The Silk Road

Volume 1 Number 1
第1卷 第1號

"The Bridge between Eastern and Western Cultures"

January 15, 2003
一月十五日

In This Issue

Next Issue

• Bibliographic Essay on Islamic World by Professor John E. Woods

• Bibliographic Essay on the Sogdians

• Article by de la Vaissière on the Sogdians

• Article by Connie Chiu "*Weather and Migrations During the Jin Dynasty*"

• And More...

About

The Silk Road is a publication of the Silkroad Foundation. Please feel free to contact us with any questions or contributions.

Silkroad Foundation
P.O. Box 2275
Saratoga, CA 95070
Editor: Charles Cox

info@silkroadfoundation.org

The Silk Road can also be viewed online at http://www.silkroadfoundation.org

Welcome to the First Issue!

Since the Soviet collapse, the nations of Central Asia have shaken off imposed obscurity to make headlines of their own. The emergence of these new states has helped to focus attention once again on their history, culture, and people. For most of us, these were places whose names we barely knew a decade ago. Collectively they form the heart of Eurasia. Today they may be known as Ukraine, Armenia, Georgia, Azerbaijan, Turkmenistan, Kazakhstan, Tajikistan, Uzbekistan, and Kyrghizstan, but in the more remote past, along with Afghanistan, Xinjiang, and Gansu, they evoked images of the ancient Silk Road—oases, caravanserai, nomads, strange empires, fantastic beasts, and exotic people. The public fascination with these distant lands has rekindled a dormant curiosity in the obscure past and modern folkways of what we now call Central Asia—the lands which embraced the multitude branches of the ancient Silk Road.

Those of us, scholars and amateurs, who seek timely and accurate information on the Silk Road and Central Asia have many obstacles to overcome. *The Silk Road*, a newsletter, was conceived and developed to help those with an interest to overcome those obstacles and to provide a central reference source for accurate information on developments in various areas of Silk Road and Central Asian studies.

When we refer to "Central Asia" or "The Silk Road" we are not referring to one in the same thing—they are not interchangeable terms. Central Asia is relatively easily defined. It is roughly the geographic region of Asia from the Urals in the west to Xinjiang and Gansu in Western China. South to North, it includes the regions north of the Caucasus, Taurus, Himalayas, the Pamirs, and Kun Lun, to the Arctic Ocean. The Silk Road is centered on Central Asia but comprises, in our use of the term, more than geography—it stands by extension for complex historical and cultural processes which need to be further investigated.

Our knowledge of Central Asia and its Silk Road conduits is impeded by several factors. The native territory of our interest, for one, is as remote to us as the territory of native Americans is to a Russian enthusiast. In addition, we have inherited in the west a legacy of 19th Century romantic and exotic notions of Central Asia based on dated travel accounts and Victorian fictions. The distortions inherent in these notions have been ably and devastatingly deconstructed in Edward Said's *Orientalism*.

One reason for our distorted image of Central Asia has been the difficulty of access for western travelers, scholars, and archaeologists. Russian and Chinese investigators working in their respective languages have done most of the first hand observation and reporting. The more experienced field archaeologists in Russia and China—Elena Kuzmina from Moscow and Wang Binghua from Urumchi, for example—have more direct experience with Central Asian sites and materials than practically all of the American investigators combined. Their reports and publications, in Russian and Chinese, are available in the west to only a limited number of specialists. Much of this material is now becoming available, and only some of that more recently still in translation.

The remove of Central Asian studies has contributed to its orphan status in major western academic institutions. Mostly the region and its history is a ward of more entrenched and better-supported traditional disciplines. Since Herodotus in Greece and Ssu Ma Chien in China, Central Asia has been parceled out as a remote and vestigial appendage of the Greek or Chinese world. It has been viewed as a projection and subjectively constructed "other" to its better-known foils.

The status of Central Asia as a separate academic subject has also suffered because literary remains for the region are scant, for one, and not in well attested languages and scripts. Written Central Asian documents appear relatively late in time compared to its better known neighbors. The mission of unlocking the mysteries of these long lost regions has fallen almost exclusively to archaeology, and even then, only relatively recently.

The term "the silk road," as indicated earlier, presents another cluster of problems. There was a silk road long before silk was actively traded by China, and there was a silk road for thousands of years after that before the term "the silk road" was coined. In a sense, the silk road was brought to Eurasia by the first modern humans out of Africa some 100,000 years ago. As they discovered and adapted to new Eurasian habitats, they exchanged adaptations and technologies with one another and traded with each other for tools and goods. Gradually, modern humans developed adaptations to most of Eurasia, especially in the wake of the melting glaciers in the last 15,000 years. By the Neolithic, about 8000 years ago, modern humans had transformed the great expanse of Eurasia into a large cultural interaction sphere, which effectively connected, on many direct

and indirect levels, virtually all of the human inhabitants of the continent from one end to the other and from pre-historic times until the present. The silk trade out of China only began to be a major factor in Han times and reached its full flowering in the Tang Dynasty. It was not the silk that created the silk road, however. Rather, a complex network of trade routes, formal and informal, maritime and terrestrial, facilitated the silk trade and prospered from it. The necklace of caravan oases centered in Central Asia readily adapted to the silk trade across Eurasia. It could be argued that the complex network of links across Eurasia was the first manifestation of what we now call globalization. For historians, this silk road network is part of world systems theory. Ironically, the silk road label was itself not invented until the late nineteenth century by Baron Ferdinand von Richthofen (1833-1905), long after silk had seen its glory—he referred in German to "Die Seidenstrassen". The term was late in coming, but it has stuck, at least in the west, as the name for the thing it describes.

For our newsletter, *The Silk Road*, however, "the silk road" is not simply a time or merely a place. While it embraces the traditional meaning of a complex network of caravan routes and oases linking China and the Levant, "the silk road" for our purposes encompasses in addition more abstract processes and dynamic interactions. The Silk Road is not an historical artifact, a thing that was deliberately created by human agency, existed for limited purposes, and then died out. Rather, in our wider use of the term, the Silk Road is a by-product of human interaction and exchange on many levels, concrete and abstract. As a concept, the Silk Road embraces the pre-history and history of modern humans since their arrival in Eurasia. In this sense, the Silk Road corresponds to the entire continent, it still exists, and it is still active in transforming peoples' lives in ways which are worth our effort to identify and understand.

Recent historians and archaeologists have evolved a new model of Eurasia as an extensive cultural interaction sphere, a "world system" if you will, with direct and indirect interaction across the continents entire expanse on many levels going back 50,000 to 100,000 years. In this wider context of space and time, the Silk Road is a symbol of the manifold interactions and processes by means of which peoples and cultures influenced each other's material culture, behavior, and beliefs—for example, by trade and exchange certainly, but also by less direct diffusion of ideas and technologies, by migration and conquest, by genes and jeans, by art and literature, by music and dance, by costume and design, by food and drink. These examples are not meant to preclude other less or more obvious possibilities. And in this wider sense, the Silk Road as symbol transcends its traditional idea of oases and caravans transporting trade and exchange via intermediaries between dispersed peoples and cultures. There are more nuanced dimensions to the Silk Road than simply trade and exchange which are worth our while to explore.

The obscurity of Central Asia has begun to be dispelled. Over the past one hundred years, methodical exploration of this region has revealed traces of larger communities and settlements dating from very early times. These were first brought to light by bold military emissaries dispatched to this region by the political authorities of the combatants in what is now referred to as "the great game". A generation of no less emboldened explorers followed them on either side of the turn from the 19th to the 20th centuries. As word of the finds of Sir Aurel Stein, Sven Hedin, and others finally came out, the archaeologists came in. Beginning with Pumpelly's excavations at Anau in Turkmenistan in 1904, there followed, especially in the past twenty-five years, a series of spectacular archaeological discoveries in the once remote and presumably isolated reaches of Central Asia. These discoveries have begun to reveal just how central Central Asia's role was to the evolution of Eurasian society and civilization. And as a result of these discoveries, we are now also aware of the existence of many peoples, cultures, and civilizations in Central Asia of which we were previously unaware. The Kushans for example; the Sogdians; the Bactrians; the Bronze Age people of the Khopet Dag; the Uighurs; the mysterious, perhaps "Tocharian," people of Xinjiang; as well as the Sarmatians.

There remain many obstacles to a fuller understanding of the pivotal role the Central Asian peoples played in the dynamics of the Silk Road. Through time, Central Asia has been the geographical context for myriad empires and innumerable cultures, continuous migrations and conquests, revolts and wars, as well as contested religions and ideologies. No less today than in the past. Given the broad canvas, the sources and materials for the study of the Silk Road are necessarily fragmented. It is not surprising, then, that the studies of subjects related to the Silk Road are generally limited in time and place, focused on a particular culture or people. But Central Asia is also central to the history of greater Eurasia. It is its position at the center of Eurasia, as Andre Gunder Frank's pamphlet *The Centrality of Central Asia* (Amsterdam: VU University Press, 1992), has so persuasively argued, that makes Central Asia the pivot at all levels of the Silk Road phenomenon. In spite of the obstacles, interest in the Silk Road and Central Asia has grown globally in recent years. There have been many major exhibitions of art from the Silk Road region. Yo Yo Ma, in a series of recent appearances, has highlighted Silk Road music. The spectacular discovery of Caucasoid mummies in Xinjiang has focused major attention, and subsequent controversy, on the early interactions between Chinese and Indo-Europeans. The stream of scholarly articles in specialized journals dealing with the Silk Road and Central Asian history has also burgeoned in recent years. More explorations and excavations of the region commence each year. Even television specials have appeared with some regularity. And finally, there have been a number of specialist and popular book length studies on the Silk Road and its peoples. These developments have helped to create an informed public interest in the Silk Road and Central Asian.

In response to this growth in interest, *The Silk Road's* purpose is to monitor research, exhibitions, publications, and events relating to Central Asia and the Silk Road, and to communicate this information, at no cost, in print and online, to interested subscribers. Though our format is still evolving, *The Silk Road* will include non-specialist articles on relevant subjects, a calendar of events, exhibitions, and performances, notices of published research, articles, and books, progress reports on important archaeological field surveys and excavations, reviews of important new books in the field, announcements of guided tours, excavations, and special events and courses. In this effort we invite and encourage our readers to participate in the creation of our newsletter. We will give serious editorial attention to unsolicited contributions which are relevant to the focus of our publication and consistent with our mission.

Roger L. Olesen

Silkroad Foundation

Sheba@Saba-Trading.com: A Yemeni Trading Link Three Thousand Years Old

Diana Pickworth

Visiting Scholar
University of California at Berkeley
Dept. Near Eastern Studies

The following is a summary of lecture delivered by Diana Pickworth on 10/16/2002 at Stanford University

Three kings of Assyria and King Solomon of ancient Israel placed orders with the traders of Saba, and none were disappointed. Delivery by camel and later by ship continued, despite political change in both the southwestern Arabian Peninsula and in the northern areas of the coastal east Mediterranean lands and inland Mesopotamia, modern Iraq.

As one aspect of the ancient Silk Route involved in the movement of Far Eastern, Indian and Indian Ocean island products, the traders of Sheba were secretive about the origins of the desired items. Gold, frankincense, myrrh and a vast variety of medicinal herbs from the Indian subcontinent increased in price as they passed through controlled warehouses and checkpoints moving to their destinations in the north. However, many of the items came from further east than their purchasers realized. The fabled land of great wealth, Saba, responded to a market economy and was often a middle man in the process.

I will discuss the early inland cities of Marib, the Sabaean capital, Tumna, the capital of Qataban, and Shabwa in the Hadramawt; all of these were sited around the edge of the Ramlat Sabatayn desert, and were part of a chain of small kingdom cities in what is modern day Yemen. We will also visit the site of Qana, a port on the Indian Ocean whence the Romans later received their myrrh and frankincense.

The Silk Road is a 19th century name created by a visionary European scholar who labeled, and thus created an image for an ancient trading system of the first millennium AD. He certainly would be hired by any top level advertising agency of the 21st century. From Xian in China, to the eastern Mediterranean coast by a single route is to understate the case and is too narrow a definition. This name described a vast trading complex which was more intricate both in the number of commodities it carried and the routes it followed than is implied in the name. Today's Superhighway of the internet would be a closer parallel.

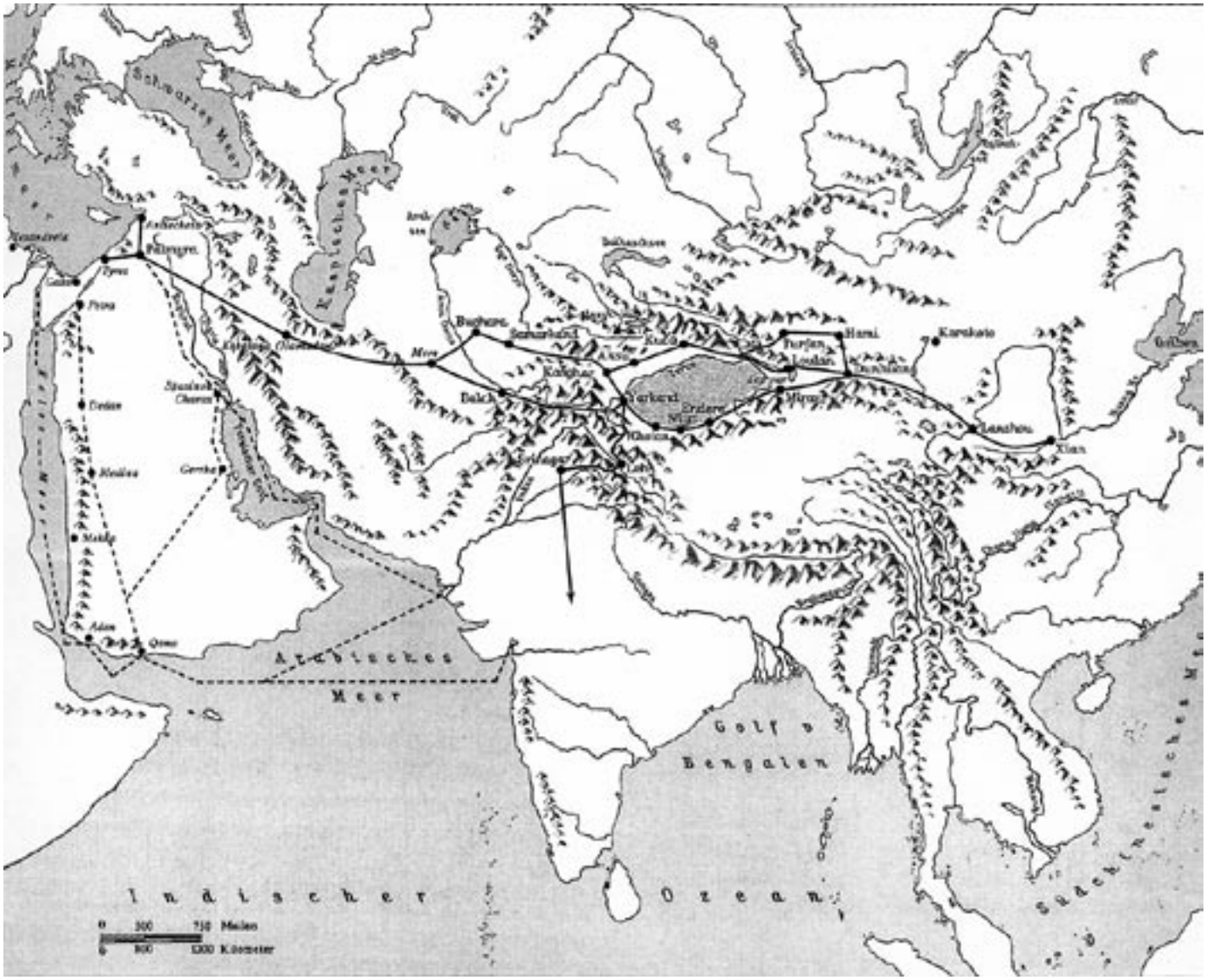
Where does the modern Republic of Yemen, and my title "Sheba@Saba-Trading.com" fit into the ancient map of a Silk Superhighway? The southwest Arabian Peninsula was a transshipment point from the early first millennium BC for items from India and Ceylon via the long, north-south camel caravan route traversing the Arabian Peninsula. Saba, as the main federation was called, sent to the Mediterranean kingdoms and inland Mesopotamian cities of the royal courts of Assyria and Babylon the fragrances they used to burn for their gods; these included frankincense and myrrh. Indigo-dyed cloth, pepper, cardamon, and precious stones all passed through the fabled land.

Yemen is not attested as a country name until the beginning of the first century AD; it means simply the south or the right hand side. The almost unbelievable longevity, and affection of the people of the southwest of the Arabian Peninsula for their country and its past is so strong that any number of companies reflect the ancient name in their modern trading name. There are Saba or Sheba gas stations, hotels, barber shops, juice stands, and groceries, and in all of them the name embodies a history of trading which goes back to the early first millennium BC. No anonymity here, no abstract Silk Route which names neither the beginning nor the end, nor the rulers of the countries involved. We hear from the angry vassal of the King of Assyria, situated at a trading post on the middle Euphrates, of the aggressive tactics and tax avoiding habits of the traders of Sheba as early as 850 BC. The caravan was skirting around the town to avoid paying the tax on goods they were taking back to Yemen.

However, until the sea routes through the Red Sea and a fast open sea passage to India using the monsoon, superceded the long overland camel caravans it is probably fair to say that any Chinese-Yemen connections were nebulous. The critical shift took place in the first century BC. That silk was esteemed, we know from a retrospective description by the 10th century Arab historian al-Hamdani. Where he describes the windows of Ghumdan, the last Sabaean royal palace in Sanaa thus; "of teak wood hung with silk curtains," this description provides a clear demonstration of both an eastern connection for trade, and a pleasure in luxurious and prestigious items.

To understand the distribution pattern of the traded items, through and out of Yemen, it is necessary to understand both the geography of the country, and its political structure throughout the first millennium BC and for the early part of the first millennium AD. One must remember that many traded goods were thought by Mediterranean purchasers to have originated in Yemen; this was an error of omission since many came originally from India and Ceylon, or from the African coast.

The physical map of Yemen shows the uplifted north-south range of mountains; these form a barrier between the inland areas and the coastal strip on the Red Sea. The narrow Tihama is home to fisher people. Today all memories of its former coffee glory, in the Rasulid period, at the small port of Mokha are forgotten. A *mocha* at Starbucks is more alive. This was not always the case and very early occupation of the land along the coast dates from between 8,000 BC and 6,000 BC, when fish eating Neolithic communities subsisted on the wealth of natural marine resources and flourished. This culture spread from the north at Sihi in modern Saudi Arabia all the way around the Bab al Mandeb to Aden, developing into a Bronze Age coastal culture. Recent research suggests that in the eighth century BC a connection was established across the Red Sea by the Sabaeans, who set up a colony settlement in Ethiopia at Axum. Our early traders did not sleep. The Red Sea was difficult to navigate for early vessels and a strong wind pattern can only be used to advantage up until the 20 degrees north; beyond this latitude, sailing can only be accomplished in the winter season when a southerly wind aids shipping and the strong north wind abates. The ports of Qusair and Jedda reflect this need to have an overland option, and a land transshipment port at this point of the Red Sea; it was this physical constraint which allowed the Nabateans to gain such power on the Arabian side, as they controlled the northern end of the trade route in the early first millennium AD.



