of some 2,000 miles (3,600 kilometers) between Samarkand and Chang'an. The most famous (though not the most reliable) Silk Road traveler, Marco Polo (1254–1324), claimed to have traveled all the way from Europe to China by land and to have returned home by sea. Most travelers moved on smaller circuits, traveling a few hundred miles (around 500 km) between their hometown and the next oasis and no further. Because goods were traded locally and passed through many hands, much of the Silk Road trade was a trickle trade. Long-distance caravans with hundreds of animals are rarely mentioned anywhere in the historical record—and usually only when states exchanged emissaries.

Today the region between Dunhuang and Samarkand attracts many tourists who come to see the famed ruins, including those now buried deep in the desert like the Rawak monastery outside Khotan, the walled cities of Turfan, and the caves of Dunhuang and Kucha. Local museums display artifacts found in tombs, such as silver and gold vessels and textiles combining Eastern and Western motifs in lively and exquisite designs. In a handful of places, the desert's dry climate has preserved the mundane as well as the visually striking: Chinese dumplings lie buried alongside rounds of North Indian naan flatbread baked over a thousand years ago by ancient Silk Road residents.

Before the end of the nineteenth century, no one realized that the sands of Xinjiang preserved so many documents and artifacts from the distant past. In 1890, the British officer Lieutenant Hamilton Bower traveled to Kucha, an oasis on the northern route around the Taklamakan, to investigate a murder. While there, he bought an ancient manuscript consisting of fifty-one leaves of birch bark with writing on them and announced the discovery to the Royal Asiatic Society of Bengal. Within a few years scholars identified it as a medical text from the fifth century CE, making it the oldest known Sanskrit manuscript in the world by almost one thousand years.[9] Alerted to the importance of such



DESICCATED DUMPLINGS FROM TURFAN
The dry conditions at Turfan preserved many perishable items, including food. Here we see four wontons and a single dumpling, dating to the 600 or 700s. By examining the dumplings that have cracked open, archeologists have identified Chinese chives and some type of meat, most likely pork, since Xinjiang was not yet Islamified at this time. Xinjiang Museum.

discoveries, European diplomats in Asia began to purchase various manuscripts and sent them to Europe, where scholars trained in philology could decipher them.

In 1895 the Swedish explorer Sven Hedin launched the first scientific mission to Xinjiang, the source of many of these ancient manuscripts. Departing that April from the town of Merket on the Yarkand River, Hedin entered the Taklamakan Desert in search of the source of the Khotan River. After fifteen days, he discovered that he was not carrying enough water for himself and the four men with him. Still, he did not turn back because he did not want to admit that his expedition had failed. When their supply ran out, he began a desperate search for water. As his men and camels collapsed one by one, the exhausted Hedin forced himself to crawl along a dry riverbed. On the sixth day without water, he located a stream, drank his fill, and carried back enough water in his boots to save the life of one man.

As he made his way out of the desert, Hedin encountered a caravan of four merchants and various pack animals, from which he purchased three horses, "three pack-saddles, one riding-saddle, bits, a bag of maize, a bag of wheat-flour, tea, jugs, bowls, and a pair of boots."[10] This is a revealing list. Even at the beginning of the twentieth century, just as in earlier times, almost all the goods traded in the Taklamakan were locally made necessities, not foreign imports. After

leaving the desert, Hedin learned that shepherds had aided another of his men, but two others had perished.

A chastened Hedin returned to the Taklamakan in December of the same year. This time he brought along enough water for his men. Entering the desert from Khotan, one of the main oases on the southern edge of the Taklamakan, they discovered the ruins of the Dandan Uiliq site. Among the wooden posts and the remnants of walls in the sand lay several Buddhist statues. Hedin did not excavate; as he later explained, "I was not equipped to make a thorough excavation; and, besides, I was not an archeologist."[11] European newspapers carried extensive coverage of Hedin's Taklamakan explorations, which were as exotic and dangerous as space explorations are today.

