REIMAGINING THE SILK ROADS

INTERACTIONS AND PERCEPTIONS ACROSS EURASIA

Edited by
Julian Henderson, Stephen L. Morgan,
and Matteo Salonia

ROUTLEDGE

Reimagining the Silk Roads

This book brings together scholars from many disciplines to shed light on the long history of the silk roads, to redefine it, and to demonstrate its vitality and importance.

Reimagining the Silk Roads illuminates economic, spiritual, and political networks, bridging different chronologies and geographies. Richly illustrated, it explores fascinating topics, including archaeological discoveries, oceanic explorations, the movement and impact of ideas, and the ways in which the silk roads, broadly defined, contributed to processes of globalisation. Reconciling the study of land and sea routes, and paying attention to themes such as material culture, environment, trade, and the role of religious faiths, the authors offer complex yet accessible studies of the history of interactions and perceptions across Eurasia over the last 3,000 years. The editors critically respond to the recent politicisation of the silk roads and reflect on their polycentric character.

The book challenges and revives silk roads studies, and it will be relevant not only to researchers in archaeology, history, heritage, and related fields, but also to the general reader.

Julian Henderson is Professor of Archaeological Science at Nottingham University and Visiting Professor at the University of Nottingham Ningbo China. He has held senior management roles in Nottingham University, UK. He has published extensively on archaeological materials and increasingly on the archaeology of the silk roads. His primary collaborative research focus is silk roads archaeology and the application of science. He is Executive Director of the Global Institute for Silk Roads Studies and Director of the Silk Road project.

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1 Reimagining the Silk Roads

An introduction

Julian Henderson, Stephen L. Morgan, and Matteo Salonia

Long camel caravans of merchants trekking over sand dunes silhouetted by a setting sun form a common image trope used to promote tourism to China's far west. In these tourism brochures, posters, and web images for travel to Ningxia, Gansu, and Xinjiang, we see a romantic imagining of the silk roads. The Silk Road was not a road like those of the Romans paved with stones, let alone a modern tarmac highway. It was a network of connections that fanned out across Eurasia through deserts, grasslands, and mountains. Nor was it just an overland route. Sea routes were important from the early first millennium and later moved more goods and more people than the overland route. And while silk remained important throughout the centuries, it was only one among an array of goods that were produced and traded across Eurasia. People and goods, knowledge and technology, culture and religions, and crops, animals, and diseases, have moved in each direction from well before historical times. Archaeology, archaeological science, and geography allow us to reconstruct those flows for periods or places for which written documents do not exist or have not survived.

The Silk Road is a modern term, coined by the German geographer and explorer Baron Ferdinand von Richthofen in 1877. It was not used by those who lived in the oasis towns of Central Asia or the nomadic pastoralists of the steppes. Nor was it used by the rulers, officials, and merchants of the literate settled empires in China, West Asia, or Europe. Richthofen used both the singular form (Seidenstrasse) and the plural (Seidenstrassen) for what he defined as the route linking Han Dynasty China to Rome at the end of the first millennium BCE. Nevertheless, in his imagination, the concept was to motivate building trans-Eurasian railways and highways that could join Europe and China. When Richthofen coined the term, the Silk Road or silk roads were part of the European imperial imagination of the late nineteenth century. In its most recent political appropriation, the Silk Road is again very much an ideological concept. It is a wrapper for the designs and aspirations of the contemporary Chinese government, which like the Han, Tang, Ming, and Qing dynasties before it, seeks to project political and economic power into its peripheries in Asia and beyond.

Some scholars have recently criticised or even dismissed the idea of silk roads, because the literature deploying this term has privileged the sedentary and literate empires at either end of Eurasia, thereby ignoring the vitality of the contributions – if

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not the centrality – of the illiterate nomadic pastoralists who lived in the vastness of the steppes. For example, Ravi K. Mishra (2020) – drawing extensively on others (Christian 2000; Hansen 2012; Chin 2013; Millward 2013) – has argued that the role of nomadic peoples and steppe cultures has been forgotten and that too much emphasis has been placed on the initiative of the Han Dynasty and Rome. And Khodadad Rezakhani (2010) believes that we should get rid of the term silk roads, mainly because of the unconvincing attempts to date with precision its 'opening' and because its definition has marginalised civilisations like India and Iran. Rezakhani has also argued that the silk roads never connected China to the Roman world, ending either in Transoxiana or India. Many of these observations are valuable contributions to a critical understanding of the term, but we believe that they should help us to redefine the concept of silk roads, rather than to reject it.

One of the leading scholars of silk roads studies, Susan Whitfield, has provided the following recent definition (Whitfield 2019, 15):

> A system of substantial and persistent overlapping and evolving interregional trade networks across Afro-Eurasia by land and sea from the end of the first millennium BCE through to the middle of the 2nd millennium CE, trading in silk and many other raw materials and manufactured items – including, but not limited to, slaves, horses, semi-precious stones, metals, pots, musk, medicines, glass, furs, and fruits – resulting in movements and exchanges of peoples, ideas, technologies, faiths, languages, scripts, iconographies, stories, music, dance and so on.

This is "a broad and inclusive definition", which Whitfield (2007, 205) had previously argued was necessary to avoid becoming trapped in contemporary politics while recognising that the trade in any one product, such as silk, did not occur in isolation from trade in others. A working definition of the silk roads she then argued should consider "all the routes, economies, markets, peoples and politics throughout Central Asia and those to and from India and Africa, along with the economies and markets of Europe and China," James Millward (2013, 18–19) has a similar expansive and comprehensive view. The silk road is a shorthand, in his view, which "stands for the exchanges of things and ideas, both intended and accidental, through trade, diplomacy, conquest, migration, and pilgrimage that intensified integration of the Afro-Eurasian continent from the Neolithic through modern times."

Earlier, David Christian (2000, 3) defined the silk roads "as the long- and middle-distance land routes by which goods, ideas, and people were exchanged between major regions of Afro-Eurasia," He prefers regions to civilisations because it allows inclusion of non-agrarian communities, and exchange to trade because trade does not capture the breadth of exchanges. This framing stressed the antiquity of the exchanges far before the emergence of Han China or the Roman Empire and the prominent role of steppe nomads. "By 2000 BCE, … languages, technologies, styles, and lifeways were being exchanged through steppes of Inner Eurasia with an intensity unmatched in the mobile communities of Eurasia's agrarian civilisations" (2000, 12).

Valerie Hansen (2012) emphasises the limits of trade along the land routes, contrarily to much of the literature. Trade along these routes she describes as "trickle trade", small-scale barter-like trade between oasis settlements, rather than large caravans often imagined. She concludes provocatively: "The Silk Road was one of the least travelled routes in human history and possibly not worth studying – if tonnage carried, traffic, or the number of travellers at any time were the sole measures of a given route's significance." Its importance rests not in trade but as a "cultural artery for the exchange between east and west of religions, art, languages, and new technologies" (Hansen 2012, 235). This exchange was multifarious and omni-directional, between the west and east, and vice versa through Eurasia, but also between north and south, such as the exchanges of the nomads from northern steppes with the settled communities of the arid Central Asia or the lands near the Mediterranean.

There is no doubt that long-distance exchanges across Eurasia had started well before the expeditions sponsored by Han Wudi (140–87 BCE), the Han emperor who vastly expanded the empire. And China was neither the initiator nor the perennial main actor of the silk roads networks. Although the Han Dynasty was an important player, many other peoples contributed both before and after the Han period. For example, in the fourth century BCE, Alexander the Great's empire linked Greece to Transoxiana in modern-day Afghanistan, which became part of the Seleucid Empire and the Greco-Bactrian Kingdom. In fact, assigning a precise point in time and place for the 'opening' of the silk roads is unrealistic. Other parts of the world can make a claim to be the origin of the silk roads such as Central Asia, the steppes, Southeast Asia, India, East Africa, and northern Europe. Even during the first and second centuries CE, the Kushan Empire was one of the pivotal actors facilitating the diffusion of Buddhism and the long-distance trade of silk, lapis lazuli, furs, currency, and other goods between Han China, Sogdiana, Parthia, and Rome.

The conceptual framework offered by the silk roads, however, is still useful. An inclusive understanding of the silk roads can enhance rather than diminish our grasp of the roles played by peoples and cultures in Africa, the steppes, Scandinavia, and Iran. One such group of people, the Sogdians, an Iranian-speaking Central Asian group, are discussed in this volume. We argue that the Sogdians had an impact on the formation of land routes and several processes including the modification of languages and the transfer of religions that would probably have not taken place without them. They offer important examples of acculturation, their social adaptions in the lands in which they settled, such as China.

Once the concept of the silk roads is disentangled from the romantic and simplistic notion of a highway between two points, Rome and Han China, the idea of silk roads can enable us to engage with the polycentric agency in the production and dissemination of goods, ideas, peoples, and faiths. The multiplicity of actors, segments, and nodes on the silk roads renders moot the critics' argument against its existence because of the lack of direct links between East Asia and imperial Rome. Even if the merchants along the land route from western China to Transoxiana (such as Sogdians) did not reach Roman outposts, there were plenty of other routes and segments (including maritime ones). What matters is that Roman trading links

extended well beyond the Middle East, into the Indian Ocean via the Persian Gulf. Evidence of Greco-Roman knowledge of (and participation in) the Indian Ocean markets can be found in sources like the first-century *Periplus of the Erythraean Sea* (which Rezakhani mentions in passing), as well as in a growing body of scholarship (Sidebotham 2011; Van der Veen and Morales 2015; Evers 2017). This is sufficient to include the Mediterranean world and the Indian Ocean in silk roads scholarship.

Furthermore, rejecting the silk roads without proffering another term robs us of a historiographical framework that has extraordinary explanatory power and that supports multidisciplinary and interdisciplinary collaboration. Indeed, in this book we cover aspects of archaeological, artistic, chemical, environmental, ecological, economic, geographical, geological, historical, political, religious, among other studies. Asia and Europe have long had an intense and continuous history of interaction that deserves to be studied in its multifaceted aspects. Merely pointing out that silk was not the only good traded along these networks, or that past use of 'silk roads' has hampered the development of studies on Central Asia or Mesopotamia, does not disqualify the entire body of literature on the silk roads nor demonstrate that the concept cannot be reimagined and better defined. To our knowledge, no recent author working on the silk roads has claimed that these networks were just shaped by silk trade (or even that silk was always the most important good). More crucially, scholars need concepts and terms that capture social, archaeological, and historical phenomena and that facilitate our understanding of world history. These concepts are often imprecise, yet through constructive criticisms, we keep testing and redefining our terminologies.

The silk roads in space and time

The spread of humans, ideas, and things across Eurasia fluctuated over archaeological time periods and recorded history. The intensity of contacts along the land routes was greatest when the major empires at each end were strongest, and security of life and goods of the merchant and other traveller was better. Conversely, contacts and prosperity contracted when their power and reach diminished, or when their policies discouraged or hindered movement, shipbuilding, and international commerce. We can identify clear periods when various routes were more prosperous and exchange was more intense. Changes over the past five millennia along the silk roads were a complex interplay of political, climatic and environmental factors that affected land routes and sea routes in different ways and at varying times. We have summarised the major developments in our narrative below and more concisely in Table 1.1.

In prehistory, there is evidence for the spread of wheat from the west to east across Eurasia in the fifth millennium BCE (Zhou et al. 2020) with the steppe route playing an important part. The same has been argued for hemp (cannabis) in the third millennium BCE (Long et al. 2017). Broomcorn millet spread from East Asia to western Asia from the sixteenth century BCE (Zhou et al. 2020), while the *Japonica* subspecies of *Oryza sativa* rice was domesticated in central China and

Table 1.1 Chronology of selected developments related to the land and sea routes across Eurasia

Period	*Land routes*	*Sea routes*	*Climate*
3000 BCE	Horse domestication spreads from the Pontic Caspian Steppes to southern Europe. Spread of cannabis across Eurasia		
2000 BCE	Khotan jade from Tarim Basin in Anyang tombs show long-distance exchanges European faience technology spreads to Central Asia and broomcorn millet from China to Mesopotamia		Several centuries of cooler temperatures spur large-scale migrations
1000 BCE			
200 BCE	The 'start' of the 'classic' historical silk roads linking indirectly the Han Dynasty and Rome. Chinese-Nomad exchange of silk for horses		
100 BCE			Roman warm period
0			
100	Buddhism enters China	Roman 'spice route' via the Persian Gulf to India where goods from China and Southeast Asian were obtained	
200	Period of disunity in China 220–589 with many regional dynasties. Sasanian Persia becomes a fundamental player along the land and maritime silk roads.	Nomad northern dynasties cut the Han southern ones' access to land routes, and they turn to maritime routes	Intense cold period from late 100s to late 200s
300	From the fourth century, Buddhism is absorbed by Chinese intellectual elite and adapted, spreading widely	West and South Asian shipping to Southeast Asia developed during the third to fifth centuries	
400			

(*Continued*)

Table 1.1 (Continued)

Period	*Land routes*	*Sea routes*	*Climate*
500	Between the sixth and seventh centuries, sericulture transferred via Khotan to Constantinople	Southern Chinese dynasties import Indian Ocean region products via Southeast Asia. Malay–Javanese shipping frequents China	
600	China unified under the Sui and Tang. Tang army garrisons the Tarim Basin, creates security, and injects capital. The 'peak' of the overland routes Nestorian Christianity arrives in China c.600, recorded on the Xian Stele (781) 755 Tang withdraw their 'Western Region' garrisons	Srivijaya in Sumatra becomes the main entrepôt between the seventh and twelfth centuries. For transshipment of goods from West and South Asia to China Southeast Asian vessels dominate shipping in the South China Seas	Medieval warm period
700			
800	Long-distance overland trade contracts after Tang withdraw and the maritime route becomes main route Cosmopolitan populations in Chinese cities, such as traders and craftsmen	Arab and Persian vessels sail beyond Srivijaya and dominate supply of China's imports Muslim merchants settle in major ports in China and across Southeast Asia	
900	Song Dynasty (960–1279) is cut off from the overland route by nomadic powers and turns to maritime commerce for survival	Ceramic ware, metal ware, and other manufactured goods become major Chinese exports	
1000	Advances in Chinese ship building, navigation, and military technologies, including gunpowder weapons	Song trade with Southeast Asia and West Asia expand greatly Chinese vessels dominate trade in the South China Sea and SE Asian waters	

(*Continued*)

Table 1.1 (Continued)

Period	*Land routes*	*Sea routes*	*Climate*
	Imports of fast-growing rice varieties from Southeast Asia expands food supply and frees labour to engage in commerce and manufacturing, the Song 'medieval economic revolution'	Diversification in types of goods traded between China, Southeast, and South Asia. Big rise in lower-value goods	
1100		Decline of Srivijaya power as Chinese merchants take over entrepôt operations in Southeast Asia	
1200	Mongol confederation extends power over North China, Central Asia to West Asia.	Quanzhou (Zaiton) in Fujian becomes the major port of the maritime silk road	
1300	Mid-thirteenth to mid-fourteenth centuries, 'Pax Mongolica' allowed unprecedented overland travel for several decades Black Death 1347–53 ravages Central Asia and Europe Drought, floods, and famine in Mongol China	Chinese merchant vessels visit the 'spice islands' along the 'eastern route' from Quanzhou via the Sulu zone Lull in Southeast Asian maritime commerce associated with droughts, famine, and political upheavals	Mid-century low temperatures across the Northern Hemisphere
1400	Local trade between the oasis towns persists, but the period is one of commercial and political decline The Red Sea is the artery between the Mediterranean and through which pepper and spices reached Europe	Voyages of Zheng He (1405–33) usher in commerce boom in Southeast Asia Melaka becomes the leading entrepôt for spices Portuguese map the South Atlantic currents and reach the Indian Ocean	Early fifteenth to late eighteenth centuries is known as the "Little Ice Age", marked by recurring episodes of decades of exceptional coldness that lead to famines and social and political upheavals

(*Continued*)

Table 1.1 (Continued)

Period	*Land routes*	*Sea routes*	*Climate*
1500	Venetian–Egyptian spice trade persists despite the Portuguese opening the Cape of Good Hope sea route 1582: beginning of the Jesuit mission to China	1511: Portuguese conquest of Melaka; competing Muslim polity ports develop at Aceh and Bantam The Portuguese establish Macao New World crops arrive in Asia, change diets, and improve food security	
1600		The 'Age of the trading companies' in Asia. Intra-Asia trade contracts, partly due to policies of the ascendent Dutch and severe climate events mid-century	Several decades of severe cold from c1610–40s and 1660–90s afflicts Europe, China, and Southeast Asia
1700		1757–1842: Canton System of trade	
1800	1877 Ferdinand von Richthofen first articulates the idea of Silk Road		
1900	Intensification in West to East transfer of science and technology		
2000	China's Belt and Road Initiative. Trans-Eurasian links promoted; political appropriation of the idea of Silk Road as a 'China gift' to the world	China's Belt and Road Initiative promotes the "Maritime Silk Road"	Strong planet warming

travelled westward (see Chapter 3). Even earlier, there is evidence of the spread of pottery technology from c. 14000 BCE from East Africa eastwards and East Asia westwards (Jordan et al. 2016). Evidence for such connections is numerous. The spread of copper and bronze technology in the prehistory (Hsu et al. 2016; Killick and Fenn 2012); the spread of European faience beads (with quartz cores and a glassy coating) into western China in the second millennium BCE (Wang et al. 2020); the occurrence of probable western Asian glass in the western Zhou dynasty (1046–771 BCE) (Li et al. 2014; Henderson et al. 2018), and the exchange

of bronze artefacts (Sherratt 2006; Jaang 2015) are all examples of interconnectedness during the Bronze Age. Therefore, interactions existed well before silk was traded.

The settled oases of the southern region of the silk roads and the grasslands of the northern received waves of migrations associated with the movement of crops and technologies from the Neolithic to the Bronze Age. The "classic" or historically documented silk roads are usually associated with the Han Dynasty (206 BCE–220 CE) in China and rise of the Roman Empire (c100 BCE–395 CE). But China and Rome had mainly indirect contact and limited awareness of each other. Some Roman embassies may have reached China and Roman material culture did (Graf 1996). Silk that was traded as far as the Mediterranean came from the exchange between the Chinese and nomadic pastoralists of horses for silk, which was sold on in Central Asian markets (Lewis 2007; Liu 2022). From the third to the sixth century, the Sasanian empire arguably constituted the heart of the silk roads, controlling proto-industrial centres and mercantile networks that stretched from Nisibis to the Persian Gulf, and favouring the rise of Iranian maritime networks in the Indian Ocean. The Sasanians were able to control much of the silk trade between Asia and the Mediterranean, and they transformed Persia from a corridor for Eastern goods to a production zone for high value commodities such as Iranian silverware, which was later traded as far as Tang China. This is also the decisive period when Buddhism, which had entered China during the Han Dynasty, would spread among the Chinese elite (Zürcher 2007). Chinese pilgrim monks travelled west to reach India in search of Buddhist scripture, and Buddhist teachers from India, Kucha, and other places went east to proselytise and to serve as advisors to Chinese rulers. This is not only a history of transfer, but also of transformation and adaptation. In the Song Dynasty, Chan/Zen Buddhism (禪宗), the school of Mahayana Buddhism that stressed specifically Chinese elements, spread by sea from Ningbo to Japan.

At the same time, the 'maritime silk road' began to develop.[1] During this period of disunity in China (c.220-589), the northern nomad-origin dynasties cut access to the overland route for the southern Han dynasties, which encouraged them to expand southward exchanges with Funan (in present-day Vietnam) and the predecessors of the Srivijaya Empire in Sumatra and Java. Indian and Persian trade with Southeast Asia and indirectly with China increased (Wolters 1967). Many of the Chinese Buddhist monks that left China for India via the overland route returned to China along the maritime route via Ceylon and Southeast Asia (Figure 1.1). The rise of Srivijaya near present-day Palembang on the Straits of Melaka, the narrow waterway that connects the Indian Ocean to the South China Sea, from the late seventh century was instrumental in the growth of the sea route from West to East Asia. Expansion of the maritime route from the late eighth century coincides with a decline in the land route and the arrival by sea of West Asian Muslim merchants in Southeast and East Asia (Heng 2009; Chaffee 2018).

Reunification of China under the Sui (589–618) and the Tang (618–907) dynasties revitalised the overland route from China. The Tang garrisoned the western regions beyond Dunhuang to the western side of the Tarim Basin and saw off

challenges from the Tibetans and the Mongolian nomads. These garrisons were mostly drawn from nomad warriors rather than Han Chinese, and were organised into self-governing protectorates, such as the Anxi Protectorate that covered the Tarim Basin and Taklamakan Desert region (Lewis 2009, 147–53). Troops were paid in silk rather than coinage, which injected capital into Central Asia and re-monetised the economies as soldiers exchanged silk for personal purchases in markets (Hansen 2012). The silk was then often carried long distances by Sogdian merchants to sell in the markets and courts of Persia and Constantinople. Religious networks continued to expand in this period, with the arrival of Nestorian Christianity in China. However, the Tang forces were defeated at Talas in 751 by the advancing Arab Muslim armies, and after the An Lushan Rebellion in 755, the Tang withdrew their forces from the western region. Hansen (2012) reckons the mid-eighth century was peak prosperity for the overland silk roads. Trade along the overland route reverted to local trade and increasingly barter exchange after the Tang withdrawal.

Meanwhile, Srivijaya had become the leading entrepôt for the transshipment of goods from West and South Asia along with Southeast Asian incense, spices, fragrant woods, and forest products as well as gold and tin from the late seventh century. It became a centre of Buddhist scholarship and Chinese pilgrim monks, most famously Yijing (635–713), who spent more than two decades there, would stay to learn Sanskrit before sailing onwards to India (Wolters 1967). At this time, Malay–Javanese vessels dominated the carriage of goods and people between China and Southeast Asia, and Indian and Persian vessels did not venture beyond Srivijaya (Wolters 1967; Heng 2009). Excavations of Palembang have provided evidence for trade in Chinese ceramics from the Guangdong and Fujian kilns, gold, tin, resins, spices, precious woods, Chinese mercury and copper, silk and coins and South Asian cotton textiles, raw glass, and jewellery (Manguin 2021).

In the mid-eighth century, Chinese documents first record the arrival of Arab Muslim traders at Guangzhou. In the ninth and tenth centuries, Arab and Persian vessels began to supplant Southeast Asian ones, and Muslim traders would often dominate the overseas trade into China for nearly 600 years (Chaffee 2018). The volume and variety of seaborne merchandise far exceeded that carried on the overland routes, and porcelain, metal goods, and other manufactured Chinese exports became more important than silk textiles. From the eleventh to the fourteenth centuries, the maritime silk road would expand further. Superior Chinese-built vessels replaced Arab ones, though West Asian Muslims continued to play a big role in foreign trade until the end of the Yuan, while Chinese merchants who increasingly sojourned in Southeast Asian ports undermined the power of local rulers such as Srivijaya whose entrepôts had thrived on the China trade (Lo 2012; Heng 2009).

Nomadic invasions of north China from the tenth century had progressively cut off the Song Dynasty (960–1279) from the overland route. In the early thirteenth century, Genghis Khan united the Mongols into a confederation of khanates. Their westward military campaigns into West Asia and Eastern Europe ushered in the so-called *Pax Mongolica*, a period when protection costs for merchants in Central

Asia declined. And so did relative prices of traded goods. The price of Chinese silk in Mediterranean markets was only three times higher than in Suzhou, the centre of silk production in China, and even less than silk from Persia (Findlay and O'Rourke 2007; Millward 2013).

The overland route leaves China for the west from Chang'an (modern-day Xian) into the Gansu, passing by Lanzhou, Liangzhou, and Yumen to reach the oasis town of Dunhuang in northwest Gansu (Figure 1.1). Dunhuang was the largest of China's frontier towns. Here the route diverges into southern and northern routes around the Tarim Basin and the Taklamakan Desert to converge at Kashgar (Xinjiang). The northern route passes through the towns of Hami, Turfan, and Kucha to reach Kashgar. Another more southerly northern route crosses the desert via Loulan to Kucha and onto Kashgar (Di Cosmo 2002). From Kashgar, the westward route leads to Samarkand, the region from which came the Sogdian merchants who handled so much of the long-distance trade on the silk roads. To the west of Samarkand, the route branches south–southwest via Bukhara and Merv to Iran (Sasanian Empire) and west to reach the Mediterranean. The other route branches west–northwest between the Aral Sea and Caspian Sea before swinging south along the Caspian Sea via the Caucasus Mountains to reach the Mediterranean.

The southern route from Dunhuang skirts around the Taklamakan Desert through the oasis towns of Niya, Khotan, and Yarkand to converge on Kashgar. The south–north flowing Khotan and Tarim rivers – and the routes beside them – connected the southern and northern routes on the western side of the Taklamakan Desert. Before reaching Kashgar, though, the traveller could branch southward at Yarkand to cross the passes of the Kunlun Mountains to Lahore, from where they might continue south to the Arabian Sea at Debal (present-day Karachi) or proceed west to Kabul and onwards to Iran. The route to the Arabian Sea was more important in the first millennium than the more northerly land routes. At Debal, travellers could take a ship west to the Persian Gulf (or the Red Sea) and at Basra re-join the land route westwards via Baghdad to the Mediterranean or along the Tigris and Euphrates northwards. Alternatively, the traveller might sail southeast from Debal along the Indian coast. At Lahore, a traveller could also turn southeast and cross through north India into the Ganges River valley. This was the route the Chinese Buddhist pilgrim monks such as Faxian (377–422) and Xuanzang (602–664) took when they journeyed to India. Another less-known route is south from Chang'an via Chengdu and Burma, which then joins the route up the Ganges River and west across north India to Lahore.

The split in focus between land and sea routes fragments scholarship on the silk roads (Whitfield 2007), yet the two modes of travel are integral to each other and were so often intertwined even from the earliest periods of recorded exchanges.[2] For example, black pepper from South India first reached China before the Tang via the land route from the west, and is known as 'foreign hot spice' (*hujiao* 胡椒), *hu* being a generic term for foreigners from West Asia. The blue glaze of Chinese blue and white porcelain used cobalt oxide first imported from the Abbasid Caliphate during the Tang. After the complexity of many possible paths that can be taken overland, the maritime route is deceptively simple.

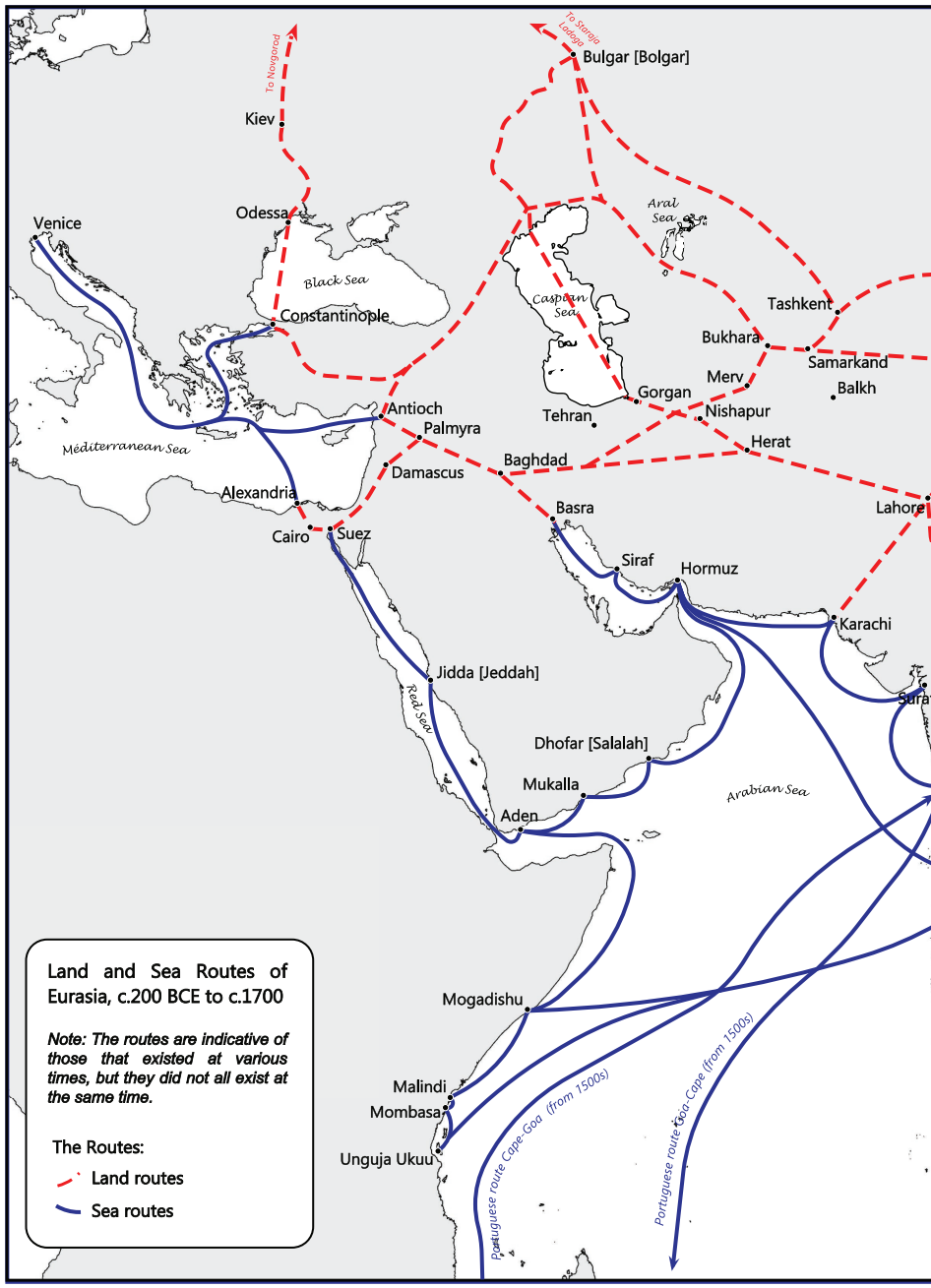

Figure 1.1 Map of selected land and sea routes connecting Eurasia at varying times up to c.1700.

Credit: Map created by Sarah Ortonovi (www.side-geomatics.com).