The uplifted mountains of the coastal range reach 9,000 feet and it was on the upland plateaus created by these mountains that the early Bronze Age farming communities settled and created their wealth during the second millennium BC. Upon this base, later, technologically superior kingdoms developed to the west on the edges of the Ramlat Sabat'ayn,which desert rarely reaches 900 feet. The interaction between the resource-rich higher settlements and the resource-poor, lower desiccating desert-edge settlements catalyzed development in the lower areas whose income ultimately derived from the control and exploitation of trade caravans. There the sub-desert climate is associated with steppe vegetation; it was control and advanced water technology that enabled the cities to feed large populations and thus survive. Research in Yemen has lagged far behind that of other near eastern countries and the mountain settlements have only been documented in the last ten years. Early excavators were surveying in the wrong areas, sure that earlier occupation should be associated with deeper levels of the cities associated with the mid-first millennium incense route. Certainly, deep sediment deposits were documented at Timna and at Marib, and the growth of these cities was not precipitous.

The origin of our caravans transporting their wealth to the Mediterranean was coincidental with the domestication of the camel as a beast of burden. A short east-west copper transportation route across Sinai was the first experimental route in 1500 BC. Only the camel—in Arabia the one humped dromedary—could sustain long dry spells between the wells at the oases. We find, therefore, that the route from the source of the frankincense and myrrh to the destination at Gaza on the Mediterranean is predetermined by spaced watering wells for the camels. These had to be associated with strongly guarded and armed storage areas controlled at each stop by powerful leaders. Shifts in power were constant and the route moved accordingly.

To understand the role Yemen was destined to play in the Silk Route it is necessary to understand its role in both space and time. The relationship of Iran, India, and Ceylon trading east to China and also west to Yemen is critical. They were early pivot points. In the first millennium BC, Yemen is trading alone, carrying the products from these three by overland camel trade to Gaza. The shift to maritime transportation was essentially the point when a more fluid China to Gaza operation began, and the long Yemeni coastline profited the homeland in the second phase of the route in the first millennium AD.

To follow the overland route, we must start at the area of its greatest resource wealth. The southeastern region of Yemen in modern Shihr and Hadramawt was the prime growing area for frankincense resin producing trees. While it appears that the trees were farmed in earlier times the range of suitable habitat is primarily but by no means only in this area. Earlier explorers report frankincense trees in all of the main

river valleys as far north as the Asir highlands of modern Saudi Arabia.

The gum was gathered in spring and autumn when the tree trunks were tapped. The resin was gathered and transported to the first station at Shabwa. This is located inland, on the southwestern edge of the desert. The Royal Palace of the king of Hadramawt was excavated by the French, and an associated deep sounding made. Today, it is a ruin and only occasional tourists make a visit. We have no documentation from this site of the trade policies. A sealing and seal from the deep sounding date to the late first millennium BC. The documentation of commodities in this case appears to have been made on parchment, with the document rolled and held by a string, the knot sealed and stamped. This is the only example I know of this technique in Yemen. Close to Shabwa is an old salt mine, called Ayadime, and this must certainly have been a strategic resource in the ancient period for the preservation of fish. Today, chunks of salty dried shark are carried north and held in high esteem as an aphrodisiac. The salt is excellent and still used today.

The next stop is Tumna, the capital city of ancient Qataban. Excavated from this site is a market decree dating to the fifth century BC. This text was published by Beeston[1], and it can be compared to the rules of the Sanaa Suq today. The text was inscribed on a stone column, and was set up in the middle of a central clearing for all to see. Those who could trade were named, and taxation and payment rules rigorously stipulated. A rasifum building, possibly a raised platform associated with a temple, was probably the area of the ancient market.

This building and a temple was excavated in the fifties by W.F. Albright, again by the French in the nineties, and today by the Italians. The nearby necropolis of Tumna has been a source of illegal antiquities. Many of the carved alabaster statues of bulls' heads and memorial plaques originated there. The necropolis is unusual, in that the design of the tombs, which are ossuaries with narrow central passages, is not duplicated elsewhere in Yemen. A continual tension between the small kingdoms existed, and in the fourth century BC the Qatabanians succumbed to become part of the Sabaean Federation.

The route from Tumna to Marib, the capital of the Sabaean Federation, lies in a northwesterly direction. The Nagd Marqad path lies around the edge of the desert, a longer, flatter route. There seem to have been political reasons at certain periods to use the steeper and possibly shorter Mablaqah Pass. This pass is a dizzying track up and over a low mountain which leads into the Wadi Harib. The modern town of Henu es-Zureir, the location of ancient Haribat, was another watering point. A memorial inscription carved at the top of the pass was sadly destroyed by road improvements in the last ten years; it was dynamited and lost after 2,000 years. The fortified ancient town of Haribat was built with the outer house walls as part of the city defensive wall system.

Marib, ancient Mariaba, and its fabled gardens and dam is so large that even today it is difficult to read the ancient topography. The medieval city sits on top of the ancient palace and scattered throughout the valley are ancient temples and mounds. The dam, which tamed the Wadi Dhana, is a sample of the fine stone working techniques and engineering sophistication available to the inhabitants. Today reevaluation of the Mahram Bilquis is ongoing by the American Foundation for the Study of Man, while the German Archaeological Institute teams are working in the cemetery and also on the citadel. The Baran temple, recently restored by the German Institute, was reopened for visitors after a 1,500 year pause.

From Marib, the caravans wend their way north to Qarnu and on to Najran, now in Saudi Arabia, but Yemeni until quite recently. A border delineation between the two countries was signed in 2000 AD. It is still a further 1,200 miles to Gaza, having already traversed 430 miles from Shabwa to Najran. Today, desert dwelling bedu drive around in Toyotas and know every outcrop of rock; the topography is dangerous and unforgiving, and one cannot move without a guide. The VHF radio, Toyota, and satellite dish reign supreme there today. They are in touch with the world.

By the end of the first millennium BC, a significant shift in transportation methods led to the beginning of a slow demise of these desert kingdoms. The discovery by Greek sailors that they could sail directly to India on the monsoon and transship through Qana, via Aden and the Red Sea to and from Gaza, created a new power base and a shift in trading practices.

Qana was excavated by a Russian team from the Oriental Institute of Moscow over a period of eighteen years. The elite houses, temples, warehouses, and burials portray a busy port. Large, 15-inch round, cakes of frankincense were excavated in the storage areas and from one of the houses a woman's hoard of jewelry and bottles demonstrate how a lady of means lived in the first century AD, in a remote outpost.

From Qana the ships sailed to Aden, known to the classical world as Eudymon Arabia, where the safe deep water harbor—a part of the ancient volcano—was nestled next to Sirah Island. In the area close to the ancient port in modern Crater—called Aden by the locals—the old, original settlement was, and remains today, inside the volcano's caldera. Here, I was fortunate enough to excavate a well as a rescue archaeology exercise, before an apartment house was built over it, sealing it forever. It was in the Haflah al Qadi area, on al-Mari Street where three ancient wells are documented.

The Silk Road did indeed pass through Aden, and below the Rasulid level there were discarded Chinese ceramics. These have been discussed with Li He of the Asian Art Museum; noteworthy were a blue cup from Fujian, celadon ware, and early 11th century AD grey-white, fine-paste ware pieces. While the Portuguese forts further along the coast contained 17th and 18th century Chinese porcelains, the well held earlier samples representing continued contact with the Far East. Yemen was without question a part of the Silk Road.

References

1. A.F.L. Beeston, "The Mercantile Code of Qataban," *Qahtan*, 1 (1959) : 2-20.

About The Author

Dr. Diana Pickworth was educated at UCB and received her doctorate from the Department of Near Eastern Studies, in Ancient Art and Archaeology. She is a National Fellow of the Explorers Club of New York. She was Assistant Professor at the University of Aden in the Republic of Yemen and Field Director at the site of Kadimat as-Saff in the Lahej Protectorate, a new site theoretically the capital city of the ancient kingdom of Tubanu. She has excavated in Iraq at the site of Nineveh with the UCB team led by David Stronach, and at the site of Tel Dor in Israel for Professor Andy Stewart. Most recently in the Yemen she has excavated at Qana, Timna, Kadimat as-Saff, and Bintayn Methul. Survey work has been carried out extensively in Yemen by Dr. Pickworth, most recently on the Island of Socotra in the Indian ocean, and southeast of the Rub ar-Khali in the Yemeni Jawf.

The Origin of Chess and the Silk Road

Los Altos, California

The classical research about the origin of Chess concentrated on investigating written and archaeological evidence resulting in opinions about Indian/Persian[1] or Chinese origin of the game. The available evidence was, however, not sufficient for a convincing theory. So the question about the origin of Chess still has to be considered open. Some speculations assumed military, mathematical, or divinification models as the basis for the game. Most scholars of Chess history do, however, agree that the relationships to these models showed after Chess already existed. Another idea, which was part of some theories, was the assumption that Chess, with all its present complexity, was invented by a single person. But this is extremely unlikely.

A significant step towards the better understanding was the founding of the Initiative Group Königstein (IGK[2]) in 1991 and its seminars, in which the present Chess historians can present their research and opinions. Its member Gerhard Josten looked for evidence in the structure of Chess. He came up with three basic unique elements: the king, the pawns, and the officers (counters, pieces). His theory is that these elements stem from different sources and are combined into present day Chess. This was supposed to be done by either Silk Road merchants, who were waiting for better weather conditions in one of the major trading places like Kashgar in today's Southwest China, or by game enthusiasts in the Kushan Empire. The Kushans had some experience with merging elements from different cultures. Josten suggests that the king and its behavior is taken from the ancient Chinese game Go, the pawns come from Indian racing games and the officers are taken from divinification or astrological methods. I have added an alternative for the astrological roots of the officer-moves with the possibility that their moves are based on the images occurring within the game of Tic-Tac-Toe.

No matter which theory is valid, the importance of the Silk Road for spreading the game is undisputable.

Forerunners and the Chinese Variation

Board games are very ancient and can be traced back at least 4,500 years to the first city of Ur and Egyptian paintings. In the 19th century AD Stewart Culin created the theory that all board games had magical or religious origin. This is not evident, for instance, in the three-dimensional Tic-Tac-Toe (*Mill*), for which a board was engraved by Roman soldiers on the cobble streets of Old-Jerusalem.

The Egyptian game *Senet* was clearly a religious game. It was a racing game played on a 10x3 board. There is also a version with 8 linear squares followed by 4x3, the "twenty-game". The exact rules of either are not known, but boards have been found together with half-flat sticks, the forerunners of dice. The names or meanings of the squares had to do with the stations of the way to the empire of the dead. There are numerous references to *Senet* in inscriptions and papyrus scrolls. The use of *Senet* as an Egyptian glyph gives an indication of its importance. According to the Nordic poem, *The Edda,* the Germanic gods spent their free time in their residence *Asgard* playing board games, but *The Edda* was not written down until the twelfth century AD.

A possible forerunner of Chess is an Indian game, known as *Ashtapada*, which means in Sanskrit a square board of 64 squares, 8 rows of 8 squares. It was played with dice and pieces, a race game possibly going back to the fifth century BC. Chinese records mention its introduction from India to China as early as 220 BC to 65 AD, roughly during the early Han Dynasty.

The likelihood of a race-game being a forerunner of Chess is preserved in the promotion of a pawn to a piece when reaching the 8th row. Hinduism prohibits gambling. The revival of Hinduism during the Gupta Dynasty led to an enforcement of this anti-gambling policy in the 6th century AD. This is used as an argument by some scholars for supporting the idea of an Indian origin of Chess. It is stated that the suppression of dice forced the transformation of a race game into a strategic game. When I discussed this with some Indian historians during a visit to India, I got clarification that the gambling inhibition was local and did not apply to total India.

Chinese Chess today is played on a board with 9x8 squares or 10x9 edges. The pieces, inscribed draughtsmen, are placed on the edges and not on the squares of the 9x8 field. The use of inscribed draughtsmen instead of stand-up figures means an additional level of abstraction and would therefore speak against an origin in China. However, sources suggest that originally Chinese Chess was also played with standing figures. In the middle of the 10-row field is a "river", which was added later, meaning originally that the board was 9x9, considering the edges, or 8x8 considering the squares. The number nine has a special importance in China. Ancient Chinese regarded odd numbers as being masculine and even numbers as being feminine. Nine, the largest single-digit, odd number, was taken to mean the ultimate masculine, and was symbolic for the supreme sovereignty of the emperor. It was sometimes combined with the number five to represent imperial majesty. Tiananmen Hall is 9 bays wide and 5 bays deep. The combination 9x5 also appears on the two halves of the Chinese chessboard (after inclusion of the river). The transfer to a 9x9 board from an 8x8 one, based on the imperial importance of the number 9 seems more likely to have happened than the other way around.

Chess Pieces and Boards

The oldest clearly recognizable Chess pieces have been excavated in ancient Afrasiab, today's Samarkand, in Uzbekistan. These are seven ivory pieces from 762, with some of them possibly older, meaning that they stem from the 6th to 8th century AD. It is not clear whether one of the pieces can be identified as a Queen. Otherwise, the occurrence of the 6 different pieces within a sample of seven out of the total 32 pieces is statistically surprising. The pieces today are kept in a downtown museum in Samarkand.

Some other old pieces, possibly Chess pieces, are the occasionally named Chess pieces of an elephant and a zebu bull kept in Tashkent. They were excavated in Dalverzin-Tepe, an ancient citadel of the Kushan Empire now in Southern Uzbekistan, and stem from the 2nd century. The Russian Chess history expert Linder feels that they are not Chess pieces, but belonged to a forerunner of Chess [Linder 1994]. They could mean an earlier than previously assumed existence of Chess. Second, there is a piece in the Metropolitan Museum in New York from the 6th or 7th century, bought in Baghdad around 1930, representing an elephant out of dolomite stone of 2-7/8 inch height [Gunter 1991]. An ivory piece, probably a Chess piece from the 6th century, has been excavated recently at a Byzantine palace in the ancient city of Butrint in Albania. This modifies the theory that Chess was moved to the West by the Arabs in favor of Christian/Byzantine involvement.

Written Reports

The oldest known Chess books or parts thereof are in Arabic, written about 850 AD. Before that, there are only incidental possible references to the existence of the game in Arabic, Persian, Sanskrit, or Chinese literature, but there is no complete description of the game, nor an indication that rules had stabilized. The earliest mentions stem from around 600 AD. Chess or *Chaturanga*[3] have not been mentioned in an otherwise very complete travel report by the Chinese Buddhist monk *Fa Xian*, who

traveled through India at the beginning of the 5th century AD. The total number of Persian references to Chess from around 600 is two out of a total of five works of middle-Persian secular literature which are known to have survived from that period. Very little is known about Chess in India for about half a millennium after that. It is not clear whether the Chess mentioned by the Persian sources was a game for two or for four players, whether it was played with dice, and what moves were allowed. The conclusion by Murray [Murray 1913] and Eales [Eales 1985] is that before the 7th century, the existence of Chess in any land is not demonstrable. Eales mentions that the compiler of a 12th century Chess manuscript wrote "It is universally acknowledged that three things were produced from India: the game, the book *Kalila wa Dimna* (a book of literary fables) and the decimal numbers (including the Zero)."

Ann C. Gunter [Gunter 1991] reports about one of the surviving texts in Middle Persian, The Explanation of Chess and Invention of Backgammon (Wizarishn i catrang ud nihishn i new-ardashir). In a said competition between the great Sassanian ruler Khusraw I, who ruled from 531 until 579, and the Indian King Dewisharm, Dewisharm sent a Chess game to Khusraw requesting that Khusraw's wise men explain the rationale of this game. The wise man Wuzurg-Mihr explained the rationale of the game and then proceeded to a challenge of his own to the Indian ruler. This supposedly was the invention of Backgammon (called *nard* in the literature), and the invention of present day dice (the numbers of which correspond to cosmological principles of the then common Persian religion, Zoroastrianism). Dice were, however, already known by the ancient Egyptians and certainly not invented as late as Khusraw I's time. It has not been possible to locate Dewisharm, and to find out which of the kingdoms that existed after the fall of the Gupta Dynasty that he ruled.

Sloan [Sloan 1985] bases his theory about Chinese Chess origin on two Chinese poems, one stemming from the 2nd century BC. Since Chess is often wrongly confused with the far older *Go*, this could also be the case here (or a mixup with another board game).

The Sinologist Joseph Needham and Pavle Bidev, both part of the Initiative Group Königstein, have, based on the theory about religious roots for all board games, suggested that the historical Chess of 7th century India was directly descended from a divinatory game (or ritual) in China. Bidev suggests that Chess has its roots in the cult of the Chinese god *Thai Yi*. Needham has shown that there are references to an "image-game" (*hsiang chhi* is elephant-game or image-game) in works of the 6th century, devised by the Emperor Wu Ti (561-578) from the Northern Chou-Dynasty. The emperor even gave lectures on the game to his staff. It was, however, not Chess since according to early sources it had as its pieces the sun, the moon, the stars, and the constellations, meaning that it was in all likelihood a complex astrological ritual. Interesting in Chinese Chess is the 3x3 fortress, an exact image of Tic-Tac-Toe.

Indirect Evidence

There is an analogy between the Indian army and the Chess army. Chinese armies did not have elephants, or only very occasionally had a limited number in the southwestern part of the China.

The earliest Chess terms appear in Sanskrit, the Persian and Arab versions are very similar. Whyld points out the fact on the IGK website (http://www.netcologne.de/~nc-jostenge) that the first Chess terms mentioned appearing in Sanskrit is not convincing. He also mentions the fact that in the story of Chess moving from India to Persia it is said to come from *Hind*, a name which was not used for India until after the 11th century AD.

Davidson [Davidson 1949] studied the "Geography of Chess". Starting with India he finds four major radiations: A northeast radiation into China, between 800 and 1000 AD along the Silk Road; a southeast radiation into Burma and Indo-China, between 800 and 1100 AD; a westward radiation into Persia and the Arab countries, between 600 and 800 AD, reaching Spain before the 1008 battlefield will of the Count of Uregel, which directed the inheritance of his Chesspieces; and a northward radiation into Siberia, between 1400 and 1500 AD.

Gerhard Josten from the IGK bases his "merger theory" on three elements in the structure of Chess. The element of hunt games is represented by the king, the element of divination counters for the moves by the officers and the element of race games by the pawns.

The imprisonment of the king occurs in a similar way in the Chinese territorial game Go, called *Weiqi*[4] in China, which means this element likely comes from China. Go is played on a 19x19 board by placing alternatively black and white pieces on the board. Horizontal and vertical connections of pieces of the same color form chains. The number of empty fields neighboring any members of a chain horizontally or vertically give the degree of freedom of the chain. A chain, including one consisting of a single piece, without any degree of freedom is taken prisoner. The situation of one piece taken prisoner could be the one which was applied to a mated king in Chess.