One of these news reports was sent in late 1897 by a manager of a Polish coal mine to his brother, Aurel Stein, who was working as an education official in the British colonial city of Lahore in India (now Pakistan).[12] A native of Hungary, Stein had completed his doctorate in Sanskrit at Tübingen in 1883 and continued to study the language with the learned Indian scholar Pandit Govind Kaul in Lahore. Sanskrit was an enormously popular field throughout the nineteenth century; many people wanted to study the Indo-European language that was more ancient than, and closely related to, Latin and Greek. During his studies in Germany, Stein had learned the importance of obtaining the earliest and most complete manuscripts.

Immediately recognizing the implications of Hedin's discovery for the study of ancient manuscripts, Stein applied to the British archeological authorities for funding to go to Khotan. Systematic investigation of the site, he argued, would provide far more information than the pillaging that had so far occurred. He also hinted at the international competition to acquire antiquities already under way. Hedin, he reported, was bound to return to the region, and the Russians were contemplating launching an expedition too. The Government of India funded his application.

The first to locate and map many of the sites discussed here, Aurel Stein found a number of stunningly important objects and documents. Leader of four different expeditions to Xinjiang between 1900 and 1931, Stein wrote extensive formal reports as well as more casual narratives. His excavations were imperfect by today's standards; he hired workmen to dig for him and rewarded them extra pay for any finds, a widespread practice that sometimes resulted in overly rushed excavation. But few of the excavators who found documents in Xinjiang—Paul Pelliot of France, Albert von Le Coq of Germany, Otani Kozui of Japan—matched the level of detail found in Stein's archeological reports. None went to as many places as Stein or published nearly as much material.

Stein's descriptions are essential to reconstructing the original condition of each site. His explanation of the circumstances leading to the burial of the documents is also important; every subsequent scholar has relied on Stein as a point of departure even when they have updated his explanations. Stein's and other accounts from the late nineteenth and early twentieth centuries are informative because their authors, with few exceptions, traveled along the same routes, using the same means of transportation as did travelers in earlier times. Their accounts fill in many details left unmentioned by past travelers, making it possible to relive the experience of travel along the ancient trade routes.

These explorers, and many who followed, revealed what was hidden beneath the sand. First, they discovered archeological evidence showing that long-distance overland trade began long ago. Different peoples living in Xinjiang sent goods to central China as early as 1200 BCE. At the time, the kings of the Shang dynasty (1766–1045 BCE) ruled the lower Yellow River valley and wrote using the earliest extant Chinese characters. The lavish tomb of one king's consort, a woman named Fu Hao, contained over one thousand jade implements, some carved out of the distinctive milky green jade of Khotan. Large quantities of seashells found in Central Asia, particularly at the Wubao site near Hami in Gansu Province from the same period, testify to trade with coastal regions either to the east in China, to the south in India, or to the west along the Mediterranean.[13]

Secondly, they revealed that diverse ethnic groups once inhabited the area. For example, at sites in Xinjiang and Gansu dating from 1800 BCE to the early centuries BCE, the dry desert climate has preserved about five hundred desiccated corpses.[14] Many of the males measure over six feet (1.8 m) tall, much taller than their Chinese contemporaries, and the deceased often have non-Chinese—sometimes called Caucasoid—features like fair hair and pale skin. Their appearance has led scholars to propose that many of the people traveling along and settling in the different oases around the Taklamakan Desert were descended from the speakers of Indo-European languages. These peoples, linguists believe, migrated to ancient India and Iran, probably from their original homeland, possibly the Pontic steppe north of the Black Sea, sometime between 2000 and 1000 BCE.[15] Some of the corpses wear woolen textiles with plaid patterns resembling those in second-millennium BCE Ireland, further evidence for Indo-European roots.[16] Some scholars have proposed that they spoke Tocharian, an Indo-European language discussed in chapter 2. Yet because none of these tombs have produced any written evidence, we cannot know what language(s) these peoples spoke.[17]

There are also discoveries of trade with people to the north, at the site of Pazyryk in Siberia, which dates to the fifth century BCE. The residents of this site

buried Chinese bronze mirrors and silk in their tombs.[18] One silk fragment bears an embroidered phoenix, most likely a Chinese motif (or a motif copied from something originally Chinese), since this had positive associations in Chinese culture. A similar textile, also from the fifth century BCE and found at Turfan, shows a beautifully embroidered phoenix on a faded yellow silk background.[19] These finds indicate that overland trade was certainly taking place in the centuries before the Common Era, but no documents reveal who was carrying these goods or why.