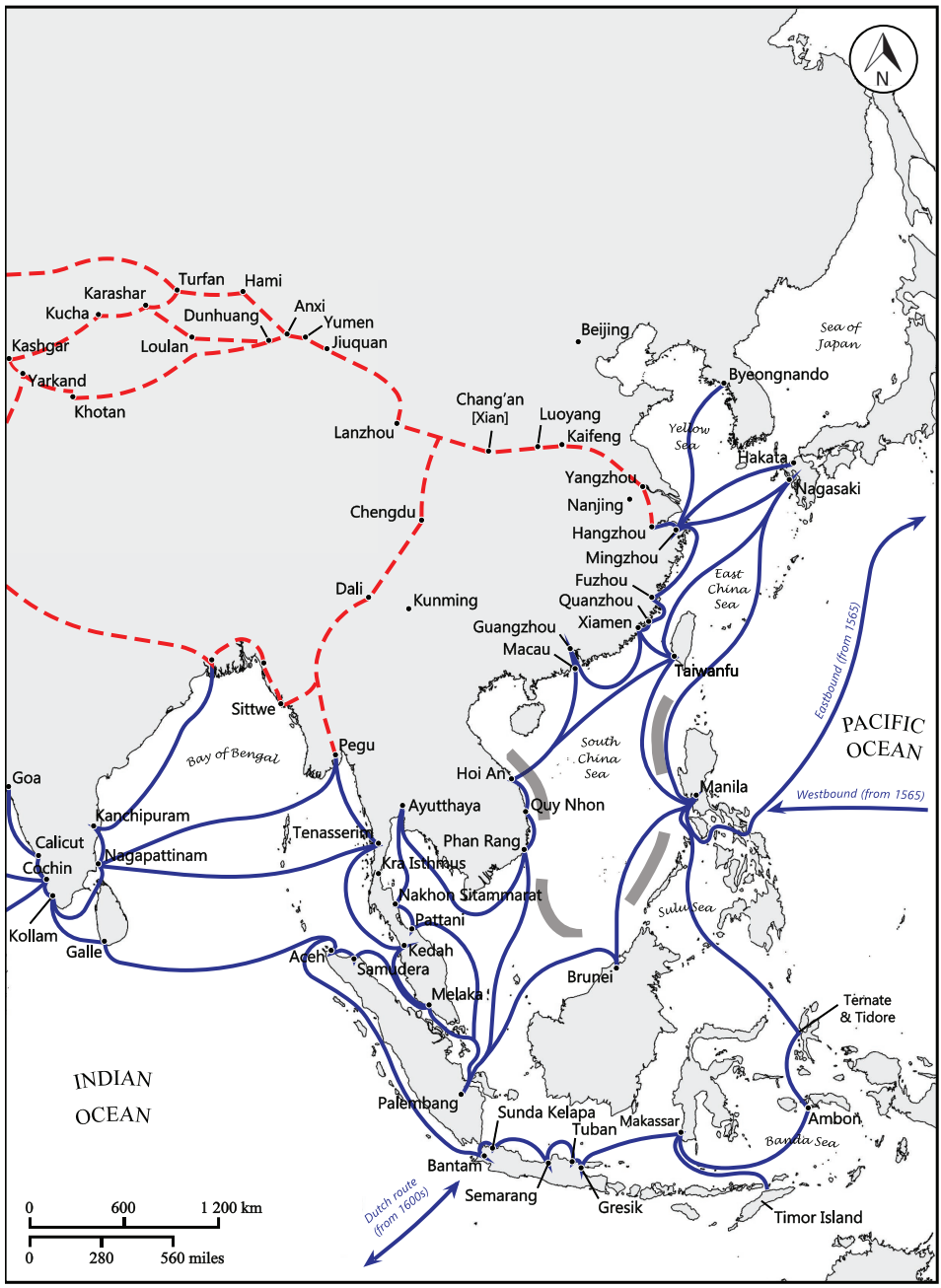

Figure 1.1 (Continued)

Note: The "nine-dash line" in the South China Sea is a contested maritime zone over which China claims sovereignty, as does several countries in Southeast Asia. In 2016, a tribunal of the United Nations Convention of the Law of the Sea concluded that China's claim had no lawful effect. Neither the editors nor the publisher takes a view on the merits of any claim.

Sea travel in the Arabian Sea, Bay of Bengal, the Straits of Melaka, and the South China Sea were determined by the winds of the Asian monsoon. Layover for months were required to await the change in the season. These winds permitted sailing along the East African coast to Arabia and the Gulf, across the Arabian Sea from Red Sea to Southern India, Ceylon, and across the Bay of Bengal to the Kra Isthmus in present-day Thailand and south to the Straits of Melaka. At ports on the Malay Peninsula and Sumatra, vessels would load produce from Southeast Asia and await the change in the monsoon wind before sailing around present-day Singapore to head north across the South China Sea to ports at Guangzhou and further north in China. Along the way, they might call at ports in present-day Vietnam, such as Hoi An. Sen (2014) describes the maritime routes as three distinct subsystems or "circuits of circulations" for goods, ideas, and people. These correspond well to the constraints of prevailing wind patterns on maritime communications under sail. The three subsystems also coincide with three broad chronological periods of development. The Arabian Sea subsystem, from East Africa around to the southwest coast of India, developed during the Roman period. The Bay of Bengal subsystem encompassing the east coast of India, Sri Lanka (Ceylon), and parts of Southeast Asia developed between the late third and sixth centuries. The third subsystem, centred on the South China Sea and encompassing Southeast Asia's mainland and island regions came into its own from the fifth–sixth centuries onwards (Wolters 1967).

Past and present globalisation

Around the start of the second millennium, a lot of the known world was connected, at least through interregional trade flows via the Islamic world, then the most connected region (Findlay and O'Rourke 2007, 43–8). The "circuits of circulation" (Sen 2014) in the Indian Ocean, Indonesian waters, and the South China Sea supported maritime trade that encompassed a vast part of the world. The so-called *Pax Mongolica* between 1250 and 1350, Abu-Lughod (1989) argued, was the start of a world system or globalisation of the known world. Might we think of connections along the land and sea routes of the silk roads as early globalisation?

In the past, different parts of the world were connected with varying degrees of intensity over several millennia, such that in a loose way, globalisation is not a new phenomenon. Horse riding dates to c. 3000 BCE and while genetic evidence suggests that horses were first domesticated on the Pontic Caspian Steppes c. 2200 BCE (Librado et al. 2024), within 300 years, similar horses had spread as far as Spain as result of migration from the steppes. Long-distance movement of material culture similarly points to connections we associate with globalisation. At Helgö, an island trading centre in Sweden dating between the sixth and eleventh centuries, archaeologists found a statue of the Buddha from north Pakistan, an enamelled Irish crozier head, a Carolingian sword pommel, an Egyptian Coptic ladle, a Byzantine silver bowl, a Mediterranean silver fish, and gemstones from South Asia (Clarke and Lamm 2004; Hedenstierna-Jonson 2020). These objects reflect exchange involving wide networks and connectivity (however indirect) between

Scandinavia, Central Asia, and Tang China in the Viking age (Hedenstierna-Jonson 2020). Another example is the spread of chess, which appeared in sixth-century India, and which was played in Iran several centuries later and as far apart as China and Norway by the twelfth century (Carboni 1996; Holmes and Standen 2018; Caldwell et al. 2009).

Most uses of globalisation in this descriptive sense fit Jan de Vries's (2010) definition of "soft globalisation", which emphasises the movement of people, ideas, and artefacts. The "hard globalisation" definition of globalisation used by economists and economic historians (e.g., Williamson and O'Rourke 2002, 2004) stresses instead the integration of markets across space, the convergence of prices, and in turn their impact on human welfare. Globalisation in a contemporary economic sense is therefore more than the movement of goods, people, ideas, religions, technologies, and diseases across space.

What distinguishes globalisation in our times is the intensity and size of the exchange. Goods and people can move great distances very quickly. Each country and region of the world is connected, at least via another, with every other. We cannot say that of the time before the sixteenth century. The old silk roads joined up the spaces between either ends of Eurasia, but travel was dangerous and slow, from one city or oasis town to another, or from one port to another, where goods were exchanged. Items like silk, spices, precious gems, glassware, and porcelain passed through many places and many hands. Hansen (2012, 2020) describes long-distance trade before 1000 as mostly small-scale "trickle trade", little more than barter-like trade. Contemporary globalisation is the heir of the big increase in the scale, speed, and intensity of connections that followed the Iberian voyages of discovery, which forged maritime links that encircled the world. At first, the change was slow, but with scientific and technical innovation, shipping speeds increased and vessels grew larger, communications quickened, and perceptions of 'time-space' narrowed between distant locations. The ebb and flow of connections and exchanges of goods, people, ideas, and technologies that were so much a part of the silk roads in the millennia before the 1500s, which we might think of as 'proto globalisation', were transformed into the inter-connected globalised world of the present from the sixteenth century.

Marco Polo and knowledge of the silk roads

The interactions across Eurasia produced a vast body of travel literature about the silk roads. These texts included accounts in Chinese dynastic histories and the writings of Buddhist monks, as well as reports by officials. Travelling as a translator in one of the fleets of Zheng He, Ma Huan (c. 1380–1460) penned a schematic yet invaluable chronicle describing the human geographies along the maritime silk roads. The spirit of the work is stated in the preface, where the author explains:

> I passed through the various countries, with their [different] seasons, climates, topography, and peoples; and I saw [these countries] with my own eyes and I walked [through them] in person […] So I collected [notes about]

> the appearance of the people in each country, [and about] the variations of the local customs, also [about] the differences in the natural products, and [about] the boundary-limits.
>
> (Ma 1970 [1433], 69–70)

For Europe, one of the most important accounts of Asia was Marco Polo's *Il Milione*. Polo (1254–1324) was a Venetian merchant who travelled to East Asia with his father Nicolo and his uncle Matteo, between 1271 and 1295. During his stay in Yuan China, Polo witnessed the vastness of its landscapes, the wealth and sophistication of its cities and industries, and he described the pepper trade and the rule of Kublai Khan, whom he claimed to have served as imperial officer. *Il Milione* became required reading for all those interested in "the Indies" – the ill-defined lands beyond Islam – including, in the fifteenth century, Christopher Columbus.[3] Yet, Polo's famous window on the civilisations along the silk roads was not an isolated piece of writing. Rather, *Il Milione* embodies a broader curiosity in late-medieval Europe about Asia (Phillips 2013). Europe's interest and openness towards the human geographies, cultures, and markets of the silk roads is present in other travel writers, who were not merchants but rather churchmen. They included not only envoys like Giovanni of Piano Carpini and later William of Rubruck, sent to meet the Mongols in the thirteenth century, but also a merry and amusing author like Odoric of Pordenone, and a bishop turned geographer like Jordan of Severac. Their accounts witness how after the late medieval commercial revolution Latin Christendom was expanding its knowledge of the world. In a couple of centuries, Portuguese and Spanish ships would map oceanic routes, find straits, and open 'new maritime silk roads' (Salonia 2022).

The Jesuit priest Matteo Ricci (1552–1610), while different from the merchant Polo, was his intellectual heir. Ricci developed a profound respect for Chinese civilisation, befriending Ming literati and arguing that the Confucian tradition could be reconciled with the Gospel. Like Polo earlier, Ricci himself produced positive images of the East for European audiences, but he also initiated a long history of scientific exchange (through the diffusion of algebra, geometry, cartography, and astronomy), which unquestionably benefited China (Ma 2021). The transfer of scientific institutions and practices represents yet another facet of the silk roads, which several chapters in our volume pay attention to.

The organisation of the volume

Our aim is therefore to reimagine the silk roads, offering a definition that moves away from the romantic origin of the 'Silk Road' and engages constructively with some of the issues in Susan Whitfield's (2007) article "Was there a Silk Road?" Thematic sections, disciplines, and geographies in this volume reflect that we took seriously two problems she points to: "the obsession with China […] impeding the development of a more nuanced understanding with pre-modern Eurasian history" and the "dichotomy" between scholars and publications discussing land and sea routes.

The volume is organised into five sections. We start with the Environment, comprising three chapters. Section 1 begins with Matt Jones's chapter that shows how the regions of the silk roads experienced the same broad range of climatic changes, periods of warming and cooling, that affected other parts of the Northern Hemisphere. In Chapter 3, Tengwen Long looks at ecological variability and the diffusion of crops and agricultural practices along the 'Proto-Silk Roads' well before documented exchanges. Chris King in Chapter 4 jumps forward a few millennia to examine the propagation of diseases along the silk roads, particularly the bubonic plague (Black Death) that killed a third to half of the population in Europe around the middle of the fourteenth century.

Section 2 has four chapters focused on material culture. In Chapter 5, Andreas Kropp discusses Palmyra, a 'caravan' city, and a vital hub for long-distance trade between the Persian Gulf and the Mediterranean Sea. He argues that its very survival depended on trade links. In Chapter 6, Julian Henderson describes the contrasting silk road hubs of Chang'an and Baghdad and illustrates silk road interconnectedness using material culture from the Belitung shipwreck and the Famen Temple (法門寺). In Chapter 7, Qin-Qin Liu demonstrates how the movement of small glass beads and their scientific analysis can be used as proof of intergroup networks between the Mediterranean and China in the mid-first millennium BCE. Gilberto Artioli et al. in Chapter 8 focus on St Mark's lion in Venice. Set in a historical context, they discuss the first scientific evidence for the use of Chinese metal in its construction combined with stylistic considerations.

Section 3 explores the diversity of faiths and social groups. In Chapter 9, Junqing Wu investigates the complexity of the relationship between foreign Buddhist missionaries and the Chinese state during centuries of disunity between the Han and Sui dynasties. The missionaries positioned themselves as 'soul savers' and 'ideologist' servants of emperors to navigate court politics. Next, Pin Lyu explores the role of the Sogdian merchants, Central Asia's middlemen extraordinaire for many centuries and purveyors of goods, but also religions, technologies, and lifestyles. He calls them "cultural bees". George Woudhuysen in Chapter 11 reviews our understanding of the nomadic Huns and their intrusion into the Roman world in the fourth century with important implications for the study of the late Roman Empire. In Chapter 12, Teng Li discusses the expansion of Christianity on the silk road in the Tang and Mongol periods, with its successes and crises. Next in Chapter 13, Irina Arzhantseva and Heinrich Haerke provide a case study of early medieval Dzhankent (Kazakhstan) between the sixth and eleventh centuries, a transshipping port on the silk roads. Chapter 14 by Marek Jankowiak considers the exchange of furs, slaves, and silver dirhams between Central Asia and Scandinavia during the ninth and tenth centuries. In Chapter 15, Claire Taylor describes slavery from the point of view of the slaves, the historians' understanding of slavery, and the Mongol period of Afro-Eurasian slave trade.

The four chapters of Section 4 examine Eurasian trade and exchange, including three that address in part the gap in the studies of the maritime route. Georg Schindler's Chapter 16 is a case study of map-making and knowledge about Eurasia in the fifteenth century. He shows German cartographers were less

informed, reproducing ancient knowledge, than those in the Mediterranean world, linked more intimately with silk road commerce. The neglected – at least in English – story of Northeast Asia's involvement in the silk roads is told by James Fujitani in Chapter 17. Between the seventh and fifteenth centuries, Japan, Korea, and later the Ryukyu Islands were drawn into trade and gift-giving, including items that had come from Southeast Asia and the Indian Ocean. In Chapter 18, Matteo Salonia tells the story of the 'Iberian Silk Roads', the contribution of the Portuguese to forging a maritime route from Europe to Asia in search of spices and souls. And with the Spanish discovery of a trans-Pacific route, the Iberians in effect girdled the world in silver flows and ushered in modern globalisation. Stephen Morgan in Chapter 19 seeks to foreground the importance of Southeast Asia in the 'maritime silk road', not simply as the source of the fabled spices but as a network of vital entrepôts that hosted diasporic merchant communities from West, South, and Northeast Asia.

The final section considers the History and Myth of the silk roads from the late nineteenth century to the present. Jan Romgard in Chapter 20 tells the fascinating story of Sino-Swedish collaboration in the early twentieth century. The Swedes Sven Hedin, a student of Richthofen, and J.G. Andersson produced pioneering knowledge of the archaeology and geology of western China and in collaboration with the Chinese government and scholars helped to lay the foundation of modern science in China. Next, Benjamin Barton examines the geo-political strategies of China's BRI on its tenth anniversary (September 2023). He focuses on the politics of infrastructure development, a physical hallmark with which the Chinese policies are most closely associated. A critical lens is applied to the BRI in Chapter 22 by David O'Brien and Melissa Shani Brown. They argue that the greatest 'success' of the BRI is not in the delivery of infrastructure projects or the projection of China's 'soft power', but in mobilising the domestic nationalist discourse to portray the party state as a global power to protect its own (Han) people, most graphically in the securitisation of Xinjiang and its non-Han population.

We conclude the volume with two brief chapters. Chapter 23 comprises a set of visual images and extended captions, which guide readers through a variety of chronologies and themes. We editors believe that students and scholars can reimagine the silk roads also by absorbing and reflecting on a broader set of visual evidence and historical objects. Our conclusion, Chapter 24, briefly takes stock of our findings and encourages colleagues from many disciplines to reconsider the definition of silk roads. We suggest that, once this concept is problematised and depoliticised, silk roads studies remain a vibrant and important field, where different academic disciplines and traditions meet and contribute to uncover a shared past.

Notes

1 While the 'maritime silk road' (海上丝绸之路) was coined decades ago, the term is politically charged because it is associated with current policies of the Chinese government, the Belt and Road Initiative (BRI). An older term, the 'spice route' is often more appropriate and fits better the character of the trade around the Indian Ocean from the first century. For a critical review of the term and the BRI, see Sen (2023) and the O'Brian and Brown chapter in this volume.

2 This neglect of the maritime routes is curious. Christian (2000), Hansen (2012), and Millward (2013), for example, acknowledge the importance of the maritime exchanges, but hastily add that for reasons of simplicity, they will focus on the land routes. The effect is to distort scholarly work and colour the popularist image of the silk roads as one of caravan and deserts.
3 On the much-debated history of *Il Milione*'s text, which was drafted by Rustichello da Pisa while Polo and he were held in a Genoese prison, see Larner's (1999) and Cliff's introduction to his translation of Polo (2015).

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Part 1
Environment

2 Climates of the Silk Road through the Common Era

Matthew D. Jones

Introduction

At the end of 2023, world leaders met in the United Arab Emirates for the 28th Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change. Climate change is high on the global agenda (IPCC 2023, 10). Its drivers and effects are seen and felt differently by peoples in different places across the world (IPCC 2022, 10). Although the dominant drivers of climate have changed in the last 200 years with anthropogenic activities, and methods to observe this on a global scale have much improved in the last few decades (IPCC 2023, 4), a changing climate that impacts different peoples in different ways is not new.

Archaeologists, geologists, and historians often focus interest on climate events that have impacted human behaviour, in various places and times, over millennia (e.g. Jones et al. 2019). This chapter focuses on the last c. 2000 years, the Common Era (CE), drawing on examples from this period of how climates along the silk roads changed, and the potential impacts this may have had on those travelling along them. It takes a long-term view, largely of the pre-industrial era before 1850 CE, including discussion of regional patterns through the main global climate periods of the last two millennia, the Late Antiquity Little Ice Age (c. 536–660 CE), Medieval Climate Anomaly (c. 900–1250 CE), and Little Ice Age (c. 1450–1850 CE).

The scale of the Silk Road in space, as well as the two millennia that are the time focus here, add complexity to reviewing change. The land routes across Central Asia rise from sea level to thousands of metres above it, crossing continents, Asia and Europe, where weather is controlled by systems originating from at least three major oceans. There is no one story of climate, climate change, or potential impact on human society, even over the relatively short period of the last two millennia. The overall result of these factors is a picture of changing gradients over four dimensions (space and time), in temperature, hydrology, and the resources important for people that climates control.

Given the interest in the Silk Road much has been written on its climates and environments in the past, present, and future (e.g. Yang et al. 2019a; Hao et al. 2020). Yang et al. (2019b, 4–5) note how past climate changes provided either favourable or adverse conditions for human economies, particularly agriculture, and/or amplified changes brought on by other social stressors. These points remain relevant today

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and into the future with current and planned development in the Silk Road regions, dominated by arid and semi-arid climates, heavily reliant on water resources. There is great uncertainty about how these might change in a world that continues to warm (Zhou et al. 2018, 181). Although past conditions, and human responses to them, can give useful context to present and potential future worlds, Yang et al. (2019b, 4–5) also note the importance of using caution in drawing direct causal links between climate and societal changes recorded in the geological and archaeological records respectively. Care is needed given the nonlinear nature of human–environment relationships, and the nuances of reconstructing both past climate and societal change. This chapter expands on these themes, to give a flavour of previous work, and direct readers to it, summarising key climate changes of the Common Era, how well these are understood for the region, and giving examples of how these changes have influenced the Silk Road and the people who inhabited various parts of it.

Climatic setting

Much of the discussion around climate change across the Silk Road regions, through time, focuses on changes in the intensity of, and interactions between, the dominant weather patterns that provide the seasonal patterns of precipitation observed in recent time (An et al. 2012, 1; Lai et al. 2024, 92). Before discussing past change, these dominant patterns are first briefly introduced.

At the western end of the historical silk roads, Mediterranean climates are dominated by warm summers with little precipitation and cold winters with precipitation largely sourced from the North Atlantic (Jones et al. 2019, 3). The winter and spring storm systems can carry rains well into the Zagros mountains that span from southeastern Turkey through northern Iraq and Iran.

Although the westerlies can bring some winter rains to the western end of the Tibetan Plateau, their dominance in winter this far east along the Silk Road regions is usually associated with a drier season. Eastwards of the Zagros precipitation broadly becomes summer dominated and controlled by various monsoon systems, outlined below (Yihui and Chan 2005, 118), which have shaped, and continue to be critical for, much of life in the low- to mid-latitudes.

The Indian Summer Monsoon (ISM), or southwest monsoon, given the predominant surface wind directions that accompany it (Gadgil 2003, 430), brings rains to India, particularly to the northeast and west coast (Hrudya et al. 2021, 1) and surrounding countries, mostly from June through to September. These rains, critical for regional agriculture and water resources (Singh et al. 2019, 2) are sourced from the Indian Ocean, and in the present also bring summer rains to the southern end of the Arabian Peninsula.

Further east, the East Asian Summer Monsoon (EASM) dominates across most of China in the summer, although with variations in the main timing of precipitation. The development of the EASM has been described as covering four main stages (e.g. Chiang et al. 2017, 3788), moving generally northwards with time. There is spring rainfall in southern China, followed by rains driven by substantive convection over the South China Sea around mid-May. In mid-June, the rainfall

band moves northwards to central China, and mid-July to mid-August sees rainfall in north-eastern China.

The dominance and extent of these different systems have changed over time. Over Holocene time scales (the current interglacial, starting c. 11,800 years ago), the monsoon systems have generally weakened due to reduced solar insolation. For example, the Indian monsoon rains do not push as far north as they once did into Arabia (Fleitmann et al. 2003, 1737) or the Tibetan Plateau (Zhang et al. 2021, 1). These latter studies show that compared with these longer, multi-millennial time-scales, the last millennium has been relatively stable. However, instrumental data do show variability in recent decades. June–September rainfall over central India significantly weakened over the second-half of the twentieth century with this trend reversing since the early 2000s (Singh et al. 2019, 8). The EASM intensity index shows higher values through the 1990s than through the preceding or following decades (Chen W. et al. 2023, 1436). Modelling experiments suggest that the future Millennium Silk Road core region, western China, and central Asia, could be between 1.5 and 6 degrees Centigrade warmer by the end of the twenty-first century (Zhou et al. 2018, 180) with an associated increase in precipitation of up to 14 percent compared with the late twentieth century.

The drivers of these recent and future changes are the varying responses of oceans and land masses, and how they interact, to a warming world and human activities. For example, the late-twentieth-century weakening of the ISM has been linked to warming of the Indian Ocean but also directly to change in irrigation and increases in anthropogenic aerosols in the atmosphere (Singh et al. 2019, 8–9). Changes in monsoon onset in the South China Sea, which has a clear link to overall EASM intensity, have been linked to ENSO activity, although this relationship has weakened in recent years (Chen W. et al. 2023, 1444). The complex interactions of the monsoonal systems, and the factors that cause change in their behaviours, require us to have a perspective longer than the instrumental climate record, one that spans hundreds to thousands of years (i.e. palaeoclimate), to contextualise and better understand recent, and likely future, change.

Common Era climate change

Palaeoclimatic information is held in natural archives, such as trees, corals, lake and marine sediments, and the chemical and biological proxies of climate stored within them e.g. pollen, oxygen isotopes (Jones et al. 2019, 4). Each proxy system, that is the combination of archive and proxy (e.g. Dee et al. 2015, 1220), filters climate in a particular way such that a time series of reconstructed climate, and climate change, are interpreted on a case-by-case basis. Different proxy systems will give information on different parts of the climate system (e.g. temperature, rainfall), and from different time scales (e.g. for a particular season, or an annual average), and at different resolutions (from sub-annual to multi-year time steps). The resulting limits of what a particular palaeoclimate time series can inform us about past climate, including its potential regional extent, need to be weighed when comparing with other climatic or cultural reconstructions.

Proxy data show that that global mean surface temperatures (GMST) were generally warmer in the first millennium of the Common Era, and cooler in the second millennium prior to the twentieth century (PAGES 2k Consortium 2019, 644). The magnitude and timing of the changes between those warmer and cooler phases varies between regions (PAGES 2k Consortium 2013, 341). These changes in GMST also change patterns in the global water cycle, with differing regional responses (Konecky et al. 2023, 1001).

The Asian temperature reconstruction in Figure 2.1a shows that temperatures were low, relative to the full 2000 years, between 1200 and 1850 CE. Collectively, the tree ring records used for this reconstruction cover much of the area of the silk roads east of modern-day Iran, but sparsely and irregularly (PAGES 2k Consortium 2013, SI 24). A tree-ring temperature reconstruction from the Altai-Sayan mountains (Figure 2.1c), not far from the northern silk road, also shows a particularly pronounced cooling at 536 CE (Büntgen et al. 2016, 233). Tree rings have the advantage of producing annually resolved records of past change, with very precise dating control. Individual trees have relatively short time spans such that these reconstructions come from the combination of data for multiple individual trees (Jones et al. 2019, 6). A better spatial coverage of available climate proxy data gives more confidence in the patterns observed, which has led to increased efforts to synthesise multiple individual palaeoclimate time series where possible in reconstructing regional climate. Chen et al. (2023, 1471) compared 30 palaeotemperature records that cover at least the last 1,000 years from the Silk Road regions. They found (Chen et al. 2023, 1475) a consistent pattern of regional temperature change for the last 1,000 years, but a similar pattern was not evident for the first millennium of the CE for which fewer records are available. There is more regional variability in temperature change for the first-half of the first millennium CE (Chen et al. 2023, 1475).

There are differing spatial patterns of hydrological change across the broader Asian region through the CE. The hydroclimate patterns shown in Figure 2.1a are globally integrated oxygen isotope anomalies from published records in the Iso2k database, a data synthesis project targeting global hydroclimate information for the CE (Konecky et al. 2020), that are predominantly controlled by effective moisture, the balance between precipitation and evaporation. Most of the sites in the middle to eastern parts of the Silk Road follow this global pattern, with more negative anomalies in the generally cooler period of the Common Era, between c. 1200 and 1900 CE and more positive anomalies in the preceding, and following, generally warmer periods (Konecky et al. 2023, 998). The sites at the western end of the Silk Road show the opposite pattern.

Two examples, from lake sediment archives, can help illustrate this opposing pattern of hydrological change. Lake Nar, in central Türkiye, recorded a positive isotope anomaly through the period 1400–1960 CE, and prior to c. 500 CE (Jones et al. 2006, 363), marking periods of relatively higher evaporation and/or lower precipitation. In comparison, Lake Qinghai, in west China, recorded a shift to more negative isotope values at 1400 CE, marking a change to relatively more precipitation compared with evaporation, with a shift back to more positive values recoded

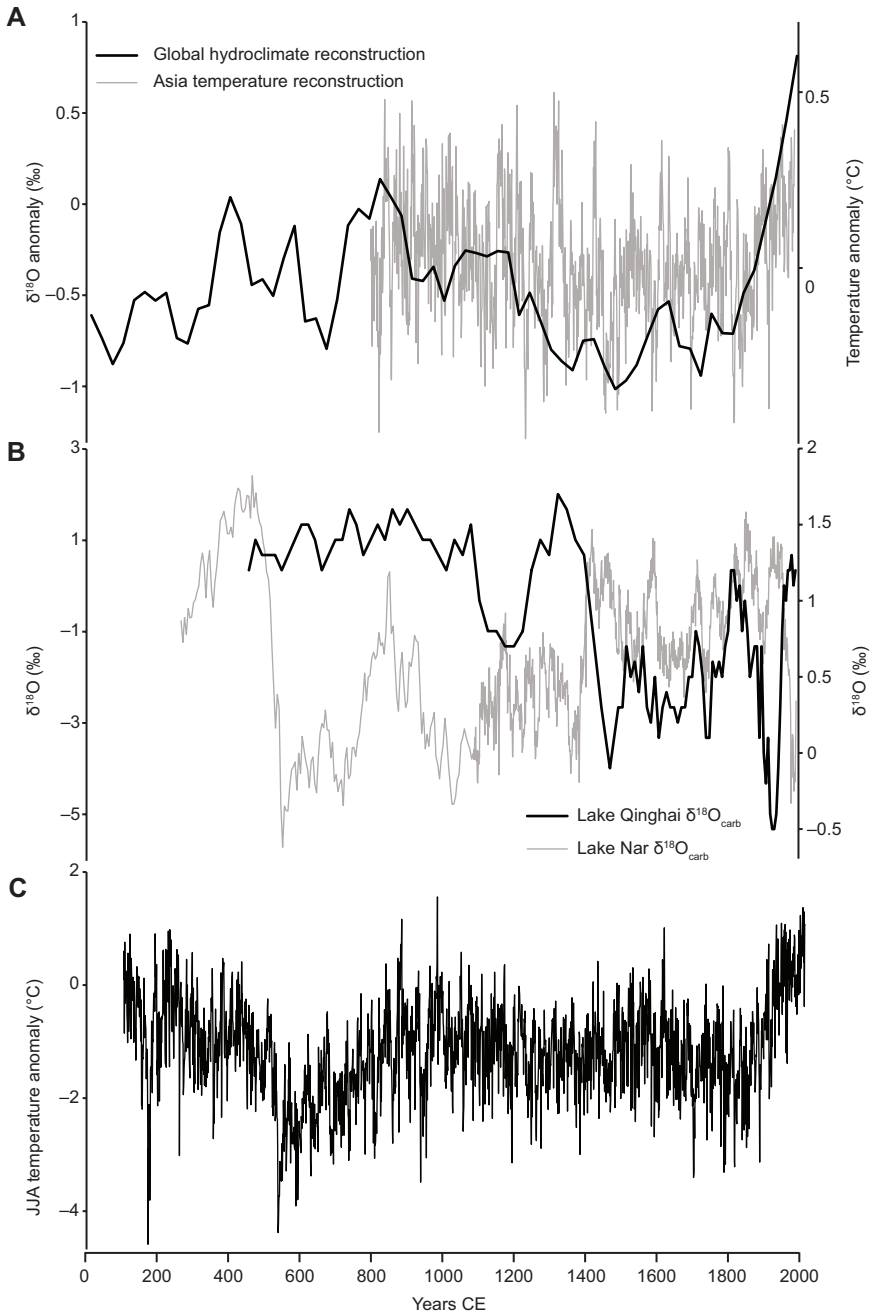

Figure 2.1 (a–c) Selected time series of Common Era climate and environment. (a) Temperature (grey line) and hydrology (black line) anomalies. The temperature reconstruction is for Asia, from 229 tree ring chronologies (PAGES 2k Consortium 2013, SI 7) and the hydroclimate reconstruction is a global view of 162 oxygen isotope records from multiple archive types sensitive to effective moisture i.e. the precipitation to evaporation ratio (Konecky et al. 2023, 998). (b) Comparison of the lake carbonate oxygen isotope records from Lake Nar (Jones et al. 2006, 363) and Lake Qinghai (Henderson et al 2010, 2220). (c) The Altai tree ring temperature anomaly reconstruction (Büntgen et al. 2016, 233). See text for further details.

in the sediments since 1950 (Henderson et al. 2010, 2220), the exact opposite of Lake Nar (Figure 2.1b).