Josten believes that the officers have their origin in old divination techniques, but in difference to other authors he believes that the divination techniques apply only to the officers and not to the complete game of Chess. Based on the fact that the geometry of the Babylonian astrolabe allows all of the important types of moves of the Chess officers and the external kinship of the astrolabe to the Byzantine Chess board, Josten states that the Babylonian astrolabe is an adequate ideal for these pieces. Supporting the astronomical/astrological connection is the 19th century theory that all board games have religious roots. Chess has been from the beginning a game for intellectuals and astrologists were considered in ancient times part of the intellectual elite. In antiquity, the stars were looked at as either images of gods or subjects with which the gods chased around. This is the justification for astrology and possibly for an early use of the game of Chess to obtain oracles. The astrolabe constitutes an analog computation device[5], consisting of various rings movable against each other. The user found the altitude of the sun or stars by means of a graduated circle on one side of the device and then turned to the other side to perform his calculations on the movable star map, a two-dimensional representation of the three-dimensional heavens. The straight line moves occur in these operations, the knight move is a combination of both. These methods are also indicated in ancient astroglyphs from Chaldaean times.

As an alternative possibility to the divinification I offer, the game of Tic-Tac-Toe could be viewed as providing the roots for the moves of the counters. Tic-Tac-Toe is played by 2 players, e.g. Black and White, with a set of pieces of equal value each, on a 3x3 board. The players move alternatively with the goal to get three of the own pieces in one horizontal, vertical or diagonal row. In the following diagram, that goal is achieved by occupying the points 1, 2, 3, or the parallels; the points 1, 4, 7, or the parallels; or the diagonals 1, 5, 9, or 3, 5, 7:

1	2	3
4	5	6
7	8	9

Tic-Tac-Toe was played at least 3000 years ago. It is also called "Three Men's Morris", where "morris" is a corruption of merels, the Latin word for counters [Pritchard 1994]. From a game-theoretic point of view, it is always a draw and is trivial. A more challenging extension was played extensively[6]. The placing of the following piece of the same color (2 moves ahead) is either vertical, horizontal, diagonal or in diagram (1) the point 8 following the point 1, or equivalent sequences this is similar to a knight's move in Chess. Thus all move

sequences of the pieces in Chess are represented.

The pawns and their idea almost certainly come from India. Most of the ancient board games seem to have been racing games played with dice or its forerunner, sticks with one flat side, which were thrown and the number being determined by the number of resulting flat sides being up or down.

Ashtapada is an ancient Hindu race game played with dice on an 8x8 board, which later might have become the Chess-board. The method of play for *Ashtapada* has been forgotten. It seems logical that there has to be an incentive for succeeding in a race, which is given by the conversion of a pawn into an officer, when the pawn reaches the last row[7]. To change a gambling game into a strategic race game requires some strategic possibilities to block or speed up the race, such as opposite pawns and the possibility to take an opposite piece by a diagonal move.

A challenge for this theory is to explain the use today, and in the total history of Chess, military names for the officers with no previous names for these pieces being known. Also in the early Arab sources the king is not imprisoned but killed.

As far as the area of origin is concerned, Josten points to the Central Asian Kushan Empire, a culture that had intensive contact with the Near East, India, and China. It would have combined various elements from games from these regions in one game. The Kushans, called "the forgotten Kushans" by some scholars, ruled from about 50 BC until about 200 AD a big empire, which included a substantial part of India, and included the excavation place where the above mentioned 2nd century AD "Chess-pieces" were found. The Kushans, having become affluent by trading on the Silk Road, were privy to cultural mergers as shown by their contemporaneous tolerance of Buddhism and Zoroastrianism, as well as their gold coins displaying Greek, Roman, Iranian, Hindu and Buddhist deities.

Josten's hypothesis about the Kushan origin from the days of the Kushan Empire would imply a lack of reports about Chess for about half a millennium before 600 AD, which might be explained as having been a maturing period. The two pieces from Dalverzin-Tepe could support the theory.

Another thought would be that Chess emerged on the Silk Road, when merchants were idly waiting for better weather conditions for travel, and playing board games. A key place of this type was Kashgar in today's far western China, which also belonged for a time to the Kushan Empire.

Historic Views

There are a number of books on Chess history, in particular the scholarly studies written by H.J.R. Murray [Murray 1913] and Richard Eales [Eales 1985]. The German book by H.F. Maßmann [Maßmann 1839] dismisses older legends about the origin of Chess, like the one that Palamedes of Euboa invented it during the 10-year siege of Troy in order to help avoid boredom among the Greek soldiers. Maßmann is of the firm opinion that Chess was invented in India and came from there via Persia and the Arabs to the West. The beginning of historical research about the origin of Chess is a 1694 publication by Thomas Hyde, *De Ludis Orientalibus*.

Hyde states the facts implicit in older Arab sources, leading to his conclusion that Chess originated in India and then traveled by way of Persia and the Arab world to western Europe and on the Silk Road to the East. The myths and legends before Hyde are all not historical, but all of them, except those of obvious later invention, point to Persia or India as the country of origin.

Li [Li 1998] refers to a publication by Irwin, read in 1793 in Dublin [Irwin, *An Account of the Game of Chess, as Played by the Chinese*, Transactions of the Royal Irish Academy (Dublin 1793), pg. 53-63]. According to this paper, Chess was invented by the Chinese General Han Xin to mentally occupy his troops during a long winter reciprocal surveillance in 204-203 BC. Li describes in detail how he believes Han Xin decided on the layout and moves, which eventually led to the Chinese form of chess. Han Xin died in 196 BC. Li mentions that there are citations in Irwin's paper, but he does not give any. I agree with other authors that a paper written 2,000 years after the fact does not constitute proof.

Josten points to the history of the British colonialism in India. The majority of India was under the control of the East India Company in the first half of the 19th century. As a result of revolts in 1857 the Company was dissolved and India was placed under the direct control of the British Crown. In 1909 Britain granted India some self-government. Josten suggests that the researchers Thomas Hyde and H.J.R. Murray, who were active during the 19th and early 20th century found willing ears with their claim of an Indian origin of Chess. This of course neglects the contributions of the early German researchers who reached similar conclusions to the British ones.

Summary

Unfortunately, written references to Chess or its development have not been found yet from before the two Persian records of about 600 AD. It is very unlikely that Chess, almost as it is played today, suddenly came into existence, invented by one person. The idea of it being a combination of elements from other board-games has merit. Since almost all known board games have religious backgrounds the astrological component is entirely possible, even though I prefer the version that all elements come from other games, *e.g.* Tic-Tac-Toe, as the basis for the counters. Kushan as the area of origin is highly possible, especially because of the 2 excavated debated pieces from the second century AD, which were found in the area of the Kushan Empire.

The books are by no means closed. In my opinion, the Chinese origin is the least likely one from the ones discussed. Josten's hypothesis is very intriguing but still needs some more work. The theory about India being the original country seems to hold together but will probably have to give in to another theory because of the lack of reports about follow-up within India during the next 500 years after 600 AD.

References

[Davidson 1949] Henry A. Davidson, A Short History of Chess, New York 1949, 228 pages.

[Eales 1985] Richard Eales, CHESS -The History of a Game, New York 1985, 240 pages.

[Gunter 1991] Ann C. Gunter, Art from Wisdom: The Invention of Chess and Backgammon, in Asian Art, Winter 1991, pg. 7-21.

[Li 1998] David H. Li, Who? Where? When? Why? How? The Genealogy of Chess, Bethesda, MD 1998, 383 pages.

[Linder 1994] I.M. Linder, The Art of Chess Pieces, Moscow, "H.G.S." publishers, 1994, 288 pages.

[Maßmann 1839] H.F. Maßmann, Geschichte des mittelalterlichen vorzugsweise des deutschen Schachspiels, Quedlinburg und Leipzig 1839, 222 pages.

[Murray 1913] H.J.R. Murray, A History of Chess, Oxford University Press 1913, 900 pages.

[Pritchard 1994] Pritchard, David: The Family Book of Games, Time-Life Books, 1994, 200 pages.

[Sloan 1985] Sam Sloan, The Origin of Chess, Copyright Sloan Publishers ISBN 0-9609190-1-5, 27 pages.

Notes

1. The idea of Persia being the country of origin appears to be only a slight modification of the theory about Indian origin

and is therefore not separately considered.

2. http://www.netcologne.de/~nc-jostenge

3. Indian name for Chess and/or a forerunner

4. ”the surrounding game”

5. The invention of the astrolabe is usually attributed to the Greek astronomer Hipparchos, at around 170 BC. This would mean a relatively late appearance of the astrolabe in Chaldaean astronomy.

6. I saw for instance an engraving of a corresponding board in the cobblestones of Old Jerusalem. Boards of this Tic-Tac-Toe expansion can also be found in some Roman museum collections.

7. There is no conversion in Chinese Chess.

The Mongols and the Silk Road

John Masson Smith, Jr.

University of California, Berkeley

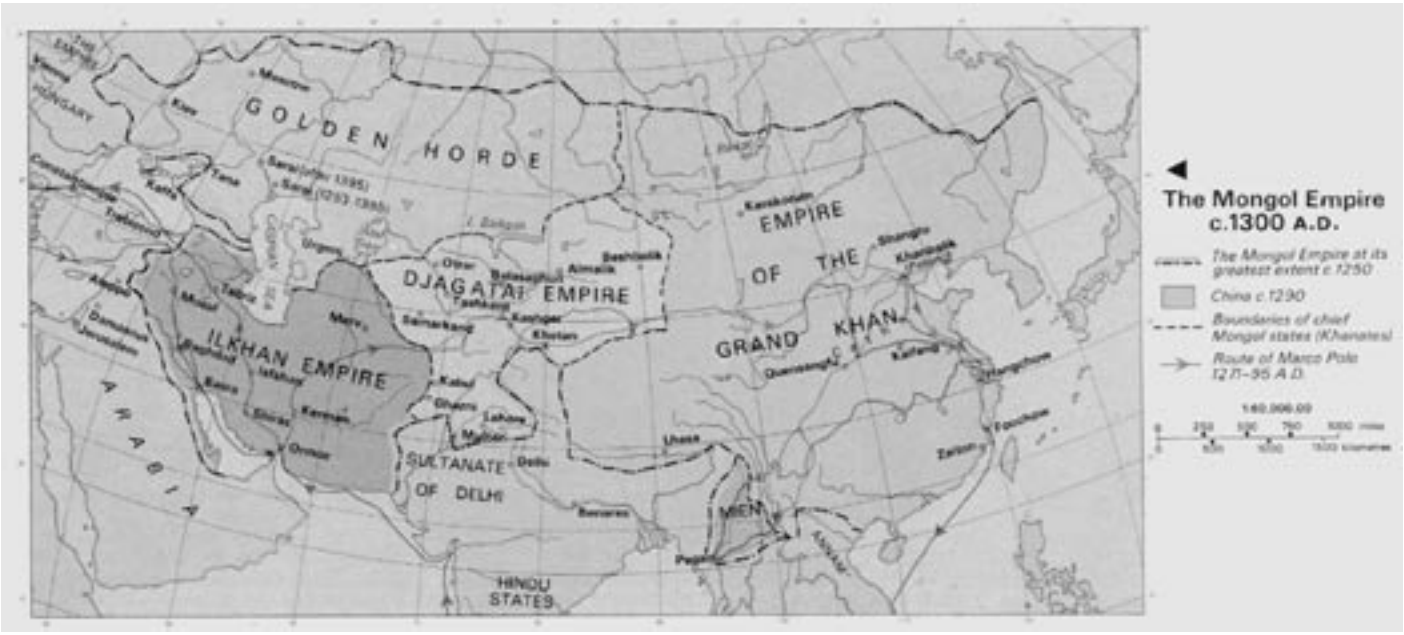
The Mongols reached Europe in 1221, on a reconnaisance of the western extent of the Eurasian steppe, the land on which Mongol armies could most easily support themselves “wherever a horse is able to tread.” Their force was a detachment of the great army Chinggis Qan (Genghis Khan) was leading through Central Asia, eastern Iran, Afghanistan, and into India. The detachment crossed northern Iran, wintering in Azerbaijan (1220-21), passed the Caucasus mountains, spent the next winter in the Crimea, explored the Volga region, and returned to Mongolia; it fought winning battles all along the way, including one against an alliance of Turkic Cuman nomads and Russians. The incursion came to the notice of Europe, but since such nomad disturbances in that region were a common occurrence, and because the new intruders had withdrawn, apparently for good, it made little impression.

In 1236-42 the Mongols returned, acting on the knowledge gained on their previous expedition: that the steppe extended into the North Pontic region (Ukraine and Crimea), that their armies could therefore sustain themselves all the way—the horses eating grass and the soldiers eating horses—and that the local inhabitants were incapable of serious resistance. This time the Mongols came in great force, with at least twelve tümens (divisions of, nominally, 10,000 men), judging by the number of commanders, mostly princes, mentioned. They overwhelmed the Cumans, Russians and Hungarians, and defeated a large army of Germans and Poles. And although the Mongols shortly abandoned Hungary (probably indefensible by a nomad-based garrison), they based a large army in Ukraine and on the Volga, conscripting many of the Cumans and monitoring their Russian vassals, and conjoined to it further forces in North Central Asia (approximately Kazakhstan), creating the sub-realm of the empire that came to be known in the West as the Golden Horde. This threatening new power caught the attention of Europe: the Mongol empire now had a presence and a frontier in Eastern Europe.

In the Middle East, Mongol task forces, beginning in 1229, established bases in Azerbaijan, and from them intimidated or forced into vassal status the Trebizondian Byzantines, Anatolian Seljuks and Cilician Armenians, among all of whom Westerners, mostly Italians, had an important commercial presence. The European Crusaders on the Levant coast too now had a new, Mongol near-neighbor in Iran and Anatolia. In 1256, these Mongols were heavily reinforced by contingents sent to exterminate the (original) Assassins, subjugate or destroy the Caliphate in Iraq, and extend the empire to the southwest. Although Syria and Egypt were successfully defended by the Mamluks, the Assassins were wiped out, as was the Caliph. Baghdad was wrecked, and much commerce that had been focussed on it now shifted north to Tabriz and Trebizond.

There were many other Mongol armies: nomad forces, Mongols and especially Turks, (which included soldiers, their families, and the domestic animals needed for their support) all across Inner Asia, in North China, and in Mongolia proper; and troops drawn from conquered or vassal settled peoples: Chinese, Iranian, Russian and many others, usually based on farmlands in their home countries, although some were sent abroad on expeditions. For instance, Chinese artillerists or garrison troops to Iran, or Russians to China. Through the reign of Möngke Qan, (1251-59), all of these forces, from the Ukraine to Manchuria, were controlled from the Qan’s camp, usually somewhere in Mongolia, via the yam service, the Mongol pony-express, which connected all of them, and passed, in part, along the Silk Road. In most local matters, however, these armies constituted components of the regional establishments set up by Chinggis in favor of his dynastic family. The establishments now, by the mid-thirteenth century, impinging on Europe from the Western steppe and the Middle East were governed, respectively, by Batu and Hülegü, both grandsons of Chinggis. Each commanded a regular army of fifteen tümens: for instance, Hülegü’s order of battle at the siege of Baghdad included fifteen commanders. Since these commanders led tümens, each composed of ten regiments (hazara), the military component of each establishment included 150 high officers and their (often multiple) wives. To these were added many administrative officials and their wives. And finally, there were the leader’s guards, at least a tümen of them (Qubilai, according to Marco Polo, had 12,000 guardsmen, rotating on duty in units of 3000).

These leaders had both imperial and personal interests. The imperial interest, which was shared by the commoners, was Chinggis Qan’s project of world-conquest. This project developed from Chinggis’ understanding of nomad society and culture, and appraisal of the balance of power at the start of the thirteenth century. Nomad



societies were warrior societies, with abundant manpower available for military undertakings (seven men in every ten; cf. one in ten conscriprted from settled populations in Mongol practice), since pastoral subsistence chores could be handled by women and children; with abundant horses (actually, ponies) for cavalry from pastoralism (pastoralism that also met the logistic needs of nomad armies); and home-made weapons—bows, arrows and clubs—effective in combination with the ponies. This military aptitude derived from pastoralism in another way also. Small camps simplified herding and reduced the need for nomadic movement, but also much diminished security from rustlers and kidnappers (Chinggis and his family had their animals rustled twice, two women—his mother and his wife—raped, and himself kidnapped). Large encampments, küriyen, with 2,000-3,000 families and huge herds, perhaps 200,000-300,000 sheep or equivalents, gave protection, within a circle of wagons, but required very frequent moves as accessible pasture was used up. The nomads had to be prepared for fight or flight at all times, and part of the preparation involved cultivation of appropriate appreciation and attitudes. One should understand when to fight and when to run, and know that, while strength, skill, weapons and numbers, are very important, they are not all-important. Bravery, audacity and cunning can alter the odds. Nomad men, in their constant insecurity, had to try to think like heroes, to imagine themselves as heroes, so as to be able, if necessary, to act like heroes. Nomad culture was, and in places still is, a warriorist culture. When Chinggis Qan invited these would-be heroes to participate in the greatest military undertaking of all time, they could not turn him down.

> "This is the order of the everlasting God. 'In Heaven there is only one eternal God; on earth there is only one lord,Chinggis Qan. This is the word of the son of God [Chinggis]… which is addressed to you. Whosoever we are, whether Mongol or Naiman or Merkit or Muslim, and wherever ear is capable of hearing, and wherever a horse is able to tread, [italics added] there make it heard and understood.'" (Letter of Möngke Qan to King ["Saint"] Louis IX of France, in Rubruck, 202)

Chinggis issued his invitation in ca. 1203, when he was winning the struggle for rule over all of (Outer) Mongolia. He knew the military resources of Mongolia, knew that the only comparable forces, the largely nomad cavalries of China's northern frontier (in today's Manchuria and Inner Mongolia) were divided between the Hsi-hsia and Kin, and within Kin between Jurchen and Kitan, so that the Mongols could attack them severally with great superiority. Success in this undertaking would give Chinggis all the (surviving) cavalry of eastern Inner Asia, and the largest such force anywhere. World conquest, which had been talked about by Huns and Turks in times gone by, did not seem like empty boasting now.

> "[Chinggis Qan] made many laws and statutes…. [one] is that [the Mongols] are to bring the whole world into subjection to them, nor are they to make peace with any nation unless they first submit…." (John of Plano Carpini, 25)

By the mid-thirteenth century, this project was well under way, with giant armies on the march to the Middle East (as mentioned above), into southern (Sung) China, and against Korea; large raiding parties also intruded repeatedly into northwestern India. These expansive efforts continued until, roughly, the turn of the century: South China was conquered, Japan, Burma, Vietnam and Java were attacked, and the Middle Eastern Mongols kept trying to seize Syria. Besides these substantial campaigns, the raids on India continued, as did incursions into Eastern Europe.

This project gave the Mongol leadership a lively interest in the countries as yet beyond their reach. To obtain such information, the Mongols used exploratory expeditions, often over great distances, as with the foray (mentioned above) through northern Iran, the Caucasus, southern Russia, the Crimea and Central Inner Asia. They also interrogated prisoners, and questioned travellers like Rubruck and merchants like Marco Polo.