The first written description of the Silk Road trade concerns Zhang Qian (d. 113 BCE), a Chinese envoy from Chang'an to Central Asia in the second century BCE, during the reign of Emperor Wu of the Han Dynasty (reigned 140–87 BCE). The emperor hoped that Zhang Qian would persuade the Yuezhi people, living in the Ferghana region of modern-day Uzbekistan, to ally with the Chinese against their common enemy to the north, the Xiongnu tribal confederation, based in modern-day Mongolia. The earliest surviving account about Zhang Qian was written at least 150 years after his trip and does not provide many basic facts about his journey, such as his exact itinerary.

It is clear, though, that Zhang went through Xiongnu territory on his way to the Yuezhi. The Xiongnu imprisoned Zhang, and it took him about ten years to escape. Nonetheless, he still proceeded to visit the Yuezhi. On his return, sometime around 126 BCE, he gave the emperor the first detailed information the Chinese received about the different peoples of Central Asia.[20] Zhang Qian was extremely surprised to discover that Chinese merchants and trade goods had preceded him to Central Asia. In the markets of Bactria, in modern-day northern Afghanistan, Zhang Qian saw bamboo and cloth manufactured in the Chinese province of Sichuan, several thousand miles away. The Chinese goods must have traveled overland.

After Zhang Qian's return, the Han dynasty gradually extended its control into the northwest. By the end of the second century BCE it secured the Gansu corridor and Dunhuang. Each time the Chinese army conquered a new region, it constructed beacon towers at fixed intervals. If a disturbance occurred, the soldiers guarding the beacon tower lit torches to alert the men in the next tower, and so on down the line until the news reached the first garrison that could dispatch troops to the troubled area. In addition to the beacon towers, the Han military also established garrisons in the newly conquered territories. Documents in the form of bamboo slips recording army purchases of clothing and grain from the local people have been found at Juyan (Ejina Banner, Inner Mongolia, 90 km northeast of Jinta County, Gansu) and Shule (near Dunhuang and Jiuquan, Gansu).[21]

The largest cache of early documents from the Silk Road was excavated from just such a Chinese garrison at Xuanquan, located 40 miles (64 kilometers) east

of Dunhuang.[22] A square dirt wall, 55 yards (50 meters) on each side, surrounded the complex, which had a stable for horses on its southern edge. Officials traveling on government business were entitled to get fresh mounts at the garrison, which also functioned as a postal station. On the northern and western edges of the enclosure were waste disposal areas; the western garbage pit extended 1.3 yards (1.2 m) underground at its greatest depth. The 2,650 artifacts from the site included coins, farm tools, weapons, iron cart parts, and utensils such as combs and chopsticks, as well as foodstuffs like grain, garlic, walnuts, almonds, and animal bones.[23]

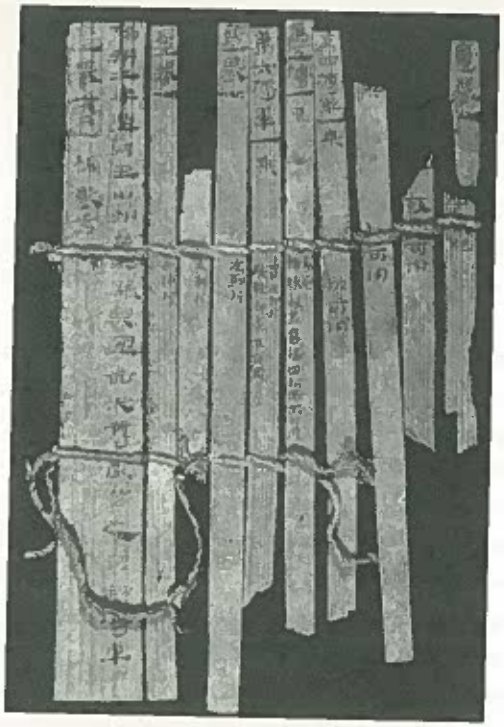
There are more than 35,000 discarded documents from the Xuanquan site: 23,000 wooden slips with Chinese characters on them, and 12,000 bamboo slips trimmed to size, apparently intended for later use. About two thousand of the slips bear dates between 111 BCE and 107 CE, the years when the garrison was in use.