These two sites, and their interpretations, highlight some of the key factors to consider when interpreting, and using, such time series as records of past climate from subtly different proxy systems (Jones et al., 2019, 20). In terms of timing, the lake records both show significant shifts about 200 years later than the global hydroclimate and regional temperature trends shown in Figure 2.1a. This highlights the need for the continued production of new, local, palaeoclimate records, given the recognition that there are regional differences in how and when climate changes. This is particularly important if past inferred climate changes are to be used to support hypotheses of cultural change from archaeological or historical evidence. It is important to acknowledge the spatial relevance of a particular palaeoclimate reconstruction i.e. is it local or regional (Jones et al. 2017, 136).

The time series from Lake Nar and Qinghai Lake are both examples of lake oxygen isotope change, but the interpretations of their opposite signals are subtly different. Jones et al. (2006, 364) show that changes in both winter (rainfall) and summer (evaporation) climate likely impacted Lake Nar, such that there was both a reduction in rainfall and an increase in evaporation at 1400 CE. At Lake Qinghai, the negative shift at the same point in time is explained as being due to a reduction in evaporation due to the lower Little Ice Age temperatures at the time, combined with a change in the source area of the precipitation (Henderson et al. 2010, 2221) as westerly sourced air masses have more isotopically negative precipitation than summer monsoonal ones, the latter likely being reduced during the cooler conditions of the time.

There are multiple other proxy records that add to the story from Lakes Nar and Qinghai. These are not all discussed here but the data for many, alongside meta-data to help with their interpretation, can be found in the databases used in this chapter, Iso2k (Konecky et al. 2020, 2265) and PAGES 2k (PAGES 2k Consortium 2017, 2), or at repositories such as the NOAA palaeoclimatology archive (National Oceanic and Atmospheric Administration 2024). This availability of data allows their use for multiple studies, across disciplines, and allows further interrogation of the data as well as the citations from which they are sourced.

One such example is a pollen-based reconstruction of annual precipitation from Lake Sasikul in Tajikistan (Ding et al. 2023, 7) that follows the global hydroclimate pattern outlined in Figure 2.1a. At Lake Sasikul, there was more precipitation falling in the generally cooler period of 1550–1900 CE, and less annual precipitation between 950 and 1300 CE. However, not all of Asia was wetter through the cooler period of the Common Era. In Southeast Asia, a series of droughts in the period between 1400 and 1900 CE significantly impacted societies, including Angkor (Buckley et al. 2014, 4). The relatively close location of Lake Sasikul to the southern Silk Road routes also enables comparison of the climate story with the local archaeological record (Ding et al. 2023, 9). A peak in the number of archaeological sites in Xinjiang between c. 600 and 900 CE, a proxy for human activity in the region, corresponds to a period in the pollen climate reconstruction that had

relatively average precipitation and temperature values. These relatively stable, and non-extreme conditions were ideal for societal development.

As well as the significant excursion at 1400 CE in the Lake Nar isotope record, conditions also change abruptly c. 530 CE (Figure 2.1b). There has been much discussion about climate change and societal impacts linked to the 536 CE event (Gibbons 2018), likely caused by multiple North American volcanic eruptions including in 536 and 540 CE (Helama et al. 2018, 1), not least the relatively short but intense period of cooling through the Late Antiquity Little Ice Age identified in some records such as the Altai tree ring record shown in Figure 2.1c (Büntgen et al. 2016, 233). The hydrological transition in Lake Nar at 536 CE is not the same as observed during the cooling of the second millennia CE. At 536 CE, the carbonate oxygen isotopes shift to more negative values (Figure 2.1b), suggesting less evaporation during this cooling phase, and potentially more precipitation. Measurements of oxygen isotopes from the same core record from diatoms, a type of unicellular algae, which measure spring lake conditions compared with the summer conditions measured by the carbonates, indicate this period was one of strong seasonality between winter and summer (Dean et al. 2013, 40). There was likely more snow in the catchment than at any other time in the last 2,000 years. The combined isotope records from Lake Nar in Türkiye and the Altai tree rings from the region where present-day China, Kazakhstan, Mongolia, and Russia intersect, suggest the years following 536 CE would have been a period when it was relatively difficult to travel along the Silk Road.

Summary and societal impacts of a changing climate

The examples above show that the Silk Road regions experienced the main global climate changes of the Common Era, with local tree ring chronologies marking the temperature anomalies of the Late Antiquity Little Ice Age (c. 536–660 CE), Medieval Climate Anomaly (c. 900–1250 CE), Little Ice Age (c. 1450–1850 CE), and post-industrial warming since c. 1850 CE (Figure 2.1a and c). As elsewhere, the hydroclimatic and resulting hydrological pictures of change across the regions, in space and time, are more complex in terms of consistency of direction and magnitude. There were times when some areas got "wetter" (see Jones 2013) whilst other became "dry", with both scenarios having potential impacts on those people living or travelling through those spaces.

Recent scholarship has argued that the 'initial' development of the Silk Road was enabled by the climate conditions at the start of the Common Era. The period 300 BCE through to 1000 CE was characterised by relatively strong East Asian Monsoon intensity, which may have been conducive to more agricultural activity in the semi-arid areas of China during the Han Dynasty, providing a foundation for the creation of the 'historical' Silk Road (Fan et al. 2023, 133). Climate model simulations of central Asia also show an increase in precipitation amount through the Common Era compared with the period 6,000–3,000 years before present (Hill 2019, 252) which may have helped drive broad, regional scale, urbanisation, and economic development. Fang et al. (2019) summarise the impacts of climate change in China over the

Common Era and also show the importance of climate conditions helpful for agriculture in explaining many of the periods of societal success through this time. This study compares temperature and aridity indices from China with time series of economic activity (including grain yield and fiscal balance) reconstructed from 1,091 records of the economic history of China (Fang et al. 2019, 238). The results show that warmer conditions correlate well with periods of prosperity, likely due to increasing agricultural yield; of 34 periods of prosperity identified, 18 occur in relatively warm periods, and 26 when conditions changed from cold to warm (Fang et al. 2019, 240).

Although an enabler, climate and environment can also be a disrupter of human activity. There has been discussion about the relationship between the Silk Road, climate, and the spread of disease, especially *Yersinia pestis* (Xu et al. 2014, 5; see King chapter). A direct causal link between climate changes and plague pandemic is difficult to make, given the complexity of the *Y. pestis* system (Fell et al. 2023, 2) and especially for past outbreaks such as the Justinian plague (541–544 CE) where data on the exact nature of spatial change in climate and disease outbreak are relatively sparse (Luterbacher et al. 2020, 7). However, the close proximity of this pandemic to the 536 CE climate event, in particular, makes the potential links an interesting area for study (Helama et al. 2018, 7).

Drought has been suggested as a driver of urban decline along the Silk Road, for example in Panjikent, once a Sogdian town in present-day Tajikistan, which declined as a centre of importance after 800 CE following drought (Owczarek et al. 2018, 698). In this case, the local resource system was particularly sensitive to drought because of deforestation and use, potentially overuse, of the relatively unstable loss for agriculture (Owczarek et al. 2018, 698). The impact of human activity on local landscapes, and how these change sensitivities of natural systems to climate change, has also been suggested to have occurred earlier in Silk Road history, as the Chinese empire expanded west through the Han dynasty, 206 BCE–220 CE (Mischke et al. 2019, 45). Mischke et al. (2019, 62) describe how four core records from lakes in the region of Han Empire expansion (Lop Nur and Bosten lakes in Xianjiang, and the former lakes of Eastern Juyan and Zhuyeze) show substantial decreases in lake level and open water surface area at this time. Given that surrounding regional records show generally wetter conditions at the same time, Mischke et al. (2019, 62) suggest that it was water for irrigation, withdrawn from the tributaries of these lakes, that led to lake-level fall, although better chronological control is needed to fully investigate this hypothesis.

These last examples show how closely climate and human behaviours, and their impacts, are linked, particularly through the Common Era, and how interactions between these two actors vary at different scales. The climate changes summarised in this chapter, and the examples of its impacts locally on the ancient Silk Road, show that climate change was an important part of the story of the Silk Road, and that more work, particularly around the subtleties of hydroclimate change, can add further nuance to this. The Panjikent example also highlights how human activities in "better" times can lead to increased vulnerabilities when things, including climate, change. It is slightly disheartening that over 1000 years after the "fall" of Panjikent, discussions on how to mitigate the impact of human activities on climate and environmental systems continue, while vulnerabilities continue to increase.

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3 Ecological variability and early agriculture along the Proto-Silk Roads

Tengwen Long

Introduction

The importance of the concept of Silk Road lies in its encapsulation of the extensive and profound cultural interconnections that have characterised the Eurasian continent. Eurasia, in the annals of world history, occupies a distinctive and pivotal role when compared with other continents. Prior to the 'Age of Discovery', Eurasia was then the true global heartland, fostering some of the most advanced and resilient civilisations in human history. In the contemporary era, the Eurasian continent is home to nearly 70 percent of the world's total population, a demographic consequence of its historical uniqueness.

Historians frequently attribute this importance to the heightened and more diverse cultural interactions among population groups inhabiting Eurasia in comparison with their counterparts in other regions of the world (Stavrianos, 1991). These interactions engendered opportunities and exerted selective pressures, compelling these societies to progress and adapt in response.

The close cultural connections within the Eurasian continent extend far back into prehistory, well before the narrowly defined historical Silk Road that is often associated with the expansion of the Han Empire of China into Inner Asia, primarily for the acquisition of warhorses and alliances aimed at countering the nomadic Xiongnu tribes (Dong, 2019). Referred to as Proto-Silk Roads or Proto-Silk Routes, these prehistoric cultural connections were marked by the dispersal of agriculture and associated agricultural technologies. Securing a stable food supply presented a significant challenge to early human societies, with sedentary agriculture emerging as a pivotal advancement. This agricultural shift provided a more dependable source of sustenance compared with subsistence hunting and gathering. Additionally, it facilitated the accumulation of social surplus and population growth. The resulting demographic increase exerted population pressures that spurred migration to less populated regions in search of arable lands for farming, shaping the cultural landscape of Eurasia.

The farming/language dispersal hypothesis (Diamond and Bellwood, 2003) posits that many of today's largest language families were dispersed historically in tandem with the diffusion of agriculture. This hypothesis finds support in that Eurasia was the cradle for numerous major language families, including Indo-European,

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Sino-Tibetan, Austronesian, Austroasiatic, Altaic, and Uralic. An examination of the origins and spread of agriculture across the Eurasian continent helps clarify the origins and distribution of some of the world's most substantial populations.

In this chapter, the concept 'proto-silk roads' is employed to trace the trajectory of social developments in Eurasia during prehistory within the broader context of the environmental and ecological diversity that characterises this continent.

Ecological variability in the Eurasian continent

Eurasia is the largest of all continents, covering 36 percent of Earth's landmass, including the lowest point on land, the Dead Sea at ca. 430 m below sea level (Figure 3.1), and the highest point, Mount Everest, towering at ca. 8,850 m above sea level. One of its most notable features is the Qinghai-Tibetan Plateau, which extends over an area of approximately 2.5 million km^2 and an average elevation of over 4,000 m above sea level. The plateau has obstructed the influx of warm and humid air masses from the Indian Ocean, permanently altering the Northern Hemisphere Westerlies and rendering Inner Asia extremely arid. This aridity gave rise to vast deserts, such as the Taklamakan, where annual precipitation seldom exceeds 50–100 mm.

Eurasia exhibits distinct environmental zones in terms of latitude, longitude, and altitude, leading to a wide range of temperature and precipitation patterns that foster significant geographical and ecological diversity across the continent. Eurasia has a multitude of biomes (Dinerstein et al., 2017), defined as unique ecosystems characterised by specific associations of plants and animals adapted to their regional climate, topography, and soil.

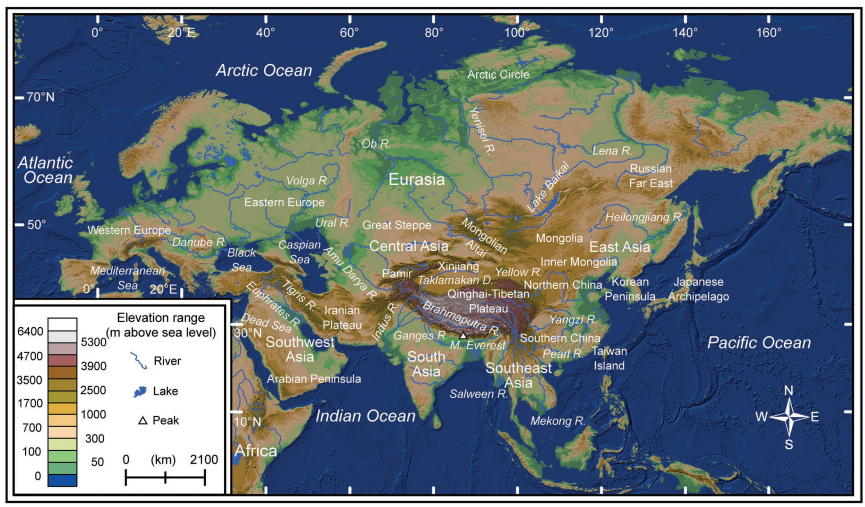

Figure 3.1 The topography of Eurasia.

Source: Tengwen Long.

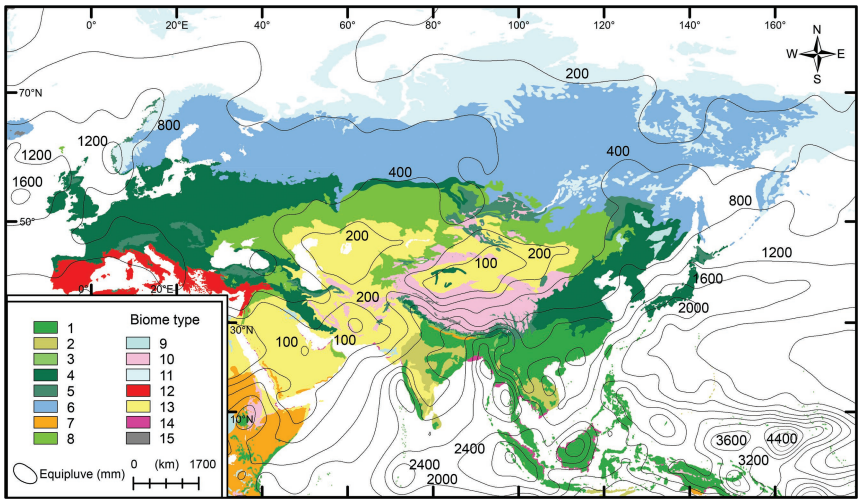

Figure 3.2 The rainfall pattern and distribution of major biomes in Eurasia. Biome types (Dinerstein et al., 2017): (1) tropical and subtropical moist broadleaf forests; (2) tropical and subtropical dry broadleaf forests; (3) tropical and subtropical coniferous forests; (4) temperate broadleaf and mixed forests; (5) temperate conifer forests; (6) Boreal forests or taiga; (7) tropical and subtropical grasslands, savannas, and shrublands; (8) temperate grasslands, savannas, and shrublands; (9) flooded grasslands and savannas; (10) Montane grasslands and shrublands; (11) tundra; (12) Mediterranean forests, woodlands, and scrub; (13) deserts and xeric shrublands; (14) mangroves; (15) rock and ice.

Source: Tengwen Long.

In the northern regions of Eurasia (Figure 3.2), including the Arctic Circle and adjoining temperate zones, tundra and taiga (boreal forests) biomes dominate, reflecting the influence of latitude and characterised by low temperatures and low evaporation rates. Moving to the southern-most side of the continent, the distribution of biomes is shaped by both latitude and longitude. In the eastern part, tropical and subtropical forests thrive in regions like southern China, Southeast Asia, and South Asia, where high temperatures and precipitation levels prevail. The monsoon, characterised by seasonal shifts in wind direction and associated with varying humidity and temperature, further influences these regions, leading to pronounced seasonality. These forests transition into temperate forests in northern China, the Korean Peninsula, parts of the Russian Far East, and the Japanese Archipelago. In the western part of Eurasia, Mediterranean forests, woodlands, and scrub biomes, along with temperate forests, predominate in Western Europe, some parts of Eastern Europe, and parts of Southwest Asia. Between the eastern and western termini of the continent, a large area of deserts and xeric shrublands biome stretches from the Arabian Peninsula, through the Iranian Plateau, the Pamir, and Central Asia, to

Table 3.1 Major rivers in Eurasia and their global rank of length

River	*Global rank of length*	*Continent*	*Length (km)*	*Basin area (10,000 km²)*
Yangzi	3	Asia	6,300	180
Yellow River	5	Asia	5,464	75.2
Ob	6	Asia	5,410	299
Mekong	9	Asia	4,500	81.1
Lena	10	Asia	4,400	249
Heilongjiang	11	Asia	4,370	184.3
Yenisei	14	Asia	4,102	258
Volga	16	Europe	3,530	136
Salween	17	Asia	3,200	32.5
Indus	21	Asia	2,900	117
Brahmaputra	22	Asia	2,900	66.5
Danube	24	Europe	2,850	81.6
Shatt al-Arab	25	Asia	2,750	67.3
Ganges	27	Asia	2,580	90.5
Amu Darya	29	Asia	2,540	46.5
Ural	30	Asia	2,428	23.1

Source: The data are from Encyclopedia of China (2003).

China's Xinjiang and Inner Mongolia regions, and Mongolia. Further north lies an extensive belt of temperate grasslands, savannas, and shrublands known as the Eurasian Steppe or the Great Steppe. Distinguished by its relatively higher precipitation levels when compared with the arid deserts and xeric shrublands biome, this steppe exhibits greater ecological productivity. Lastly, the abovementioned landscape is punctuated by montane biomes, further diversifying the environmental mosaic.

The Eurasian continent has some of the world's major river systems (Table 3.1), which play vital roles in connecting various biomes and serving as ecological hotspots and conduits for the fast spread of plants and animals. Archaeological evidence also suggests that early hunters and gatherers who moved out of Africa strategically followed these large river systems (Ge et al., 2021). River valleys have fertile alluvial soils that support highly productive ecosystems, although these fertile soils are often only patchily distributed depending on the supply of sediments from the rivers during seasonal floodings.

These dynamic environmental patterns are a backdrop for the development of human activities and cultures across the continent.

Early agricultural centres in the Eurasian continent

While most contemporary societies rely on agriculture for their daily sustenance, the ancestors of humans depended exclusively on hunting and gathering as their primary source of food throughout almost the entire Pleistocene (from ca. 2,580,000 years before present [YBP] to ca. 11,650 YBP). Archaeological evidence (Pokhojaev et al., 2019) suggests that the initial transition from a hunting and gathering

lifestyle to food production took place around the shift from the late Pleistocene (from ca. 129,000 to ca. 11,650 YBP) to the Holocene (from ca. 11,650 YBP to the present). This transition, in addition to the adoption of a sedentary way of life and the emergence of pottery production, are often regarded as the three pivotal components of the Neolithisation or Neolithic Revolution. These transformative developments marked the onset of the Neolithic Age.

The precise catalysts for this revolution remain a subject of debate. Many potential mechanisms have been proposed, encompassing factors such as environmental change, the imperative to sustain burgeoning populations, and alterations in social structures (Abbo et al., 2005). Despite these ongoing debates regarding the triggers, the earliest appearance of the Neolithic Revolution, including the advent of agriculture, was confined to a few core regions (Bellwood, 2005). Two notable examples of these regions, Southwest Asia and eastern China, are situated on the Eurasian continent (Figure 3.3).

Often, these core regions are positioned within or near the drainage basins of the major rivers discussed earlier, offering favourable conditions conducive to human settlement. These conditions include a high level of ecological diversity, a flat geomorphological landscape, and fertile alluvial soils. Noteworthy examples encompass the Yangzi and Yellow Rivers in eastern China, as well as the two tributaries of the Shatt al-Arab River, the Euphrates and the Tigris. Both regions, eastern China

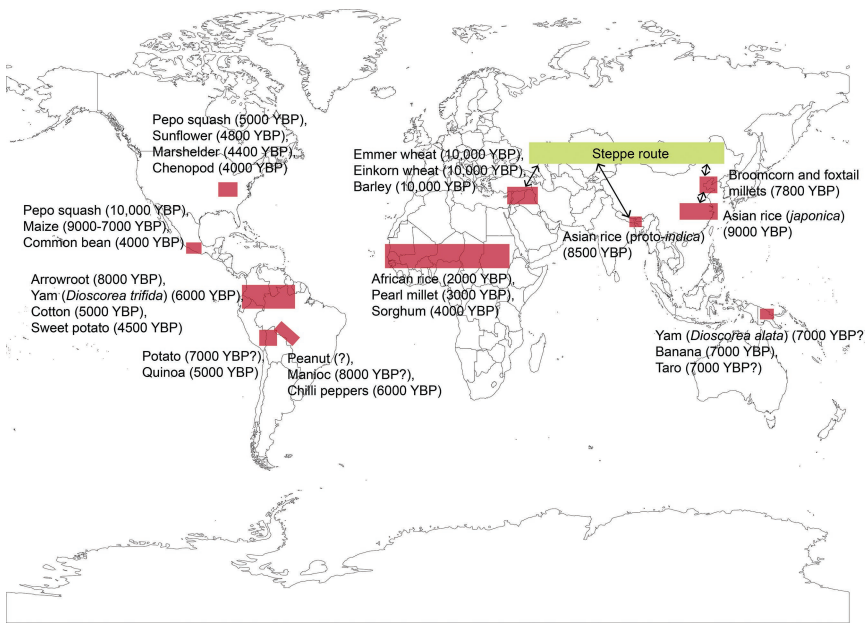

Figure 3.3 Major domestication centres and associated domesticates, modified from Price (2009). The role of the Great Steppe in connecting domestication centres in Eurasia is highlighted.

Source: Tengwen Long.

and Southwest Asia, are situated in close proximity to the southern margins of the Eurasian continent, characterised by warm temperate or subtropical climates that facilitate a relatively extended growing season for plants.

Southwest Asia stands out as the most extensively studied region for the origins of agriculture. The legacy of agricultural development in Southwest Asia has left us with a rich array of domesticated plants and animals that still play a significant role in our daily culinary practices (Abbo et al., 2022). The term 'founder crops' was introduced to underscore the critical role of eight of these domesticated plants (Table 3.2) in shaping the foundations of early agricultural economies throughout much of Eurasia in prehistory. Furthermore, the 'Big Four' domesticated animals for food—cattle, sheep, goats, and pigs—originated in Southwest Asia. In contrast, two other domesticated animals, dogs and cats, were primarily kept as pets or for herding livestock rather than for consumption.

The process of domestication of plants and animals in Southwest Asia is believed to have commenced around 13,000 YBP, a time frame supported by a growing body of archaeological and chronological evidence. In this context, the substantial and frequent environmental changes occurring at the conclusion of the Pleistocene or during the Pleistocene/Holocene transition are considered pivotal factors in shaping shifts in subsistence strategies (Richerson et al., 2001). Various potential influences of these environmental changes on food supplies have been proposed within the Southwest Asian context, including climate aridity, land reduction due to rising sea levels, or reduced availability of wild food resources resulting from alterations in seasonality (e.g. McCorriston and Hole, 1991).

Table 3.2 Examples of plants and animals possibly domesticated in Southwest Asia

Common name	*Scientific name of domesticated species*	*Possible wild progenitor(s)*
Einkorn wheat	*Triticum monococcum*	*Triticum boeoticum*
Emmer wheat	*Triticum turgidum*	*Triticum dicoccoides*
Barley	*Hordeum vulgare*	*Hordeum spontaneum*
Lentil	*Lens culinaris*	*Lens orientalis*
Chickpea	*Cicer arietinum*	*Cicer reticulatum*
Pea	*Pisum sativum*	*Pisum humile*
Bitter vetch	*Vicia ervilia*	*Vicia ervilia*
Flax	*Linum usitatissimum*	*Linum bienne*
Cattle, Zebu	*Bos taurus, Bos indicus*	*Bos primigenius*
Sheep	*Ovis aries*	*Ovis orientalis*
Goat	*Capra hircus*	*Capra aegagrus*
Pig	*Sus scrofa domesticus*	*Sus scrofa*
Dog	*Canis lupus familaries*	*Canis lupus*
Cat	*Felis catus*	*Felis silvestris*

Source: The data are from Abbo et al. (2022).

Table 3.3 Examples of plants and animals possibly domesticated in China

Common name	*Scientific name of domesticated species*	*Possible wild progenitor(s)*
Broomcorn millet	*Panicum miliaceum*	*Panicum ruderale*
Foxtail millet	*Setaria italica*	*Setaria viridis*
Buckwheat	*Fagopyrum esculentum*	*Fagopyrum cymosum*
Asian rice (*japonica*)	*Oryza sativa* subsp. *japonica*	*Oryza rufipogon*
Dog	*Canis lupus familaries*	*Canis lupus*
Pig	*Sus scrofa domesticus*	*Sus scrofa*
Chicken	*gallus domesticus*	*Gallus gallus*

Source: The data are from Crawford (2006) and Liu and Ma (2017).

Primarily reliant on agriculture, the Southwest Asian heartland developed over millennia and transitioned into civilisations around 6,500 YBP (Marro, 2010). This region saw the emergence of the earliest urban settlements and empires in human history. The use of metals, particularly bronze, marked a significant technological milestone known as the Bronze Age. During this era, Southwest Asia played a central role in Eurasian history and witnessed the rise and fall of civilisations like Sumer, Akkad, and Elam.

Eastern China was the domestication centre for another suite of important plants and animals (Table 3.3). This region is the origin of the *japonica* subspecies of Asian rice (rice), while the *indica* subspecies is more prevalent in South and Southeast Asia. The fixation of domestication traits in *indica*, however, was a consequence of hybridisation after the spread of the fully domesticated *japonica* subspecies to South Asia. In the late Pleistocene, various wild rice varieties were native to East Asia, Southeast Asia, and South Asia. The earliest utilisation and subsequent domestication of wild rice, *Oryza rufipogon* in this case, transpired in the southern part of eastern China, particularly along the middle and lower reaches of the Yangzi and Huai rivers (Long et al., 2022). The evidence of phytoliths, microfossils formed by silica deposition in plant tissues and preserved in sediments, pushes the timeline for rice use back to ca. 21,000–13,800 YBP. However, recent advances in direct dating of rice grains in archaeological contexts place the origins of rice cultivation in the lower Yangzi region at around 9,000 YBP. Unlike Southwest Asia, where climate change may have driven food production, eastern China lacks strong evidence of environmental pressures driving this transition, suggesting a more significant role of socio-economic factors. This underscores the notion that the triggers for the origins of agriculture can vary considerably across different regions of the world.

Millets are another category of domesticated crops from eastern China, recognised as a fundamental subsistence basis for the development of Chinese civilisation. Although they do not hold the same prominence in modern diets as rice, millets were once staple crops in the middle and lower reaches of the Yellow River. In fact, millets remained a dietary staple in certain regions of northern China until

recent times. Their waning significance in China can be attributed to their relatively lower yields in comparison with other crops, such as wheat, which generally offers higher productivity.

While some earlier literature posited the extensive geographical coverage of nearly the entire Yellow River basin as the centre of millet domestication, closer scrutiny in recent decades has cast doubt on the early dating of millet remains (Stevens et al., 2021). Indeed, securely dated archaeological evidence for millets has been uncovered, dating back approximately 7,800 YBP, in regions surrounding the Bohai Sea, an area referred to as the East Asian fertile crescent (Leipe et al., 2019).

The spread of agriculture

Radiocarbon (^{14}C) is the most used dating technique in reconstructing the early history of agriculture. This method is based on the radioactive decay of ^{14}C atoms, which have a consistent half-life of 5,730±40 years. By measuring the remaining amount of ^{14}C atoms in a sample and comparing it with a hypothesised initial value, the duration of radioactive decay can be determined and hence the date. The application of Accelerator Mass Spectrometry has enabled direct dating of agricultural remains using small samples, such as a single rice grain or phytolith residues. This development has led to the generation of extensive databases containing direct ^{14}C dates targeted at the reconstruction of early agriculture (Long et al., 2018). These direct dates not only illuminate the development of agriculture in global core regions but also provide insights into the spread of crops and domesticated animals to other parts of the world. Geographic Information System modelling, which generates trend surfaces from discrete site points to simulate the arrival times of crops and animals in specific geographic locations, has also played a crucial role in these reconstructions (Long et al., 2022).