> "[Möngke Qan's officials] began to ask us numerous questions about the kingdom of France: whether it contained many sheep, cattle and horses—as if they were due to move in and take it all over forthwith." (William of Rubruck, 155-6)

> "When Messer Niccolo [Polo] and Messer Maffeo [Polo] arrived at the court of [Qubilai Qan] he received them honorably and welcomed them with lavish hospitality and was altogether delighted that they had come. He asked them many questions: first about the Emperors, the government of their dominions, and the maintenance of justice; then about kings, princes, and other nobles. Next, he

asked about the Lord Pope, and all the practices of the Roman Church and the customs of the Latins. And Messer Niccolo and Messer Maffeo told him all the truth about each matter…." (Marco Polo, 36)

Some of the results of these inquiries may be found in the work of the Mongols' Persian vizier, Rashīd al-Dīn (II, 325), as, for instance, the figure of 400,000 for the army of Hungary (a mistake, based on the Mongols' calculation that, as in nomad societies, the army included the whole adult male population). The intelligence requirements of the Mongol army thus supported a policy of receptivity to would-be visitors from the outside world.

As for the personal interests of the Mongol elite, these varied, of course, from person to person, but most wanted to enjoy the fruits of their extraordinary conquests. They had previously led a simple existence in the fastnesses of Outer Mongolia; Chinggis and his small following, early in his career, successfully pillaged a Tatar community, and came to be "considered grand and gained renown" because the loot included a silver cradle and a gold-brocaded quilt, and "at that time such luxury items were rare among the Mongols." (Rashīd I, 164) During Chinggis' campaigns of expansion into China, and especially with the taking of the Kin dynasty's northern capital (approx. modern Beijing) in 1215, the Mongols gained an appreciation of the wealth, especially in foodstuffs and textiles, now available to them through plunder and extortion, taxation and exchange. The government established a program intended to provide for the general population of Outer Mongolia very substantial supplies of food and drink (more, in fact, than could be supplied). More successfully, the Mongol dynastic and military elite provided themselves with the best of everything. They consumed large volumes of alcoholic beverages such as fermented honey (bal) and millet (buza), rice mead, and wines, exotic to the Mongols, and, in the case of wine, pleasingly powerful by comparison with their domestic tipple, fermented mare's milk (qumis), which they also continued to consume in quantities. Foodstuffs were likewise lavishly provided, especially horsemeat, the favorite, and mutton, the most widely available in the pastoral economy. For a quantifiable example, William of Rubruck (202) reported the following provisions for a banquet hosted by Möngke Qan: "a hundred and five carts laden with mare's milk, and ninety horses to be eaten." Ninety Mongolian ponies would have yielded about 20,000 lbs of meat, three lbs of meat for each guest at a party for 7,000 (consisting largely of the Qan's off-duty guards, most likely); assuming 1000-lb loads on the drink-carts, each of the 7,000 would also have been served about two gallons

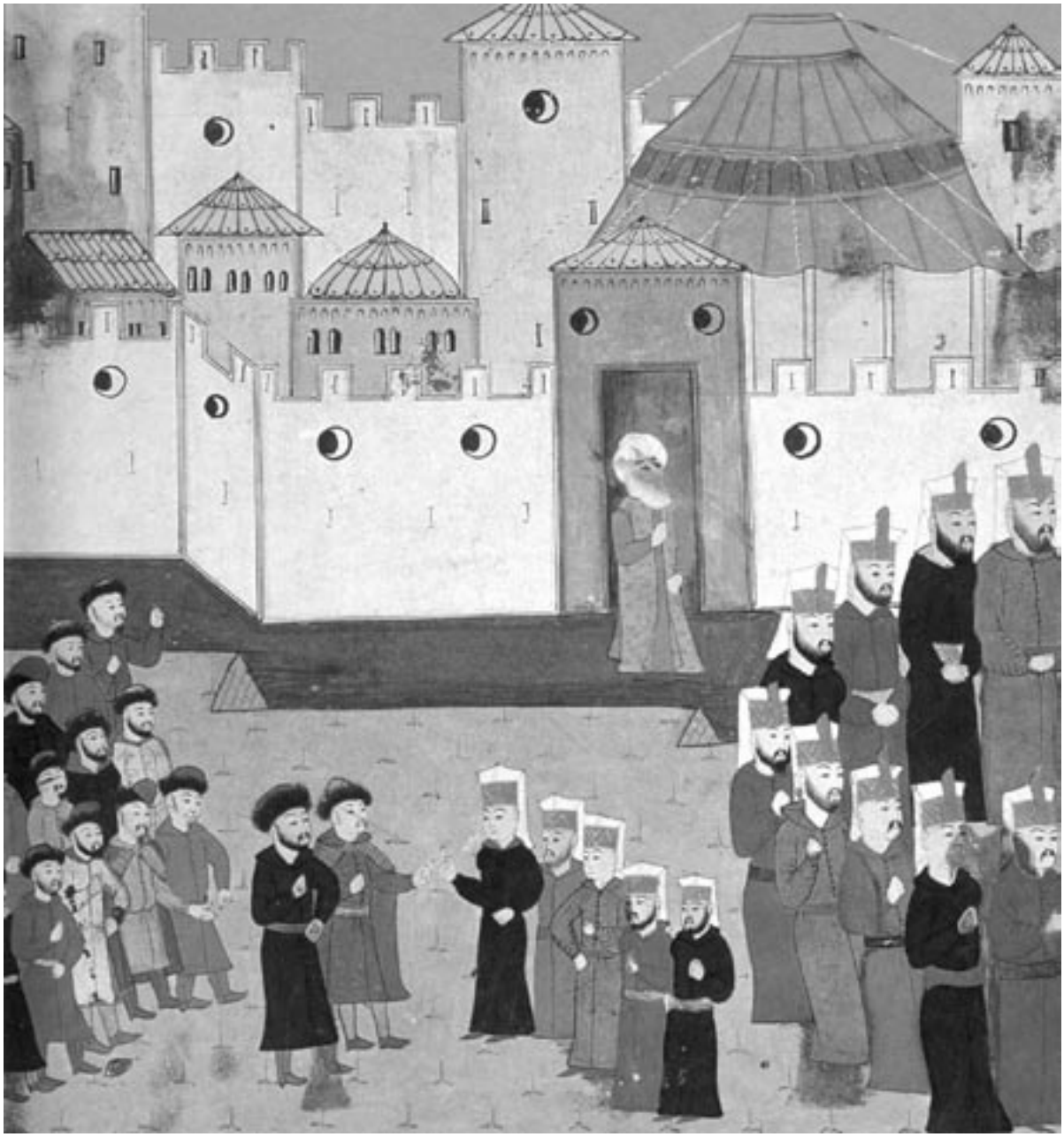
of qumis (qumis is a "lite" drink, hence the large volume, the approximate equivalent of 19 shots of 90-proof whiskey).

The Mongol elite enjoyed many such parties—and they dressed up for them. Qubilai entertained at festivals for the New Year and for each of the thirteen lunar months, on assorted "festive occasions," and on birthdays. Birthday parties would have been frequent: Qubilai had four wives and 22 sons by them; daughters not specified, plus a number of concubines and 25 more sons (daughters again not counted); and the birthdays of his other relatives, his great commanders, their wives and children, were doubtless celebrated as well. "All the [Mongols] celebrate their birthdays as festivals," says Marco Polo. (137f) The guests probably included all those eligible to have parties in their honor, and, for the lunar month festivities, the 9,000 off-duty guards, and most likely their wives, were also invited. Guest lists of 40,000, as reported by Marco Polo (137f), seem quite plausible. At these many parties the top Mongols wore very fancy dress, in many cases, robes of cloth-of-gold (nasij). Those of high rank had nine different banquet-outfits for winter wear, and fourteen for summer, including one of nasij for each season. Since there were more than 20,000 top-level bureaucrats to provide for in the Mongols' East Asian (Yuan) realm alone, around 50,000 robes would have been needed. The guards, all 10,000-12,000 of them, were issued banquet robes as well, a different one to wear at each of the thirteen monthly celebrations.

Cloth-of-gold served not only as clothing, but for bed covers, animal-caparisons, and draperies. In the latter category, the embellishment of the huge royal palace tents, found in the camps of all the regional rulers, as well as in some of their urban centers, involved prodigious quantities of nasij, as their interiors were entirely lined, walls and ceiling, with the cloth-of-gold; one such tent is said to have seated 1,000 persons. Some of the great officers and officials also possessed such tents. And since these great tents could not be pitched and struck quickly—the ordinary Mongol ger, housing a single family, could be erected or taken down in less than a day, whereas one palace-tent, of the Middle Eastern ruler, Ghazan Khan, took a month to set up—the rulers probably had several of them, one in each of their most-regularly used camp-sites, at minimum, one each in their summer-camp (yaylaq) and winter-camp (qishlaq).

The Mongol grandees not only wanted to enjoy silks, but to profit from them as well. Silk had since time immemorial been a kind of currency in China, a tool of its diplomacy, and the basis of its international trade over the aptly named Silk Road. Owing to the in-

ternational popularity among the wealthy of silk, its production had spread across Inner Asia to the Middle East, where the Mongols found and took over its silk factories as they had in China. Furthermore, they established new silk factories, in Inner Mongolia, the Tarim Basin, and two in China proper, to increase the volume of silk production, and to develop new silk products. Chinese weavers were sent to Samarkand to collaborate with the local Muslim weavers, and Muslim weavers—who were specialists in cloth-of-gold—were brought to China. Wealthy Mongols invested in these enterprises, and in the vending of their products, forming commercial associations (ortaqs) with merchants experienced in transporting—over the Silk Road, for instance, but also by sea--and exchanging these goods abroad. Such Mongols could also arrange for their merchant partners to use the facilities of the yam to obtain provisions, fresh animals and secure lodgings for their caravans. In the century, approximately, of Mongol rule in Eurasia, the Silk Road flourished as never before. Disputes between the Mongol realms sometimes delayed or diverted commercial traffic, as happened to Marco and the other Polos, who had to resort to a slow and difficult route between Iran and Eastern Turkestan on their way to China to avoid rumored strife in Transoxiana. But the Mongol regional governments usually, and the Mongols generally, remained eager to promote and engage in commerce, even, sometimes, at risk to their own interests. Mongols in Afghanistan, for instance, allowed regular passage of large numbers of horses being exported by the Golden Horde (the Mongol realm in modern Ukraine, Russia and Kazakhstan) to India, for use by the sultans of Delhi against Mongols invading from Afghanistan.



Under the Mongols, furthermore, the Silk Road had more routes than in earlier times. Before the Mongols unified Inner Asia, its nomads were divided among a plethora of independent, rivalrous tribes and great-power client-tribes set against the independents. In this geo-political setting, trade was often—and often rightly—viewed as trading with the enemy and discouraged by prohibitions and despoliations. Such dangers minimized commercial transit over the steppe route through the "nomad zone," despite its considerable logistical advantages: grasslands and water-sources stretching between Hungary and Manchuria supporting myriad potential transport and food animals. Instead, much if not most of the time, merchants preferred to risk desert travel, whose predictable hazards made commercial transit difficult, but also precluded nomad inhabitation and interference.

Now, under the Mongols, commercial and other travelers could use both the steppe and the desert branches of the Silk Road. Plano Carpini and Rubruck, respectively spy and missionary, were taken by Mongol escorts over steppe routes, at paces that they found impressive and uncomfortable. They reported long days in the saddle, lots of trotting, and long daily distances covered, although the overall distances divided by the days of journeying mostly indicate an average pace of about 20 miles per day, which conforms to the distance between stages of the yam; on Rubruck's return trip, however, the daily average was 36 miles per day. The yam supported not only the pony express of the Mongol command and control system, but the merchant caravans that brought the qan and his court, and the establishments of the dynastic and military elite, the spoils of empire, and distributed

the surplus luxury goods from the factories that catered to these Mongol grandees.

Very shortly after coming into direct contact with Europe, The Mongols and their commercial associates began selling to Europeans; China silk could be bought in Italy by 1257. Not long after, Italian merchants reached China. Marco Polo's father and uncle arrived in ca. 1265, on a diplomatic mission for which they were recruited by an envoy of Hülegü while they were in Inner Asia on a commercial venture: bringing jewels as "gifts," to the ruler of the Golden Horde, in return for which they were presented with goods worth twice as much as the jewels. The Polos traveled to China again in ca 1275, taking Marco along, hoping, no doubt, to buy such goods at the source and reap the largest share of the profit from importing them into Europe. This undertaking was apparently sidetracked, and they spent the next twenty years there, with Marco supposedly in the Qan's service, but in the end commerce won out, and they returned to Italy laden, according to Marco, with jewels. The reported success of such early adventures, substantiated by imports of real goods, then led to much more commercial activity on the part of Europeans in Inner and East Asia. By ca. 1320, the way east, and the most reliable mercantile strategy to employ there, could be reduced to a succinct set of recommendations by a Florentine banker, Francesco Balducci Pegolotti, experienced in eastern Mediterranean commerce. The route he suggested began at the port city of Tana, in the northeast corner of the Black Sea and easily accessible by Italian shipping. From there, one hired transport to Astrakhan at the mouth of the Volga river; with a horse-cart, the journey was 10-12 days, or 25 days by ox-cart. Boat passages up the Volga took the travellers to the imperial towns of Saray (Palace) in one day, and Saraychuk (Little Palace) in eight days. These were seasonal residences of the nomadic Mongol rulers of the Golden Horde, and therefore considerable commercial centers. The next leg of the journey led to Urgench on the Amu Darya River, somewhat south of the Aral Sea, 20 days by camel-wagon; Pegolotti recommended that the travelling merchant invest his capital in fine Italian linens and sell them in Urgench, where they brought high prices, in return for Mongol currency: the silver ingot of about 7.5 ounces, about 216 g, called sum (sommo in Italian). With these, and perhaps some of the best linens, the merchant should proceed to Otrar on the Syr Darya (north of modern Tashkent), 35-40 days by camel-wagon, then to Almaligh on the Ili River, 45 days by pack-donkey, and then to the Chinese cities of Kanchow, 70 days by donkey, and the great port-city of Qinsay (modern Hang-chow), 45 days—maybe more—by horse. The pace of these commercial travels approximated that of Plano Carpini and (for his outward journey) Rubruck: about 20 miles per day. At Qinsay, the silver sum ingots had to be exchanged for the legal tender of China: paper money called balish by Pegolotti (and equivalent in value, presumably, to the silver balish, a large ingot of about 4 pounds 12 ounces, or 2,160 g). After Qinsay, the merchant could go on to the Mongols' principal political center in China, Khanbaligh ("The Qan's City," also Da Du or modern Beijing). Silk could be purchased in China at one sum for 20 (Genoese) pounds; with the 25,000 gold florins of venture capital suggested by Pegolotti, exchanged for linen and then sum at 5:1, a merchant could buy, after expenses of (perhaps) 400 sum, around 92,000 Genoese pounds of silk, and, assuming a safe return to Italy, sell them for about three times their cost. The Silk Road, under the Mongols, ended in Italy, whence the riches of the Mongol Empire found their way to the rest of Europe. "Tartar cloth" is mentioned not only by Dante and Boccaccio, but by Chaucer, and many examples of it have been found in Europe.

These close and frequent contacts with the Mongols revealed a new world to the Europeans. Previously, the hazards of travel among nomads, and the barriers to passage through the Muslim states had left the West almost entirely ignorant of the countries and peoples beyond Russia and the Middle East. India and Ethiopia, conflated, were located past the Muslims; the land (China) whence Rome had, indirectly, imported silk, had been forgotten; and these farther eastern regions, factually unknown, were populated in the Western imagination by notional monsters or imaginary Christian kingdoms in accordance with wishful thinking or even stories passed on by Muslims and by the Mongols themselves. John of Plano Carpini, the first European visitor to report on Mongolia, was told, for instance, of dog-headed people, and of people with but one leg and arm, who moved by hopping or turning cartwheels; the dog-headed people were already "known" to Muslim and

European writers. William of Rubruck (170), the next to report from Mongolia, inquired more skeptically about "the monsters and human freaks who are described by Isidore and Solinus [the dog-headed and single-limbed]" (R/J&M, 201] and, on finding no eye-witnesses, doubted their existence. (We should remember our own Bigfoot and Loch Ness monster as we smile at medieval credulity.) Besides the freaks, there was also the "Christian priest-king, Prester John," wishfully developed in the twelfth century from reports out of (actual) Ethiopia of their priest-kings entitled dzan, together with rumors of the troubles of the Muslims with non-Muslims on their eastern frontiers—actually the conflict between the Muslim Seljuks in Central Asia and the Buddhist Qarakitai—and the fact, albeit unknown in the West, of a considerable presence of Nestorian Christians in Inner and East Asia. Prester John allegedly headed a great Inner Asian Christian power that was going to attack the Muslims from the East in support of the Crusaders in Palestine. Western visitors to the Mongols at first tried to identify Prester John among the recent, pre-unification tribal leadership of Mongolia; the Kerait chiefs had, for instance, been under Nestorian influence. They sought also to reach Mongol leaders alleged to be Christians, to little avail, since these were essentially polytheistic (a position difficult for monotheistic Christians and Muslims to grasp), with perhaps individual preferences for particular Nestorian priests. Marco Polo (119) gives a quotation of Qubilai (Kubla Khan) which expresses the Mongol attitude well: "There are four prophets who are worshipped and to whom all the world does reverence. The Christians say that their God was Jesus Christ, the Saracens Mahomet, the Jews Moses, and the idolaters Sakyamuni Burkhan [the Buddha], who was the first to be represented as God in the form of an idol. And I [Qubilai] do honour and reverence to all four, so that I may be sure of doing it to him who is greatest in heaven and truest; and to him I pray for aid." But as the reports of Carpini and Rubruck, of Marco Polo and others, accumulated, the freaks and monsters were relegated to the fringes, along with Prester John, and Christian Mongols became a forlorn hope. These imaginings were displaced by a new, and true, knowledge of a huge empire, with vast populations of real people, possessing immense wealth, some of which latter could be shared by Westerners on very good terms.

Just as the Empire's territories, peoples and riches were becoming well-known in the (especially Italian) commercial circles of Europe, the Empire was beginning to implode. After the death of Möngke Qan in 1259, imperial unity had been lost. But for another three-quarters of a century, the four (or, occasionally, five) now-independent Mongol realms that had been sub-units of the unitary empire, managed to maintain a degree of economic cooperation despite sporadic, and sometimes prolonged, hostilities. The Polos had had to use back-ways to China to avoid trouble, but Pegolotti's silk buyers could go straight through from Tana to Kanchow, Qinsay and Qanbaligh. But in 1335, the Mongol ruler of the Middle East, Abű Sa'îd, died without an heir, and his officials and officers, unable to agree on a successor, fought one another to stalemate and collapse. The Middle Eastern branch of the Road closed, and with that, European access to its desert route. The other branch,

via the Golden Horde (Tana to Urgench and on East), remained open until 1368 when the Yuan dynasty Mongols abandoned China in the face of the Ming rebellion, opening a long period of Ming-Mongol antagonism and conflict that prevented direct access to China across the steppe. Direct European contact with China thereafter became impossible, and indirect trade between Europe and China declined to pre-Mongol levels. The Chinese, no longer conscripts in the Mongol program of world-conquest, and fully content with their own vast resources, lost interest in, as well as contact with Europe. But European awareness of China did not similarly decline. Memories of the commerce carried on by Pegolotti's merchant associates, and especially Marco Polo's fascinating stories, maintained knowledge of the Far East, and the desire of renewed access to it.