The slips are written on wood and bamboo because paper was just spreading to Central Asia at this time. Invented in China during the second century BCE, paper was first used as a wrapping material and not for writing. The official histories record, for example, that in 12 BCE a murderer used poison wrapped in paper.[24] Some of the earliest paper scraps found at Xuanquan, dating to the first century BCE, also bear the names of medicines, confirming the early use of paper as a wrapping material.

Not until four centuries later, in the second century CE, did paper come into widespread use as writing material in China. It took even longer for paper to replace wood and bamboo as the most common writing material along the Silk Road. Because paper was always expensive, people wrote on other materials like leather and tree bark. The documents at Xuanquan consist mostly of wooden slips tied together to form bunches (much like a placemat made from Popsicle sticks).

The documents from the Xuanquan site include much everyday correspondence among the officials stationed at the Xuanquan postal station and other nearby locations, notices of new edicts issued by the emperor, announcements of runaway prisoners, and private letters. The scribes at Xuanquan distinguished among different types of wood: they reserved higher-quality pine for imperial edicts and used poplar and tamarisk, which warped easily, for routine documents and correspondence.

Since Xuanquan was the final stop before Dunhuang on the way out of China, almost all envoys passed through it once on their journey into Han-dynasty China and again when leaving. Chinese geographic sources from the Han dynasty list more than fifty kingdoms in Central Asia. Although the Chinese documents usually refer to these rulers as kings, each domain often



DOCUMENTS BEFORE PAPER
Even after paper spread from China to the Silk Road in the second century BCE, some documents continued to be written on wooden slips. The earliest paper was used to wrap medicine, and it was not until the third century CE that the transition to using paper for writing was complete. These slips record the carts requisitioned by a garrison. Bound together by string, they were rolled up when stored. Characters were read in columns from top to bottom and from right to left, so one began reading at the upper right-hand corner, and read vertically down the first slip, returning to the top of the second slip, and continuing in the same way until finishing at the bottom left corner.

consisted of a single oasis with a population as small as several hundred people and no larger than several thousand. These oases resembled small city-states more than kingdoms.[25]

Big or small, these different states dispatched envoys to visit the Chinese capital to present gifts to the emperor, whom they acknowledged as their superior, and to receive gifts in return. Among the most treasured gifts were the horses that grazed in the Central Asian grasslands; because they roamed free, they were always stronger than the smaller, less powerful Chinese breeds that ate fodder hand-carried to their stables. The Chinese prized the heavenly horses of the Ferghana valley, in Uzbekistan, most of all. Even in this early period, during the Han dynasty, it is impossible to distinguish between official trade, in which an envoy brought a gift (often animals such as horses or camels) and received something for his ruler in return, and private trade, in which the same envoy might present an identical animal to the Chinese and keep the return gift for himself.

The gift-bearing delegations from Central Asian kingdoms varied in size. On some occasions delegations were a thousand strong: the king of Khotan, for example, headed a single group of 1714 people.[26] More typical was a delegation

from Sogdiana, in 52 BCE, that included two envoys, ten aristocrats, and an unspecified number of other followers, who led nine horses, thirty-one donkeys, twenty-five camels, and a cow.[27]

These delegations traveled on fixed itineraries and carried travel passes listing the towns, in order, they were allowed to visit. According to the law of the Han dynasty, which drew on even earlier precedents, anyone going through a checkpoint, on land or by water, needed a travel pass, called a *guosuo* (literally "passing through a place").[28]

Several of the Xuanquan documents list all the stops between Dunhuang, the first town within the empire, and the Han-dynasty capital, either Chang'an in the first century BCE or Luoyang in the first century CE. Delegations were not permitted to stray from these routes. At each stop, officials counted the people in each delegation and the animals traveling with them to ensure that the party exactly matched the one enumerated on the travel pass. Officials could emend these passes and could also issue new passes. They checked the delegations when they went through Xuanquan on their way to China and again when they left Xuanquan, usually about six months later, on their way back to Central Asia. The cooks at Xuanquan kept detailed records of their expenditures on food for each guest, whether Chinese or foreign, whom they identified by rank and direction of travel (east or west).[29]