Using these techniques, excavations of archaeobotanical and zooarchaeological remains across diverse Eurasian regions have facilitated the establishment of high-resolution chronologies charting the spread of crucial domesticated species. Following the domestication of the *japonica* subspecies of rice in eastern China, an example is its dissemination to various regions, including the Yellow River basin, southwestern China, and Southeast Asia, approximately 6,000 YBP (Long et al., 2022). The introduction of the domesticated form of rice into South Asia, however, presents a more intricate narrative. Well-dated evidence indicates that South Asia may have been the birthplace of the proto-*indica* form of rice as early as 8,500 YBP. Nevertheless, the fixation of key domestication traits within the *indica* subspecies occurred through the hybridisation of proto-*indica* and *japonica* rice (Fuller and Qin, 2009). This hybridisation took place after the spread of *japonica* rice to South Asia, facilitated by cultural connections between East and South Asia. Archaeological sites containing remnants of rice in South Asia experienced a substantial increase around 4,300 YBP (Long et al., 2022). The presence of archaeobotanical remnants like millets, peaches, and apricots, as well as farming tools, such as hand harvest knives, suggests a 'Chinese horizon' in South Asian archaeology around 4,000 YBP that implies the cultural connections (Fuller, 2011).

The diffusion of rice to the Korean Peninsula and Japanese Archipelago began from ca. 3,500 YBP. This spread may have been associated with military expansions or political upheavals in the Yellow River basin, including the transition from the Shang to Zhou Dynasty around 3,000 YBP (Leipe et al., 2020). In addition, the declining agricultural yields stemming from the gradual decrease in summer monsoon rainfall during the transition from the mid- to late Holocene (ca. 3,000 YBP) may have played a significant role in prompting the migration of rice farmers.

Millets emanated from their domestication centre in northern China near the Bohai Sea, dispersing in both eastern and western directions. Around 5,700 YBP, they spread eastward to the Korean Peninsula, subsequently reaching the Khanka-Ussuri Plain and the Japanese Archipelago (Leipe et al., 2019). In the western direction, millets arrived in the middle Yellow River region approximately 6,600 YBP, followed by the upper Yangzi River region around 5,400 YBP, and the upper Yellow River region around 5,200 YBP. Further westward, they appeared in southeastern Kazakhstan around 4,400 YBP, while their presence in China's Xinjiang region dates to around 3,900 YBP. This reversal in the east–west spread of millets suggests that the heartland of Xinjiang may have been initially bypassed during the early connections in Inner Asia, largely because of the severe aridity hostile to settlement (Long et al., 2018). Instead, the most likely route linking the upper Yellow River region and Central Asia was through the southwestern slopes of the Mongolian Altai and the southern Mongolian Plateau where water is more readily available.

The cultivation of millets appeared in Eastern Europe around 3,600 YBP and rapidly disseminated to other parts of Europe over the next two centuries (Filipović et al., 2020). Some archaeologists posit that the rapid spread can be attributed to the growth of millets primarily during the summer period, offering an additional harvest and surplus food for Europe, where subsistence primarily relied on the winter cropping of wheat and barley. Millets likely played a pivotal role in facilitating significant societal and economic transformations during Europe's Bronze Age.

Crucially, the Proto-Silk Roads were polycentric networks, and interactions and exchanges flowed in a variety of directions. The spread of wheat to China followed a trajectory opposite to the westward dispersal of millets. After its domestication in Southwest Asia, wheat, along with other Southwest Asian domesticated crops and animals, extended to Iran and Central Asia (Roustaei et al., 2015). The earliest convincing evidence of wheat in China was found on its northwestern border with Kazakhstan, dating to ca. 5,000 YBP, as indicated by recent excavations at the archaeological site of Tongtian Cave (Zhou et al., 2020). Other early wheat dates in China appear to suggest an unusual pattern, with wheat spreading from east to west instead (Long et al., 2018). For instance, the lower Yellow River region in the eastern part of China is recognised for having some of the second oldest dates for wheat grains, dating from around 4,600 YBP. It was not until between ca. 4,000 and 3,500 YBP that other dated examples of wheat began to appear in the middle and upper Yellow River regions, Tibet, and the heartland of Xinjiang. Like the spread of millets, the heartland of Xinjiang was seemingly bypassed during the initial spread of wheat in China.

In addition to crop dispersal, the spread of livestock was also an important component in the early connections across Eurasia. Domesticated animals such as sheep, goats, and cattle began to appear in East Asia around 5,000 YBP. This coincided with the presence of Southwest Asian crops like wheat and barley and the adoption of technologies such as bronze production (e.g. Gao et al., 2021). All of these elements together formed part of a Bronze Age cultural package that had a transformative impact on the Eurasian continent, leading to the establishment of the first 'World System' (Warburton, 2011). These close cultural interactions across the continent were firmly established during this time, contributing to the complex and interconnected history of Eurasian societies.

Contrary to some criticisms moved against the concept of Proto-Silk Roads, this historical framework can be re-imagined to highlight (not to deny) the importance of Inner Asian intermediaries and steppe cultures. The diffusion of key crops and livestock underscores the crucial role played by the Great Steppe in facilitating early cultural connections across the Eurasian continent. This can be attributed, in part, to the favourable ecological conditions found in this region. The Great Steppe encompasses the Mongolian Steppe, Kazakh Steppe, and the Pontic-Caspian Steppe, forming an extensive belt of grassland capable of providing ample resources to sustain the development and mobility of large pastoralist societies (Anthony, 2022). The inhabitants of the Great Steppe were the first to domesticate horses (Levine, 1999). Domesticated horses increased mobility, which was pivotal in shaping the early Eurasian 'World System' (Long et al., 2018) and facilitated connections between previously somewhat isolated agricultural centres. Over time, this steppe corridor continued to serve as a significant route for trade and military movements, as exemplified by the westward expansion of the Mongol Empire around 800 YBP (Allsen, 2015).

The examples discussed above highlight that the dispersal of crops and livestock from core regions to other parts of the world after their domestication was a gradual, polycentric, and discontinuous process. One of the critical questions that requires further examination is whether the agricultural expansions primarily resulted from demic or cultural factors. Demic diffusion entails the movement of agricultural populations themselves, leading to the spread of agricultural practices and crops. In contrast, cultural diffusion involves the dissemination of agricultural technologies, cultural traits, and lifestyles among different populations.

Formation of language families and agricultural expansion

Increasing evidence suggests that agricultural expansion in prehistory is linked to the movement of agricultural populations themselves. Agriculture holds an advantage over other subsistence strategies such as hunting and gathering in its ability to sustain a higher population density within a given unit of land (Bellwood, 2005). Ethnographical and archaeological studies have revealed that the quality of life for farmers is not necessarily superior to that of their hunting and gathering counterparts, who often enjoy more leisure time and better health statuses (e.g. Sahlins, 1972; Hewlett et al., 1998). Neither is agriculture an inherently more 'advanced'

lifestyle compared with hunting and gathering, nor is the transition from hunting and gathering to agriculture an automatic societal progression. However, agriculture does offer a more dependable source of sustenance in challenging environmental conditions, and it supports higher population densities than hunting and gathering. Over successive generations, agricultural communities are likely to have more descendants than their hunting and gathering counterparts. As population levels increase, they eventually reach a threshold where the available land in a given area can no longer sustain further growth with existing technology and environmental management practices. Consequently, the pressure to acquire arable land drives agricultural communities to migrate to new regions.

Historical linguistics provide compelling evidence of the close association between major language families worldwide and the migration patterns of early agricultural societies. Eurasia is the homeland of numerous significant language families due to the historical presence of diverse early agricultural communities. Recent research has shed light on the expansion of these languages by examining linguistic relatedness among languages found in neighbouring regions. For instance, the Sino-Tibetan language family is believed to have originated in the Yellow River basin in northern China (Zhang et al., 2019), a region closely tied to early millet farming communities (Leipe et al., 2019). The expansion of millet farming populations was pivotal in spreading the Sino-Tibetan language family across large parts of East Asia.

Another illustrative case is the Austronesian language family, which is spoken across a vast expanse encompassing the Pacific and Indian Oceans, with its northern-most distribution being Taiwan Island (Blust, 1999). However, an integrated examination of linguistic, archaeological, and archaeobotanical evidence suggests a hypothesis positing the northern Chinese origin of this language family, specifically in present-day Shandong province, China (Sagart et al., 2018). Proto-Austronesian people might have followed the eastern coastline of China, crossed the Taiwan Strait, and eventually disseminated the language through maritime travel to various islands in the Pacific and Indian Oceans. Nevertheless, further research and additional evidence are required to rigorously test this hypothesis.

The expansion of the Transeurasian or Altaic language family, including Japanese, Korean, Tungusic, Mongolic, and Turkic languages today, has also been closely associated with the movement of millet farmers (Robbeets et al., 2021). Aside from the domestication centre of millets in the Yellow River basin, which contributed to the development of the Sino-Tibetan language family, there existed another distinct millet domestication centre in the West Liao basin, located on the other side of the Bohai Sea. The West Liao basin is considered the ancestral homeland of the Transeurasian language family, which had little linguistic influence from the Sino-Tibetan family. This concept aligns with the broader image of an East Asian fertile crescent (Leipe et al., 2019) but underscores the polycentric origins of millet domestication in the region.

While the farming/language dispersal hypothesis appears to hold in the examples mentioned above, it requires further investigation using the accumulation of more archaeological, archaeobotanical/zooarchaeological, and linguistic evidence.

Moreover, this hypothesis should be examined in the context of other major language families and for other crop examples. For instance, the linguistic connections to rice are still not entirely clear (Long et al., 2022).

Conclusion

Cultural connections across the Eurasian continent began in prehistory, often referred to as Proto-Silk Roads, predating the establishment of the narrowly defined historical Silk Road by a substantial period. These prehistoric cultural connections can be viewed as the precursor to the Silk Road but were primarily associated with the creation and spread of agricultural systems. Early agricultural centres were largely situated in the southern part of the continent and existed independently from one another for extended periods. However, the Great Steppe, located to the north of these agricultural centres, played a pivotal role in connecting them starting from the late Neolithic and early Bronze Age. The diffusion of agriculture was closely intertwined with the expansion of farming societies into regions inhabited by hunter-gatherer communities and contributed to the spread of major language families. This early exchange of agricultural knowledge, technologies, and cultural practices laid the foundations for the broader cultural interactions and trade networks that would later characterise the historical Silk Road.

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4 Diseases and the medieval Silk Roads

Chris King

The ancient 'silk roads' which connected the cities and cultures of Asia, North Africa, and Europe through a series of interlocking overland and maritime trade routes reached their zenith in the thirteenth century, in what European historians designate the 'high medieval' period. As Janet Abu-Lughod (1989) argued more than three decades ago in her influential study *Before European Hegemony*, this period saw the increasing integration of regional networks of trade and a flourishing of material, cultural, and technological exchanges across Eurasia, as travellers, merchants, and diplomats traversed the continent in growing numbers. We are acutely aware today, following the 2020 Covid-19 pandemic, that increasing globalisation creates the potential for other, less welcome forms of exchange, of pathogens which can have profound impacts as they spread through human societies. This was certainly the case in the medieval period as the intensity of contact along trans-Eurasian trade routes became the primary mechanism for the spread of a devastating pandemic of bubonic plague, a disease which is endemic in rodent populations on the Central Asian steppe. Once it took hold, plague swept across western Asia and Europe in the 1340s and 1350s, killing between one-third and one-half of the population (Benedictow 2004).

The timing and impact of this profound fourteenth-century crisis is now being understood from multiple disciplinary perspectives, drawing together a huge variety of scientific, archaeological, and historical evidence. The first significant area of new research is to understand the importance of global patterns of climate change which underpinned the combined effects of famine, disease, and recession that struck Europe and Asia in the first half of the century. Bruce Campbell (2016) has drawn together a wide range of historical and climate datasets to understand the changing ecological conditions that led to the outbreak of animal and human diseases. Climate intersects with humanity in complex ways; it provides the context and sometimes the stimulus for human decisions and action, but it rarely determines on its own the historically contingent responses of human societies to external changes or shocks. As Campbell (2016, 20–29) argues, we need to consider the interplay of changing climatic and environmental conditions, demographic impacts, and the adaptation or transformation of social and economic structures to understand broader historical change.

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A second major new area of research has focused on the geography and chronology of the mid-fourteenth-century plague pandemic, combining genetic, bioarchaeological, environmental, and historical data. New phylogenetic studies are giving us important insights into the evolution of the pathogen and when it made the leap from a stable enzootic disease in wild rodent populations to a devastating human pandemic capable of spreading at speed and intensity. The medieval historian Monica Green has been highly influential in translating genetic and epidemiological studies for a non-scientific audience and placing their insights into an appropriate medieval Eurasian context (Green 2015, 2020, 2022). Together, these diverse approaches that draw together scientific and historical insights are generating fascinating new understandings about the nature and impact of the fourteenth-century plague pandemic, making this one of the most exciting and fast-changing aspects of the study of the silk roads.

Material exchanges: trade and travel

The lands and cities around the Mediterranean had long been places of interaction and trade, inhabited by diverse communities of Latin and Orthodox Christians, Muslims, and Jews. The creation of the Latin-ruled Crusader kingdoms in the Levant from 1100 was a significant catalyst for these contacts. While the military campaigns of successive waves of the crusading movement were often bloody and destructive, their flourishing port-cities were hubs for commercial, technological, and cultural exchanges. Over the course of the twelfth and thirteenth centuries, there was an intensification of indirect and, increasingly, direct contact between western European Christendom and the rest of the Eurasian continent. These contacts varied greatly, from travellers and merchants to religious missionaries and diplomatic embassies, but they are evidence of a greater degree of mobility and exchange across the overland and maritime routes connecting Europe, North Africa, the Middle East, and Central and eastern Asia in this period (Frankopan 2015, 136–87).

The Italian maritime city-states were major contributors to the crusading movement through the provision of finance, ships, and military capacity, establishing merchant colonies across much of the eastern Mediterranean. Venice and Genoa competed through the later twelfth and thirteenth centuries for control over the maritime trade in luxury eastern products as well as grain from the Black Sea (Jacoby 2018; Pubblici 2021). The profits arising from this trade were vast, and the wider transformative effect of the increasing material and cultural exchanges between Europe and Asia was profound. Sericulture and silk weaving was already established across the Islamic world and Byzantine empire, and by the thirteenth century, many Italian cities had encouraged immigrant artisans to establish independent silk industries (Jacoby 2004). By far, the most important and valuable imports were exotic spices which had huge economic and cultural valency for medieval Europeans as foodstuffs, perfumes, and medicines; they were brought into Europe in ever-increasing quantities from the ‘spice islands’ of Southeast Asia, Sri Lanka, and the Malabar coast (India) via the overland Asian caravan routes with

their terminus in the Levant and Black Sea ports, as well as the maritime spice route through the Indian ocean and Arabian Sea into Alexandria (Freedman 2008). Along with spices and incense came precious stones such as the lapis lazuli from Afghanistan that was ground to make the stunning blue pigment found in Italian frescoes; pearls and gemstones; dyes; fine metalwork; exotic woods; and glass and ceramics. Combined with imports of gold and ivory from West Africa traded into the Mediterranean, these rare and precious materials underpinned the performance of royal, aristocratic, and ecclesiastical displays of wealth and power in jewellery, clothing, tableware, and church ornaments (Spufford 2002). Technologies and ideas were equally important in the ongoing exchange between the east and west – from knowledge in mathematics, astronomy, and medicine which were studied in the newly created urban universities, to the adoption of the Arabic numeral system by European merchants and the spread of new inventions such as gunpowder weapons and mechanical clocks (Brotton 2002; Livesey and Brentjes 2017).

By the year 1300, Europe had become a more dynamic and commercialised region than two centuries previously. Throughout this period, European populations were increasing, agricultural land was becoming more productive, and towns and cities were rapidly expanding. Paris had reached 200,000 inhabitants by 1300, followed by Venice with 120,000, and Genoa, Milan, and Florence with 90,000–100,000, while London, Cologne, and Ghent had around 80,000 and Bruges, 50,000, and many of them were migrants from rural areas (Rubin 2020, 1–24). Agricultural surpluses of grain and livestock supported growing urban populations and industries, especially the manufacture and trade of woollen cloth. Mercantile elites increasingly sought to have their financial and political power recognised by rulers and rivalled them in the conspicuous consumption of imported luxuries (Nicholas 1997). Maritime trade networks were well-established and far-reaching. Every year the Italian galley fleets set sail from the Mediterranean to their northern base in Bruges, an entrepôt for the Low Countries and London, to exchange wool, cloth, iron, and grain for luxury imports, while the Hanseatic League of northern German and Baltic merchants brought timber, furs, and preserved fish. Overland trade was also important, from the Champagne fairs trading woollen cloth from the Low Countries and France down to Italy, to the localised exchange of agricultural produce and craft goods in markets and small towns across the continent. Europe's ports and rivers were full of barges and ships, while the roads were busy with travelling merchants, drovers, pedlars, itinerant artisans, messengers, and pilgrims. There was much greater mobility and interconnection between European regions and cities than has sometimes been assumed.

This economic development was underpinned by a much wider set of global circumstances which directly impacted the nature and context of exchanges across the old world. The first of these was the role of climate and environmental factors. The period between c.950 and c.1250 is known as the Medieval Climate Anomaly, or in older works, 'the Medieval Warm Period'. A range of palaeoclimatic data identifies this as a period of generally higher average global temperatures. In Europe, this created positive conditions for agricultural productivity, which in turn supported population expansion and increasing urbanisation (Campbell 2016, 36–58).

The disruption of this long period of climatic stability across Eurasia was the environmental context for the outbreak of plague in the mid-fourteenth century.

Changing geopolitical factors provide a second important context for this period of increasing contact between Europe and Asia. In the first half of the thirteenth century, a coalition of steppe nomads, under a charismatic leader known to the west as Činngis or 'Genghis' Khan, swept across Central Asia and the Middle East, destroying many of the great trading cities along the silk roads – Samarkand, Bukhara, Nishapur, Merv, and Herat. Between 1237 and 1241, they devastated the lands of the Kievan Rus, and invaded Poland and Hungary; the great Islamic city of Baghdad and the Abbasid Caliphate fell in 1258. Having conquered much of northern China in the first three decades of the thirteenth century, in the 1270s, they overwhelmed the Southern Song, thereafter ruling China as the Yuan dynasty (1271–1368) from their newly established capital at Khanbaliq or Dadu, the site of modern Beijing (Morgan 2007; Jackson 2017). While the Mongol conquests were frequently brutal and destructive, the long-term impact of their rule was more beneficial. The Mongol 'empire' was divided into semi-independent regional Khanates and encompassed many different religions, cultures, and languages, but the establishment of administrative control across this vast territory brought significant opportunities for increased travel and trade along the overland trans-continental silk routes. Such movements were not always peaceful; the Mongols were also responsible for major forced relocations of populations across Central Asia and western and northern China, while the trade in enslaved war captives flourished (Allsen 2015; Jackson 2017, 210–41). Merchants, travellers, missionaries, and embassies could obtain a pass from the Mongol emperor giving safe passage; Mongol military and judicial power gave a degree of protection from banditry; roads, inns, and caravanserais were maintained, and paper currency facilitated credit exchanges between the great trading cities. These favourable conditions for trade are what some historians have called the 'Pax Mongolica', which led Abu-Lughod to focus on the thirteenth century as a significant moment in the formation of a proto 'world system', integrating and intensifying networks of exchange across the Eurasian continent (Abu-Lughod 1989, 153–84).

In the first-half of the fourteenth century in both Central Asia and Europe, however, these trading networks were shifting and sometimes coming under strain. Mongol hegemony was starting to disintegrate with increasing political and military rivalry between the Khanate of the Golden Horde in the western Asian steppe and the Persian Ilkhanate. In Europe, the fall of the last of the Crusader kingdoms at Acre in 1291 and the growing dominance of the Mamluk empire in Egypt and the Levant meant that access for Italian merchants to valuable eastern commodities was severely disrupted. This led to an increasing focus on the Black Sea ports and the further intensification of trade and travel along the northern trans-continental routes through Persia and Central Asia (Abu-Lughod 1989, 359–60; Di Cosmo 2005; Campbell 2016, 273–6). It is these caravan routes, traversing the semi-arid grasslands of the Eurasian steppe, which provided the opportunity and means for another form of exchange, the invisible spread of a deadly pathogen which would prove to have devastating and transformative consequences.

Biological exchanges: the impact of the Black Death

The long period of relatively optimal climatic conditions in Europe and Asia gave way in the later Middle Ages to a period of colder and wetter weather known to historians as 'the Little Ice Age', lasting from the fourteenth to the seventeenth centuries. Although this is a long-established historical phenomenon, many studies have convincingly tracked the initiation and progress of this period of climatic change in global palaeoclimatic and historical datasets, including dendrochronological (tree-ring) growth sequences from European oak, Central Asian junipers, and American pine species; deuterium-10 levels in the Greenland ice cores reflecting North Atlantic sea-surface temperatures; historical records of grain yields from English manorial accounts, and Islamic records of the fluctuating levels of the river Nile (Dawson et al. 2007; Fraedrich et al. 1997, Graham et al. 2011; Grove 2004; see Campbell 2016, 198–208, 277–86 for a comprehensive review of multiple lines of evidence). Global temperatures began to shift downwards in the 1260s with more pronounced effects in the 1290s onwards, bringing increasing climatic instability and extreme weather events. These could have profound ecological and human consequences. In western Europe, heavy rainfall in the early fourteenth century caused harvest failures and terrible famines in the years 1315–22, in which up to a tenth of the population may have died, and a devastating outbreak of a European-wide cattle panzootic, probably rinderpest, in 1315–21 (Campbell 2010, 2016, 191–8, 209–27). In South China and Southeast Asia, the monsoon rains weakened and the rice harvest frequently failed (Sinha et al. 2011). In Campbell's analysis, the interaction of climate change, economic recession, warfare, and disease presented a 'perfect storm' in the long fourteenth century which set the Eurasian continent on a new trajectory (Campbell 2016, 319–29).

'The Black Death' is the name given by later historians to the devastating pandemic which swept across western Asia, Europe, and north Africa in the years 1346–53, known by European contemporaries as the 'great mortality' or 'great pestilence'. Since 2010, microbiological studies have conclusively demonstrated that this disease was plague, through analysis of ancient DNA (aDNA) extracted from the preserved teeth pulp of victims in known Black Death cemeteries in London and burials from medieval Barcelona and other sites in Europe (Haensch et al. 2010; Bos et al. 2011; Spyrou et al. 2016). Plague is caused by the bacterium *Yersinia pestis*, and before the creation of modern antibiotics it was one of the most virulent and deadly diseases known to humankind. It is primarily, however, a disease of rodents and can survive for long periods in populations of ground-burrowing wild species, such as steppe-dwelling gerbil or marmot populations in Central Asia, or prairie dogs in western United States. The disease is transmitted by ectoparasites (commonly, rodent fleas of the genus *Xenopsylla*). In mass global outbreaks, the disease becomes a panzootic, spreading to commensal rodent species which live alongside humans – in the medieval period and in modern times, the most common being the black rat (*Rattus rattus*). Once the disease has ripped through a rodent population which has substantially less resistance to the pathogen than its traditional host species, their fleas turn to other mammalian hosts, including humans,

regurgitating bacteria into the lymphatic system or bloodstream. Death can occur within a week for the common, bubonic, form of the disease (characterised by the painfully infected lymph nodes forming buboes in the neck, armpit, or groin); plague can also develop a pneumonic form which is passed directly from person to person via infected air droplets, or a septicaemic form which directly infects the bloodstream, both of which kill within 2–3 days (Benedictow 2004, 11–34; Campbell 2016, 227–39).

The geographical starting point of the outbreak of plague in the mid-fourteenth century has been much debated. Older scholarship often assumed that the transfer from wild rodents to black rats and thence to humans occurred in the Caucuses or Volga region of western Asia, close to where it first appears in historical records (Benedictow 2004, 44–51). Another strand of thinking has frequently targeted southern China, especially the Yunnan province which borders Myanmar, which is believed to be the origin of the global plague pandemic which spread from Hong Kong in the late nineteenth century (McNeill 1976). More recently, convincing arguments have been put forward that the origins of the mid-fourteenth-century outbreak were in the interior of western China and Central Asia, either in the Tibetan-Qinghai Plateau (Cui et al. 2013) or in the Tian Shan mountains, on the border between modern-day Kyrgyzstan and the Xinjiang autonomous region of western China (Green 2020, 1612–14). These remain some of the most important natural reservoirs for *Y. pestis* within steppe-dwelling populations of great gerbils and marmots, where a concentration of ancient lineages of plague has been identified through phylogenetics.

Here the sequencing of the full *Y. pestis* genome has had a profound impact on our understanding of the evolution of the pathogen. Each genome sequence can be plotted on a 'phylogenetic tree' of the DNA of the pathogen, which shows where mutations in the DNA have emerged as it spreads through different populations, creating distinctive 'branches' of the genome. This is a process made familiar to us in the twenty-first century by the rapid appearance and identification of new variants during the 2020 global Covid-19 pandemic, as scientists tracked the evolution of the virus almost in real time. By comparing the genetic sequence of modern samples of *Y. pestis* in different regions around the globe with aDNA samples recovered from bubonic plague victims from specific sites and time periods (such as the 1348–49 London Smithfield cemetery), it has been possible to track the development of the pathogen through time and space (Morelli et al. 2010; Bos et al. 2011; Spyrou et al. 2016). Furthermore, the genome sequence also provides us with a form of 'molecular clock' that identifies moments when new variations emerged and the time it is likely to have taken them to spread. In 2013, an international team presented the first comprehensive phylogenetic tree of plague drawing on a total of 133 whole genome sequences, including the recently recovered aDNA sequences. They identified a clear polytomy or rapid sequence of changes in the genome of the pathogen which they called a 'Big Bang', leading to the establishment of several new variants or branches spreading out from the Central Asian origin zone of the disease (Cui et al. 2013). From this 'event horizon', we can trace four separate strands of *Y. pestis* spreading into different parts of Eurasia, one of which was the

variant that was introduced into the Caucuses region and spread as the Black Death in the mid-fourteenth century, and which then became established in Europe and was responsible for recurrent outbreaks of plague in human populations in this region for the next 400 years (Green 2020).

The chronological timing and underlying causes of this 'Big Bang' polytomy in the plague genome, and the moment, or rather moments, when plague made the crucial transfer from wild to commensal rodent species and subsequently to humans, remain important questions for scientists and historians to tackle. Initial estimates derived from genome sequencing suggested that the polytomy known as the 'Big Bang' is most likely to have occurred in the mid-thirteenth century (Cui et al. 2013). Based on this, Green has argued that the Mongol conquests and expansion of the thirteenth century were the primary mechanism for the seeding of new *Y. pestis* strains from the marmot populations of Tian Shan into marmot and other rodent hosts across Central Asia in the century before the mid-fourteenth-century Eurasian pandemic. The Mongols are certainly known to have exploited marmots for their fur, skin, and meat, and the movement of Mongol armies could have enabled the wide geographical dispersal of the four main post-polytomy lineages (Green 2020, 1616–18). Hymes has identified recorded instances of epidemic disease associated with Mongol sieges of northern Chinese cities between 1218 and 1232 AD (Hymes 2014), and Green points to records of *wabā* ('epidemic' or 'pestilence') associated with the Mongol sieges of Girdkuh in 1254, Lanbasar in 1257, and Baghdad in 1258, which have previously not been identified as possible plague outbreaks (Green 2020, 1621–3). However, more recently, an early fourteenth-century origin date for the pandemic has been proposed from new genetic data from the site of Issyk-Kul in Kyrgyzstan, north of the Tian Shan mountains. Here, a nineteenth-century Russian expedition recorded two large Nestorian Christian cemeteries, with over 100 gravestones recording a sequence of deaths in 1338/39 ascribing them to a deadly pestilence. Although these were often assumed to be potential evidence for an early plague outbreak, this has now been confirmed by the identification of aDNA of *Y. pestis* in the skeletal remains which is closely related to the 'Big Bang' polytomy (Spyrou et al. 2022). The debate over the scientific dating highlights that this is a still-evolving area of enquiry (Green 2022; Slavin 2023). Whether the spread of plague across Eurasia occurred over a longer time frame or was a more rapid process, intensifying human contacts along the silk roads were a key factor in the transmission of the disease.

Campbell's account emphasises the importance of climate change as the primary cause for plague entering a more active state in the mid-fourteenth century, with a clear downturn in global temperatures identified in the 1340s and early 1350s which he identifies as a 'tipping point' (Campbell 2016, 277–89; see Green 2018). In fact, these different perspectives on the timing of the outbreak of the Black Death may not be so far apart as it first appears. Campbell's analysis of the climactic and environmental data shows the start of a long period of climatic instability in the Central Asian steppe in the thirteenth century, with alternating periods of wetter weather interspersed with episodes of drought, which would have created environmental conditions which enabled the expansion and subsequent collapse

of rodent populations. This may have led to increasing contact between wild and commensal rodent species, perhaps under conditions of environmental stress and competition for food resources. In turn, this increased the potential for localised outbreaks of bubonic plague within steppe-dwelling human populations or traders and travellers who were crossing these lands along the trans-continental caravan routes with increasing frequency (Campbell 2016, 235–52). It is possible that there were many local outbreaks in the century between 1250 and 1350 which burnt themselves out without leaving any trace in the epigraphic or historical record and without developing into a rapidly spreading epidemic. A longer period of gradual intensification of *Y. pestis* infections within its reservoir wild rodent populations then met the constellation of factors in the mid-fourteenth century identified by Campbell, which created the environmental and social conditions for a devastating cross-continental human pandemic.