During the fifteenth century, European geographical speculation about ways to the Far East that would avoid hostile Muslims and unreliable nomads, was stimulated by the rediscovery and widespread publication of the second century Alexandrian geographer Ptolemy's Geographical Survey, which encouragingly, but incorrectly, asserted that the Ocean extended, uninterrupted, from the western shores of Europe to the coasts of East Asia, and helpfully, if mistakenly, calculated that the Oceanic share of the world's circumference (the world was, and long had been, generally known to be round) was about 180°—about 30% less than the actual distance. Even this reduced breadth of the ocean, however, was too much for any European ship to cover without reprovisioning. Christopher Columbus overcame this problem. Columbus had read, and become enthralled by, Marco Polo's stories, to the point of determining that, by whatever means necessary, he would plan a feasable voyage to East Asia and carry it out. His means involved selective adoption of miscalculations by various geographers that minimized the distance still more: a French astrologer gave the Ocean 135°; an Arab astronomer posited a shorter degree; and Columbus trimmed the Arab's figure by expressing it not in nautical miles, but in Roman, 20% shorter. This brought East Asia within range: about 2,700 miles (the actual distance is around 13,000 miles.) Columbus was a lucky man. Following a tireless effort to find financing for his project, he succeeded in obtaining, over the objections of a scholarly advisory committee, funds for his intercontinental expedition from the Spanish royals. And fortunately for him, there was in fact another continent within range.

Thus the Mongols, and their best salesman, Marco Polo, turned out to be responsible, not only for revealing a Far Eastern world new to Europe, but for instigating the discovery—by mistake!—of another New World.

References

The following works are used as references.

Sources

Ala al-Din Juvaini, *The History of the World-Conqueror*, J.A. Boyle trans. (Cambridge MA: Harvard UP, 1958), two vols.

Francesco Balducci Pegolotti, *La Pratica della Mercatura*, Allan Evans ed. (Cambridge MA: Mediaeval Academy of America, 1936); Pegolotti's text on the China trade is translated in R.S. Lopez and I.W. Raymond, *Medieval Trade in the Mediterranean World* (New York, 1955), 355-58.

John of Plano Carpini, *History of the Mongols,* in Christopher Dawson ed., *Mission to Asia*, Medieval Academy Reprints for Teaching, 8 (Toronto: Toronto UP, 1998).

Marco Polo, *The Travels of Marco Polo*, R. Latham trans. (Harmondsworth: Penguin, many reprints [n.b. pagination varies among reprints; citations above refer to the 1980 reprint]).

Rashīd al-Dīn, *Compendium of Chronicles*, W.M. Thackston trans. (Cambridge MA: Harvard, 1998-99), three vols.

William of Rubruck, *The Journey of William of Rubruck,* in Christopher Dawson ed., *Mission to Asia*, Medieval Academy Reprints for Teaching, 8 (Toronto: Toronto UP, 1998).. (Citations of Rubruck refer to the translation in Dawson; P. Jackson and D. Morgan ed., *The Mission of Friar William of Rubruck*, P. Jackson trans; (London: Hakluyt Society, 1990) has a better translation and full annotation.

Studies

Thomas T. Allsen, *Mongol Imperialism* (Berkeley: University of California Press, 1987).

_____, *Commodity and Exchange in the Mongol Empire: A Cultural History of Islamic Textiles* Cambridge UP, 1997).

John Carswell, *Blue and White: Chinese Porcelain around the World* (London: British Museum Press, 2000).

Elizabeth Kolbert, "The Lost Mariner," *The New Yorker* (October 14 & 21, 2002), 206-11.

David Morgan, *The Mongols* (Oxford: Basil Blackwell, 1986).

James C.Y. Watt and Anne E. Wardwell, *When Silk was Gold: Central Asian and Chinese Textiles* (New York: Metropolitan Museum of Art, 1997).

Illustration Credits

Mongol Empire map, China in Maps, H. Fullard ed. (Chicago: Denoyer-Geppert, 1968).

Mongols (R) vs. Mamluks E.D. Phillips, The Mongols (New York: Praeger, 1969).

Palace Tent, Nigâr Anafarta ed., Hünernâme: Miniyatürleri ve Sanatçýlarý (Istanbul: Doðan Kardeº, 1969).

Mongol Siege, David Talbot Rice, The Illustrations to the 'World History' of Rashîd al-Dîn (Edinburgh UP, 1976).

Ox- and Camel-Carts, Eighteen Songs of a Nomad Flute: A Fourteenth-Century Handscroll in the Metropolitan Museum of Art (New York: Metropolitan Museum, 1974).

Royal Reception of Church Envoy, Culture in Western Asia, 1256-1353 (New York: The Metropolitan Museum of Art; New Haven: Yale UP, 2002).

Age of Mongolian Empire: A Bibliographical Essay

Paul D. Buell

There is an enormous literature on the age of Mongolian Empire, that period extending from approximately the late 13th century, as prequel, through much of the 14th century, later in Russia, in which Mongols, their states, and successor states dominated the stage in much of the Old World. Unfortunately it is very uneven in quality, much of it in less common languages, and marred by an excessive concern for philological detail. There is also a notable lack of useful overviews, those available either being too popular, and inaccurate, or just plain silly, or so ponderous in detail as to be virtually unreadable by a general audience. Unfortunately, given the complexity of the field, with sources in so many languages, some of them still unpublished, and the decline that Mongolian studies has undergone in recent decades, in the United States in particular, this situation is unlikely to change any time soon.

The bibliographical survey of the field that follows is not even remotely complete, nor could it be given the limited space available for this article. My purpose in providing it is rather to offer a useful guide to what is available, including some items in less common languages, either because these items are extremely important, or because they are the only literature available in major areas of interest. Nonetheless, the main emphasis is on those works that are the most easily read and understood by the non-specialist.

History of the Field

Despite the obvious interest of the topic, since the Mongols touched so many cultures in creating their empire, and in many ways brought Europe, in particular, out of its shell, serious scholarly study of the history of the age of Mongolian Empire and of its successor states only dates back a little over 300 years. The early works included a first biography of Cinggis-qan[2], of which there are now a large number. It was written by Petis de la Croix (*Histoire du Grand Genghizcan*) and published in 1710 in Paris. Like most works from this first age of study of the topic, based as they were upon only a most limited sampling of primary source material, it is little read today. One early examination of the rise of the Mongols that is read today are the relevant chapters of Edward Gibbon's monumental *Decline and Fall of the Roman Empire* (various editions). Gibbon was the first to advance a social interpretation of the rise of Cinggis-qan that is still in vogue today.

Not long after Gibbon's time, a more serious study of the age of Mongolian Empire began, in Russia, where the great Russian orientalist school began to study all things Mongolian as a cooperative effort. It had the advantage of a ready access to documents in the original Mongolian as well as in other Asian languages, including, as time went on, Chinese. The influence of this school is still felt today, both within Russia, and without, thanks to many émigré scholars such as the late Nicholas Poppe who lived and taught in Seattle, Washington, for many years. The present author was among his students.

Outside Russia, the first truly comprehensive history of the Mongols and their age appeared in 1824, that of French-Armenian Constantin d'Ohsson (*Histoire des Mongols*, 4 volumes, various editions, original published in Paris). It is still useful today because of d'Ohsson's masterful use of the Persian sources. In the years after d'Ohsson, a concerted effort was made, it is still continuing, to publish, translate and annotate these sources to make them available to the non-specialists. Among the earliest efforts in this area was E. Quatremère's edition and translation of a portion of the text of Rashīd al-Dīn's history (*Histoire des Mongols de la Perse*, Paris, 1836). Shortly thereafter, the Russians also began to publish translations of Chinese sources, in most cases making them available for the first time to a European audience. Of special note in this regard, were the translations published by E. Bretschneider, in his still useful *Medieval Researches, From Eastern Asiatic Sources*, first published in 1888. Another major milestone was Henry Yule's annotated edition of Marco Polo, appearing in 1876, later updated by Cordier and republished in 1903. Their combined effort is still the most usable translation of Marco Polo, and the notes are a gold mine for scholars.

As more sources became available, specialized studies began appearing as well. These included Joseph von Hammer-Purgstall's histories of the Mongols in Russia, and in Iran (1840 and 1841-1843)[3], only fully superceded in recent decades. Less successful was a general history in English, by Henry H. Howorth (*History of the Mongols from the 9th to the 19th Century*, London: Longmans, Green, and Company, 1876-1927), since Howorth was unable to read his primary sources in the original languages.

In the 20th century, various national schools of Mongolian studies flourished. The most important of these, as might be expected, was the Russian school, which continued strong throughout the late Czarist and Soviet periods. Two of its most important exponents were V. V. Barthold, whose worked straddled the Czarist and Soviet periods, and B. Y. Vladimirtsov, who produced many works including a biography of Cinggis-qan and an important examination of early Mongolian society from a Marxist perspective, the first based upon the most important Mongolian sources including the *Secret History of the Mongols*. Also important within the Russian schools, not only for his own work, but for the many scholars that he trained, was Nicholas Poppe. Among his many works, his study of the Mongolian documents in the aPhags-pa Script is still the standard work on the topic. More recently working in Russia was the Buriyat Ts. Munkuyev, a leading interpreter of early Mongolian society and politics from a Marxist perspective.

Prominent within the German school were B. Spuler, who wrote highly detailed histories, several times updated, on Mongol Russia and Iran (replacing those of Hammer-Purgstall), and Erich Haenisch. Haenisch, although not the first to reconstruct the Mongolian text of the *Secret History of the Mongols* from Chinese transcription (he was proceeded by Paul Pelliot in France), still produced a valuable edition of the text and a dictionary of the Mongolian words occurring in it[4], among many works. Also important German scholars, both still living at the time of writing, are Herbert Franke, although more of a Sinologist than Mongolist, and the Turkologist and linguist G. Doerfer. Doerfer's voluminous dictionary of Mongolian and Turkish loan words found in Modern Persian is a major resource for anyone working in the field since key concepts are accompanied by detailed essays that put each into a cultural and historical context.

Even more important than the German school, in terms of total output, was the

French school long dominated by Paul Pelliot (1878-1945). In addition to major articles and collections of notes (he never wrote an actual book) published during his life time, his posthumous works, some of major importance for the field, continued to appear for several decades after his death. His masterpiece, incomplete, he never got past the letter "C", is his massive *Notes to Marco Polo*, including full discussions of such topics as "Cinggis-qan" and "cotton," although much of it is philological, making the text, poorly organized in any case, difficult to get through. As noted, Pelliot was also the first to reconstruct the Mongolian text of the *Secret History of the Mongols*[5].

Pelliot had many students, including Louis Hambis, who was actively involved in producing the series of posthumous works of Pelliot, as well as major translations of primary sources on his own, and the German Paul Ratchnevky, whose contributions to the field of Mongolian studies are many. They include a highly usable life of Cinggis-qan based primarily upon Mongolian and Chinese sources (but not Persian, since Ratchnevsky does not read Persian). Also a student of Pelliot was the American, F. W. Cleaves, who in turn had many important students himself. Over several decades, nearly all published in the *Harvard Journal of Asiatic Studies*, Cleaves produced a series of profusely documented (even with notes on notes) examinations of source material, above all inscriptions. Cleaves was also the author of a translation of the *Secret History of the Mongols*, although it is in a particularly obscure language and is difficult to read and lacks a promised volume of notes. Continuing the Cleaves, and thus Pelliot tradition, although he is somewhat more interpretive, in the United States was David Farquhar (who was also a student of Poppe). His magnum opus is a detailed exegesis, produced posthumously, of the government of Mongol China as it appears in the *Yuanshi*, "Official History of the Yuan" (various editions), that is, of China's Mongol dynasty.

Another extremely important national school is that of the Japanese which has concentrated its efforts on the history of the Mongols in East Asia in particular. Since the Japanese, before 1945, were in physical contact with the Mongols, and closely allied with them (an advantage of the Russian school as well), and have always had maximum access to East Asian sources, the work of this school has often been far in advance of anything being produced in the Western world. Leading scholars of the Japanese school include Yanai Wataru 箭內互, who more or less invented the field in Japan, Haneda Torū 羽田亨, Iwamura Shinobu 岩村忍, who produced valuable work on Mongolian social and economic history, and Maeda Naonori 前田直典. Maeda's life was cut short but his ideas on imperial Mongolian government remain vital to this day.

Although the age of the Mongolian Empire is less directly studied in China, except so far as it impinged on China, and then rarely in comparative terms, Chinese scholarship in the field has continued to be important. Most useful of Chinese publications in the general area are numerous high-quality editions of source material. Recently such publications included two separate editions, one with a dictionary of the text's Arabic and Persian terminology, of the surviving chapters of the *Huihui yaofang* 回回藥方, "Muslim Medicinal Recipes"[6]. This was once part of a large encyclopedia of Islamic medicine prepared, apparently, for the Mongol rulers of China. The text is unique not only in including Arabic script entries for Arabic and Persian terms otherwise given in Chinese transcription, but also as the only Chinese text to quote Galen and other Western authorities.

Also major contributions of Modern China to the field is a new version (by Ke Shaomin 柯紹忞) of the *Yuanshi* 元史, called *Xinyuanshi* 新元史, "New Yuan History" (various editions), and the unexampled *Mengwuer shiji* 蒙兀兒史記, "Historical Record of the Mongols," of Tu Ji 屠寄 (various editions). Tu Ji's history is, without doubt, one of the finest works ever produced on the Mongols of the imperial period (and somewhat after), but little known since it is written in Chinese. Among Chinese specializing in the field was Wang Guowei 王國維, whose life was also cut short before he could realize his full potential. He produced annotated editions of early Chinese sources that remain highly useful. Foremost among younger scholars devoting themselves to the study of the Mongol age is Hsiao Ch'ich'ing 蕭啓慶. In addition to many other valuable works, Hsiao is the author of the best available essay on late qanate China in the *Cambridge History of China*.

Finally, there is the native Mongolian (people's republic) school, perhaps the most important of all since the Mongols are closest to their own traditions and its output has been voluminous, although much Mongolian scholarship has gone forward isolated from what is being done elsewhere. This has either been for political reasons, during the period of Soviet influence, or simply because of the physical isolation of Mongolia from the larger research libraries and the limited foreign language skills of many Mongolian scholars (this is changing rapidly). Mongolian contributions are particularly important in the area of social history, since they know their own culture best, in material culture, for the same reason, and in archaeology. Although the first to carry out fieldwork specifically devoted to sites associated with the Mongol imperial period were Russian archaeologists, including S. V. Kiselev, who carried out the first excavations at the site of the imperial Mongol capital of Qaraqorum, the Mongols are the ones doing most of the digging today, although Chinese archaeologists are much involved too, in Inner Mongolia and adjacent areas, as well as at many sites in China proper relating to the Mongol era, and efforts by Russians continue. Unfortunately, while excavation reports published by Chinese, Russian, and other scholars are relatively accessible and thus well known, those published by Mongolian scholars in Mongolia are not. Few libraries located outside Mongolian-speaking areas have any Mongolian books at all, not to mention excavation reports, rarely collected outside of Mongolian libraries. In the United States, only the Wilson Library of Western Washington University, in Bellingham, Washington, has large holdings of such material, both from the Ulaanbaatar and Inner Mongolian side.

Among the many Mongolian scholars concerned with the early history of their country, before and the during the Mongol age, and immediately after, are N. Ishjamts, Kh. Perlee, Sh. Bira, the latter still very active, Sh. Natsagdorj, B. Sum'yabaatar, and Ch. Dalay. Particularly important is the work of Dalay whose study of Mongolia in the Mongol age presents a thesis that strongly counters that of John Dardess that the Mongols became Confucianized as Mongolia became, in essence, a part of China. Also an important Mongolian scholar is D. Gongor. His two-volume *Khalkh Tovchoon*, "Short History of the Khalkha," offers the fullest social history of the Mongols, including those of the period of empire, ever written, in any language. Also an achievement of Mongolian scholarship is the only full translation of the *Yuanshi* 元史 into Mongolian by Dandaa (pen name of Ch. Demcigdorj).

In addition to the national schools, there are also a great many scholars working in various countries more or less independently, only loosely associated with anything that might be considered a school. Among them, still living, but already having had a long career, is Igor de Rachewiltz. He was born in Italy but is currently living in Australia. The contributions of Igor de Rachewiltz to so many areas of the field are too numerous to list here, but perhaps his greatest contribution of all will be his translation of the *Secret History of the Mongols*, with full apparatus, to appear in 2003, the product of decades of work. Igor de Rachewiltz has also worked extensively with Chinese biographical materials connected with major figures of the Mongol Yuan dynasty. He and his associates have not only produced a large biographical dictionary relating to the first period of Mongol control in China, but also have published several reference works aimed at making Chinese literary sources more accessible to scholars.

Another scholar making a strong individual contribution was the great Turkish historian Ismail Hakkı Uzunçarşılı. Although he was primarily interested in the history of Turkey and its origins, institutionally, the relevant chapters of his *Osmanılı Devleti Teşkilâtina Medhal* ("Overview of the Organization of the Ottoman Government") remains the best institutional history of any of the successor qanates, in this case, Mongol Iran. Uzunçarşılı's work is particularly valuable in that it provides substantial information regarding the context in which Ilqanate institutions existed and developed. Unfortunately, Turkish, outside of Turkish studies, is not a commonly read language and Uzunçarşılı's work, including his many other contributions, and those of Turkish scholars in general, remain largely unappreciated.

Most scholars in the United States also work in isolation and are not really part of a national school since the field of Mongolian studies is largely unrecognized there and most of those devoting all or part of their scholarly energies to the Mongol age do so as part of other fields. On example is Thomas Allsen. Allsen is one of those few scholars knowing both Chinese and Persian well, although based in Iranian studies. Allsen has produced a number of important institutional studies, including the standard work on the era of Möngke qan (1251-1259), but has recently devoted himself to the issue of cultural exchanges between the Islamic and Chinese worlds during the Mongol Age. Another example is the present author, more a Mongolist but still based in Chinese studies, but also knowing some Persian, a number of other important source languages, including Western ones, and very strong on the Altaic side. Like Allsen he has produced a number of institutionally-based studies and like Allsen he has now turned to the cultural history of the Mongol age, focusing on the history of food and comparative medical history.

Today, with centuries of scholarship to draw on, and nearly all of the important sources published and readily available, we would anticipate the dawn of a golden age of Mongolian studies, the study of the age of Mongolian Empire in particular, since interest in that period in other fields is now at a high level. Alas, it is not likely to be so for two very good reasons. One is an acute shortage of true specialists in the field, that dying breed, very rare to begin with, comprised of those with the necessary linguistic and other skills to study the period broadly with a maximum use of primary sources in all the many languages that have to be dealt with. Most scholars in the field today, and some are very competent, are based in some other area to the exclusion of Mongolian studies and tend to view the Mongol age through the rose-colored glasses of their own particular regional hobby-horses. Most important, few know any Mongolian at all and thus are unable to gain a feeling for the insider's view of events and people. A second reason for pessimism is the almost complete past failure to support the field as a legitimate area of scholarly inquiry, outside of a few, very rare institutions, some of those dying. This is particularly true in the United States. Thus, even if the proper specialists emerge, who will employ them? The example of the present author who works entirely on his own, enjoys no institutional support whatever, and, most important, has no students thus making no contribution to the future, is not that atypical. Can we really afford to have an important field of scholarly inquiry that is, for all practical purposes, "out of the loop," especially today when the strategic importance of Central Asia grows by the day.