The wooden slips from Xuanquan are remarkably detailed. One of the longest records describes a dispute occurring in 39 BCE, when four Sogdian envoys petitioned Chinese officials to protest the low prices they had received for camels. The Sogdians maintained that Chinese officials had paid them the rate for thin, yellow camels, but they had actually delivered more valuable fat, white camels. The Sogdian envoys not only had a clear sense of market values but also sufficient confidence in the predictability of the system to protest when the prices diverged from their expectations. The Sogdians also expected, as envoys carrying the appropriate credentials, to be housed and fed at each stop along the way, but ended up paying for their meals instead. The officials at Dunhuang who heard the dispute in 39 BCE concluded that the Sogdians had been appropriately compensated. One possible explanation for the harsh treatment of the envoys: the Han-dynasty officials bitterly resented the Sogdians for cooperating with their longtime enemy, the Xiongnu, so they retaliated by underpaying them.[30]

The Xuanquan documents define an entire world, a world that included oases on the far western edge of China, near the modern city of Kashgar, as well as those beyond modern China's border in Uzbekistan, Pakistan, and Afghanistan. The rulers of these different Central Asian oases participated in the systematized exchange of diplomatic envoys with the Chinese emperor of the Han

dynasty, and envoys from these different points regularly traveled the Silk Road on their way to the Chinese capital.

Of the many foreign embassies that visited the Han-dynasty emperors to present tribute, only one was conceivably from Rome. An envoy from the ruler of Da Qin (literally the "Great Qin"), the official history reports, arrived by sea in 166 CE. Da Qin sat on the western edge of the world known to the Chinese and displayed many characteristics of a utopia; only in some instances does the term refer specifically to Rome. The Da Qin emissary presented ivory and rhinoceros horn, typical products of Southeast Asia. Many suspect that this envoy was an imposter who claimed to be from a distant, barely known place in order to receive permission to trade. This single mention is intriguing but hardly conclusive.[31]

As the Xuanquan documents and other materials reveal, the Han dynasty initiated regular trade along the routes around the Taklamakan for purely strategic reasons—they sought alternative routes to Central Asia so that they could bypass the Xiongnu, their constant enemy. Official envoys might occasionally engage in private trade, but always as a sideline to their official business. Their movements were never spontaneous but took place along carefully planned and recorded itineraries. For all their detail about Chinese trade with the Central Asian oases, the Xuanquan documents make no mention of any place west of the Kushan Empire (in northern Afghanistan and Pakistan) and certainly not of Rome itself.

Unfortunately, no documents with a level of detail comparable to the Xuanquan documents have been excavated on the European side, so analysis of Europe's trade must rely on known Greek and Latin texts. One of the most informative sources is the *Periplus of the Erythraean Sea*, a book written sometime in the first century CE by an anonymous merchant living in Egypt who wrote in Greek.[32] After describing the various ports of east Africa, Arabia, and India, the *Periplus* concludes with an account of the lands lying beyond the known world:

> Beyond this region [an island in the sea to the east of the port at the mouth of the Ganges], by now at the northernmost point, where the sea ends somewhere on the outer fringe, there is a very great inland city called Thina from which silk floss, yarn, and cloth are shipped by land . . . and via the Ganges River. . . . It is not easy to get to this Thina; for rarely do people come from it, and only a few.[33]

Thina? The spelling makes sense, given that ancient Greek had no letter for the sound "ch" and the letter theta was probably pronounced something like *ts* in ancient Greek. The author did his best to record the unfamiliar name he heard

from Indian traders. In Sanskrit, China was pronounced Chee-na (named for the Qin dynasty, 221–207 BCE); the Sanskrit word is the source of the English word "China." In subsequent centuries, Roman geographers like Ptolemy (ca. 100–170 CE) learned more about Central Asia, but scholars are still struggling to reconcile their descriptions with the actual geography of the region.[34] The author of the *Periplus* is certain of only one kernel of information about the Chinese: they produced silk in the form of floss from cocoons, spun thread from that floss, and wove cloth from the thread.