Plague was first recorded in the Caucuses in spring 1346 (Benedictow 2004, 60). The old story of how the plague entered Europe is well-known; that the Mongol army of the Golden Horde besieging the Genoese Black Sea port of Caffa, struck by the devastating mortality, flung diseased corpses over the walls to infect the defenders, who then spread the Black Death as they fled the stricken city. The account has recently been demonstrated to be entirely apocryphal by Hannah Barker, who instead tracks the arrival of plague into the northern Black Sea ports in 1346 and its subsequent spread via rodent-infested merchant ships carrying bulk loads of grain as well as other commodities around the coast and into Constantinople and the eastern Mediterranean in August or September 1347, having been stalled by a temporary suspension of the Black Sea grain trade (Barker 2021). What is clear is that the spread of the disease followed the networks of overland and maritime transport which had been established during the previous two centuries of intensifying contact, travel, and trade. Its progress was remorseless; Alexandria, Messina, and Marseilles succumbed by autumn 1347 and the great trading cities of Italy were hit in early 1348. By the summer of 1348, plague was raging in Paris, and it had landed on the southern coast of England, probably in ships from Gascony; it spread across midland and northern England as well as the southern Low Countries in 1349, and Scotland, Germany, southern Scandinavia, and the Baltic in 1350–51 (Campbell 2016, 300–5). Mortality rates varied and were partly dependent on the ratios of rodent and human populations; many large towns and cities lost over one-half of their population in a short time, and in rural villages, the impact could be equally devastating. At least one-third of Europe's population died in the first wave of the pandemic, and subsequent outbreaks through the fourteenth century resulted in an overall reduction of the European population by 50 percent (Benedictow 2004; Campbell 2016, 319).

Further research questions remain about the impact of the mid-fourteenth-century pandemic as scholars continue to explore the ramifications of new scientific data about the plague's phylogenetic development and epidemiology against historical and archaeological evidence. The rapidity of the plague's spread has called into question for some the traditional explanation of the disease's transmission by infected rat fleas, especially in rural areas and parts of Northern Europe where rat colonies were

not present in dense concentrations. Some scholars have suggested that in the mid-fourteenth century the disease may have been primarily spreading in its pneumonic form, directly from person to person via infected droplets from the lungs (Sloane 2011). The problem with this argument is that the pneumonic form of the disease spreads so rapidly, with a near total mortality rate, that this is unlikely to sustain an outbreak within a large population – victims die too quickly to be effective vectors of transmission. It also cannot explain the way in which plague clearly had a long enough incubation period to survive sea voyages between different ports (Benedictow 2004, 233–41). Another explanation currently being investigated is that rather than relying solely on the traditional explanation of rodent carriers of infection and the rat flea (*Xenopsylla cheopis*) as the primary vector of transmission from rats to humans, infection may have been carried by other ectoparasites, such as human fleas (*Pulex irritans*) or human lice (*Pediculus humanis corporis*). This would have facilitated the spread of infection from person to person by indirect means, and it is also possible that these carriers could survive for periods of time in textiles or clothing apart from a human host, which would enable the spread of disease between households and communities and potentially along overland or maritime trade routes (Drancourt et al. 2006; Dean et al. 2018). These possible alternative vectors of transmission currently remain contested in the scientific literature and so must be treated with caution, but they point to the continued benefits of bringing biological and historical approaches into dialogue.

Conclusions

The long-term impacts of the mid-fourteenth-century Black Death on society and economy in Europe and Asia were profound, complex, and wide-ranging. The disease returned in several further mass-epidemics in the fourteenth century, choking off demographic recovery, and remained present with periodic outbreaks especially in urban centres for the next 400 or more years (Campbell 2016, 335–55). In western Europe, the demographic impact of the Black Death in association with the ongoing challenges created by the 'Little Ice Age' have been identified as important drivers of the transformation of the economy, with the decline of traditional forms of land tenure and the continued intensification of urbanisation and commercialisation in wider society. While no single causal explanation can account for major developments in world history, historians are now increasingly viewing the demographic and economic impacts of the Black Death as one key factor in the old debate over the 'great divergence' between the west and the east as global trade networks were transformed by western European commercial and colonial expansion in the early modern era (Frankopan 2015, 191–201; Campbell 2016, 373–94; Belich 2022).

Just as we have seen in the debates over the origins of the mid-fourteenth-century plague pandemic, its wider demographic and economic effects can be revealed by combining traditional historical lines of evidence with a range of archaeological, environmental, and scientific data. Osteoarchaeological analyses of the skeletal remains recovered from late medieval cemeteries are providing new insights into

the demographic and health impacts of plague on European populations. Studies of skeletal stature and dental stress markers from London for instance have shown a decline in population health in the generations leading up to the Black Death which may indicate the longer-term effects of the early-fourteenth-century crisis, and that these individuals experienced higher levels of mortality during the pandemic, while there are signs of improving diets and health after the Black Death for surviving populations (DeWitte 2018). The climatic and environmental evidence which has been used by Campbell to explore the ecological conditions which led to the Black Death pandemic have been used by other scholars to track its long-term economic impact. For example, in a recent collaboration between the Initiative for the Science of the Human Past at Harvard University and the Climate Change Institute at the University of Maine, analysis of trace levels of atmospheric lead in Alpine ice cores has demonstrated the dramatic and near total cessation in lead mining and smelting across Europe during the height of the pandemic in 1349–53 (More et al. 2017).

The study of the silk roads has been at the forefront of efforts among medieval historians to create a more global view of the Middle Ages which recognises the interconnectedness of societies and economies across the old world, brought together by increasingly dense networks of trade and cultural exchange as well as the devastating impact of pandemic disease (Green 2015; Heng 2021; Holmes and Standen 2018). These connections are highlighted by new insights drawn from multiple scientific disciplines from palaeoclimatology to osteoarchaeology and phylogenetics. They range from the microscale study of bubonic plague bacteria extracted from ancient DNA to global-scale environmental datasets from tree-rings and ice cores which record the long-term climatic shifts which underpinned changing ecological and economic conditions over the medieval period. Much of this evidence is new and theories continue to evolve, showing the continued need to bring scientific and historical approaches together to fully understand the impact of material and biological exchanges along the medieval silk roads.

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Part 2

Material culture

5 Roman Palmyra as a hub of trade and commerce

Material, epigraphic, and numismatic evidence

Andreas J.M. Kropp

Introduction

The oasis city of Palmyra in the Syrian desert is one of the most iconic sites of the ancient world (for overviews, see Will 1992; Sartre and Sartre-Fauriat 2008; Smith 2013; Sommer (ed.) 2020; Gawlikowski 2021; Raja 2022; Raja (ed.) 2024). A minor outpost for much of its history, Palmyra rose quickly from obscurity to opulence in the first century BC and became a vital hub for long-distance trade between the Persian Gulf and the Mediterranean Sea. Palmyra's heyday lasted some 300 years, and its fortunes were closely tied to Rome. It was Roman governance of the Near East that created stable conditions for Palmyra to flourish. And it was the uprising against Rome, under Palmyra's famous queen Zenobia, that brought about its spectacular downfall, ending her short-lived empire with the sack of the city by Aurelian's troops in AD 273. Yet, while its fortunes lasted, Palmyra enjoyed more liberties and privileges than almost any other community within the confines of the Roman Empire.

The fact that Palmyra prospered enormously under Roman rule is beyond dispute: the splendour of its key landmarks exudes prosperity and urban sophistication. Palmyra's crown jewel was the Temple of Bel. Inaugurated on the 6th of April in AD 32, this immense monument, set within a colonnaded courtyard of 200 by 200 metres, integrated the principles of Greek Hellenistic temple architecture of the highest order with Mesopotamian building traditions and idiosyncratic adaptations to accommodate local cult practices. Until its destruction by Islamic State militants in 2015, this temple stood as one of the most impressive material witnesses of any ancient civilisation in the Levant.

Palmyra is often dubbed a 'caravan' city. The term has been used in various ways over the years, but at its core, it denotes a city whose prosperity rested, to a considerable extent, on revenue from long-distance trade. The label 'caravan city' has been applied too loosely to include cities, such as Bostra, south of Damascus, Gerasa in Jordan, and Dura-Europos in northern Syria by the Euphrates – but Palmyra is the one instance where this appellation is fully justified. As the following pages show, Palmyra's fortunes were tied up with long-distance trade in a variety of ways, politically, economically, and militarily, and in particular, its elite found

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ingenious ways to establish Palmyra as an indispensable node on a vital trade route, and to profit from this position to entrench their own power.

Self-governance and military muscle

Pliny the Elder, writing in the 70s AD, in a famous passage paints a vivid picture of Palmyra as a city athwart the empires of East and West, skilfully navigating its own course between the two great antagonists.

> Palmyra is a city famous for its situation, for the richness of its soil and for its agreeable springs. Its fields are surrounded on every side by a vast circuit of sand, and it is as it were isolated by Nature from the world, having a destiny of its own between the two mighty empires of Rome and Parthia, and at the first moment of a quarrel between them always attracting the attention of both sides.[1]

Palmyra was annexed to Rome's *provincia Syria* probably in the early first century AD. No Roman garrison was established in the city until the 160s AD. Instead, the first military force attested there are Palmyrene troops serving as auxiliary units to Roman legions. This is but one indication that Palmyra enjoyed rights and privileges granted to hardly any other local community under Roman rule.

Palmyra was the only city in the Roman Near East where, alongside the standard Greek that was the official language of Rome's eastern provinces, the native (Palmyrene) Aramaic language was used in public inscriptions. Even though Aramaic was the spoken *lingua franca* across the Near East at the time, only Palmyra manifested the confidence and pride in its own traditions to elevate their native tongue on par with Greek in their public documents. Latin was also used occasionally, e.g. in a number of trilingual inscriptions, but to a much lesser extent, even though Palmyra became a titular Roman colony in the second century AD. Palmyrene vocabulary and personal names also show a distinct Arabic element, but it is unknown to what extent Arabic, too, was a spoken language among the people of Palmyra.

Throughout its history, Palmyra's commercial, social, and religious life was dominated by powerful groups of clans and tribes. The leading citizens of Palmyra formed a local elite with strong ties among priests and magistrates. The basis of their power was partly located outside the city itself. The Palmyrene elite maintained close connections, and perhaps familial ties, with the people of the desert.

First elements of a civic organisation are attested in the first century AD, with Palmyrene inscriptions naming civic offices such as treasurers and Greek-style civic institutions, namely a council (*boulē*) and an assembly (*dēmos*). At the same time, inscriptions also frequently mention the names of different tribes – a dozen or so are attested at first, but by the end of the first century AD, the number was reduced to just four (Kaizer 2002). It is thought that each of these four 'civic' tribes was in charge of one or two major sanctuaries at Palmyra. Thus, for instance, the sanctuaries of Baalshamin and Allat were linked to a tribe with an Arabic name (*Benē Ma'zin*, the "shearers") which had at first been located outside the city limits

but was later integrated into the city as Palmyra grew northwards (Yon 2022, 301). While these official four 'civic' tribes are amply attested in inscriptions, personal or familial tribal affiliations are not explicitly mentioned in the limited documentary record at our disposal, but one must assume that adherence to clans and tribes continued to constitute a significant force in the social life of the Palmyrenes.

Palmyra was located in a solitary fertile green spot in the midst of an inhospitable desert, but its exceptional position allowed it to control large tracts of the surrounding area. Palmyra's local militias, an elite camel corps of mounted archers, were not stationary in the city but patrolled the vast expanse of the surrounding desert of Syria between Emesa (Homs) and the Euphrates border to the north. The routes were thus protected by Palmyra's own military units, as evidenced by several inscriptions naming commanders (*stratēgoi*) and troops. With military muscle and diplomacy, they could therefore ensure safe passage for the caravans and organise appropriate guides, pack animals, and relay stations.

Trade, commerce, and caravans

Palmyra's quick and spectacular rise to prosperity, which manifests itself in the city's sumptuous monuments, was closely tied to long-distance trade. Caravans of camels and horses travelling the routes across the Syrian desert were Palmyra's commercial life blood (on trade in Palmyra; see in particular Matthews 1984; Gawlikowski 1996; id. 2022; Millar 1998; Young 2001, 136–86; Seland 2016; id. 2020). Palmyra's geography, positioned halfway between the Euphrates to the north and east and the Mediterranean coast to the west (some 200 km in either direction from Palmyra), was ideally suited as a stopover along the east–west trade routes. From the middle of the Euphrates, the Syrian desert route straight west through Palmyra represented the closest connection to the Mediterranean, and a considerable shortcut compared with the traditional route which followed the Euphrates all the way to its western bend, and from there into northern Syria and the Orontes Valley.

This desert shortcut was not a natural trade route; the route had to be created and maintained. It was especially under the Roman aegis over the region that the political, economic, and military conditions aligned in such a propitious way as to allow Palmyra to flourish as a major trade hub.

The importance of caravan trade in Palmyra's economy is reflected in the epigraphy. Some three-dozen so-called 'caravan inscriptions' illustrate the traffic between Palmyra and Mesopotamia between AD 19 and 260 (Gawlikowski [1996] lists the 34 caravan inscriptions known at the time). These inscriptions, written in Aramaic, often doubled with a Greek translation, originally accompanied bronze statues representing Palmyrene elites involved in trade. These bronze statues, like hundreds of others that originally populated the public spaces of Palmyra, are now lost, but from the tiny scraps that do survive, e.g. a left foot clad in a sandal, one can gather that they were originally dressed in Greek costume, with *chiton* and *himation*, or possibly with Roman togas. Most of these statues were no doubt brought in from outside Palmyra, as suggested by a passage from the famous "Tariff" regulating the import of such statues (Kropp and Raja 2014, 394).

The caravan inscriptions and statues were set up after the successful conclusion of a journey from the east back to Palmyra, and commissioned either by the merchants participating in a caravan or by the municipal authorities in their name. Among the destinations repeatedly mentioned are Spasinou Charax on the Persian Gulf and, somewhat closer, Vologesias in Babylonia on the lower Euphrates. The texts are disappointingly vague on the exact exploits of the beneficiaries. They are usually thanked in generic terms for having helped a caravan or "pleased the merchants in everything." No specific trade goods are enumerated, and no details are provided as to the finance, logistics, or organisation of caravan ventures.

Another notable omission from the caravan inscriptions is any destination to the west of Palmyra. The only travels mentioned are to and from Mesopotamia and the Gulf, never to the Mediterranean. It may be that only the eastern journeys were considered perilous and thus in need of organised and well-funded protection, which would then be rewarded with public honours in the shape of statues and inscriptions. Travel from Palmyra to Damascus and Emesa, and from there to the main seaports, was much less risky and in no need of organisation into large, well-armed caravans. Trade to the west was thus less worthy of note, and quite possibly in the hands of merchants from outside Palmyra.

The inscriptions thank the great notables as benefactors without whom the caravans would not be possible, but do not highlight any specific task or feat, probably because their contributions were elementary and too self-obvious to all parties involved to deserve special mention. The texts do, however, single out so-called caravan chiefs (*synodiarchai* in Greek), men whose responsibility was to lead the caravans safely from Palmyra to Mesopotamia and back, while also taking charge of organisational tasks. They, too, were no doubt members of the elite.

Palmyrene authorities seem to have distinguished between privately organised and public caravans. The former were in the hands of 'merchants' (*emporoi*), the latter were led by *synodiarchai* on officially sanctioned business. The striking designation of "caravan of all the Palmyrenes" found in one inscription appears to confirm this kind of distinction. There was thus a twofold structure with, on the one side, caravans connected to the civic organs of the city, and on the other side, elite members acting on their own accord.

As for Palmyra's commercial success, most profits appear to come not from taxing merchandise in transit, but rather from services rendered. Goods in transit probably never entered the city; they were stored in caravan stops built some distance away. Some of these *khans* at the outskirts of the city, where the goods must have been unloaded, taxed, and exchanged, have been documented and excavated, e.g. in the Valley of the Tombs (Gawlikowski 2021, 48–9 Fig. 22). The oasis was enclosed within an extended walled circuit, but this wall does not seem to have served a strategic purpose. It probably marked Palmyra's fiscal boundary, and is today still known as the "customs wall." This municipal privilege was leased, as was the privilege of collecting Roman customs duties, to private leaseholders at a small profit.

Camels and horses were the primary modes of transport for desert routes. In addition, one inscription indicates the use of boats on the Euphrates, which probably

implies that camels and horses were left to graze on the river bank, waiting for the traders to return. Palmyrene merchants established themselves in Mesopotamia from early on. By 33 BC, a Palmyrene community is attested at Dura-Europos, a town under Parthian control since the late second century BC. A community of Palmyrene and Greek merchants in Seleucia (presumably Seleucia on the Tigris) was established by AD 6. Palmyra's merchants also held permanent trading posts in Babylonia (Ctesiphon, Vologesias) and on the Persian Gulf (Spasinou Charax, Phorath, Bahrein).

Some Palmyrene merchants pushed further east: two inscriptions refer to traders going all the way to northwestern India (referred to as 'Scythia' in the texts) on boats owned by Palmyrenes, and there is further evidence for a Palmyrene presence in the Persian Gulf. By contrast, there is no evidence that Palmyrenes crossed into Iran or Central Asia, let alone China. Conversely, no merchants from the Far East are attested as travelling to the Roman Levant. Although Chinese sources seemed to be dimly aware of some names of Near Eastern cities, some Roman embassies may have reached China and some Roman material culture definitely did, we have no information about direct trade contacts (Graf 1996). But the lack of direct contact is not in itself significant. Trade in either direction did, of course, take place, but via middlemen along the way.

What items did the caravans carry? The caravan inscriptions do not specify the trade goods imported. Judging from what is known about Rome's eastern trade at large, they included exotic herbs and spices, principally pepper, but also ginger, cardamom, aloe, and spikenard; exotic woods such as teak; Indian muslin cloth, Chinese silk (brought via India), precious and semi-precious stones, and pearls from the Persian Gulf (Gawlikowski 2021, 48). What all these goods had in common was their portability, durability, and extreme resale value in cities across the Roman Mediterranean where these items were exceedingly rare and precious luxury commodities. Due to their value and rarity, such luxury goods are by definition hard to grasp archaeologically and rarely found in excavations, but one notable exception at Palmyra is Chinese silk.

Silk, either as raw silk or woven textiles, had to be imported to the west from China all through antiquity until the sixth century AD when the technique of raising silkworms was finally mastered in the west. In Palmyra, the tombs of the local aristocracy have yielded large numbers of silk textile fragments that give a vivid impression of the splendour of luxury clothing among the city's elite at the time. A good part of the silk reached Palmyra as ready-made textiles with monochrome decorative patterns. The number and quality of these so-called "Han damask" textiles in Palmyra are extraordinary and only comparable to those found in client kingdoms in western China where they were probably used and exchanged as tribute payments and diplomatic gifts. Besides Palmyra, there is no other location in the Roman Empire where Han damask has been found (Stauffer 2013, 132). Palmyra has even yielded two examples of Chinese silk with polychrome decorative patterns and Chinese lettering. Such textiles were only allowed to be produced in special workshops under Chinese imperial control. Again, Palmyra is the only Roman site to provide such finds. On the whole, Palmyra has yielded the largest amounts of

Chinese silks anywhere in the Roman Empire and thus allows for unique insights into the use of this sought-after fabric that spurred the imagination of contemporary observers and commentators as the epitome of luxury and decadence.

In addition to ready-made silk textiles, Palmyra also imported raw silk which was then used by local craftsmen to produce silk textiles on the spot. Technical analyses have shown that part of the silks were woven on horizontal Syrian looms and not on vertical Chinese looms (Ruffing 2022, 395). Furthermore, raw silk could also be rewoven in Palmyra together with other types of material, such as wool, cotton, or linen. The local textile manufacture in Palmyra profited in this way from its access to trade goods from the Far East. Palmyra was not just at the receiving end of long-distance trade, but could draw on these connections to draw positive impulses to its local economy and manufacture.

Palmyra's caravan trade peaked in the latter half of the second century AD. The caravan inscriptions are concentrated in the years between AD 130 and 161, though at least three more date from the late second or early third centuries. What followed was a noticeable decline in trade (with no caravan inscriptions between 211 and 247), possibly owing to conflict and insecurity in the region in the wake of the overthrow of the Parthians by the Persian Sassanids in AD 224. But, given the relatively small sample size, the absence of caravan inscriptions alone cannot be taken as a sure indicator of the demise of trade. Rather than the cessation of long-distance trade, the absence of these monumental inscriptions may, in part at least, hint at changes in habits of organising, recording, and rewarding caravan ventures. The trade routes certainly remained open to some extent, as shown by the continued presence of merchants in Palmyra, but we now learn from Palmyrene inscriptions of soaring interest rates raised on loans of 30 or 32 percent, reflecting the increased risks and insecurity (Gawlikowski 2022, 386).

At the same time, there is evidence to suggest a re-orientation in the third century, with new Palmyrene involvement in Egypt and on the Red Sea coast (Yon 2022, 291). Two individuals, identifiable as Palmyrenes by their names, were honoured at Coptos by Palmyrene wool merchants, under the name of "Palmyrene *nauklēroi* of the Erythraean Sea." Further new discoveries from various locations around the Arabian Peninsula attest to the exploration of new routes and outlets by Palmyrene merchants: Palmyrene inscriptions at Suqutra, Qani on the Yemeni coast, and South Arabian inscriptions in the Hadramawt where Indians, Chaldaeans (most probably people from southern Mesopotamia), and Palmyrenes met (Gawlikowski 2022, 382; Yon 2022, 291).

Visual evidence: camel and ship reliefs

In addition to material evidence of actual trade goods from distant lands found in Palmyrene tombs, and to caravan inscriptions celebrating elite citizens in public spaces, there is also visual evidence that is often taken as evidence of Palmyra's status as a caravan city: a handful of relief monuments depicting camels and, in one case, a ship, are regularly cited to prove the importance of long-distance trade in the economic life of the city.

The camel, the quintessential 'ship of the desert', was the indispensable means of long-distance transport across the arid deserts from its domestication, probably in the Arabian Peninsula in the course of the second millennium BC, until the early twentieth century. For the inhabitants of these areas, the camel was also an essential source of milk, meat, wool, leather, and fuel (Seland 2017, 106). In Syria and the Levant, the predominant camel breed was the one-humped dromedary, whereas in less arid areas from inner Asia to Asia Minor, the two-humped 'Bactrian' camel was more common.

In the Hellenistic and Roman Levant, horse- and camel-mounted troops were often employed jointly, both by native troops and the corresponding units in imperial armies. For instance, Palmyrene men are known to have served in the Roman army, usually as camel riders and archers, from at least the time of Trajan (early second century AD), e.g. in the *ala I Ulpia Dromedariorum Palmyrenorum milliaria*, which was first stationed at Palmyra, then moved to Arabia. Around the middle of the second century AD, the Roman garrison that was stationed at Palmyra, the *ala I Ulpia Singularium*, joined the existing Palmyrene *militiae* of camel riders to help patrol the countryside and protect the long-distance trade routes (Stoll 2022, 342).

In light of the camel's pervasive role in the life of their communities, depictions of domesticated camels are surprisingly rare in the artistic repertoire of ancient civilisations. Palmyra is one of the few ancient sites to have yielded such images. These consist of small-scale relief sculptures from sarcophagi or blocks from architectural structures. Some are ascertained to come from tombs, while others were found to be out of context or of uncertain provenance. They seemingly attest to the involvement of Palmyrene aristocrats in the lucrative caravan trade.

An architectural block found reused in the Justinianic city wall depicts, within a rectangular frame of leaf mouldings, a row of three camels resting on their haunches (Figure 5.1) (Colledge 1976, pl. 129; Tanabe 1986, nos. 92–93). The three animals are rendered identically. Each is equipped with a high-backed saddle covered with animal fur and flanked by shield, spear, and quiver. There is no indication of trade goods or transport here, and instead strong hints to a military context. The military connotation of this image is confirmed by other reliefs from Palmyra which depict camels with identical equipment but with the addition of

Figure 5.1 Monumental base with three camels.

Source: Palmyra Museum A24/1226. H 36 cm, W 173 cm. Photo A. Kropp.

riders on their backs who are unmistakably identified as warriors (or warrior gods) in native desert costume, holding swords or lances in their hands (Colledge 1976, 43 pl. 33; Tanabe 1986, nos. 141–2).

A second block, a sarcophagus panel found reused in the Camp of Diocletian (Figure 5.2), depicts a standing camel equipped in the same manner and flanked by two Palmyrene men in elaborate costumes, one of whom is holding the camel's reins (Colledge 1976, pl. 143). The depicted figures have been repeatedly identified as a caravan leader and his servant in recent publications (Sartre and Sartre-Fauriat 2008, 84; Smith 2013, 74–5), but as E.H. Seland correctly points out, there is no indication in the imagery of any connection with the world of trade or commerce, nor is there a visible distinction in status between the two figures (Seland 2017, 107–8). Instead, the military theme is once again prominent, with the left figure holding a spear and the right one a long sword.

Seland, however, misinterprets the costume: the two figures are not wearing "trousers suitable for riding" (Seland 2017, 108) but rather elaborate Persian costumes of the kind often found in funerary relief sculpture. They consist of richly embroidered long-sleeved belted cloaks, trousers, and soft-leather boots. Such costumes are never shown on figures on camel-back; they instead appear in civilian life, e.g. in the context of banqueting scenes at Palmyra, as elegant evening dress on the bodies of reclining revellers and their attendants.

The relief sculpture hence combines the display of martial prowess with the refined elegance of the Palmyrene elite lifestyle. To underline the elite status, the relief also depicts between the heads of the two standing figures a *modius*, the cylindrical hat worn by Palmyrene priests, to indicate priestly status. The monument hence puts on display the civilian as well as the military credentials of these Palmyrene citizens, without any hint to trade or commercial activities.

The iconography of the camels in both monuments provides important insights into Palmyra's material culture, as it includes historically significant antiquarian

Figure 5.2 Sarcophagus panel with camel and two men.

Source: Palmyra Museum 2093/7431. H 75 cm. Photo A. Kropp.

details: These images show what was at the time a new kind of saddle: a cross-bow saddle (*Kreuzbogensattel* in German) with a wooden construction around the hump of the camel. In contrast to traditional saddles, contraptions made of straps and cushions, this kind of saddle provided the rider with a stable seat and allowed the camel to carry a heavier load and thus cross longer distances than was previously possible. Bridging the vast expanse of the desert with greater ease, this innovation enhanced the power and income of those in control of desert routes for centuries to come. The Palmyrene camel reliefs, alongside images of Nabataean camels on Roman denarii minted in 58 BC, are among the very first known attestations of the new cross-bow saddle type (Kropp 2013, 41–2 n. 290, Fig. 1).

Of all the images of Palmyrene means of transportation, by far the most famous and unusual one is the so-called ship relief (Figure 5.3) (Colledge 1976, pl. 103). This fragment of a funerary relief was found in the tomb of Julius Aurelius Maronas (dated AD 236) in the western necropolis. It depicts a complex scene made up of disparate elements (Seland 2017, 112–13).

Its main feature is a detailed image of a large sailing ship with a rounded hull and equipped with rudder side oars. The ship is fully rigged and under sail. This is a striking image of a maritime vessel at a desert city hundreds of kilometres away from any sea coast. To the left of the ship, the relief shows the figure of a man of disproportionately large size in relation to the ship. The figure is fragmented, and only the lower part is preserved up to the chest. He seems to be clad in an unusually short belted tunic. With his left hand, he appears to be grasping, incongruously, the stern of the ship. With his right hand, he is holding the reins of a large animal, now broken off entirely except for the two front hoofs. The surface of the hoofs is too badly weathered to determine with certainty whether they belonged to a horse or a camel, but considering the context, the latter is by far the more likely (Seland 2017, 112). Of all the Palmyrene relief sculptures regularly cited in the literature as

Figure 5.3 Ship relief from the tomb of Julius Aurelius Maronas, AD 236.

Source: Palmyra Museum 1046/2249. H 85 cm. Photo A. Kropp.

evidence for caravan trade, the ship relief is the only one that stands up to scrutiny as testimony of Palmyrene long-distance trade. Gawlikowski (2021, 172) interprets the scene plausibly as "commemorating a caravan venture to the Gulf and a sea passage to India."

The relief also represents an entirely unique and original composition, juxtaposing a camel and a sailing ship scaled down to size, and in their midst with a firm grip on both, the towering figure of one Palmyrene aristocrat. This uniqueness underlines how out of the ordinary such celebratory images of long-distance trade were in the visual landscape of ancient Palmyra. There were no pattern books or visual formulas to fall back on for this subject. In contrast to the extremely repetitive funerary sculpture of Palmyra, reproducing the same visual formulas a thousandfold, images of caravan trade were not in any artists' repertoires – they had to be invented there and then.

Conclusion: silk trade *ante* Silk Road

This chapter has brought together the available material, epigraphic, and visual evidence for Palmyra's pre-eminent position within the trading and transit networks that connected the Mediterranean world with Asian markets. Palmyra's far-flung contacts are most vividly exemplified by Chinese silk textiles of impressive quality and quantity found in the tombs of the Palmyrene elite. No other site in the Roman Empire has yielded a comparable trove of Chinese silk. But findings such as these do not amount to evidence for the existence of an ancient "Silk Road" in the sense of either a continuous commercial link or a consistent vector of political encounter or cultural exchange between the East and West (Millar 1998). Contacts between the Roman Near East and China always remained indirect, sporadic, and haphazard, to such an extent that the two empires maintained no diplomatic contacts and were barely aware of each other's existence.

The lack of an ancient "Silk Road" can in no small part be attributed to logistics:

> The overland caravan route across Iran to Central Asia and beyond hardly existed as a sustainable commercial prospect. The cost of land transport was enormous, fifty times more expensive than sea shipping and five times more than river haulage. This cost, and political risks resulting from the strained relations between Rome and Parthia, as well as frequent passage fees levied even in friendly territory, made merchants choose land routes only when unavoidable.
>
> (Gawlikowski 2022, 382)

The situation was rather different for the sea lanes. As outlined above, two routes offered themselves to the merchants from the Roman Empire. One of them linked Egyptian Red Sea ports and the western coast of India; the other started at the head of the Persian Gulf to reach the same Indian ports. Palmyrene traders are known to have operated on both routes, and it was these routes, via Indian middlemen, that probably brought Far Eastern goods to Palmyra and helped transform it into a prosperous hub of commerce.

Appendix: a new typology of Palmyrene coinage

Palmyra's idiosyncratic coinage is a complex subject. In sharp contrast to scores of other cities of the Roman Near East, the coins of Palmyra are small, lightweight, and often of crude manufacture. Whereas other cities regularly produced civic bronze coinage in 3 or 4 different denominations, with the largest one often up to sizes of 30 mm and beyond, Palmyra's coinage is typically in the range of 10–15 mm and a weight of 1–1.5 g. It seems paradoxical that, of all Syrian cities, a phenomenally prosperous city of commerce such as Palmyra should produce a local currency so thoroughly unimpressive. But findings from on-site excavations have shown that the intermittent output of Palmyra's local mint may, in part at least, be due to the fact that

Figure 5.4 Standard typology of Palmyrene coinage.