Bibliographical listings

The bibliographical listings provided below are highly selective and have been chosen either because the present author finds them particularly useful or because they provide virtually unique coverage. The listing is under the following somewhat arbitrary categories:

1. General Works, Collections
2. Reference
3. Historiography
4. Translations of Primary Sources
5. Cinggis-qan
6. Mongolia to 1206
7. Mongolian Empire
8. Mongol China
9. Golden Horde
10. Ca'adai Ulus, Qaidu, and Turkistan
11. Mongol Iran
12. Military
13. Food, Medicine
14. Diplomatics, International Relations, Cultural Exchanges
15. Trade, Economic History
16. Art, Architecture, and Textiles
17. Religion
18. Archaeology
19. Black Death

Following most sections is a short commentary on works listed that the present author has found particularly useful. Works discussed in the introduction are usually not discussed again.

1. General Works, Collections

Amitai-Preiss, Reuven, and David O. Morgan. *The Mongol Empire and Its Legacy*. Leiden: Brill, 1999.

Boyle, J. A. *The Mongol World Empire*, 1206-1370. London: Variorum Reprints, 1977.

Buell, Paul D. *Historical Dictionary of the Mongolian World Empire*, Lanham, Md., and Oxford: The Scarecrow Press, Inc. (Historical Dictionaries of Ancient Civilizations and Historical Eras, No. 8), 2003

Franke, Herbert, and Denis Twitchett, editors. *The Cambridge History of China, Volume 6, Alien Regimes and Border States, 907-1368*. Cambridge: Cambridge University Press, 1994.

Gongor, D. *Khalkh Tovchoon*. Two volumes. BNMAU Shinzhlekh Ukhaany Akademiyn Tüükhiyn Khüreelen. Ulaanbaatar, 1970-1978.

Grousset, René. *The Empire of the Steppes, a History of Central Asia*. Translated by Naomi Walford. New Brunswick, N.J.: Rutgers University Press, 1970.

Kessler, Adam T., editor. *Empires beyond the Great Wall: The Heritage of Genghis Khan*. Los Angeles: Natural History Museum of Los Angeles County, 1993.

Lattimore, Owen. *Inner Asian Frontiers of China*. Boston: Beacon Press, 1962 (1951).

——. *Studies in Frontier History*: *Collected Papers 1929-1958*. London: Oxford University Press, 1962.

Morgan, David. *The Mongols*. New York: Basil Blackwell, Inc., 1986.

Phillips, E. D. *The Mongols*. London: Thames and Hudson (Ancient Peoples and Places, volume 64), 1986.

Saunders, J. J. *The History of the Mongol Conquests*. London: Routledge & Kegan Paul, 1971.

Spuler, B. *The Muslim World: A Historical Survey. Part II: The Mongol Period*. Leiden: Brill, 1960.

Tikhvinskiy, S. L. *Tataro-mongoly v Azii i Evrope: Sbornik statei*. Moscow: Nauka, 1970.

Waldron, Arthur. *The Great Wall of China, From History to Myth*. Cambridge: Cambridge University Press, 1990.

Weiers, Michael, editor. *Die Mongolen, Beiträge zu ihrer Geschichte und Kultur*. Darmstadt: Wissenschaftliche Buchgesellschaft, 1986.

Yanai Wataru 箭內互. *Mōkōshi kenkyū* 蒙古史研究. Tôkyô: Tôhô shoin, 1930.

There is a real shortage of useful general works on the Mongols. The best of the general surveys are those by J. J. Saunders, David Morgan, and Michael Weiers, in German. My new Dictionary is intended to replace all three of these works. Also essential for any attempt to gain an overview of the topic are the works of Owen Lattimore. Franke and Twitchett, although concentrating on China, provide useful background information not only on the Mongols, but on their steppe predecessors including the influential Kitan.

2. Reference

Doerfer, G. *Türkische und mongolische Elemente im Neupersischen*. Four volumes. Wiesbaden: Franz Steiner Verlag, GMBH, 1963-1975.

Pelliot, Paul. *Notes on Marco Polo*. Three volumes. Paris: Imprimerie National, 1959-1973.

3. Historiography

Buell, Paul D. "Steppe Perspectives on the Medieval History of China: Modern Mongol Scholarship on the Liao, Chin and Yüan Periods." *Zentralasiatische Studien*, XV (1981), 129-149.

Gumilev, L. N. "'Taynaya' i 'Yavnaya' Istoriya Mongolov xii-xiii vv." In S. L. Tikhvinskiy, editor, *Tataro-Mongoly v Azii i Evrope*. Moskva: Nauka, 1970, 455-474.

Poucha, Pavel. *Die Geheime Geschichte der Mongolen als Geschichtsquelle und Literaturdenkmal*. Prague: Československo-venská Akademie Věd (Archiv Orientální Supplementa, 4), 1956.

Poucha's work on the *Secret History of the Mongols* in German is highly recommended to anyone interested in the subject as is Gumilev's compelling look at competing historiographic traditions in early Mongolian sources.

4. Translations of Primary Sources

Boyle, John A., translator. *The Successors of Genghiz Khan; Translated from the Persian of Rashīd al-Dīn*. New York: Columbia University Press, 1971.

Bretschneider, E. *Medieval Researches, From Eastern Asiatic Sources*. Two volumes. London: Routledge & Kegan Paul, Ltd., 1967 (1888).

Budge, E. A. W., editor and translator. *The Chronography of Gregory Abūl Faraq, the Son of Aaron, the Hebrew Physician, Commonly known as Bar Hebraeus, Being the First Part of his Political History of the World*. Two volumes. London: Oxford University Press, 1932.

Buell, Paul D., Eugene N. Anderson, and Charles Perry. *A Soup for the Qan: Chinese Dietary Medicine of the Mongol Era as Seen in Hu Szu-hui's Yin-shan Cheng-yao*. London: Kegan Paul International (Sir Henry Wellcome Asian Series), 2000.

Cleaves, F. W. "The Biography of Bayan of the Bârin in the Yüan Shih." *Harvard Journal of Asiatic Studies*, 19 (1956), 185-303.

——. *The Secret History of the Mongols*. Cambridge, Mass.: Harvard University Press, 1982.

Damdinsüren, Ts., Translator. *Mongolyn Nuuts Tovchoo*. Ulaanbaatar: Ulsyn Khevleliyn Gazar, 1975.

Dawson, Christopher, editor. *Mission to Asia: Narratives and Letters of the Franciscan Missionaries in Mongolia and China in the Thirteenth and Fourteenth Centuries*. Translated by a Nun of Stanbrook Abbey. New York: Harper Torchbooks, 1966.

Franke, H. *Beiträge zur Kulturgeshichte Chinas unter der Mongolenherrschaft, Das Shan-kü sin-hua des Yang Yü*. Wiesbaden: Franz Steiner (Abhandlungen für die Kunde des Morgenlandes, XXXII, 2), 1956.

Gibb, H. A. R., translator. *The Travels of Ibn Battūta, A.D. 1325-1354*. Five volumes. Cambridge: Hakluyt Society (new series, 110, 117, 141, 178, 190), 1958-2000.

Haenisch, Erich, and Peter Olbricht. *Zum Untergang zweier Reiche, Berichte von Augenzeugen aus den Jahren 1232-33 und 1368-70*. Wiesbaden: Franz Steiner (Deutsche Morgenländische Gesellschaft, volume XXXVIII, 4), 1969.

Haenisch, Erich, Yao Ts'ung-wu, Peter Olbricht, and Elisabeth Pinks. *Meng-ta pei-lu und Hei-ta shih-lüeh: chinesische Gesandten-berichte über die frühen Mongolen 1221 and 1237* (Asiatische Forschungen 56). Wiesbaden: Otto Harrassowitz, 1980.

Hambis, Louis, translator. *Le Chapitre CVII du Yuan Che : Les Généalogies Impériales Mongoles dans l'Histoire Chinoise Officielle de la Dynastie Mongole. Avec des Notes Supplémentaires par Paul Pelliot*. Leiden: Brill (*T'oung Pao* suppl. 38), 1945.

——, translator. *Le Chapitre CVIII du Yuan Che, les Fiefs attribués aux Membres de la Famille Impériale et aux Ministres de la Cour Mongole d'après l'Historie Chinoise Officielle de la Dynastie Mongole*. Volume 1. Leiden: Brill, 1954.

Jackson, Peter, and David Morgan, editors. *The Mission of Friar William of Rubruc*k. London: Hakluyt Society (Hakluyt Society, second series, volume 173), 1990.

Juvaini, 'Ala-ad-din 'Ata-Malik. *The History of the World-Conqueror*. Translated by J. A. Boyle. Two volumes. Manchester: Manchester University Press, 1958.

Komroff, Manuel. *Contemporaries of Marco Polo*. London: Jonathan Cape, 1928.

Lech, Klaus, translator *Das Mongolische Weltreich, Al-'Umari's Darstellung der mongolischen Reiche in seinem Werk Masalik al-absar fi mamalik al-amsar*. Wiesbaden: Otto Harrassowitz (Asiatische Forschungen 22), 1968.

Munkuyev, N. Ts. *Kitayskiy Istochnik o Pervykh Mongol'skikh Khanakh*. Moscow: Nauka, 1965.

Pelliot, P., and L. Hambis. *Histoire des Campagnes de Gengis Khan*. Volume 1. Leiden : Brill, 1951.

Rachewiltz, Igor de. "The *Hsi-yu lu* 西遊錄 by Yeh-lü Ch'u-ts'ai 耶律楚." *Monumenta Serica*, 21 (1962), 1-128.

——. translator. *The Secret History of the Mongols. A Mongolian Epic Chronicle of the Thirteenth Century*. Leiden: E. J. Brill, 2003.

Ratchnevsky, Paul. *Un Code des Yuan*. Volumes 1 and 4. Paris: Collège de France, Institut des Hautes Études Chinoises, 1985 (1937, 1985).

——. *Un Code des Yuan*. Volume 2. Paris: Presses Universitaires de France, 1972.

Ratchnevsky, Paul, and Françoise Aubin. *Un Code des Yuan*. Volume 3. Paris: Presses Universitaires de France, 1977.

Sagaster, Klaus. *Die weisse Geschichte*. Wiesbaden: Otto Harrassowitz (Asiatische Forschungen, 41), 1976.

Schulte-Uffelage. *Das Keng-shen wai-shi. Eine Quelle zur späten Mongolenzeit*. Berlin: Akademie-Verlag (Ostasiatische Forschungen, Sonderreihe Monographien no. 2), 1963.

Schurmann, Herbert Franz. translator. *Economic Structure of the Yüan Dynasty, Translation of Chapters 93 and 94 of the Yüan shih*. Cambridge, Mass.: Harvard University Press (Harvard-Yenching Institute Series, XVI), 1967.

Yule, Henry, translator, and Henri Cordier, editor. *Cathay and the Way Thither*, *Being a Collection of Medieval Notes of China*. New, Revised Edition. Four Volumes. London: Hakluyt Society (second series, volumes 33, 37-38, 41), 1913-1916.

——. *The Book of Ser Marco Polo, the Venetian*. Two volumes. Amsterdam: Philo Press, 1975 (1903-1920).

Waley, Arthur. translator. *The Travels of an Alchemist, The Journey of the Taoist Ch'ang-ch'un from China to the Hindukush at the Summons of Cinghiz Khan, Recorded by His Disciple, Li Chih-ch'ang.* Taipei: Southern Materials Center, Inc., 1978 (1931).

Wang, Teresa, and Eugene N. Anderson. "Ni Tsan and His 'Cloud Forest Hall Collection of Rules for Drinking and Eating'." *Petits Propos Culinaire*, 60 (1998), 24-41.

There is now a wide range of translated sources available for those interested in the age of Mongolian Empire. Essential are the late John Boyle's translations of Persian sources, particularly his masterful translation of the history of Juvaini, and the forthcoming translation of the Secret History of the Mongols by Igor de Rachewiltz. Also particularly recommended are the new Gibb translation, now complete, of *The Travels of Ibn Baṭṭūṭa*, Lech's partial translation of Al-'Umari, and Peter Jackson and David Morgan's new rendering of the travels of William of Rubruck. The available Chinese material is mostly fairly technical but Waley's *The Travels of an Alchemist* is particularly readable, and the translation of some early Chinese eyewitness accounts by Haenisch, Yao, Olbricht, Pinks is highly useful. Pelliot and Hambis provide a good translation of part of another early Chinese source, the *Shengwu qinzheng lu* 聖武親征錄, "Record of the Personal Campaigns of the Sagely Militant," which may be based upon a now-lost Mongolian chronicle. Containing mostly notices from the European side, Yule's *Cathay and the Way Thither* is still worth examining. For those interested in cultural history, food and medicine in particular, I recommend our *A Soup for the Qan*. This is supplemented by the recipes translated by Teresa Wang and Eugene N. Anderson.

5. Cinggis-Qan

Ratchnevsky, Paul. *Genghis Khan, His Life and Legacy*. Translated by Thomas Nivison Haining. Oxford, and Cambridge, USA: Blackwell, 1991.

Vladimirtsov, B. I. *Gengis-Khan.* Translated by Michel Carsow. Paris: Librairie d'Amérique et d'Orient Adrien-Maisonneuve, 1948.

Ratchnvesky's *Life* still remains the best. A new biography utilizing the Persian sources too is urgently needed.

6. Mongolia to 1206

Buell, Paul D. "The Role of the Sino-Mongolian Frontier Zone in the Rise of Cinggis-qan." In Henry G. Schwarz, editor, *Studies on Mongolia, Proceedings of the First North American Conference on Mongolian Studies*. Bellingham, Wash.: Center for East Asian Studies, 1979, 63-76

Cleaves, F. W. "The Historicity of the Baljuna Covenant." *Harvard Journal of Asiatic Studies*, 18 (1955), 357-421.

Munkuyev, N. Ts. "Zametki o Drevnikh Mongolakh." In Tikhvinsky, S. L., editor, *Tataro-Mongoly v Azii i Evrope*, Moskva: Nauka, 1970, 352-382.

Ratchnevsky, Paul. "Zum Ausdruk t'ouhsia in der Mongolen-zeit." In *Collectanea Mongolica: Festschrift für Rintchen zum 60. Geburtstag*. Wiesbaden: Otto Harrassowitz, 1966, 173-191.

Vladimirtsov, B. *Le Régime Social des Mongols, le Féodalisme Nomade*. Translated by M. Carsow. Paris: Librairie d'Amérique et d'Orient Adrien-Maisonneuve, 1948.

Mongol's pre-imperial history is very poorly covered. My own work is summarized and expanded in my *Dictionary*. Vladimirtsov remains indespensible.

7. Mongolian Empire

Allsen, Thomas A. T. "Prelude to the Western Campaigns: Mongol Military Operations in the Volga-Ural Region, 1217-1237." *Archivum Eurasiae Medii Aevi*, 3 (1983), 5-24.

_____ "Guard and Government in the Reign of Grand Qan Möngke, 1251-1259." *Harvard Journal of Asiatic Studies*, 46 (December, 1986), 495-521.

——. *Mongol Imperialism.* Berkeley: University of California Press, 1987.

——. "Mongolian Princes and Their Merchant Partners." *Asia Major*, 2 (1989), 83-126.

Ayalon, D. "The Great Yāsa of Chingiz Khān: A Re-examination." *Studia Islamica*, 33 (1971), 97-140.

Buell, Paul D. "Sino-Khitan Administration in Mongol Bukhara." *Journal of Asian History* XIII (1979): 2, 121-151.

——. "Kalmyk Tanggaci People: Thoughts on the Mechanics and Impact of Mongol Expansion." *Mongolian Studies* VI (1980), 41-59.

——. "Early Mongol Expansion in Western Siberia and Turkestan (1207-1219): A Reconstruction." *Central Asiatic Journal*, XXXVI (1992), 1-2, 1-32.

——. "Sübötei-ba'atur." In Igor de Rachewiltz, Chan Hok-lam, Hsiao Ch'i-ch'ing and Peter W. Geier, editors. *In the Service of the Khan, Eminent Personalities of the Early Mongol-Yuan Period (1200-1300).* Wiesbaden: Otto Harrassowitz, 1993, 13-26.

——. "Chinqai (1169-1252): Architect of Mongolian Empire." In Edward H. Kaplan and Donald W. Whisenhunt, editors. *Opuscula Altaica, Essays Presented in Honor of Henry Schwarz*. Bellingham, Wash.: Center for East Asian Studies (Studies on East Asia, 19), 1994, 168-186.

Cleaves, F. W. "*Darugha* and *Gerege*." *Harvard Journal of Asiatic Studies*, 16 (1953), 237-259.

Henthorn, William. *Korea: The Mongol Invasions*. Leiden: Brill, 1963.

Olschki, Leonardo. *Guillaume Boucher, a French Artist at the Court of the Khans*. New York: Greenwood, 1969.

Rachewiltz, Igor de. *Papal Envoys to the Great Khans*. Stanford, Calif.: Stanford University Press, 1971.

Schurmann, H. F. "Mongolian Tributary Practices of the Thirteenth Century." *Harvard Journal of Asiatic Studies*, 14 (1956), 304-89.

Smith, J. M. "Mongol and Nomadic Taxation." *Harvard Journal of Asiatic Studies*, 30 (1970), 46-85.

There is a rich literature, only sampled here, on Mongolian Empire, much of it highly technical. Particularly important are the works of Thomas Allsen. His *Mongol Imperialism* remains the best monograph on the era of Möngke (r. 1251-1259) and one of the best monographs in the entire field. Unfortunately out-of-print, but highly readable, is Igor de Rachewiltz's *Papal Envoys to the Great Khans.* See also the relevant biographies, including my own work, in Igor de Rachewiltz, Chan Hok-lam, Hsiao Ch'i-ch'ing and Peter W. Geier's *In the Service of the Khan*. My own "Chinqai (1169-1252): Architect of Mongolian Empire," is a corrected expansion of the biographical article found there with substantially more context provided. The works of Smith are always recommended, whatever the topic since they are very well thought out and extremely well documented.

8. Mongol China

Allsen, Thomas A. "The Rise of the Mongolian Empire and Mongolian Rule in North China." In Herbert Franke and Denis Twitchett, editors, *The Cambridge History of China, Volume 6, Alien Regimes and Border States, 907-1368*. Cambridge: Cambridge University Press, 1994, 321-413.

Buell, Paul D. "The Sung Resistance Movement, 1276-1279: The End of an Era." *Annals of the Chinese Historical Society of the Pacific Northwest*, III (1985-1986), 138-186

——. "Saiyid Ajall." In Igor de Rachewiltz, Chan Hok-lam, Hsiao Ch'i-ch'ing and Peter W. Geier, editors, *In the Service of the Khan, Eminent Personalities of the Early Mongol-Yuan Period (1200-1300).* Wiesbaden: Otto Harrassowitz, 1993, 466-479

Chan, Hok-lam. "Liu Ping-chung: a Buddhist-Taoist Statesman at the Court of Khubilai Khan." *T'oung-pao*, 53 (1967), 98-146.