The Chinese were indeed the first people in the world to make silk, possibly as early as 4000 BCE, if an ivory carving with a silkworm motif on it, from the Hemudu site in Zhejiang, constitutes proof of silk manufacture. According to the Hangzhou Silk Museum, the earliest excavated fragment of silk dates to 3650 BCE and is from Henan Province in central China.[35] Skeptical of such an early date, experts outside of China believe the earliest examples of silk date to 2850–2650 BCE, the time of the Liangzhu culture (3310–2250 BCE) in the lower Yangzi valley.[36]

In the first century CE, when the *Periplus* was written, the Romans did not know how silk was made. Pliny the Elder (CE 23–79) reported that silk cloth had made its way to Rome by the first century. Pliny misunderstood silk production: he thought silk was made from a "white down that adheres to . . . leaves," which the people of Seres combed off and made into thread. (His description more accurately describes cotton.) Yet in another passage he wrote about silkworms.[37] Modern interpreters often translate Seres as China, but, to the Romans, it was actually an unknown land on the northern edge of the world.

China was not the only manufacturer of silk in Pliny's day. As early as 2500 BCE, the ancient Indians wove silk from the wild silk moth, a different species of silkworm than the one the Chinese had domesticated. In contrast, the Indians collected broken cocoons that remained after the silk worms had matured into moths, broken through their cocoons, and flown away.[38] Similarly, in antiquity, the Greek island of Cos in the eastern Aegean produced Coan silk, which was also spun from the broken cocoons of wild silk moths. Early on, the Chinese had learned to boil the cocoons, which killed the silk worms, leaving the cocoons intact and allowing the thread to be removed in long, continuous strands. Even so, Chinese silk cannot always be distinguished from wild silk, and it is possible that Pliny may have described Indian or Coan, not Chinese, silk.[39]

Because Chinese and Coan silk resemble each other so closely, analysts must identify motifs unique to China in order to determine the origins of a piece of silk. Yet since any motif can be copied, the most reliable indicator of Chinese manufacture is the presence of Chinese characters, which only the Chinese wove into their cloth. Textiles found in Palmyra, Syria, from the first

to third centuries CE were among the earliest Chinese silks to reach west Asia from China.[40] The Chinese emperor routinely sent envoys to the Western Regions to bestow textiles on local rulers, and they in turn probably sent them further west.

Still, most of the beautiful silks found in Europe that are labeled "Chinese" were actually woven in the Byzantine Empire (476–1453 CE). One scholar who examined a thousand examples dating between the seventh and thirteenth century found only one made in China.[41]

Silk in particular drew Pliny's ire because he simply could not understand why the Romans imported fabric that left so much of the female body exposed: "So manifold is the labor employed, and so distant is the region of the globe drawn upon, to enable the Roman matron to flaunt transparent raiment in public."[42] He railed against other imported goods as well—frankincense, amber, and tortoiseshell, among others—because consuming them, in his opinion, weakened Rome.[43]

Had the trade between China and Rome been as significant as Pliny contended, some Roman coins would presumably have been found in China. Yet the earliest European coins unearthed in China are from Byzantium, not Rome, and date to the 530s and 540s.[44] Vague rumors to the contrary, not a single Roman coin has turned up in China—in contrast to the thousands of Roman gold and silver coins excavated on the south Indian coast, where Roman traders often journeyed.[45] Historians sometimes argue that coins made from precious metals could have circulated between two places in a given period but might not survive today because they were melted down. But the survival of so many later non-Chinese coins in China undercuts this argument. Many Iranian coins made of silver and minted by the Sasanian Empire (224–651) have appeared in quantities as large as several hundred (see the example in plate 4B).

In sum, the absence of archeological or textual evidence suggests surprisingly little contact between ancient Rome and the Han dynasty. Although Pliny the Elder offered a confident critique of the silk trade, no one in the first century CE collected any reliable statistics about Rome's balance of trade.[46] If Romans had bought Chinese silk with Roman coins, some remnants of Chinese silk might have surfaced in Rome. Starting in the second and third centuries, a few goods managed to make their way between Rome and China. This is the period of the Palmyra silks and also when Romans began to pin down the location of Seres.

The art-historical record in China also confirms intermittent contacts between Rome and China that accelerate in the second and third centuries CE. In the Han dynasty, only a few rare examples of Chinese art display foreign

motifs. But by the Tang dynasty much more Chinese art incorporated Persian, Indian, and even Greco-Roman motifs.[47] The Tang dynasty marked the high point of Chinese influence in Central Asia and also the height of the Silk Road trade.