Source: Krzyżanowska 1982.

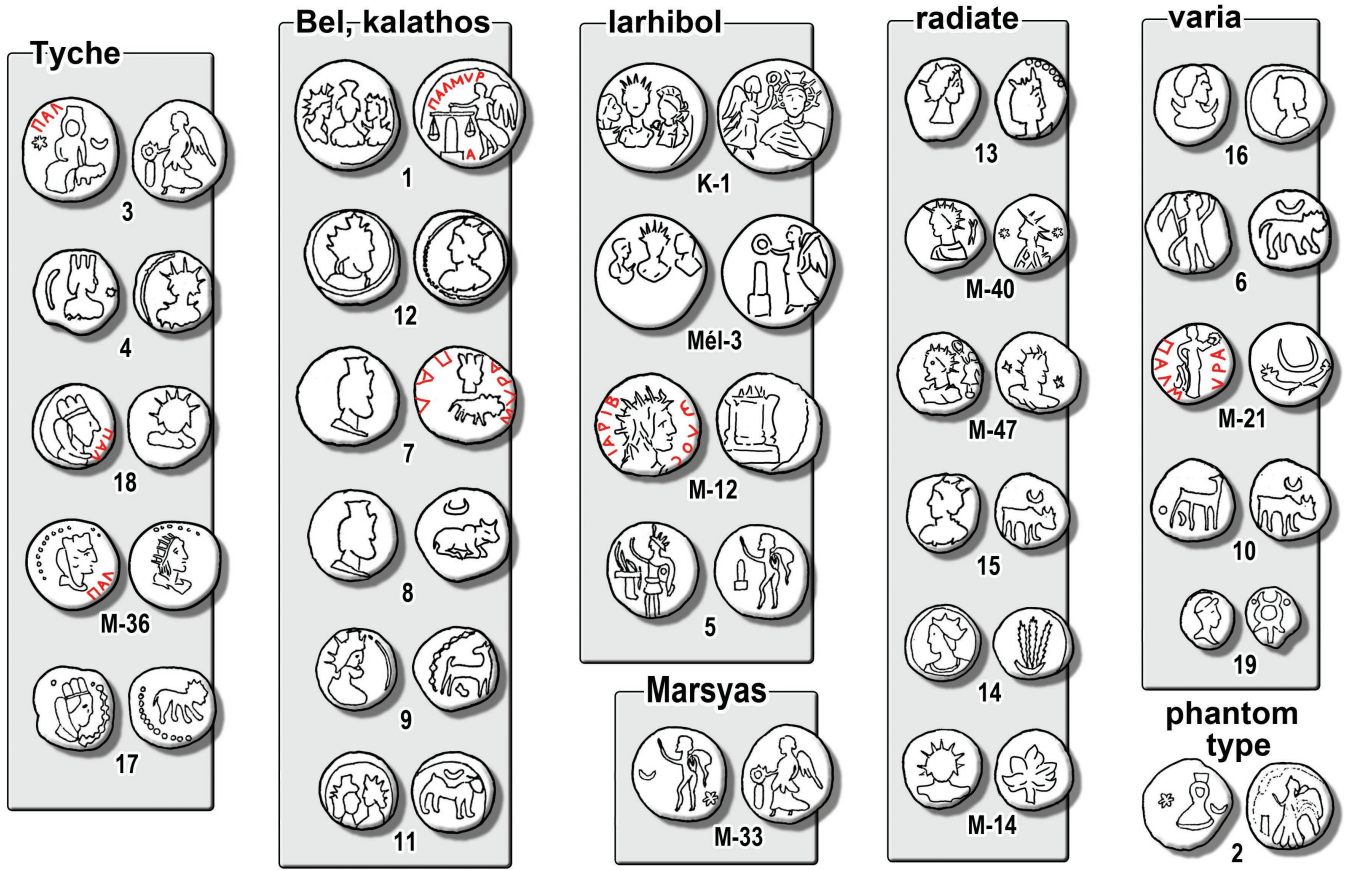

Figure 5.5 New typology of Palmyrene coinage. The numbering follows Krzyżanowska 1982 unless preceded by a letter.

Source: © A. Kropp.

other currencies from East and West circulated freely in Palmyra and were widely accepted as legal tender, thus rendering sustained local coin production obsolete.

The study of Palmyra's coinage had long been dormant but has seen renewed interest in recent years. Yet even in new publications, the coin typology that is still universally in use is the preliminary and incomplete one first presented by Krzyżanowska more than 40 years ago (Figure 5.4) (Krzyżanowska 1982).

I present here, for the first time, a new typology of Palmyrene coins that fundamentally overhauls the standard typology (Figure 5.5). This illustration is intended as a preview of an upcoming detailed study on Palmyrene coin typology. This new typology is based on a thorough review of all the available numismatic evidence and previously overlooked publications. It is hence more accurate and comprehensive than its predecessors, and it puts the coinage into a coherent thematic order (sorted by obverse iconographies) that visualises the internal coherence between these coin issues, forming a proper visual programme with a discernible rationale. This categorisation by iconographic themes offers new insights on local identities and religious life as set out by the mint of Palmyra and thus promises to set Palmyrene numismatics on a new footing.

Note

1 *HN* 5.88. Although written in the later first century AD, Pliny probably relied on sources that pre-dated Palmyra's annexation by Rome.

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6 Abbasid Caliphate and Tang Dynasty in the ninth and tenth centuries CE

Trade, acculturation, and transformation

Julian Henderson

The earliest evidence for human interaction across Eurasia along the routes of the 'silk roads' date from the late second and third millennia BCE. By the ninth century, there is ample evidence of a complex network of east–west and north–south interconnections joined the Arab Abbasid caliphate in West Asia, the Türkic people and others of Central Asia, the Indian Chola, Rashtrakuta, and Chahamana empires, and the Tang Dynasty in China. Trade goods, people, and ideas moved along these routes between cosmopolitan hubs in East, Central, and West Asia. There is also clear evidence of silk road links from West and Central Asia to the 'Viking' world, along routes to the north of the Black Sea. Moreover, the network of connections spanned both land and maritime routes, which linked East Africa and the Persian Gulf to South Asia, Southeast Asia, and East Asia as far east as Japan.

Glass, furs, medicines, gold, silver, tea, grapes and wine, clover, peaches, horses, wheat, chariots, iron, and bronze metallurgy, amongst other things, were exchanged along the silk roads between the third and first millennia BCE (Mair 2014, 2). During the first millennium CE, exchange expanded through Central Asia linking, at least indirectly, west and east ends. Trade in Islamic dirhams, silver, glass, and slaves even occurred northwards with the Vikings (Rus). This chapter will show that, by the ninth–tenth centuries, glass and pottery was mass produced in West Asia and traded with East Africa, South Asia, and East Asia, while Chinese ceramics were in heavy demand in West Asia. Bentley (1996, 752) suggested that mass migrations, imperial military campaigns, and long-distance trade had a big cross-cultural impact "across the boundaries of societies and cultural regions." The societies and cultures of those involved would have shaped the social, economic, and ritual meanings of the material culture, at its origins and its final destinations.

Journeys along the silk roads were rarely end to end, though this depended on the traveller. Buddhist monks were involved in trade so the spread of religion to new areas was interwoven with trading activities. It is difficult to know whether religious men travelled over thousands of miles continuously; diplomats may have. One group of central Asian peoples, famed for their trading activities, were the Sogdians, who had originated in Central Asia in modern Uzbekistan. By the Tang Dynasty, they had founded communities in many locations along the silk roads, including the capital Chang'an – see chapters 9 and 10.

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Sociologists who investigate how modern populations adapt to new social environments in foreign lands use the concept of *acculturation*. Adapting to the new economic, political, social, and religious environments was a complex process for travellers far removed from their roots. This often led to a fascinating modification of languages, religions, and material cultures. Later generations adapted to their new home, such as the Sogdians adopting elements of Chinese burial practices in Chang'an and South and West Asian Buddhist monks who became advisers to Chinese courts. This chapter will discuss evidence for the extent of interaction across the silk roads focused on the major imperial hubs during the Islamic Abbasid caliphate and the Tang Dynasty. Case studies will next explore the morphology of their capitals, Bagdad and Chang'an, and analyse the significance of the artefacts found at the Famen Temple in Chang'an and on the Belitung shipwreck in the Java Sea for evidence of trade and contacts across the silk roads.

International hubs

By the medieval period or earlier a network of caravanserai (hotels) stretched across Eurasia to provide protection for silk road travellers, including religious people, diplomats, and tradesmen. Undoubtedly, the caravanserai allowed for the exchange of ideas about technology, trade, religion, medicine, diet, and more. Although interaction across the Eurasian silk roads occurred between cosmopolitan hubs, these were mediated through smaller settlements in between that were linked to local networks (Hansen 2012, 36–7). Here I will discuss the characteristics of two cosmopolitan hubs, Chang'an and Baghdad (see Figure 1.1). They played an important role in enabling the flow of people, things, and ideas. Both cities were characterised by a successful and centralised administration, strong diplomatic links, a successful economy and a cultural florescence.

Chang'an

The Tang capitals of Luoyang and Chang'an had mixed cosmopolitan populations because of their open policy of welcoming non-Chinese peoples. Luoyang's population peaked in the sixth century at around 550,000. It included monks from central and southern Asia as well as merchants and exiles from southern states, Central Asian kingdoms, the Rouran Khaganate (in outer Mongolia), and Koguryo in Korea (Huang 2021). This provided a model for the development of Tang Chang'an (Wang 1999).

Central Asian foreigners were referred to by the Chinese as *Hu* (胡) and Arabs as *Dashi* (大食). There is general agreement that *Dashi* referred to the Umayyad caliphate (661–750 CE) and the Abbasid caliphate (750–1258 CE). Apart from Arabs, Persians, Türkic peoples, Uighurs (a Türkic ethnic group living mainly in eastern and central Asia), Xianbei and Khitans (nomadic Mongolian peoples), Tibetans (such as the Tanguts), Koreans, Japanese and Sogdians, and others lived in Chang'an. Xue (2006) describes nine classes of Sogdians (*Zhaowu jiu xing* 昭武九姓) whose homeland was the area between the Syr Darya and the Amu Darya

in central Asia and stretching eastwards as far as present-day Xinjiang. They are especially famous as successful traders and businesspeople. Their presence in Chang'an is partly revealed by their tomb epitaphs (see Liu's chapter).

Tang period Chang'an can be reimagined as a cosmopolitan urban environment whose development was tied to the silk roads. It measured 9.7 km by 8.6 km and was the biggest city in the world at the time. The city was organised in a grid pattern of streets, according to functional zones. The market of the foreigners, the western market, was a similar size to the eastern market, around 1 km north–south and east–west (see Figure 6.1). The imperial palace was located in a north–central position (Kiang 2014). The Kaiyuan Gate in a northern position in the western city wall was used by foreigners to enter and leave the city. Kiang (2014) has noted that a pottery workshop was in Liquan ward close to the western market. Government officials located in the markets administered them. The western market was renowned for its foreign shops (*hudian,* 胡店) which sold silk, medicinal herbs, tea, cattle, horses, sheep, and other central Asian commodities. Sogdian Persian jewellers located there specialised in jade and pearls (Abrecht 2014, 265–6). Warehouses were used to store exotic precious metals, gems, and elephant tusks. Amongst other things, tea, silk, and (later) porcelain were exported.

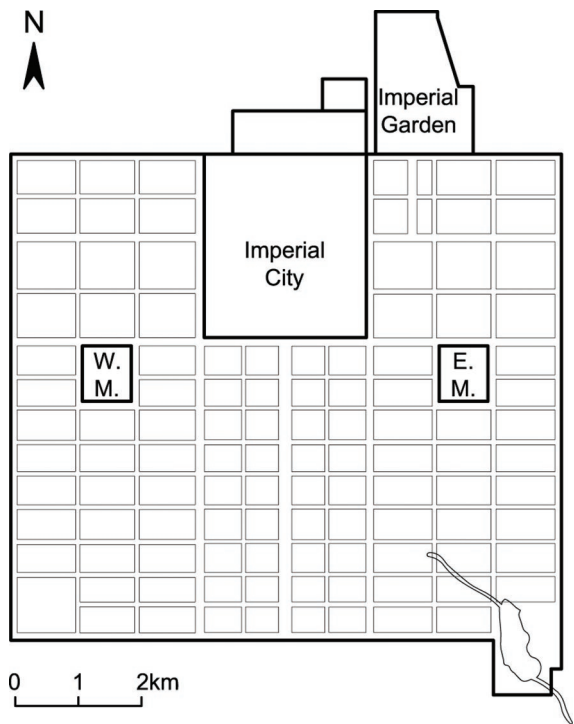

Figure 6.1 A map of Chang'an (W.M. = Western Market; E.M. = Eastern Market).

Source: Reproduced with the permission of Prof Xing Xie.

Shared spaces in which residents of different ethnicities came together included bazaars, as well as Manichean and Zoroastrian temples, Nestorian Christian churches, and Islamic mosques in northwest Chang'an. There were also Taoist temples, Buddhist monasteries, temples, and family shrines. Some of the Chang'an population would have 'experienced a sense of solidarity within, and sometimes beyond, their ethnic and religious communities' (Feng 2011, 53). Moreover, these spaces would allow an exchange of ideas about commerce, technology, diets, religions, philosophy, and politics, and would contribute to the process of acculturation and the hybridisation of cultural identity. There were mosques in the main ports of Guangzhou, Quanzhou, Hangzhou, and Yangzhou (see Figure 1.1). The Great Mosque in Chang'an is thought to have been built in the seventh century, though its present Ming Dynasty form is based on a West Asian traditional mosque with prayer hall and minaret but otherwise has characteristic Chinese decoration. The fourteenth-century Muslim traveller Ibn Battūta, who overall did not hold a positive view of Chinese society, observed the following: 'In every city of China is a quarter where the Muslims live separately and have mosques for their Friday prayers and other assemblies. They are highly regarded and treated with respect' (Mackintosh-Smith 2002, 262). Nevertheless, Taylor (2022), also citing Ibn Battūta, has argued it was more common for Muslims to be treated rather badly and with great suspicion.

Notable evidence for the presence of foreigners in Luoyang and Chang'an is provided by the Luoyang pillar and Xi'an stele. The former is an octagonal shape, the shape of a stūpa, which was erected by Christian Sogdians. Lotus flowers, the precious pearl, and flying apsaras typical of Buddhist representations are carved on it, but also a Nestorian Christian cross. Inscribed on it is mention of a well-known Christian Bukharan Sogdian family, An (Nicolini-Zani 2009). The Luoyang pillar is important evidence for the fusion of religions resulting from interaction along the silk roads as part of the process of acculturation. The Xi'an stele dating to c. 781 CE provides similar evidence and confirms the early history of Christianity in China.

Tang acceptance of foreigners is revealed in Chinese epigraphical sources which mention that Iranians, mainly Sogdians, were appointed as administrative and military officials. Nicolini-Zani (2009) had noted that these appointments would have been linked to the spread of Christianity into Tang China; the names of the clergy may have been changed to Chinese ones. The appointment of Iranian Sogdians as government officials in the imperial Tang capital Chang'an therefore shows both the extent to which they were accepted by the Tang government and the degree to which Sogdians became acculturated to their new homes.

Baghdad

Three main dynasties shaped the development of the Islamic 'Golden Age': the Abbasids in Baghdad; the Fatimids in Cairo (909 CE–1171 CE); and the Umayyads in Cordoba (929 CE–1031 CE) in the west. The Umayyads made Damascus their capital with greatest evidence of interaction with the Mediterranean on the edge of

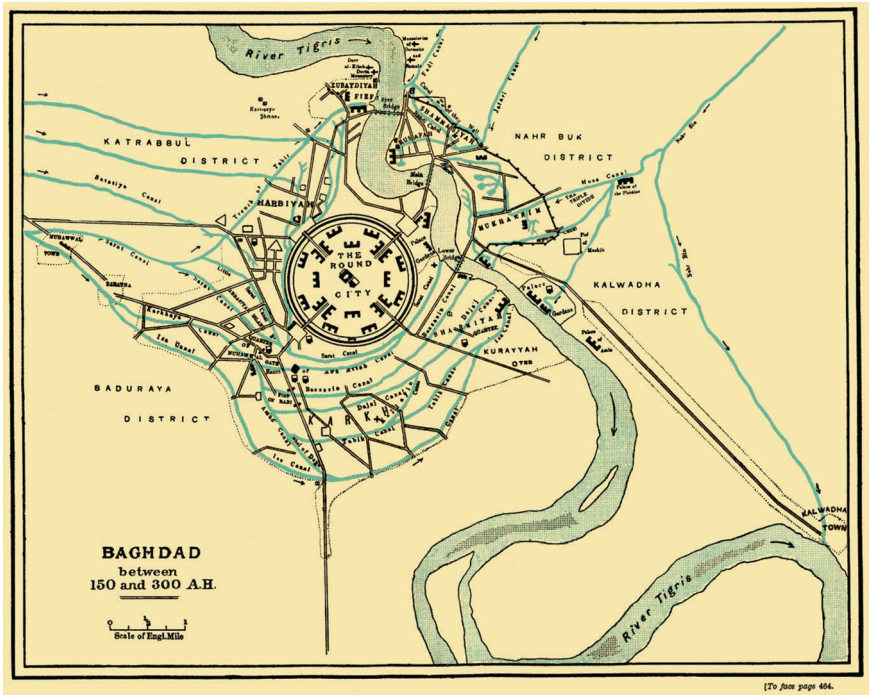

Figure 6.2 The round city of Baghdad between 150 and 300 AH (842–922 CE) by William Muir 1883.

the old classical world, and to the north in modern east Anatolia and Azerbaijan. From 750 CE, the Abbasids moved the centre of the caliphate to the east, with Baghdad as their capital and with a greater focus on areas to the east, in Persia and Central Asia. The Abbasid's second Caliph, Al-Mansur (754 CE–757 CE), founded the circular city of Baghdad (Madinat-as-salam, the city of peace), its capital, straddling the Tigris River (see Figure 6.2). Al-Mansur started the construction of the round city of Baghdad in 762, or in the Muslim calendar, AH 145. The Tigris connected Baghdad with Basra, the key port at the head of the Persian Gulf, which served trade routes to East Africa, and South and East Asia. Baghdad was also on the important desert road from Iraq to Khurasan. Khurasan lies in northern Iran and Transoxiana and included the hubs of Nishapur, Herat, Balkh, and Merv. South of Baghdad is the Euphrates River, which gave access to Mosul, al-Raqqa, and the Jasira further north.

The city included mosques, a garrison, and a palace protected by high walls enclosing at its maximum an area of 5 km^2; most of the population lived outside the walls. After 750 at the start of the Abbasid caliphate, Arabs and non-Arabs were integrated into the caliphate. The influential Persian Barmakids were originally guardians of a Buddhist shrine near Balkh, Afghanistan. They then converted to Islam (Kennedy 2004, 137) and supported the urbanisation of the east

bank of the Tigris, a suburb to the east of the palace city. Under the Abbasids, the marketplace in Baghdad was named after loyal viziers and non-Arab clients, a form of propaganda (Bessard 2020, 46–7).

Hārūn al-Rashīd, the most famous of the Abbasid caliphs, with close ties with the influencial Barmakid family, came to power by way of a coup in 786 (AH170); he reigned until 809. In his first ten years as caliph, political and fiscal centralisation occurred focused on Baghdad, with provincial governors having less power than previously. The time of Hārūn saw the last period when the caliph controlled an area from Ifriqiya (North Africa) in the west to Sind (northwest India) in the east (Kennedy 2004, 145). Hārūn conducted frequent raids into the neighbouring Byzantine empire to the west. The Frankish emperor Charlemagne (d. 814) sent envoys to Baghdad in 797 (AH 180–1) and 807 (AH 190). There is also a Latin account of Hārūn sending an elephant as a gift to Charlemagne in 801 (AH185).

Like Chang'an, Baghdad was a cosmopolitan, imperial capital. Unlike the Chang'an, Baghdad was planned in concentric circles with the caliph's palace at the centre, whereas in Chang'an the palace was in the central northern area of the city. As already noted, Tang Dynasty Chang'an had many ethnic minorities living within its walls from western, central, and East Asia. Baghdad's cosmopolitan population mainly consisted of north African, western and central Asian peoples. There is very limited evidence that the Chinese lived in West Asia, including Baghdad (George 2015). Chinese prisoners were taken at the battle of Talas in 751. One was called Du Huan. His relative, Du You, notes that a letter from Du Huan had mentioned the presence of Chinese artisans in West Asia, possibly in Iraq, who had come from Chang'an and the regions around it. They included painters, fine metalworkers, and weavers.

Another contrast between Tang Chang'an and Abbasid Baghdad was that Chang'an had a variety of religious buildings whereas Baghdad had mainly mosques and a smaller number of churches. A third contrast between the two is that Chang'an had been a capital city in the Han dynasty, rebuilt as the capital in the Sui Dynasty and expanded as the capital of the Tang Dynasty. In contrast, Baghdad was the centre of the Abbasid caliphate, while the palace city of al-Raqqa in northern Syria was also an important commercial and military centre, especially between 796 and 808. In 836, a new capital, Samarra, was founded by al-Mutasim on the east bank of the Tigris, 125 km to the north of Baghdad (Northedge 2005a, 2005b). It is therefore clear that the reuse of the same location as an imperial capital found in Chang'an, is lacking in the Abbasid caliphate.

The position of Baghdad on the Silk Road was important militarily, allowing Abbasid armies to conquer new territories beyond the River Oxus (Amu Darya in northern Afghanistan). Moreover, the 'House of Wisdom' (bayt al-hikma) – an archive serving the caliph and his government – was founded there, overseeing the Graeco-Arabic translation movement supported by al-Mansur, Hārūn al-Rashīd, and Hārūn's son, al-Mamun. It hosted a wide range of people whether Islamic or not, Arab or not (Gutas 1998). Baghdad was a centre of artistic, philosophical, scientific, medical, and literary endeavours. The famous alchemist, al-Jabir, was a close friend of Hārūn al-Rashīd. Islamic medical knowledge, including urinalysis and wound healing was shared with the Chinese Buddhist traders. Muslims also

brought to India their insights on astronomy and scepticism of the geocentric universe (Hoskin 1999, 60).

During the Abbasid caliphate, there was a great demand for Chinese ceramics, which motivated Islamic artisans to imitate Chinese stonewares and porcelain to make stonepaste wares. A later Persian historian, Bayhaqī (995–1077) describes how the governor of Khurasan, ʻAli ibn ʻIsa, sent as a present to Hārūn: "twenty pieces of imperial China-ware, including bowls, cups and half-cups, the like of which had never been seen at a caliph's court before, in addition to two thousands other pieces of porcelain." This is clear evidence of links between eastern and western Asia along the silk roads as well as a demand for the exotic in Hārūn's court, and beyond. It is probable that there was an industrial quarter in Baghdad just as there were in al-Raqqa (Henderson et al. 2005; Henderson 2022) and Samarra, but unfortunately it has physically not survived. There is historical evidence for a market next to the industrial estate in al-Raqqa (Heidemann 2006) and this would have been the case in Baghdad too. Even in the eighth century, the market in Kufa on the Euphrates about 100 miles south of Baghdad, the first Abbasid capital, was described by Du Huan, mentioned above, as 'full of beautiful textiles, pearls and shells. Glassware and metal vases and jugs became common' (Yu 2012, 312).

Case studies

Famen Temple, Shaanxi Province, Central Western China

The Famen Temple was originally built in the eastern Han dynasty (25–220 CE). The crypt (a Buddhist reliquary) was built in 874 at the same time as a stūpa. The stūpa collapsed during the reign of the Ming emperor Longqing (1567–72) and an octagonal pagoda with 13 levels was built to replace it. While cleaning the foundations of the temple in 1981 after the collapse of the Ming roof due to heavy rain, the crypt beneath the stūpa was discovered.

A wealth of material was found in the crypt. A finger bone reputed to belong to the Buddha provided the basis for relic veneration in the temple. In addition, 121 gold and silver vessels, eight bronze vessels, 20 glass vessels, 19 porcelain vessels, 400 pearls and pieces of jade, hundreds of pieces of silk fabrics, coins of the Tang Dynasty, and two inscriptions recording events in the 15th year of the Xiantong reign (874 CE) were found. All the material culture is of the highest quality workmanship. Indeed, the porcelain included 'secret coloured' celadon that resembles finely polished jade of 'imperial' quality. Another example found in a Buddhist temple is a teacup from the Huqiu pagoda, Suzhou city, eastern China. The occurrence of such high-quality ceramics at the Famen Temple underscores the close connection between the imperial court and finger bone veneration at Famen. By the early ninth century, the practice of relic veneration at the Famen Temple indicates that Tantric rituals, notions of huguo (护国 protection of the state) and bringing peace and prosperity to the people had permeated the practice.

Most of the glass vessels found in the Famen Temple are typical Middle Eastern products. Arguably, 18 of them constitute the best-preserved collection of complete Islamic glass vessels from anywhere in the world; the 19th vessel, a cup and

saucer, is a typical Chinese product, the 20th piece is a fragment (An 1991; Jiang 2010; Li et al. 2016). The presence of glass is highly significant. It underscores the high value attributed to imported glassware. Glass is considered one of the Buddhist Seven Treasures and to hold the wisdom and light of the Buddha, as documented in the 'Lotus Sutra' 法华经 and the 'Amitabha sutra' 阿弥陀经. That found in the Famen Temple reflects spiritual–religious beliefs and demonstrates its prestigious value. Such Islamic glass has been found in other prestigious contexts such as in the stūpa of the Dule Temple in Jixian, Tianjin built in the Liao Dynasty (916–1125 CE), the Northern Pagoda in Chaoyong, Liaoning province dating to the Chongxi reign (1032–54) of the Liao Dynasty and the Tomb of Princess Changuo and her husband in Naiman, Inner Mongolia (An 1991).

Amongst the glass vessels in the Famen Temple are six complete cobalt blue scratch-decorated glass bowls (An 1991, Figures 3–8, Li et al. 2016). They include unique gilded examples, which suggest that they were commissioned. Such vessels were made in vibrant dark blue, purple, and amber colours, and sometimes paler colours (see Figure 6.3). The scratched decoration on the six cobalt blue vessels from the temple is incised, a technique also known as sgraffito. It either consists of highly stylised geometric designs or naturalistic (vegetal and bird) designs and can also include inscriptions (Carboni 2001, 71–3); vessels that have been found on other sites also date mainly to the ninth century CE. One scratch-decorated piece from Nishapur has twisted ropes, sunflowers, and vines, providing a parallel for a Famen piece and which An (1991, Figure 7) suggested was produced in the same workshop. Indeed An (1991) suggested that they were all imported from Nishapur.

Figure 6.3 Early Islamic scratch-decorated glass vessel from the Famen Temple.
Image: Julian Henderson.

Figure 6.4 Early Islamic lustre-decorated glass vessel from the Famen Temple.
Image: Julian Henderson.

The variety of decoration may reflect the ethnicity of those who made the artefacts, though we lack conclusive historical evidence. The caliph was able to move groups of artisans across vast areas of the Islamic world, so the involvement of people of different ethnicities in glass production probably led to the exchange of technical information and a fusion of traditions, sometimes labelled 'technology transfer.' Another relatively unusual glass vessel from the Famen Temple is a lustre-decorated bowl – see Figure 6.4 (An 1991; Carboni 2001, Figure 9; Li et al. 2016). It is a deep translucent colour, with the lustre decoration that includes a poppy head in the base, which might be associated with opium use. Carboni (2001, 79–81) has suggested possible production locations and zones for scratch-decorated vessels in general as being Nishapur from where they were traded along the Silk Road, al-Raqqa, or 'Mesopotamia,' with production perhaps occurring in several locations. Using non-destructive X-ray fluorescence analysis, Li et al. (2016) suggested that some plant ash Famen pieces with scratch decoration were made in Syria and Iran.

Moreover, the use of trace-element analysis has shown that these scratch-decorated vessels were manufactured in Samarra and perhaps Nishapur (Henderson et al. 2016; Schibille et al. 2018). The impurities in the silica and plant ashes, the primary raw materials used to make the glass, allow identification of both production zones and specific sites, such as Samarra and Ctesiphon, where glass must have been fused in furnaces (Figures 6.5 and 6.6). If glass is recycled into new items locally, it would contain the local site chemical signature, though with some exceptions (Lü et al. 2022). Very unusually, these local signatures provide evidence for specialised production of vessels with specific kinds of colours and decoration (Henderson 2022). Science therefore helps us to define the silk roads by tracing the movement of chemically characterised glass (and therefore people) across the Eurasian landscape.

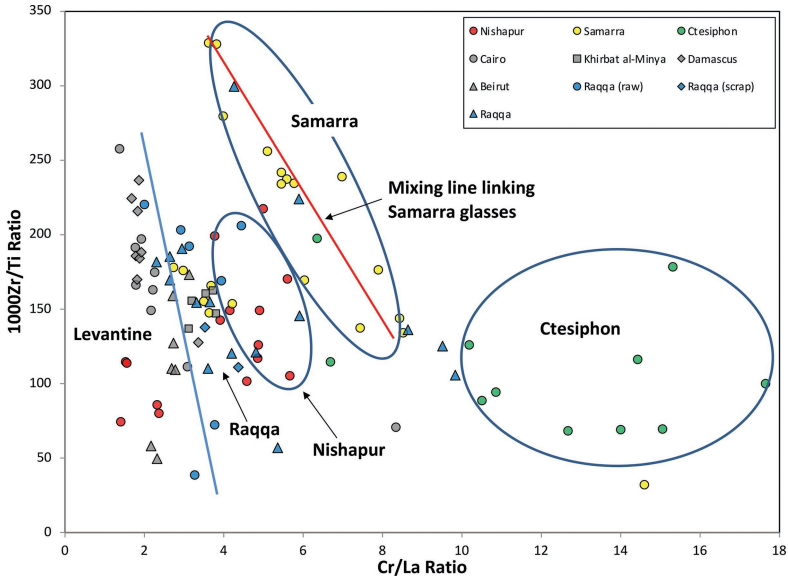

Figure 6.5 Trace elements associated with silica providing distinctions between early Islamic glasses made in the western Asian silk road hubs.