Ch'en, Paul Heng-chao. *Chinese Legal Tradition under the Mongols, the Code of 1291 as Reconstructed*. Princeton, N.J.: Princeton University Press, 1979.

Ch'en Yüan 陳垣. *Western and Central Asians in China under the Mongols* (*Monumenta Serica* Monograph XV). Translated from the Chinese by Ch'ien Hsing-hai 錢星海 and L. Carrington Goodrich. Los Angeles: *Monumenta Serica*, 1966.

Dalay, Ch. *Yuan gürniy üyeiyn Mongol*, Ulaanbaatar: Ulsyn Khevlelyn Gazar, 1973.

Dardess, John W. *Conquerors and Confucians: Aspects of Political Change in Late Yüan China*. New York and London: Columbia University Press, 1973.

——. "Changing Forms of Imperial Rule in Mongolia and Central Asia." *Monumenta Serica*, XXX (1972-1975), 117-165.

——. "Shun-ti and the End of Yüan Rule in China." In Herbert Franke and Denis Twitchett, editors. *The Cambridge History of China, Volume 6, Alien Regimes and Border States, 907-1368*. Cambridge: Cambridge University Press, 1994, 561-586.

Farquhar, D. M. "Structure and Function in the Yüan Imperial Government." In John D. Langlois, Jr., editor, *China under Mongol Rule*. Princeton, N. J.: Princeton University Press, 1981, 25-55.

——. *The Government of China under Mongolian Rule, A Reference Guide* (Münchener Ostasiatische Studien 53). Stuttgart: Franz Steiner Verlag, 1990.

Franke, Herbert. *Geld und Wirtschaft in China unter der Mongolen-Herrscahft: Beiträge zur Wirtschaftsgeschichte der Yüan-Zeit*. Leipzig: Otto Harrassowitz, 1949.

Franke, Herbert H. "Tibetans in Yüan China." In John D. Langlois, Jr., editor, *China under Mongol Rule*. Princeton: Princeton University Press, 1981, 296-328

Haneda Tôru 羽田亨. "Môko ekiden kô 蒙古驛傳考." Tôkyô: Tôyô kyôkai chôsa gakujutsu hôkoku 東洋協會調查部學術報告, 1, 1909.

Hsiao Ch'i-ch'ing 蕭啓慶. *Hsi-yü-jen yü yüan-ch'u cheng-chih* 西域人與元初政治. T'aipei 台北: Kuo-li t'ai-wan ta-hsüeh wen-shih ts'ung-kan 國立台灣大學文史叢刊, 1966.

——. *The Military Establishment of the Yuan Dynasty*. Cambridge, Mass.: Harvard University Press, 1978.

——. "Mid-Yüan Politics." In Herbert Franke and Denis Twitchett, editors, *The Cambridge History of China, Volume 6, Alien Regimes and Border States, 907-1368*. Cambridge: Cambridge University Press, 1994, 490-560.

Iwamura Shinobu 岩村忍. Mongoru shakai keizai shi no kenkyūモソゴル社會經濟史の研究. Kyōto: Kyodai Jinbun Kagaku Kenkyūjo 巨大人文科學研究所, 1968.

Jay, Jennifer W. *A Change in Dynasties*. Bellingham, Wash.: Center for East Asian Studies (Studies on East Asia, Volume 18), 1991.

Kuwabara Jitsuzō. "On P'u Shou-keng." *Memoirs of the Research Department of the Toyo Bunko*, II (1928), 1-79, VII (1935), 1-104.

Langlois, John D., Jr., editor *China under Mongol Rule*. Princeton, N. J.: Princeton University Press, 1981.

Lee, Sherman E., and Wai-kam Ho. *Chinese Art under the Mongols: The Yüan Dynasty (1279-1368)*. Cleveland: Press of Case Western Reserve University, 1968.

Lo, Jung-Pang. "The Controversy over Grain Conveyance during the Reign of Khubilai Khan (+1260 to +1294)." *Far Eastern Quarterly*, 13 (1953), 262-285.

——. "The Emergence of China as a Sea Power during the Late Sung and Early Yuan Periods." *Far Eastern Quarterly*, 14 (1954-1955), 489-503.

Maeda Naonori 前田直典. Genchō shi no kenkyū 元朝史の研究. Tōkyō: Tōkyō daigaku shuppankai 東京大學出板會, 1973.

Mangold, Gunther. *Das Militärwesen in China unter der Mongolenherrschaft*.

Inaugural-Dissertation, Bamberg: Aku Fotodruck, 1971.

Martin. H. Desmond. *The Rise of Chingis Khan and His Conquest of North China*. Baltimore: The Johns Hopkins Press, 1950.

Meng Szu-ming 蒙思明. *Yüan-tai she-hui chieh-chi chih-tu* 元代社會階級制度. Hong Kong: Lung-men shu-tien 龍門書店, 1967.

Mote, Frederick W. "Chinese Society under Mongol Rule, 1215-1368." In Herbert Franke and Denis Twitchett, editors, *The Cambridge History of China, Volume 6, Alien Regimes and Border States, 907-1368*. Cambridge: Cambridge University Press, 1994, 616-664.

Olbricht, Peter. *Das Postwesen in China, unter der Mongolenherrscahft im 13. und 14. Jahrhundert*. Wiesbaden: Otto Harrassowitz (Göttinger asiatische Forschungen, 1), 1954.

Rachewiltz, Igor de. "Yeh-lü Ch'u-ts'ai (1189-1243): Buddhist Idealist and Confucian Statesman." In A. F. Wright and D. Twitchett, editors. *Confucian Personalities*. Stanford, Calif.: Stanford University Press, 1962, 189-216.

——. "Personnel and Personalities in North China in the Early Mongol Period." *Journal of the Economic and Social History of the Orient*, 9 (1966), 88-144.

——. "Turks in China under the Mongols: A Preliminary Investigation of Turco-Mongol Relations in the 13th. and 14th. Centuries." In Morris Rossabi, editor, *China among Equals.* Berkeley and Los Angeles: University of California Press, 1983, 281-310.

Rachewiltz, Igor de, Chan Hok-lam, Hsiao Ch'i-ch'ing, and Peter W. Geier, editors, *In the Service of the Khan, Eminent Personalities of the Early Mongol-Yuan Period (1200-1300)*. Wiesbaden: Otto Harrassowitz, Wiesbaden, 1993.

Rossabi, Morris. "The Muslims in the Early Yüan Dynasty." In John D. Langlois, Jr., editor, *China under Mongol Rule*. Princeton, N. J.: Princeton University Press, 1981, 257-295.

——. *Khubilai Khan: His Life and Times*. Berkeley: University of California Press, 1988.

——. "The Reign of Khubilai Khan." In Herbert Franke and Denis Twitchett, editors, *The Cambridge History of China, Volume 6, Alien Regimes and Border States, 907-1368*. Cambridge: Cambridge University Press, 1994, 414-489.

Serruys, Henry. "Remnants of Mongol Customs during the Early Ming." *Monumenta Serica*, 16 (1957), 137-190.

——. *The Mongols in China during the Hung-wu Period*. Bruxelles (Mélanges Chinois et Bouddhiques, Vol. XI), 1980.

——. *The Mongols and Ming China: Customs and History*. London: Variorum Reprints, 1987.

Steinhardt, Nancy R. S. "The Plan of Khubilai Khan's Imperial City." *Artibus Asiae*, 44 (1983), 137-158.

Thiel, J. "Der Streit der Buddhisten und Taoisten zur Mongolen-zeit." *Monumenta Serica*, 20 (1961), 1-81.

The literature on Mongol China is vast, although not always readable. The best overview can be found in the relevant chapters of the *Cambridge History of China* by Allsen, Hsiao, Rossabi, Dardess, and Mote, although the last two see Mongol China as more of a Chinese entity than this writer. Still essential for the earliest period of Mongol rule in China is Igor de Rachewitlz's "Personnel and Personalities in North China in the Early Mongol Period" and the biographies in de Rachewiltz, Chan, Hsiao and Geier are equally essential for the early Yuan period, although they too see Mongol China as too Chinese, and Confucian. Also highly recommended for early Yuan is Morris Rossabi's *Khubilai Khan*. For those that read Asian languages, Iwamura and Meng provide excellent social history. Jay provides a readable look at the issue of Song loyalism, the supposed refusal of many members of the Song elite to serve or even acknowledge the existence of their Mongol conquerors. Although somewhat after the period, the many works of Henry Serruys make for highly interesting reading. Martin, although containing many errors, and now out-of-date, can still be useful for a basic orientation regarding the first Mongol conquests.

9. Golden Horde

Allsen, Thomas A. "Mongol Census Taking in Rus', 1245-1275." *Harvard Ukrainian Studies*, 5/1 (1981), 32-53.

——. "The Princes of the Left Hand: An Introduction to the History of the *Ulus* of Orda in the Thirteenth and Early Fourteenth Centuries." *Archivum Eurasia Medii Aevi*, 5 (1985-87), 5-40.

Fedorov-Davydov, G. A. *Obshchestvennyi stroy Zolotoy Ordy*. Moscow: Izdatel'stvo Moskovskogo Universiteta, 1973.

Halperin, Charles J. *Russia and the Mongol Impact on Medieval Russian History: Golden Horde*. Bloomington, Indiana: University Press, 1985.

Spuler, B. *Die goldene Horde: Die Mongolen in Russland, 1223-1502*. Second edition. Wiesbaden: Otto Harrassowitz, 1965.

Yegorov, B. L. *Istoricheskaya Geographiya Zolotoy Ordy v XIII-XIV vv*. Moskva: Nauka, 1985.

There is no fully adequate survey of the Golden Horde currently available. The best remains Spuler, which is difficult to read. For those reading Russian, Federov-Davydov is highly recommended as is the new survey of historical geography by Yegorov.

10. Ca'adai Ulus, Qaidu, and Turkistan

Allsen, Thomas T. "The Yüan Dynasty and the Uighurs of Turfan in the 13th. Century." In Morris Rossabi, editor, *China among Equals.* Berkeley and Los Angeles: University of California Press, 1983, 243-280.

Aubin, J. "L'ethnogénèse des Qaraunas." *Turicica*, 1 (1969), 65-94.

Barthold, W. *Turkestan down to the Mongol Invasion*. Translated from the Russian by Mrs. T. Minorsky. Fourth edition. London: Luzac and Company Ltd., 1977.

Biran, Michal. *Qaidu and the Rise of the Independent Mongol State in Central Asia*. Richmond, Surrey: Curzon, 1997.

Kutlukov, M. "Mongol'skoye Gospodstovo v Vostochnom Turkestane." In S. L. Tikhvinskiy, editor, *Tataro-Mongoly v Azii i Evrope.* Moskva: Nauka, 1970, 85-99.

The standard work is now Biran and thanks to her the field is now well covered. Barthold's *Turkestan* is still recommended

for the earlier period, not directly covered by Biran.

11. Mongol Iran

Amitai-Preiss, Reuven. *Mongols and Mamluks : The Mamluk-Ilkhanid War, 1260-1281*. Cambridge: Cambridge University Press (Cambridge Studies in Islamic Civilization), 1995.

Boyle, J. A. "Dynastic and Political History of the Il-Khans." In J. A. Boyle, Editor. *The Cambridge History of Iran,* Volume 5: *The Saljuq and Mongol Periods*. Cambridge: Cambridge University Press, Cambridge, 1968, 303-421.

——, Editor. *The Cambridge History of Iran,* Volume 5: *The Saljuq and Mongol Periods*. Cambridge: Cambridge University Press, 1968.

Smith, J. M. "Mongol Manpower and Persian Population." *Journal of the Economic and Social History of the Orient*, 18/3 (1975), 271-299.

——. "'Ayn Jālūt: Mamlűk Success or Mongol Failure?" *Harvard Journal of Asiatic Studies*, 44/2 (1984), 307-345.

Spuler, Berthold. *Die Mongolen in Iran*. Third edition. Berlin: Akademie-Verlag, 1968.

Uzunçarşılı, Ismail Hakkı. *Osmanılı Devleti Teşkilâtina Medhal*, Ankara: Türk tarhı Kurumu Basımevi, 1970.

The relevant chapters of the *Cambridge History of Iran*, particularly the chapter by J. A. Boyle, provide the best coverage, but the articles by J. M. Smith are extremely important, particularly his "Mongol Manpower and Persian Population," which argues that there really were hordes of Mongols and not just a few, as is generally argued. On Uzunçarşılı see above.

12. Military

Nicolle, David. *The Mongol Warlords, Genghis Khan, Khublai Khan, Hülegü, Tamerlane*. Poole, Dorset: Firebird Books, 1990.

This is a popular book but is extremely well done although the narrative does contain errors. The illustrations are excellent. On Mongol China, see also Hsiao's *The Military Establishment of the Yuan Dynasty* above.

13. Food, Medicine

Anderson. E. N. "Food and Health at the Mongol Court." In Edward H. Kaplan and Donald W. Whisenhunt, editors. *Opuscula Altaica, Essays Presented in Honor of Henry Schwarz*. Bellingham, Wash.: Center for East Asian Studies (Studies on East Asia, 19), 1994, 17-43

Buell, Paul D. "The *Yin-shan Cheng-yao*, A Sino-Uighur Dietary: Synopsis: Problems, Prospects." In Paul Unschuld, editor, *Approaches to Traditional Chinese Medical Literature, Proceedings of an International Symposium on Translation Methodologies and Terminologies*. Dordrecht, Boston, London: Kluwer Academic Publishers, 1989, 109-127.

——. "Pleasing the Palate of the *Qan*: Changing Foodways of the Imperial Mongols." *Mongolian Studies*, XIII (1990), 57-81.

——. "Mongolian Empire and Turkicization: The Evidence of Food and Foodways." In Reuven Amitai-Preiss, editor, *The Mongol Empire and Its Legacy*, Amsterdam: E.J. Brill, 1999, 200-223.

Franke, Herbert H. "Additional Notes on Non-Chinese Terms in the Yüan Imperial Dietary Compendium *Yin-shan Cheng-yao*." *Zentralasiatische Studien* IV (1970), 7-16.

Lao Yan-shuan, "Notes on Non-Chinese Terms in the Yüan Imperial Dietary Compendium *Yin-shan Cheng-yao*." *The Bulletin of the Institute of History and Philology, Academia Sinica* XXXIX (October 1969), 399-416.

Perry, Charles: "A Mongolian Dish." *Petits Propos Culinaires* 19 (March, 1985), 53-55

Rall, Jutta. "Zur persischen Übersetzung eines Mo-chüeh, eines chinesischen medizinischen Textes." *Oriens Extremus* 7 (1960), 2, 152-157.

——. *Die vier grossen Medizinschulen der Mongolenzeit* (Münchener Ostasiatische Studien 7). Wiesbaden: Franz Steiner Verlag, 1970.

Sabban, Françoise. "Cuisine à la cour de l'empereur de Chine: les aspects culinaires du *Yinshan Zhengyao* de Hu Sihui." *Medièvales* 5 (Novembre, 1983), 32-56.

——. "Court Cuisine in Fourteenth-Century Imperial China: Some Culinary Aspects of Hu Sihui's *Yinshan Zhengyao*." *Food and Foodways* I (1986), 161-196.

——. "Ravioli cristallins et tagliatelle rouges: les pâtes chinoises entre xii^{e} et xiv^{e} siècle." *Médiévales* 16-17 (1989), 29-50.

Smith, John Masson, Jr. "Mongol Campaign Rations: Milk, Marmots and Blood?" In Pierre Oberling, editor, *Turks, Hungarians and Kipchaks, A Festschrift in Honor of Tibor Halasi-Kun*. Washington, D.C.: Institute of Turkish Studies, 1984, 223-228.

——. "Dietary Decadence and Dynastic Decline in the Mongol Empire." *Journal of Asian History*, 34 (2000), 1, 35-52.

Works by Sabban are highly recommended for those interested in the history of food as it relates to the Mongol era. She sees the food of the time as more Chinese than I myself do, for example, but see my examination of early Mongol foodways in "Pleasing the Palate of the *Qan*: Changing Foodways of the Imperial Mongols." The same material is reviewed in more detail in *A Soup for the Qan* cited above, but see also my "Mongolian Empire and Turkicization," published after *A Soup for the Qan* and incorporating later research. Smith's "Mongol Campaign Rations: Milk, Marmots and Blood?" represents first class detective work.

14. Diplomatics, International Relations, Cultural Exchanges

Allsen, Thomas T. *Culture and Conquest in Mongol Eurasia*. Cambridge: Cambridge University Press (Cambridge Studies in Islamic Civilization), 2001.

Cleaves, F. W. "An Early Mongol Version of the Alexander Romance." *Harvard Journal of Asiatic Studies*, 22 (1959), 1-99.

Franke, Herbert. "Sino-Western Contacts under the Mongol Empire." *Journal of the Hong Kong Branch of the Royal Asiatic Society*, 6 (1966), 49-72.

Golden, Peter B. *The King's Dictionary: The Rasūlid Hexaglot, Fourteenth Century Vocabularies in Arabic, Persian, Turkic, Greek, Armenian and Mongol*. Leiden: Brill, 2000.

Kotwicz, Wladyslaw. "Les Mongols, promoteurs de l'idée de paix universelle au début du XIIIe siècle." *Rocznik Orientalistyczny* 16 (1950), 428-434.

Mostaert, A., and F. W. Cleaves. *Les Lettres de 1289 et 1305 des Ilkhans Aryun et Öljeitü à Philippe le Bel*. Cambridge, Mass.: Harvard University Press, 1962.

Olschki, L. *Marco Polo's Asia*. Berkeley and Los Angeles: University of California Press, 1960.

Skelton, R. A., Thomas E. Marston, and George D. Painter. *The Vinland Map and the Tartar Relations*. New Edition. New Haven and London: Yale University Press, 1995.

Vogelin, E., "The Mongol Orders of Submission to European Powers, 1245-1255." *Byzantion*, 15 (1940-1), 378-413.

The best work in this category is unquestionably that by Thomas Allsen, but see also the relevant sections of a *Soup for the Qan* which looks at some of the same traditions from the perspective of food and medicine. John Carswell below also provides an excellent survey although focusing on art, namely blue and white porcelain. Kotwicz and Franke remain classics and Skelton, Marston, and Painter offer a highly useful survey of early Western relations with the Mongols. See also de Rachewiltz *Papal Envoys to the Great Khans* cited above.

15. Trade, Economic History

Allsen, Thomas T. *Commodity and Exchange in the Mongol Empire, A Cultural History of Islamic Textiles*. Cambridge: Cambridge University Press (Cambridge Studies in Islamic Civilization), 1997.

Phillips, J. R. S. *The Medieval Expansion of Europe*. Oxford: Oxford University Press, 1988.

Both Allsen and Phillips are highly recommended. Phillips is particularly readable. It is one of the few books related to the period in question that is broadly interpretive.

16. Art, Architecture, Textiles

Carswell, John. *Blue and White: Chinese Porcelain around the World*. London: British Museum Press, 2000.