Image: Julian Henderson.

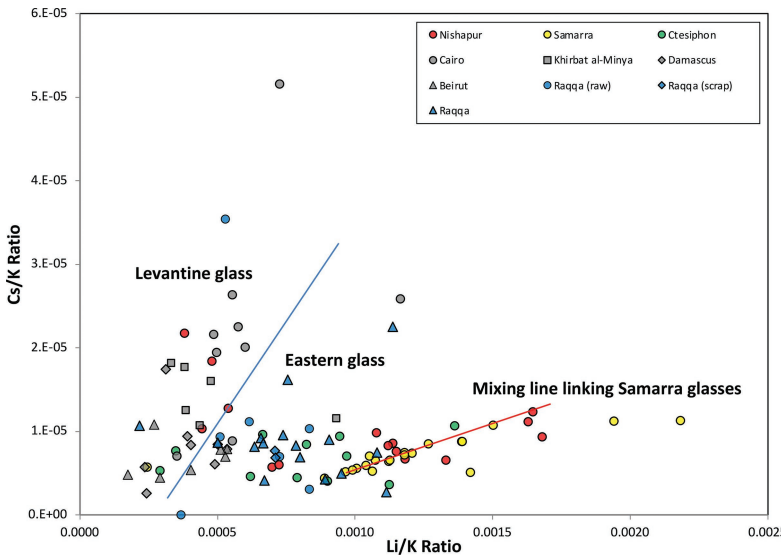

Figure 6.6 Trace elements associated with plant ash providing distinctions between early Islamic glasses made in western Asian silk road hubs.

Image: Julian Henderson.

The most likely way the Famen glass travelled from western Asia to China in the ninth century CE, with least likelihood of breakage, would have been by sea and then on canal boats to Chang'an.

The Belitung shipwreck

The Belitung shipwreck near Belitung Island in the Java Sea dates between 830 and 850 CE. It is a sewn plank built Arab *dhow*. Although the wreck was investigated commercially and some of its contents were lost to private collectors, it is an extraordinary time capsule. The Belitung is the largest collection of Tang Dynasty artefacts found in one place. The cargo includes silver and gold vessels, 28 bronze mirrors, 10 tonnes of lead ingots used as ballast, 18 silver ingots and 2 kgs of gold foil, but it is mostly Chinese ceramics. The gold and silver consist of dishes, bowls, cups, a wine flagon, boxes, and a bracelet. An octagonal gold vessel decorated with seven central Asian musicians and a dancer with long curly hair and billowing clothes would probably have been used for wine drinking. It was possibly used in ceremonial gift-giving by Tang elites and may indicate diplomatic links between western and eastern Asia or perhaps with Java (George 2015, Heng 2019).

The ceramic evidence provides an important insight into production specialisations for trade across the maritime silk road in the Tang Dynasty. The 50,000 pale cream-coloured Changsha ware vessels found on the shipwreck were decorated in brown and green vapour trails, floral, animistic, and foliage patterns (Yang 2011). These were made for export in the Changsha kiln, Hunan. Their occurrence on the Belitung demonstrates the very high levels of production necessary to feed the enormous demand for such wares along the 'maritime silk road' as far as western Asia (Stargardt 2014). Archaeological excavations in western Asia reveal a greater propensity for Yue wares there; some 400 fragments of Changsha wares have been found in India (Zhao 2013, Heng 2019, n.21). In total, 119 Xing white wares and 218 green Yue stoneware vessels were found on the wreck. One of the key centres for Yue stoneware production was near Shanglin lake, between Ningbo and Cixi, Zhejiang province, dating to the Tang Dynasty (618–907), Five Dynasties (907–60), and the Song Dynasty (960–1279). They are stonewares decorated with green celadon glazes coloured with iron. The characteristic reflectiveness of the glazes is due to the presence of microcrystals of anorthite (Vandiver et al. 1989, 318). The greenish colours are thought to have been made in imitation of jade. The bodies were made from crushed weathered acidic rocks, so-called 'porcelain stone' (Guo 2007). The raw materials used to make the glazes were silica and plant ash. The use of strontium isotopes is one of the few ways to confirm the use of ashes of plants as the fluxing raw material: the isotopes are associated with calcium in the ashes (Ma et al. 2014). Hundreds of these vessels would have been fired at one time in so-called 'dragon kilns' built on hillsides (Wood 1999, 33–5) of which around 200 operated by the Shanglin lake; many vessels would have been stacked and separated using rough vessels called saggars. Another production area for Yue celadon wares was east of Guangzhou, Guangdong province, though the Shanglin lake is considered the main production zone for the wares found on the Belitung.

The main forms of ceramics found on the Belitung were massive storage jars and smaller tablewares including bowls, which were typically packed inside the large jars. Such bowls were used for drinking tea and formed part of Zen Buddhist meditation; Yue wares were found in the Famen Buddhist temple (see above). One of the best archaeological parallels for the Changsha and Yue wares found on the Belitung are from the excavation of Tang Dynasty site in Helilu harbour, Ningbo (Krahl 2011). Overseas, Yue wares have been found at the Abbasid capital of Samarra, Iraq, the rich port of Siraf, Iran on the Persian Gulf, and in Fustat, a suburb of modern Cairo, for example. Yue and Changsha wares have been found on various sites in East Africa, with about 100 Changsha vessels from Manda and Shanga (Zhao 2013); in South Asia, these bowls have been found in Mantai, Sri Lanka, and Banbhore east of Karachi (Hsieh 2011). Three white dishes from the wreck are painted with a blue design, amongst the earliest Chinese blue and white ceramics. It has been suggested that these were used as prototypes perhaps to be offered to western Asian customers: the decoration of foliage and lozenges is not found amongst domestic Tang ceramics (Krahl 2011), but similar to designs of contemporary Iraqi ceramics (Hallett 2011, 80).

Exceptionally, amber, aromatic resin, and star anise from south China or Southeast Asia were found in the jars on the Belitung (Krahl 2011, Figure 11). All of these were potentially associated with medicines and alchemy. It is possible that such a secondary cargo was to be taken to West Asia. George (2015) has suggested that the Belitung was first destined for Java or the Kingdom of Srivijaya in Sumatra before returning to West Asia. Perhaps the Belitung vessel put into Siraf on the Persian Gulf, Mantai on Sri Lanka, and Hoi An in Vietnam. Although Guangzhou was a possible terminal port because of the hundreds of pieces from the Guangdong kilns found on board, a more likely port was Yangzhou on the Yangzi River because of the variety of ceramics, such as Yue and Changsha wares. Moreover, Yangzhou sat at the crossroads of the Grand Canal and the Yangzi River (Hsieh 2011). It is possible that the Belitung would have unloaded west Asian merchandise at Yangzhou such as frankincense, myrrh, glass, ivory, cotton textiles (from India), and minerals like cobalt (Murphy 2020). Perhaps the Belitung later stopped at Guangzhou. Voyages would have been timed to take advantage of the monsoon trade winds across the Indian Ocean.

Conclusions

In the study of interactions across Eurasia, the silk roads can be reimagined to function as a conceptual framework, revealing interactions and acculturation over a broad chronology. The Eurasian silk roads that emerged since the third millennium BCE through the agency of a multiplicity of peoples and regions, had by c. 800 CE become a complex interconnected network of land and sea routes, which offered great opportunities for the exchange of ideas and material things as well as the movement of people. In the early Abbasid caliphate and the late Tang Dynasty, several cosmopolitan hubs with populations of up to 500,000 existed. People of

different ethnicities resided in these hubs, bringing together their diverse experiences, and potentially undergoing acculturation as they adjusted their lifestyles to fit their new environments, including their religions, languages, diets, technologies, and philosophies.

Chang'an was one of the principal hubs in China and capital of the Tang Dynasty. It was home to many ethnic minorities, including those from western and central Asia. Even though Baghdad was the capital of the Abbasid caliphate and partly contemporary with Chang'an, its ethnic minorities were largely from the Arabic world along with some Nestorian Christians who had fled from the Byzantines. There is little evidence of the presence of Chinese or other East Asian peoples. In China, large Arab-speaking communities were present in Chang'an and in Chinese ports such as Guangzhou and Yangzhou.

The presence of Arab and other foreign communities in parts of East Asia undoubtedly helped to drive Silk Road trade, creating connections between their homelands and East Asia. The late Tang Buddhist reliquary in the Famen Temple and the Belitung shipwreck reveal this in different ways. The West Asian material culture in the former underscores the highest possible ritual context and value associated with a finger bone of the Buddha and moreover illustrates an important connection between Buddhist relic veneration and the imperial state. It also exemplifies a radical transformation of the social and ritual values of the west Asian glass vessel found there.

Before the late Tang period when the Belitung shipwreck was discovered, it was commonly assumed that the maritime silk roads were of minimal importance, but this is far from the case. The finds on the shipwreck not only demonstrate a thriving maritime trade, but also make it possible to predict that other Tang shipwrecks, perhaps also Arab *dhows*, will be found with comparable evidence for trade. This discovery of the largest collection of Tang material in one place, including ceramics, silver and gold vessels, iron and silver ingots, and aromatics, reflects the high demand for Chinese material in western and southern Asia. The boat was most probably returning to West Asia, almost certainly via Srivijaya on Sumatra and southern Asia. The massive number of ceramics, especially Changsha ware, would suggest this was a specific order of which similar ones would have helped to drive the Chinese economy. The presence of three prototype Chinese blue and white bowls with western Asian decoration offer a fascinating insight into the trade in ceramics at the time.

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7 Natron glass and the Silk Roads in the first millennium BCE

Qin-Qin Lü

Coined in the nineteenth century, the term 'Silk Roads' refers to the extensive network facilitating trans-Eurasian interactions. This term often conjures popular images of intrepid diplomats and explorers such as Zhang Qian and Marco Polo, mighty empires such as Imperial Rome and the Tang Dynasty, and cosmopolitan hubs such as Chang'an and Samarkand. Yet, it is crucial to recognise that long-distance connections across the Eurasian Continent preceded the involvement of formal states, and the formation of communication networks also predated the prominent figures who traversed these routes. Substantial evidence indicates the presence of prehistoric long-distance interactions, including the spread of copper smelting technology (Roberts, Thornton, and Pigott 2009) and the diffusion of domesticated crops, such as wheat, barley, and millet (Stevens et al. 2016).

Instead of viewing the Silk Roads as the outcome of an event that switched on long-distance trade, the development of inter-regional networks should be understood as an evolutionary and heterogeneous process occurring at multiple scales and driven by various forces. The exchange of materials and knowledge remained time-consuming on the continental scale before and during the Bronze Age, suggesting limited long-range communications. For instance, it took six millennia for wheat to reach the lower Yellow River in China after its domestication in West Asia (Dong et al. 2017). By the late 1st millennium BCE, inter-regional interactions appeared to intensify. Chinese silk, mirrors, and lacquer from Warring States China were discovered in contemporary burials in Inner Asia and Siberia (Brosseder 2015). Soon after, Chinese silk and Roman glass vessels each became highly valued goods on the other side of the continent far from their origins (An 1984; McLaughlin 2016). Therefore, it is essential to understand how the long-distance interactions, reflected by the diffusion of materials and knowledge, accelerated in the 1st millennium BCE, and how these early interactions shaped the historical links now collectively known as the Silk Roads.

Glass has been widely traded in Eurasia and Africa for millennia. Glass is made mainly from two basic ingredients: silica and flux. Flux lowers the fusing temperature of silica and can be derived from suitable mineral or botanical sources. By tracing the origins of glass, ancient glass artefacts provide insights into inter-regional interactions along the Silk Roads. In archaeological science, the primary basis for provenancing glass is chemical composition, which is used

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to attribute glass objects to technological types, often corresponding to specific geographical origins. Recent advances in glass research have increasingly relied on high-precision trace-element data, particularly using Laser Ablation Inductively Coupled Plasma Mass Spectrometry (e.g., Shortland, Rogers, and Eremin 2007). This state-of-the-art characterisation method can also overcome moderate surface corrosion often present in archaeological glass (Lü and Wu 2019).

A material closely related to glass – faience – provides a good example of using science-based provenance as a means to reveal prehistoric cultural connections. First produced in the Near East at the end of the 5th millennium BCE, faience is a type of silicate material composed of a body of quartz particles and an alkali glaze, often produced as beads and pendants. Chemical analysis revealed the type of alkali flux used to make faience beads found in China. Researchers suggested that, soda-rich and mixed-alkali faience objects dated to the 2nd millennium BCE and onwards were likely imported products originating from the Near East and Europe. Meanwhile, potash-rich faience objects dated to the Western Zhou Dynasty (1046–771 BCE), unique among contemporary faience, have often been considered native Chinese products (Lin et al. 2019; Lei and Xia 2015; Gu et al. 2014; Wang et al. 2020). By unveiling the technological origins of faience beads from Bronze Age China, researchers have illustrated both long-range interactions and local innovation in this period.

This work focuses on natron glass in Eurasia during the 1st millennium BCE. It will review natron glass finds of this era in both the Mediterranean and China and their technological signatures. Based on composition-based provenance and typological features, it will discuss how natron glass objects spread across the continent and delve into the socio-cultural implications associated with the diffusion of nation glass.

Natron glass in the West

Natron glass is a type of glass made using the natron mineral, a soda-rich evaporite deposit predominantly sourced from Egypt, as the flux. Throughout most of the 1st millennium BCE and 1st millennium CE, natron glass was prevalent in areas to the west of the Euphrates, evidenced by numerous finds unearthed across the Mediterranean and Black Sea regions and Europe. Researchers generally agree that natron glass production usually involved a few primary glassmaking centres, which made raw glass from natron and silica material, and many secondary workshops, which melted and shaped raw glass into final products (Degryse and Shortland 2009; Henderson 2013). Because natron glass primary production was limited to the Mediterranean region, natron glass discovered elsewhere can be used as a proxy for investigating long-range links.

A recent study compiled and assessed the compositional data of natron glass from Eurasian sites dated to the eighth to second centuries BCE (Lü et al. 2021). Using principal component analysis, these samples were categorised into four types, I_0, I, II, and III, based on the concentrations of aluminium, barium, zirconium, titanium, strontium, neodymium, lanthanum, and thorium, all associated with impurities

Table 7.1 Compositional types of natron glass objects (eighth to second century BCE) from the Mediterranean and Europe

Site	*Date (BCE)*	*Source/note*	*Type*	*Quantity*
Satricum, Italy	4–3 C.	(Oikonomou et al. 2018)	III	5
Satricum, Italy	4–3 C.	(Oikonomou et al. 2018)	II	39
Rhodes, Greece	640–600	(Oikonomou and Triantafyllidis 2018)	I	2
Rhodes, Greece	640–600	(Oikonomou and Triantafyllidis 2018)	II	1
Methoni, Greece	6–4 C.	(Blomme et al. 2017)	I	2
Methoni, Greece	6–4 C.	(Blomme et al. 2017)	II	3
Pydna, Greece	6–4 C.	(Blomme et al. 2017)	II	22
Adria, Italy	5 C.	(Panighello et al. 2012)	II	11
Adria, Italy	3 C.	(Panighello et al. 2012)	III	2
Adria, Italy	2 C.	(Panighello et al. 2012)	III	7
Dren-Delyan, Bulgaria	end of 6 C.–upper 4 C.	(Tzankova and Mihaylov 2019)	II	15
Francavilla Marittima, Italy	8–7 C.	(Conte et al. 2019)	I_0	3
Francavilla Marittima, Italy	8 C.	(Conte et al. 2019)	I	1
Sarno(S. Valentino Torio), Italy	725–700	(Conte et al. 2016)	I_0	1
Sarno(S. Valentino Torio), Italy	725–550	(Conte et al. 2016)	I	8
Sarno(S. Marzano), Italy	750–725	(Conte et al. 2016)	I	1
Capua, Italy	770–745	(Conte et al. 2016)	I_0	1
Amendolara, Italy	7–6 C.	(Conte et al. 2019)	I	1
Son Mas, Spain	maybe 4–3 C.	(Van Strydonck et al. 2018)	II	8
Son Mas, Spain	maybe 3 C.	(Van Strydonck et al. 2018)	III	11
Polish sites	Hallstatt C/D, 8–5 C.	(Purowski, Syta, and Wagner 2020)	I	~20
Polish sites	Hallstatt D to Early La Tène, 7–3 C.	(Purowski, Syta, and Wagner 2020)	II	~30
Pichvnari, Georgia	5 C.	(Shortland and Schroeder 2009)	II	15
Demetrias, Greece	3–1 C.	(Smirniou et al. 2018)	II	15
Epirus, Greece	3–1 C.	(Oikonomou 2018)	II	~40

found in sand (Table 7.1). Each type corresponds to different sources and/or recipes of raw materials as well as different regions of production and/or circulation.

Type I_0 exhibits extremely low levels of impurities, indicating its production from a pure silica source, probably crushed quartz pebbles. Type I is compositionally similar to Type I_0 but contains slightly more impurities and is also more variable. Both types have been found in Iron Age sites in southern Italy. A few Type I glass objects were discovered in Rhodes and Methoni, Greece. Type I composition is also identified in beads from a number of sites in Poland (Table 7.1).

Type II and Type III both have high levels of elements typically derived from clay and feldspar contained in quartz sands, implying that quartz sands were used to make raw glasses for these types. Significantly, Type II exhibits high contents of strontium. An elevated strontium level in natron glass typically indicates the use of coastal sands that contain aragonite (Freestone et al. 2003). Type II glass generally resembles in composition Roman glass that was made using Levantine coastal sand (Brems and Degryse 2014). Pliny the Elder suggested that the sands for Roman glassmaking came from the Belus River's mouth, and Strabo described Sidon (Lebanon) as a Roman glass production centre (Brems et al. 2012). Still, tangible archaeological evidence for pre-Roman primary glassmaking remains scarce, with only one late Hellenistic site in Beirut (first century BCE) known to have furnace glass reported (Henderson 2013).

A large number of samples fall under Type II. Particularly, the large proportion of artefacts with Greek contexts among Type II glass are intriguing. Much of the raw glass used to make glasses from Methoni and Pydna, Greece was inferred to have originated from the Levant (Blomme et al. 2017). Natron glass artefacts have also often been found in Greek settlements dating to the Middle/Late Hellenistic periods (third to first centuries BCE). Many of these objects, such as those from Demetrias (Smirniou et al. 2018) and Epirus (Oikonomou 2018), belong to Type II. In addition, a Greek origin was proposed for natron glasses found in Spina and Bologna, northern Italy, and Mozia, Sicily (Arletti et al. 2010; Arletti, Ferrari, and Vezzalini 2012), which may also classified as Type II based on aluminium and titanium levels.

Natron glass was likely imported into Rhodes in the Archaic period (Oikonomou and Triantafyllidis 2018), although Rhodes has also been suggested as a potential glass production centre during the Classical and Hellenistic eras (Triantafyllidis 2000). Eastern Mediterranean glass vessels produced using the core-forming technique were thought to have connections to Rhodes (Shortland and Schroeder 2009; Panighello et al. 2012; Oikonomou and Triantafyllidis 2018), the Levant (Jackson-Tal 2004; Harden 1981; Panighello et al. 2012; Blomme et al. 2016), or Italy (Oikonomou and Triantafyllidis 2018; Harden 1981).

Along the Black Sea coast, natron glass unearthed in Dren-Delyan, Bulgaria was suggested to have a Levantine origin (Tzankova and Mihaylov 2019). Natron glass from Pichvnari, Georgia and from Apollonia Pontica, Bulgaria may be connected to Levantine production and also share similarities with glass from Rhodes (Shortland and Schroeder 2009; Lyubomirova et al. 2014). These glasses belong to Type II as well. Additionally, previous research suggested the Levant as the raw glass origin for some of the Polish samples (Purowski, Syta, and Wagner 2020).

Type III may have been linked to the use of Egyptian black sand, known for its high heavy mineral contents such as magnetite, ilmenite, and monazite and elevated levels of rare earth elements. Natron glass beads excavated from Son Mas, Mallorca, western Mediterranean exhibit two compositional types that can be attributed to Type II or Type III. An Egyptian origin was suggested for the latter (Van Strydonck et al. 2018).

The chronological sequence of these technological types is worth noting. Type I_0 mostly dates back to the eighth century BCE. Type I glass production likely began at a similar time, and most Type I objects date to before the sixth century BCE. Both Type I and Type II have been identified in Rhodes samples dated to 640–600 BCE and Methoni samples dated to sixth to fourth centuries BCE. In Iron Age Poland, most natron glass artefacts belong to either Type I (eighth to fifth centuries BCE) or Type II (seventh to third centuries BCE). These dates indicate a possible transition from Type I to Type II in the seventh to sixth centuries BCE.

Type II may have originated in the seventh century BCE. It is probable that during the Phoenician times, raw glass from the Levant was transported to secondary workshops across the Mediterranean. The majority of Type II artefacts have been unearthed from Greece, the Black Sea region, or Italy. This chronological and geographical distribution largely coincides with Greek colonial expansion, hinting at a close association between Type II glass and Greek influence. The late Hellenistic period witnessed a surge in glass production (Jackson-Tal 2004; Henderson 2013), which largely followed the Levantine glassmaking tradition.

Type III glass might have been more region-specific, with the majority discovered in Italy and the western Mediterranean from sites dating to the fourth to second centuries BCE, although the origin of Type III glass might have been earlier. Since both Type II and Type III glasses have been identified among core-formed vessels from Italy, a shift in raw glass supplies probably occurred in Italy in the fourth to third centuries BCE.

Natron glass in the East

We now turn to natron glass found in eastern Eurasia. The earliest glass in China appeared around the mid-1st millennium BCE. Diverse glass types, including soda (both natron-based and plant-ash-based), potash, and lead-barium glasses, were simultaneously present in China, underscoring active cultural exchanges (Henderson, An, and Ma 2018). No evidence for natron glass primary production has been found so far from regions east of the Black Sea. China is distant from the primary region of natron glass production and circulation. It is believed that all early natron glasses discovered in China were imported and are indicative of long-distance connections.

Deep blue glass beads and various types of eye beads are of particular interest (Figures 7.1–7.3). Deep blue monochrome beads were prevalent in the Mediterranean and Black Sea regions (Figure 7.2). In the East, for instance, similar deep blue beads have been reported from Wupu (eighth to fifth centuries BCE) in eastern

Figure 7.1 Blue monochrome beads and blue-and-white eye beads (EB-d, see Table 7.2) in National Museum of Georgia, possibly associated with Greek and Colchian contexts in the second half of the 1st millennium BCE. Photo: Lü.

Figure 7.2 Eye beads (EB-b, see Table 7.2) in National Museum of Georgia, dating to the second half of the 1st millennium BCE. Photo: Lü.

Figure 7.3 Eye beads (EB-a, see Table 7. 2) in the Metropolitan Museum of Art (Accession No. 17.194.698), purportedly dated to the sixth to fourthh centuries BCE with a Greek or East Mediterranean origin. The public domain image is used according to the Met's Open Access policy.

Xinjiang and identified as Type II natron glass, indicating their production using Levantine raw glass (Lü et al. 2021).

Ubiquitous across Eurasia in the 1st millennium BCE, eye beads were culturally significant to numerous societies in Eurasia (e.g., Spaer 2001). Eye beads are named due to their appearance with coloured spots that seemingly mimic eyes. The terms 'body', 'inlaid area', 'ring', and 'pupil' are often used to refer to different parts of a stratified eye bead. The research on eye bead typology continued from the early twentieth century (e.g., Beck 1928; Eisen 1916) to today (e.g., Lü et al. 2021; Zhao 2012).

Eye beads have been discovered in a number of Chinese burial sites dating to the late Spring and Autumn (771–476 BCE) and the Warring States (475–221 BCE) periods (Figure 7.4). Eye beads from Jiuxian (Dong et al. 2012), Xujialing (Gan et al. 2009), Zenghouyi (H. Zhao et al. 2014), Hougudui Tomb I (Zhang, Cheng, and Zhang 1983), Leigudun Tomb II (Qin et al. 2009), Xiongjiazhong (Li et al. 2013), and Majiayuan (Huang, Yan, and Wang 2015) have been analysed. Notably, as many as 173 beads were unearthed from Zenghouyi. The analytical methods, data availability, and the extent of environmental corrosion in samples vary among these analyses. Most of the eye beads were discovered in the central provinces of

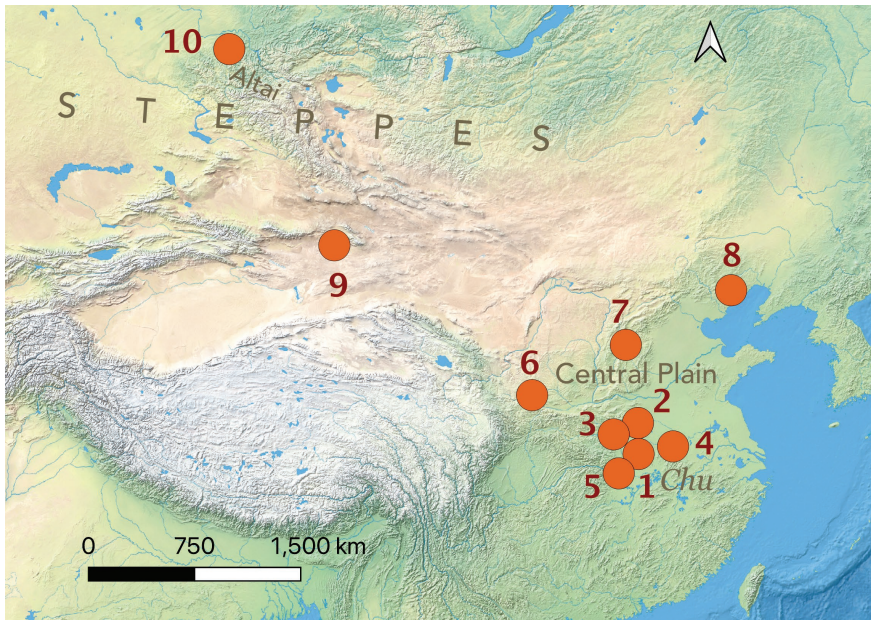

Figure 7.4 East Asian sites dating to the mid-1st millennium BCE with glass objects that are natron-based or possess typical forms closely associated with natron-based glassmaking: (1) Zenghouyi and Leigudun; (2) Jiuxian; (3) Xujialing; (4) Hougudui; (5) Xiongjiazhong; (6) Majiayuan; (7) Zhaoqing Tomb (Taiyuan); (8) Dongdazhangzi; (9) Wupu; (10) Chultukov Log I. This map was created with QGIS and the *Natural Earth II* base layer.

Henan and Hubei under the control or influence of the Chu state. The beads from Jiuxian, Xujialing, Zenghouyi, and Dongdazhangzi have been suggested as natron glass (Dong et al. 2012; Gan et al. 2009; Zhao et al. 2014; Xu et al. 2015). Based on major elements, eye beads from Hougudui, Leigudun, Majiayuan, and Xiongjiazhong were also likely made from natron glass.

Four popular types are identified among the mid-1st millennium BCE globular eye beads discovered in China, named as EB-a to EB-d (Table 7.2), based on the colours of different parts. These forms have also been found in eye beads from the Mediterranean, the Black Sea, and Europe. Furthermore, artefacts excavated from the Southern Urals and Northern Altai also provide potential parallels (Table 7.2). Notably, some of these assemblages have been analysed and identified as natron glass, and several have even been pinpointed as Type II natron glass. Assuming similarities in typology and composition are often inter-correlated, it is inferred that all four eye bead types were made from natron glass, with at least EB-a, EB-b, EB-d being Type II glass. Furthermore, colouration in these eye beads from across Eurasia seems comparable. It is common to find blue/green (copper-coloured) or yellow bodies (containing lead antimonate), blue pupils (cobalt-coloured), white inlaid parts (containing calcium antimonate), and brown rings (containing iron and/

Table 7.2 Four types of the mid-1st millennium BCE stratified eye beads across Eurasia. EB-a features a greenish-blue body, deep blue pupils, deep blue rings, and white inland areas; EB-b exhibits a yellow body, deep blue pupils, deep blue rings, and white inland areas; EB-c is characterised by a green/blue body, deep blue pupils, brown rings, and white inland areas; and EB-d presents a deep blue body, deep blue pupils, and white inland areas. a. H. Zhao and Li 2017; b. H. Zhao et al. 2014; c. Anikeeva 2015; Yablonsky 2015; d. Tzankova and Mihaylov 2019; e. Shortland and Schroeder 2009; Turmanidze 2005; f. Gan et al. 2009; g. Henderson, An, and Ma 2018; Zhang, Cheng, and Zhang 1983; h. H. Zhao et al. 2011; i. Borodovskaya and Borodovsky 2009; j. Agua et al. 2017; k. Purowski, Syta, and Wagner 2020; m. Van Strydonck et al. 2018

	North China	*Central China*	*Northern Altai*	*Southern Urals*	*Black sea*	*Europe*
EB-a	Tomb of Zhaoqing[a]	Zenghouyi (*likely natron*)[b] Shanghai Glass Museum (*likely natron*)[a]		Filippovka I[c]	Dren-Delyan (*Type II natron*)[d] Pichvnari (*natron*)[e]	
EB-b		Zenghouyi (*likely natron*)[b] Shanghai Glass Museum (*likely natron*)[a]			Dren-Delyan (*Type II natron*)[d] Pichvnari (*natron*)[e] National Museum of Georgia	Altdorf (*natron*)[j] Owidz (*Type II natron*)[k]
EB-c		Zenghouyi (*likely natron*)[b] Xujialing (*likely natron*)[f] Hougudui (*likely natron*)[g] Leigudun (*likely natron*)[h]	Chultukov Log I[i]	Filippovka I[c]	Pichvnari[e]	
EB-d		Shanghai Glass Museum *(likely natron*)[a]		Filippovka I[c]	Svaneti Museum of Georgia National Museum of Georgia	Son Mas (*Type II natron*)[m]

or manganese). High antimony is a common feature, consistent with the historical practice of using antimony as a decolourant/fining agent (as well as an opacifying agent) in natron glass until the second century BCE (Sayre and Smith 1961).