Ipsilroglu, M. S. *Painting and Culture of the Mongols*. New York: Harry N. Abrams, Inc., 1966.

Carswell's beautiful book is now a classic. It is highly recommended.

17. Religion

Banzarov, Dorji. *The Black Faith, or Shamanism among the Mongols.* Translated by Jan Nattier and John R. Krueger. *Mongolian Studies*, VII (1981-1982), 53-92 (1846).

Budge, E. A. Wallis. *The Monks of Kublai Khan Emperor of China*. London: The Religious Tract Society, 1928.

Deweese, Devin. *Islamization and Native Religion in the Golden Horde: Baba Tukles and Conversion to Islam in Historical and Epic Tradition*. University Park, Pa.: Pennsylvania State University Press (Hermeneutics: Studies I), 1994.

Egami, N. "Olon-Sume et le Découverte de L'Eglise Catholique Romaine de Jean de Montecorvina." *Journal Asiatique*, CCXL (1952), 155-167.

Pallisen, N. "Die alte Religion der Mongolen und der Kultus Tschingis Chans." *Numen*, III (1956), 3, 178-229.

——. *Die alte Religion des mongolischer Volkes während der Herrschaft der Tschingisiden*. Micro Bibliotheca Anthropos, 7, 1958.

Pelliot, Paul. *Recherches sur les chrétiens de l'Asie centrale et d'extrême-orient*. Paris: Imprimerie Nationale, 1973.

Rossabi, Morris. *Voyager from Xanadu: Rabban Sauma and the First Journey from China to the West*. Tokyo, New York, London: Kodansha International, 1992.

Roux, Jean-Paul. *Faune et Flore Sacrées dans les Sociétés Altaïques*. Paris: Librairie d'Amérique et d'Orient Adrien-Maisonneuve, 1966.

——. *La religion des Turcs et des Mongols*. Paris: Payot, 1984.

Pallisen's profusely documented dissertation (Mico Bibliotheca Anthropos) on native Mongolian religion in the era of Mongolian Empire is still most useful but it should now be read with the relevant sections of work by Roux in mind. Pelliot's posthumous *Recherches* is dense but excellent. Touching on the same Christian culture of East Asia is Rossabi's highly readable study of Rabban Sauma.

18. Archaeology

Kiselev, S. V., editor. *Drevniye Mongol'skiye Goroda*. Moscow: Nauka, 1965.

Maydar, D. *Mongolyn Khot Tosgony Gurvan Zurag (Ert, Dundad Ye, XX Zuuny Ekh)*. Ulaanbaatar: Shinzhlekh Ukaany Akademiyn Khevlel, 1970.

Perlee, Kh. *Khyatan Nar, Tedniy Mongolchuudtay Khobogdson n'*. Ulaanbaatar: Ulsyn Khevlel (Studia Historica Institute Historia Comiteti Scientiarum Republica Populi Mongoli, Tomus 1, Fasc. 1), 1959.

Pending a full publication of new Mongolian excavations, Kiselev, for those reading Russian, remains essential.

19. Black Death

Ell, Stephen R. "Immunity as a Factor in the Epidemiology of Medieval Plague." *Reviews of Infectious Diseases* 6, 6 (November-December 1984), 866-879.

——. "Plague and Leprosy in the Middle Ages: A Paradoxical Cross-Immunity?" *International Journal of Leprosy and Other Mycobacterial Diseases* 55, 2 (June 1987), 345-350.

Gottfried, Robert S. *The Black Death, Natural and Human Disaster in Medieval Europe*. New York: The Free Press, 1983.

McEvedy, Colin. "The Bubonic Plague." *Scientific American* 258, 2 (February, 1988), 118-123.

Scott, Susan, and Christopher J. Duncan. *Biology of Plagues: Evidence from Historical Populations*. Cambridge: Cambrdige University Press, 2001.

There is a huge literature on the Black Death and the works listed above are only a very limited selection of it. Gottfried is a useful introduction but see also new work by Scott and Duncan.

Notes

1. This bibliographical essay is a much expanded and updated version of that appearing in my forthcoming *Historical Dictionary of the Mongolian World Empire*.

2. This is the correct, Mongolian spelling of his name.

3. Hammer-Purgstall, Joseph von, *Geschichte der Goldenen horde in Kiptschak : das ist: der Mongolen in Russland, etwa 1200-1500 : mit ausführlichen Nachweisen, einem beschreibenden Übersicht der vierhundert Quellen, neun Beilagen, enthaltend Dokumente und Auszüge, und einem Namen- und Sachregister*, Amsterdam, APA Philo, 1979 (1840), and Hammer-Purgstall, Joseph von, *Geschichte der Ilchane, das ist der Mongolen in Persia. Mit neun Beilagen und neun Stammtafeln*, Darmstadt: C. W. Lesk, 1842-43.

4. Erich Haenisch, *Mangḫol un Niuca Tobca'an, Die geheime Geschichte der Mongolen*, Wiesbaden: Franz Steiner Verlag, 1962, and Erich Haenisch, *Wörterbuch zu Mangḫol un Niuca Toba'an*, (*Yüan-Ch'ao Pi-shi*) Die geheime Geschichte der Mongolen, Wiesbaden: Franz Steiner Verlag, 1962.

5. Paul Pelliot, *Histoire secrète des Mongols. Restitution du texte mongol et traduction français des chaptires i à vi*, Oeuvres posthumes I, Paris, 1949.

6. Kong, S.Y. 江潤祥, et al. *Huihui yaofang* 回回藥方. Hong Kong: Hong Kong zhong bianyi yinwu youxian gongsi 香港編譯印務有限公司, 1996, and Song Xian 宋峴. *Huihui yaofang kaoshi* 回回藥方考釋. Two volumes. Beijing 北京: Zhonghua shuju 中華書局 (Zhongwai jiaotong shiji congkan 中外交通史籍叢刊), 1999.

About the Author

Paul D. Buell holds a PhD in History, an MA in Chinese, and a Certificate in C Programming, and is an independent scholar, translator, and editor living in Seattle, Washington, where he runs his own consulting and translation service. He also works concurrently for Independent Learning, Western Washington University, located in Bellingham, where is he also an adjunct professor of Western's Center for East Asian Studies. He is the author of more than 80 books and articles, including the forthcoming Historical Dictionary of the Mongol World Empire, to be published by Scarecrow Press in 2003. He specializes in the institutional and cultural history of the Mongolian Empire, the comparative history of human and veterinary medicine, modern Central Asia, and lexicography. He has been a translator of Mongolian since 1968, of Modern Icelandic since 1976, and of Kazakh and Uzbek since 1981. During the years 1968-1970 he researched and wrote the National Intelligence Survey Social Characteristics Volume for Mongolia while an employee of the US Bureau of the Census in Washington, D.C. and between 1981 and 1994 was a consultant for the Foreign Broadcast Information Service of the US Central Intelligence Agency and prepared bi-weekly summaries and interpretations of the Kazakh press. He is a current author-contributor for Jane's Sentinel China and Northeast Asia, and Jane's Sentinel Russia and the CIS, and recently served as an associated editor of the World Military Encyclopedia, edited By S. L. Sandler (ABC-CLIO, 2002)

Lecture Summary: "Genesis of the Indo-Iranians: Archaeological and Linguistic Aspects"

Professor Elena Kuzmina

The Institute for Cultural Research
Moscow

The following summary is of lecture given by Professor Elena Kuzmina on November 11, 2002, at Stanford University

Of crucial importance in the study of the Indo-Iranians' history in the period before writing is a comparison of linguistic and archaeological data. Common terms pertaining to the productive economy and metallurgy, horse-breeding, the cult of the horse and wheel vehicles, which are found in Indo-Iranian and other Indo-European languages, indicate that during the Aeneolithic the Indo-European community was still preserved on the territory embracing areas of advanced horse-breeding and the cult of the horse. According to archaeological data, these areas comprise the South-Russian steppe, where the horse was domesticated in the 4th millennium BC and the cult of the horse and horse sacrifices were practiced at the time. The terminus post quem of the disintegration of the Indo-European community was the period of the spread of wheel vehicles in the Old World: according to archaeological data, the 3rd millennium B.C. The terminus ante quem of the branching off of the Proto-Indo-Aryans fell in the middle of the 2nd millennium BC: according to literary sources, the period concurrent with the appearance of Aryan horse-breeders in the Near East. Notable proximity between the economic types, the social organization patterns and the religious-mythological systems of the Indo-Aryans, Iranians and Saka-Scythians, reconstructed from linguistic sources, indicates that, despite the different historical destinies of these peoples, the problem of the origin of the Indo-Iranians can be resolved only if due account is taken of the origin of each of these ethnic groups.

When reconstructing the peoples' ethnic history in the period before writing, it is important to ascertain the archaeological traces of various types of migration and to evolve criteria of the ethnic attribution of archaeological cultures. Four such criteria are examined.

1. The retrospective method. This concerns the establishment of systematically traced typologicalseries between the culture of the Sakas and the Sauromatians (unquestionably Iranian speaking peoples) and the antecedent timber-grave and Andronovo cultures, which allows us to regard them as genetically linked and thus to surmise that the bearers of the two latter cultures were Indo-Iranians.
2. The collation of the linguistically reconstructed culture of the Indo-Iranians and of actual archaeological cultures. The predominance of cattle-breeding (mostly large horned cattle); the importance attached to horse-breeding and the use of the chariot; the cults of the horse and of the ancestors; the burial ritual; and the social stratification of society, with the charioteer soldiers making up a specific stratum—all these features prevent us from relating the Indo-Iranians to the cattle-breeding cultures of the Near East and to the inhabitants of present-day Turkmenia and Iran in the 3rd millennium BC. Yet this reconstructed culture tallies fully with the culture of the Eurasian steppe population; moreover, the traditions of this type of economy in the South Russian steppe date back to the 4th millennium BC. Of vital importance is the appearance in this area in the 16th century BC of horse-drawn chariots and the separation of the stratum of charioteer soldiers. The absence in the area of the cult of the pig, inherent in other Indo-European cultures, and the wide use of the two-humped camel (Camelus bactrianus) and its cult also favor the Indo-Iranian attribution of these cultures.
3. The coincidence of the Indo-Iranian toponymic map with the map showing the spread of the timber-grave and Andronovo cultures.
4. The collation of data concerning the contacts between Indo-Iranian and other languages, and those concerning the system of the outside links of the steppe cultures, particularly with Mycenaean Greece and the inhabitants of the Eurasian forest belt.

A comparison of results obtained by various means gives sufficient scientific support to the hypothesis of the Indo-Iranian attribution of the timber-grave - Andronovo tribes.

In determining the routes followed by the Indo-Iranians as they migrated away from their original homeland, precedence is taken by the data reflecting their spiritual culture, and not by the characteristics of their ware and similar characteristics.

Letters

Dear friends and colleagues:

I am very pleased to announce that the much revised and expanded version of my annotated translation of the "Western Regions from the Hou Han shu" is now freely available to all on the "Silk Road Seattle" website, managed by the University of Washington in Seattle.

It is a translation of Chinese accounts of the development of the Silk Routes between China, Rome, India, Persia, and Central Asia during the first two centuries AD.

To access it please go to http://depts.washington.edu/uwch/silkroad/texts/texts.html and then click on "Hou Han shu". If you wish to download it or print it out, please remember that it is composed of a number of files. The main file contains the introduction, index, and translated text. There is a separate file for References or Bibliography and another forms an Index to the main Chinese characters. Finally, there are 29 separate files of Notes (one for each of the Sections of the Text). To access each of these just click on any of the coloured superscript numbers in each of the sections of the text - this will take you to the appropriate file which can then be downloaded or printed.

I posted a "draft" version in May and sought comments from readers. The amount and quality of the responses was far beyond expectations - thank you all so very much for all your encouragement and help. Some have contributed a great deal of thought and time to this process and I am deeply indebted to you. I have credited all those whose suggestions or comments I have used in this revision (I hope I haven't missed anyone). If you downloaded the previous version please wipe it and replace it with this new one.

Finally, I should mention that I have also done considerably more research myself and am proposing a significant number of new identifications and historical details which will be of particular interest to specialists in this new revised edition.

I would especially like to point out the following new information:

- I have proposed that the introduction of sericulture to Khotan took place as early as the first half of the 1st century AD (see note to Section 4.1)
- I have proposed a number of new identifications of places along the route of the Chinese envoy Gan Ying in 97 AD (see note to Section 10.9)
- I am proposing that the first Kushan Emperor, Kujula Kadphises, was involved in the invasion and destruction of Parthuaia or Parthyene (the site of the ancient Parthian capital of Nisa) in 55 AD (see note to Section 13.13).

I do hope this revised edition will provide a reliable and useful tool for everyone interested in this period of history. One of the great joys, though, of publishing on the Web is that it is relatively easy to correct mistakes or add new information. This is an on-going project so, if you have anything you would like to add or see changed in future revisions please do contact me personally by email at wynhill@tpg.com.au (please don't write to the very busy staff at the website).

I hope to be able to publish within the next couple of months, and on the same site, a draft annotated edition of the 3rd century Chinese text, the Wei lue, which adds considerably more information to that contained in the Hou Han shu - especially more details on some of the easternmost Roman dependencies. Following this I hope to be able to add the biographies of several of the Chinese generals who were responsible for China's contacts with the West during the first few centuries AD. I will be again looking for readers' help to correct and refine these drafts. When completed they should form a widely-available, useful and sound basis for further studies in the field.

I trust you will enjoy this new edition and I look forward to hearing from you if you have any comments or queries.

John E. Hill
Cooktown, Australia

Dear friends and colleagues:

Although you have seen information on this project a few months ago, I thought an update would be in order:

Silk Road Seattle (http://www.uwch.org/silkroad), a project of the Walter Chapin Simpson Center for the Humanities at the University of Washington (Seattle), is continuing to add internet-based resources relating to the history and cultures of Eurasia. Support for this project has been also been provided by the Silkroad Foundation. The site features:

- An extensive "virtual" Art of the Silk Road exhibition, with text, maps and high-quality images from major museum collections (among them, British Museum, Musee du Louvre, Museum fuer Indische Kunst, Asian Art Museum of San Francisco...). A few web pages are still being added to the "cultures" and trade sections, but the exhibit is now substantially complete.
- a Silk Road atlas, which includes an new interactive map exercise to help students learn basic geography.
- richly illustrated web pages on cities and architecture. Most recently we have added a very nice page on Isfahan (written by Prof. Kim Sexton of the University of Arkansas), have posted pages on Samarkand and on Dunhuang. In two of these (Isfahan and Shah-i Zinde in Samarkand), we have a nice map feature for a quick overview of the location of key monuments.
- richly illustrated pages on the traditional cultures of pastoral nomads, the most recent addition being on animals in nomadic culture. A translation of Kojojash, an important Kyrgyz epic, will be coming soon.
- historical texts, including accounts by important travellers. Notable recent additions include two of Prof. Nicholas Sims-Williams' translations of the Ancient Sogdian Letters, and a revised version of John Hill's extensively annotated translation of the Hou Han Shu chapters on the Western Regions. Our posting of Hill's translation as "work in progress" has already elicited very fruitful scholarly exchange and suggestions which have now been incorporated into the revisions.
- annotated bibliographies and links.

Questions or offers of contributions may be sent to the project director, Prof. Daniel C. Waugh (dwaugh@u.washington.edu). We hope to enlist collaborators from many institutions to build this already valuable resource. Please be aware that our means for processing new material are somewhat limited—there probably will be something of a hiatus in additions to the site over the next two to three months at least—but we will try to post new material expeditiously. We can very easily add annotated links to material posted to other sites, and would like suggestions about those.

Prof. Daniel C. Waugh
University of Washington
Seattle, WA, USA

Announcements

SilkRoad Foundation Online Course: The Silk Road

Instructor: *Professor Daniel C. Waugh, University of Washington*
Date: *Sunday, March 23, 2003 - Saturday, June 14, 2003*
Tuition: *$150*

This online non-credit course introduces the history of cultural and economic exchange across Eurasia for nearly 2000 years, beginning around 200 BCE. The silk roads were many, going east-west and north-south, and silk was only one of many items of exchange. Important components of the history of the Silk Road are the dissemination of religious beliefs and artistic interaction. Among the topics to be covered are:

- Geography of Eurasia
- Culture of the inner Asian nomads and their interaction with sedentary centers
- Major urban centers such as Dunhuang and Samarkand
- Products and Mechanisms of Trade
- The spread of Buddhism, Islam, and Christianity, and evidence of their artistic legacies

The course will explore the reasons for the rise of the Silk Road trade as well as its decline. Some emphasis will be placed on the evidence in eye-witness travel accounts.

The course is for those in the beginning stages of learning about the Silk Road, not for individuals who may already have considerable expertise. Enrollment in the course constitutes a commitment to spend an estimated 5-6 hours a week over twelve weeks in doing various assignments. Although the course is not for credit, participation can be meaningful only if those enrolled put significant effort into the endeavor. Successful online students make time to logon and work on course materials several times each week, even if it is only for brief periods to check email and respond to postings. Assignments will involve reading both in purchased books and in web-based materials, keeping a journal, participation in online discussion, and probably one or two short essays. Participants will need to be comfortable with use of the internet and e-mail (including sending attachments) and have regular access to a (preferably) fast internet connection. Important portions of the online materials include image files; so a 56K modem connection would be minimally adequate. The language of communication for the course is English. Enrollment is limited to 25.

Professor Waugh has taught a course on the Silk Road for several years, been involved in a variety of public education projects on the Silk Road, and travelled extensively along parts of the region it encompasses.

For more information on the course or other programs sponsored by the Silkroad Foundation, please visit http://www.silkroadfoundation.org or email: info@silkroadfoundation.org

---

Exhibit: The Legacy of Genghis Khan—Courtly Art and Culture in Western Asia, 1256-1353

Dates:
*November 5, 2002-February 16, 2003 Metropolitan Museum of Art, New York (*http://www.metmuseum.org*)*

*April 13-July 27, 2003 LA County Museum of Art (*http://www.lacma.org*)*

This exhibit will be the first systematic investigation of the important artistic and cultural achievements that occurred in the Iranian world as a by-product of the Mongol invasions of western and eastern Asia.

The Silk Road Newsletter

The Silk Road Newsletter is a publication of the Silkroad Foundation. Articles, short essays, event news or reviews of new books are welcomed. Please email info@silkroadfoundation.org for more information.

The newsletter is available online http://www.silkroadfoundation.org

Silkroad Foundation
P.O. Box 2275
Saratoga, CA 95070
Editor: Charles Cox

Exhibit: Afghanistan—A Timeless History

*Date & Place: On view through February 9, 2003 The Museum of Fine Arts, Houston (*http://www.mfah.org)

Afghanistan: A Timeless History provides an excellent overview of ancient Afghanistan art, from prehistory to Islamic periods in the first millennium. The 110 works exhibited are revelations, dispelling the notion that Afghanistan art is merely a melding of cultural influences from other major civilizations.

Performance: Tuvan female shaman Ai-Churek

One of the most powerful shamans in Tuva, is scheduled to visit the Bay Area and stay for a month in February. She will make few public appearances to perform traditional rituals and discuss her native spirituality and the uses of indegenous healing rites. Workshops and seminars will also be scheduled. More event details later... (http://www.purenaturemusic.com)