Considering the typological and technological affinities, it is likely that most of these eye beads were made by the same network of raw glass suppliers and craftsmen. The findspots of these eye beads suggest a plausible route for the spread of glass objects from the Mediterranean and Black Sea to China. Although more evidence is needed to establish specific dispersion routes, it can be stated with confidence that a substantial number of natron glass products had arrived in East Asia by the early fifth century BCE.

Discussion: natron glass and the Proto-Silk Roads

The diffusion of early natron glass beads from the Mediterranean to East Asia was most likely facilitated by the Eurasian Steppe spanning from Eastern Europe to Siberia.

In western Eurasia, Greek expansion likely promoted the dissemination of Mediterranean material culture to the Black Sea (Boardman 1980). Glass beads were well-received in the North Black Sea region with many varieties found in local burials (Alekseeva 1975). Scythian burials near Greek colonies frequently reported blue-and-white eye beads (Hall and Yablonsky 1998). Blue eye beads are particularly common in Sarmatian burials in the Lower Volga (Mosheeva 2008). Blue beads and blue-and-white eye beads have often been discovered in Colchian and Greek settlements in Georgia (Figure 7.1).

Nomadic groups roaming the Steppe likely facilitated the transport of glass items. Natron glass beads dating to the early Sarmatian period (fourth to second centuries BCE) have been excavated in Pokrovka, Orenburg in the Southern Urals near the Russian border with Kazakhstan. These beads closely resemble those in Scythian sites in Crimea and the Don Basin (Hall and Yablonsky 1998; 1997) and include common types found in the Mediterranean region. They are made from Type II natron glass (Lü et al. 2021). Eye beads and core-formed vessels were discovered in the Filippovka I burials (Yablonsky 2015), again indicating the importance of the Southern Urals in the movement of Mediterranean glass objects. Further east, eye beads were discovered from Scythian burials in the Northern Altai (Borodovskaya and Borodovsky 2009), identified as the EB-c type (Table 7.2).

Most of the natron glass beads discovered in China were found in central China, although more finds are currently being reported from northern China and the Central Plain. It remains unclear how the Chu elites in central China obtained natron glass beads, as central China was unlikely in direct contact with the Steppe. However, with materials exchanged between northern China and the Steppe, Chu probably had the capacity to acquire rare treasures as one of the powers at the time. The demand for translucent decorations probably stimulated the early development of Chinese glassmaking, since lead-barium glass and potash glass eye beads soon appeared in Warring States burials (Li et al. 2013; Liu, Li, and Gan 2015).

Crucially, the movement of early natron glass appears to have occurred relatively swiftly without involving agents usually associated with the historical Silk Roads, e.g., diplomats or traders. This implies that a degree of integration in intergroup networks had likely taken place without formal political frameworks. Glass jewellery, similar to other luxurious decorative items, may have been displayed as symbols of status. The need of the elites for these prestige goods may have catalysed more intergroup exchanges and gradually consolidated intergroup connections. For the communication networks to integrate, the large-scale expansion of interaction spheres may be explained by micro-level weak connections, which initially existed between key individuals (possibly social elites) belonging to different groups that came into contact. It has been proposed that (intergroup) weak ties, rather than (intra-group) strong ties, can facilitate diffusion by reaching larger social distances and broader audiences (Granovetter 1973). The diffusion over social distance was further amplified in geographic distance by the high mobility of population, which may have been vital for the spread of natron glass across the sparsely populated Steppe. Small glass objects moved with pastoralists, who may have acted as intermediaries for overland trade with their seasonal migrations (Hall and Yablonsky 1998). The population interflows of eastern and western Scythian groups (Unterländer et al. 2017) may have also contributed to the spread of material culture.

The proposed Steppe route for natron glass dispersion does not preclude the possibility of alternative routes, such as one through Iran and Central Asia. Not far from the Black Sea, eye beads have been discovered in the Galekuti-I burial in Gilan Province, north-western Iran, dated to the sixth to fourth centuries BCE (Sono and Fukai 1968): these beads appear to be of the EB-a type. Few scientific analyses of glass have been reported from these regions, thus limiting our scope for discussion. However, it is known that in the next centuries, trade routes through the oasis states in Xinjiang and the Hexi Corridor gained prominence, which, together with the maritime trade, gave rise to an influx of natron glass such as Roman glass vessels into China.

Conclusion

A large number of Mediterranean natron glass objects, most of which were likely made from Type II glass, may have reached East Asia by the mid-1st millennium BCE. As glass objects moved eastwards across the Eurasian Continent, they became integral to a prestige goods economy that, in turn, promoted the integration of intergroup networks. Natron glass beads were likely part of a broader cultural exchange package between the Mediterranean, eastern Europe, the Steppe, and China at this time. The relatively swift flow of natron glass items suggests an increasingly efficient and interactive transcontinental connection, signifying the arrival of a more interconnected era for Eurasia.

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8 A 'Lion' on the Silk Road

Gilberto Artioli, Ivana Angelini, and Massimo Vidale

State of the art

Endowed with "…natty mustache, leering grin, opaque white eyes, intricately curled mane" and a face that "looks partly simian, partly devilish, partly human - an effect created in part by the placement of its ears on the sides of its head" (Wills 1999, 45–9), the great bronze lion located on top of one of the gigantic granite columns facing the harbour in San Marco square in Venice (Figures 8.1 and 8.2) still baffles the simplest interpretations.

The winged lion of St. Mark has been associated with Venice since the adventurous transport of the Saint's body from Alexandria in Egypt in 829 AD and continues to live as its symbol today in the Venice flag. The economic growth of Venice through trade and commerce during the Middle Ages through to the fourth Crusade, and its expansion into the Levant, were physically represented by the widespread depiction of the lion on every conquered land: Dalmatia and Croatia, the Ionian Islands, the whole Aegean Sea including Crete, and finally Cyprus. All harbours along the Adriatic coast, Epirus, the Peloponnese, and all the ruled Islands displayed the familiar winged lion figure, with the book closed when at war, and with the book open when ruled in peace spelling *Pax tibi Marce evangelista meus* (Be at peace, Mark, my evangelist). The lion therefore has been linked for centuries to the Apostle St. Mark as the much beloved symbol of Venice (Aldrighetti 2002, Griffith 2005), and there is a uniquely strong perception of the symbol as intrinsically linking Venice and the saint, a perception that has grown through history. In the words of Griffith (2005): "The myths of Venice – of which the lion is an overall symbol – have been consciously and diligently cultivated for more than a millennium". It would therefore be a surprise if the lion and all it symbolised was in some way linked to distant lands near the other end of the silk roads. Here we consider combined art historical, technological, and scientific investigations of the lion and what light they shed on its origin in the context of silk road connections.

The bronze lion that is now on the column in the Piazzetta in Venice (Figures 8.1 and 8.2), is indeed one of the earlier depictions of the winged lion and it has a mysterious origin. Boni (1892), who carried out the first important modern restoration of the statue in 1891, following J. Ruskin (Pilutti Namer 2013) had ascribed it to a Venetian twelfth-century foundry. Ward Perkins (1947) interpreted the lion as a

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Figure 8.1 The two statues in San Marco's square, Venice in a classical representation. Luca Carlevaris (1663–1730). Private collection. The column at the right supports the 2.8 tonnes bronze statue of the lion.

Figure 8.2 The two statues in San Marco's square, Venice in a modern photograph.

Hellenistic sculpture made in Eastern Anatolia or northern Syria under the influence of Assyrian traditions. According to the *Burlington Magazine* (Vol. 132, No. 1053, December 1990), commenting on a short-lived display of the restored lion in the British Museum, London, in 1990–91, such an "apparently alien creature of

forbidding aspect" had been previously identified as "Romanesque, Gothic, Assyrian, Etruscan, Sassanian, Chinese". The *Burlington Magazine* adds that

> Bianca Maria Scarfi… has arrived at the conclusion that the 'lion' is a Hellenistic interpretation of the Mesopotamian/Persian lion-headed griffin, made in the fourth or third centuries B.C., going so far as to suggest that it may originally have been ridden by a figure of Sandon brandishing an axe.

However, according to the same source, during the special meeting on the lion held at the British Museum on 16 November 1990, while classical archaeologists eventually rejected the lion as their own, it was the medievalists who claimed it. A detailed review of previous interpretations can be found in Scarfì (1990, 31–124), by far the most complete and thoroughly informed work available on the statue (Figure 8.3).

Because of the absence of further investigations, the completeness of Scarfì's volume (1990) and its in-depth discussion of the available evidence, an origin in the Near East has gained ground (for example, in Wills 1999, 46) and it is the most popularised story on social media.

As reported in the cited literature, the lion's statue is first historically mentioned in a document of 14 May 1293 of the "Maggior Consiglio" of Venice. It states that the lion, already on the column in the Piazzetta, should have been restored at the expense of the revenues derived from wine and lumber trades (Boni 1892, 307). Tradition infers that the two columns were erected in the Piazzetta in 1172, though there are no detailed reports of the lion being positioned on the column top, as evidently happened during the course of the thirteenth century. The statue is present in a number of classical paintings and landscapes of Venice, among which we may point out the remarkable works depicting the lion by Francesco Bassano il Giovane (1549–92), Luca Carlevaris (1663–1730) (Figure 8.1), Giovanni Antonio Canal "Il Canaletto" (1697–1768) (Figure 8.4), Bernardo Bellotto (1721–80), and others.

There is scarce news on the statue during the following centuries, until the fall of the Republic of Venice in 1797. The statue escaped the fate of being re-melted or simply destroyed like most of other artworks, as it was brought to Paris as trophy by the French, together with the famous four horses of the Basilica. In Paris, it was modified by lowering the tail between the legs, symbolising a humiliated Venice, and positioned on a pillar in a fountain beside the *Hôtel national des Invalides*. Brought back to Venice in 14 broken pieces in 1815, it was quickly reassembled and restored by the sculptor Bartolomeo Ferrari (Catra 2014). In April 1816, the lion reappeared as the symbol of Venice on its original column, and in this restored form, it is depicted in a painting by Jean-Baptiste Camille Corot (1796–1875) (Figure 8.5).

The present reconstruction of the lion is due to Giacomo Boni, who also wrote the first scientific and well-documented article on the statue (Boni 1892). However, the most extensive scientific investigation commissioned by the *Soprintendenza ai Beni Archeologici del Veneto* was carried out during the removal of the statue from the column in 1985 and its transfer to the TEMAV (Centro Ricerche Venezia)

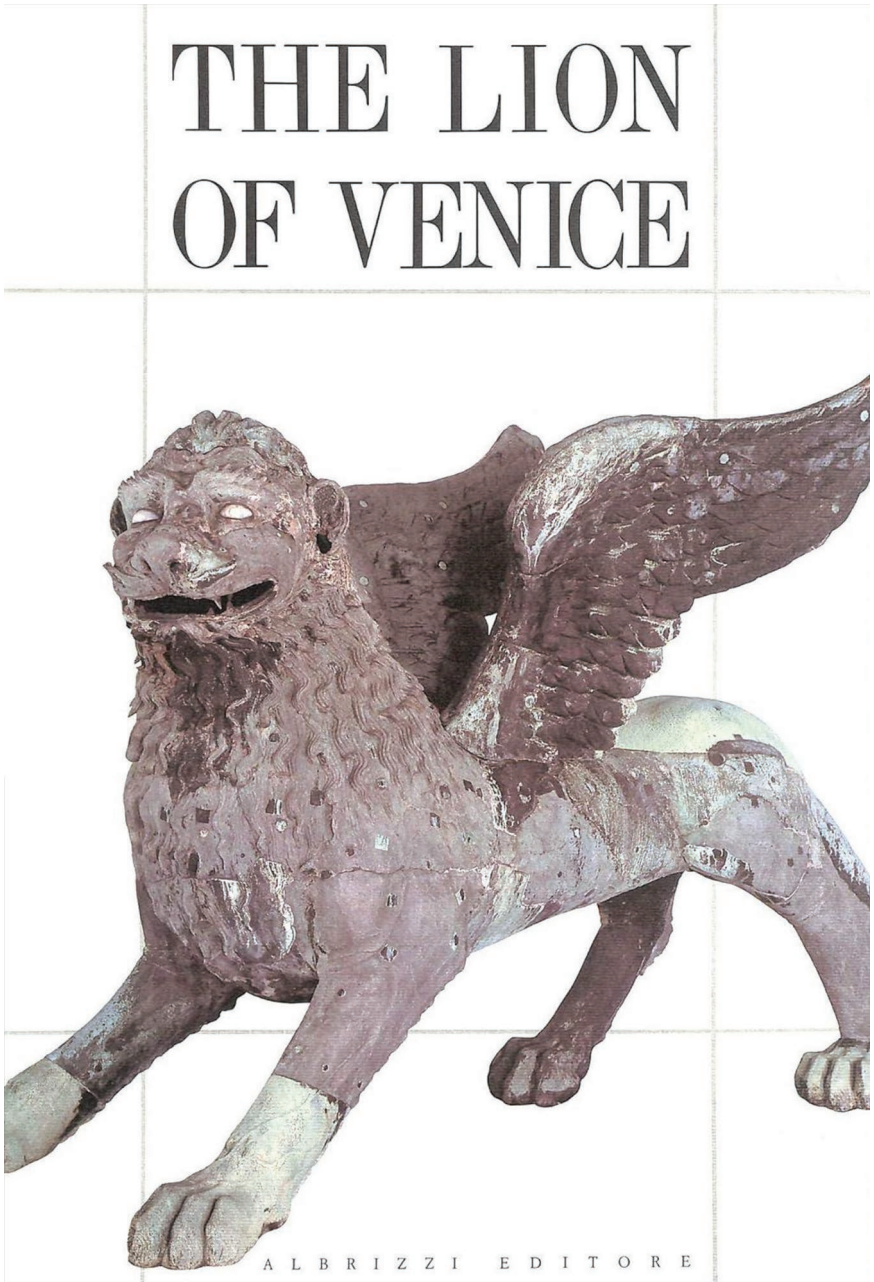

Figure 8.3 Front page of the Scarfì (1990) volume, published in several languages on the occasion of the last restoration and studies.

Figure 8.4 Canaletto (1697–1768), Venice: the Riva degli Schiavoni. The Wallace collection.

Figure 8.5 Camille Corot (1796–1875), Venise, La Piazetta, circa 1835–45. Norton Simon Museum, Pasadena, US.

restoration laboratory for final cleaning and consolidation. On this occasion, a complete photographic documentation was obtained, including a photogrammetric survey, and complete archival research, resulting in the information reported above, by Scarfì (1990). The detailed analytical and stylistic investigation resulted in the fundamental identification of different phases of casting, assembling, and restoration, each one characterised by macroscopic features and verified by chemical markers (Figure 8.9).

Following Scarfì (1990, 46–72), the identified construction and restoration phases are: *Phase I*, which includes the head, the breast, a portion of the front left leg, a portion of the belly, and both back thighs. These are parts of the original cast, and they were possibly produced by several overlapping casting flows. In proximity to the left eyebrow and the left jaw, there is evidence of gilding, proving that at some time, the lion was a shining gold colour. These parts of Phase I are characterised by a lead (Pb)-poor bronze which also contains antimony (Sb). *Phase II* involves the original re-casting of large parts of the lion's back on the original statue, reportedly because of a modification of the whole ensemble after detaching the lion from anything it may have carried on its back. The bronze alloy of this phase is also Pb-poor. *Phase III* includes several patches carried out before 1293 and using a poor-quality bronze with tin (Sn) < 7 wt% and Pb > 11 wt%. These interventions were carried out to amend defects in the original casting, especially along the sides below the wings and, interestingly, in the extensive remaking of the curls at the top of lion's head. This anomalous "head top" was possibly made to hide the previous cutting of one or two horns. *Phase IV* is the phase which relates to the cited restorations, ordered by the "Maggior Consiglio" of Venice in 1293 (Boni 1892, 307). They were carried out by an easily identifiable bronze alloy containing bismuth (Bi) (apparently characteristic of the bronze stocks circulating in Venice at the time), and they involved especially the front right leg and shoulder, part of the breast and part of the belly, as well as other minor parts. *Phase V* is the full restoration phase carried out by Bartolomeo Ferrari in 1815 upon the return of the broken statue of the lion from France. The restoration involved a substantial and complex work, which included the complete re-melting of the existing pieces of the earlier feathery wings (as depicted in the Canaletto paintings) and the casting of new more compact wings. *Phase VI* is the well-described 1891–92 restoration by Boni (1892). It was essentially carried out by consolidating the different early parts through a net of internally cast pieces joined by coach bolts and screws, with minimal casting and soldering.

Of interest here is the observation that several parts of the statue are indeed of the original pristine cast (Phase I: Scarfì 1990, 64–79, Tables XIII–XVIII). This phase is identified by specific chemical markers (Sentimenti et al. 1990, 149–85). A few samples were already analysed by LIA (lead isotope analysis) during the 1985 investigation, but the data could not be interpreted at the time because of a lack of refence databases. Three fragments extracted from the original parts of the lion by the Istituto Centrale del Restauro, Rome[1] were used for the new investigation, and the results are reported in Figures 8.10–8.11.

The Chinese provenance hypothesis

The hypothesis of the Chinese provenance of St. Mark's bronze lion was previously advanced but never discussed in detail before.[2] The close analysis of the facial features of the Venice lion (Figures 8.6 and 8.7) clearly shows that it has no relation whatsoever with the Medieval iconography of lions present in Romanesque cathedrals and churches. Digging through the endless series of lions and other creatures of ancient Chinese art (e.g. Munsterberg 1948; Falco Howard 2006), Figure 8.7 shows the formal similarity between a terracotta *zhenmushou* of the Tang dynasty (618–907) (Earth spirit or grave-quelling beast) that ended up on the antiques market, and the unusual physiognomic characteristics of the lion's muzzle. In other cases, the comparisons are less literal but still valid. Made of polychrome terracotta, and reportedly dated by thermoluminescence (TL) for authenticity, these Earth spirit depictions show hybrid monsters in an aggressive posture, with leonine features, two horns and short raised wings attached to the shoulders.

Considering the two respective materials, terracotta and metal, and consequently, the different rendering of details, the face/muzzle of the Tang hybrids resemble the lion, especially the low forehead, bulb-like nose, lateral position of the ears, flocks under the chin, the grinning mouth and setting of the fangs, and the pronounced, convoluted wrinkling of the forehead at the root of the nose, were a round depression is visible. Obviously, such comparisons are limited to the face/

Figure 8.6 Close-up picture of the bronze lion from Venice. The unusual facial features are clearly observed.

Figure 8.7 Close-up picture of the muzzle features of the bronze lion from Venice (lower right). The unusual features are compared to those of Chinese Earth spirit (Zhenmushou, or Earth spirit, or grave-quelling beast of the Tang dynasty (618–907 AD)). Tjitra website: www.tjitra.nl/tang-dynasty-quot-earth-spirits-quot-of-terracotta-qp-286/view.

muzzle (but possibly also to the presence of wings), and the *comparandum* remains somehow isolated – but, we believe, meaningful.

The Venice statue, before the later false mane (the so-called upper 'hairpiece') was applied, as Bianca Maria Scarfì already argued after inspecting the head, it

may have had one horn or two. The same author, and the revealing pictures published in her monograph, had made it clear that the bronze creature had wings from the earliest casts, as traces of the plumage (at the attachment of the wings) are clearly recognisable just behind the shoulders (Scarfì 1990, 79, Figure 27). If this is the case, it might be a fantastic hybrid attributable to auspicious beasts such as the *pixiu* (貔貅), a winged monster usually equipped with a horn (if male) or two (if female), similar to either cattle or deer. Attributes of the *pixiu* are a leonine body, protruding eyes and sharp fangs. The *pixiu* is a 'talisman' related to the practices of *Fengshui*. In Confucian circles, if winged, the *pixiu* is a powerful protector of students aspiring to pass the imperial exam to become state officials. It could also, however, be a *bixie* (辟), another hybrid animal with a leonine body equipped with wings but lacking horns (Till 1980).

If, on the other hand, we decide not to give any weight to the remnants of the plumage, and leave them unexplained, the sculpture could also be a fragment of a lion (獅子 *shizi*), or 'Buddhist lion' (佛狮子 *Foshizi*) such as the 'guardian of the *dharma'*, protector of the entrances to Buddhist temples and monasteries. Guarding city gates or palaces, as in the portals and palaces of the Forbidden City, or when placed along the 'Way of the Spirit' (*Shendao*) of mausoleums, especially imperial ones, it is simply called a 'lion', and distinguished only by material: stone or bronze. Even in these cases, from at least the seventh–eighth centuries, the mane is usually rendered as very curly.

The proportions of the snout of St. Mark's lion indicate that the hypothesised Chinese original must have been more or less similar in size to the Venetian one. However, in the period between the seventh and the eighteenth centuries, no bronze lions of similar proportions are known, either being placed along a 'Way of the Spirit' or, between the sixth and eleventh centuries, guarding a Buddhist temple or altar.

However, this lack of evidence might be due to the precise historical circumstances. Between the fifth and the twelfth centuries, Mahayana Buddhism had the favour of the imperial house, or was even a state religion. The monasteries had imperial protection and certainly rich enough to even commission large bronze talismanic or guardian statues. But historical records clearly state that between 574 and 577 Emperor Wu of the Northern Zhou dynasty confiscated the property of Taoist and Buddhist temples and monasteries and had all their bronze statues destroyed and melted down. In 845, Emperor Wuzong of the Tang Dynasty, due to the disruption produced by the victorious war against the Uighur tribes in 843, began the 'Persecution of Buddhism in the Huichang Era': over the course of 20 months, 4,600 temples and monasteries were destroyed, their property confiscated and, once again, bronze statues were broken into pieces and melted down, mainly to mint money. During the subsequent persecution of Buddhism by Emperor Shizong (r. 954–9) of the Later Zhou dynasty (951–60 AD), 3,336 temples and monasteries were destroyed, and all Buddhist statues (those weighting more than 2.5 kg) were confiscated and melted down for minting money (Ch'en 1954; Reischauer 1955; Palumbo 2017). These events might well explain why there is practically no evidence left of the large bronze Buddhist statues dating between the seventh and the

tenth centuries and why Buddhist sculpture from the tenth century (i.e. from the time of the Song, Liao, and Jin dynasties) was widely made out of wood or stucco, rather than bronze.

With the Mongol conquest of China, starting in 1206, and the founding of the Yuan dynasty (1271–72), Vajrayana Buddhism became the *de facto* prevailing religion (although never proclaimed a state religion). The iconography of the Chinese lion incorporated one of the main symbols of Vajrayana Buddhism: the 'snow lion' (雪獅*xueshi*, Tibetan *Gangs seng ge*), remaining the canonical representation of the Buddhist lion, or guardian lion, or, again, the 'Dog of Fo' of this day; all quite different, however, from the lion of St. Mark.

The oldest crab-like lion

Another possible implication of this intriguing story is that among the early Venetian artists starting to reproduce and popularise images of the St. Mark lions on stone, at least some might have had the chance of seeing the original colossus directly on the ground. Thus, they could observe it at ease and in detail from a frontal position, before or after its parts were assembled and finished and then placed on the top of the column.

Such contingencies are strongly suggested when considering the image of Figure 8.8, a square limestone bas-relief visible, until 1967, above the entrance of the bell tower of the Venetian church of St. Aponal, and kept at present at the Museum Correr of St. Mark's square (Piazza 2023). Some scholars consider it the oldest known image of St. Mark's Venetian lion, to be dated between the twelfth and thirteenth centuries.[3] The bas-relief belongs to the somehow unsettling iconographic variety commonly labelled, in Venice, *leon in moeca*, because of the frontal view with the wings rising on both sides of the chest, recalling the eight legs of a rising crab of the species *Carcinus moenas*.[4]

In fact, we argue that this bas-relief (Figure 8.8) shares consistent similarities with its colossal bronze model. The analogies include the flattish muzzle below a low forehead, a large nose with curvy contours below marked ocular bulbs, thick and symmetrical corrugated eyebrows, spiral-like flocks radiating from the head and – most important – the upper forelimbs covered with small pointed feathers. The latter appear exactly where a series of delicate, tiny plumes (mentioned above) are visible on the sides of the bronze statue (Scarfì 1990, 79, Figure 27), while on later images, wings would have been planted vertically above the back.

On the whole, the figure's traits reveal a set of vivid, first-hand perceptions as well as a competent remastering and codification of the lion's formal anomalies, aspects fully compatible with and reflecting its exotic origins in east Asia. Once the lion stood on its final dominating setting on the column, such formal features would have been almost completely invisible from the *Piazzetta*.

Note how the framed figure of St. Aponal's lion is competently built on the two diagonal lines of the symmetrical wings, and below this it is well balanced on the studied book grasped by claws at left, and the three waves flowing at right (recurring on other similar images *in moeca*). Placed within a trapeze-like field that unnaturally

Figure 8.8 The oldest known depiction of the so-called "crab-like" lion. Museo Correr, Venice.

resembles the tail of a bird, the three waves impress the onlooker with the power of an ideogram, rather than the summary depiction of an added bodily part.

Both St. Aponal's bas-relief and its bronze model patently reveal the intensity and determination of the original political programme: to re-enforce the sacrality of Venice's grasp of its seas. Ultimately, the expedient fabrication of the leonine symbol from the relics of a Buddhist monstruous image cast by heretic hands, and transported from thousands of miles across the Eurasian silk road, appears as unscrupulous and as unprejudiced, and, even more for these reasons, profoundly totalitarian and autarchic.

Scientific support of the Chinese provenance hypothesis

Because a few fragments from the original Phase (Phase I) of the lion's statue were available for modern Lead Isotope Analysis (LIA), and especially because reference databases of lead isotope data of copper ores have recently been published (Artioli et al. 2020; Killick et al. 2020), it was decided to attempt a provenance of the copper employed to cast the original statue.

The most reliable method to date for provenancing ancient metal is the careful combination of chemical data characterising the composition of the metal with the

isotopic signature of the lead traces (LIA) contained in it. LIA was pioneeringly carried out on silver ores and objects, mostly from the Eastern Mediterranean and the Aegean, in the 1980s. The subsequent systematic application of the method to copper and copper-based alloys (Gale and Stos-Gale 1982, Pernicka 2014), and especially the skilled combination of lead isotope ratios and trace element patterns, opened the way to the possibility of linking metal artefacts to the original ore deposits. Technically, LIA is conceptually based on the radiogenic isotope techniques commonly used in geology and petrology to derive the age of the formation of rocks, including the age of the earth and of meteorites (Faure and Mensing 2005; Allègre 2008). The method uses the well-modelled universal decay curve of radiogenic elements and the interpretation of the isotope ratios based on age isochrons (Albarède et al. 2012, Killick et al. 2020). However, as widely discussed in the literature, it is clear that (1) it is not possible to discriminate two ore bodies having the same geological age based on the isotopic character alone, and (2) although it is possible to safely state that the measured LI ratios can exclude the origin of the metal from isotopically non-compatible ores, it is not possible to ensure the origin from specific ores unless all other sources can be excluded. The interpretation process, therefore, must involve comparison with all possible sources (i.e. extensive reference databases of LI data), and in most cases, it should also rely on complementary chemical, geographical, geological, archaeological, or archaeometallurgical information (Baron et al. 2014; Villa 2016).

In the case of the St. Mark bronze lion, two samples from Phase I and one sample from the wings of Phase V (Figure 8.9) as defined by Scarfì (1990) were measured

Figure 8.9 The different phases defined by Scarfì (1990, Table XV). The three samples analysed in the present work are from Phase I (grey colour) and V (orange colour). The three samples analysed by Sentimenti et al. (1990) are from phases I-II-III (grey, blue, and green).

by inductively coupled plasma-multi collector-mass spectrometry (ICP-MC-MS) and compared with those already obtained by Sentimenti et al. (1990).

The measured LI data from the new samples are in surprisingly good agreement with those reported by Sentimenti et al. (1990, 183, Table 11), indicating a reassuringly substantial consistency of the LIA data.[5] As a general interpretation, when compared with the databases of Eurasian ores, the data are compatible with very few copper ore deposits, and they broadly fit with the copper ores of the Balkans, especially with the Bulgarian ores (Figure 8.10). But, of course, stylistic and historical considerations definitely rule out the possibility that the statue has a Balkan origin.

Therefore, the search must be expanded by comparing our data with the broader Eurasian deposits, especially the excellent database of Chinese ores recently provided by Hsu and Sabatini (2019). As a matter of fact, the detailed analysis of Chinese copper and polymetallic deposits provides an excellent comparison: several deposits along the course of Lower Yangtze river present a good fit to the measured data (Figure 8.11). The data are especially compatible (Euclidean distances < 0.05)[6] with the ores of the Guishan and Yaojialing deposits (Anhui province) and the Anji deposits (Zhejiang province) (Figure 8.12), all in the Lower Yangtze tectonic unit (Hsu and Sabatini 2019).

It should be noted that in case of alloys containing a very low quantity of lead (i.e. casting Phase I in Scarfì [1990]), the LI signal refers to the origin of copper, whereas when the lead quantity is higher than 1–2 wt%, the LI signal most likely refers to the origin of the lead added to lower the melting point for brazing and amending casting defects (i.e. phases II–III).

The apparent paradox of the relative homogeneity of the LIA data for different reconstruction and restoration phases can be reconciled by considering that the identified phases I–II–III are actually related to adjustments and amendments of casting defects carried out quickly in the post-manufacturing phase, well before the statue appeared in Venice (Scarfì 1990, 55–64). Concerning the analysed sample pertaining to Phase V, relative to the restoration carried out by Bartolomeo Ferrari in 1815 upon return of the broken parts from France (Scarfì 1990, 49–50), there are direct accounts that the replaced parts were obtained by re-melting scraps and fragments of the original pieces, with the direct addition of brass, easily identified by the high Zn content in the alloy. Evidently the lead signal is still compatible with the original formulation, and this is possible only if the added brass had a very low content of lead.

We may therefore conclude that: (1) all analysed samples show a remarkable homogeneity of lead isotope composition, despite the complex casting and restoration history, and (2) all measured signals are entirely compatible with a Chinese origin of the copper and lead metals, especially with mines along the tectonic basin of the Lower Yangtze river, among the most important deposits in mainland China, and famously massively exploited since late prehistoric periods.

It is worth noting that one archaeological bronze fragment recently analysed by Qiang Li et al. (2024, sample AY-3 from the Yinxu Stadium excavation, tomb

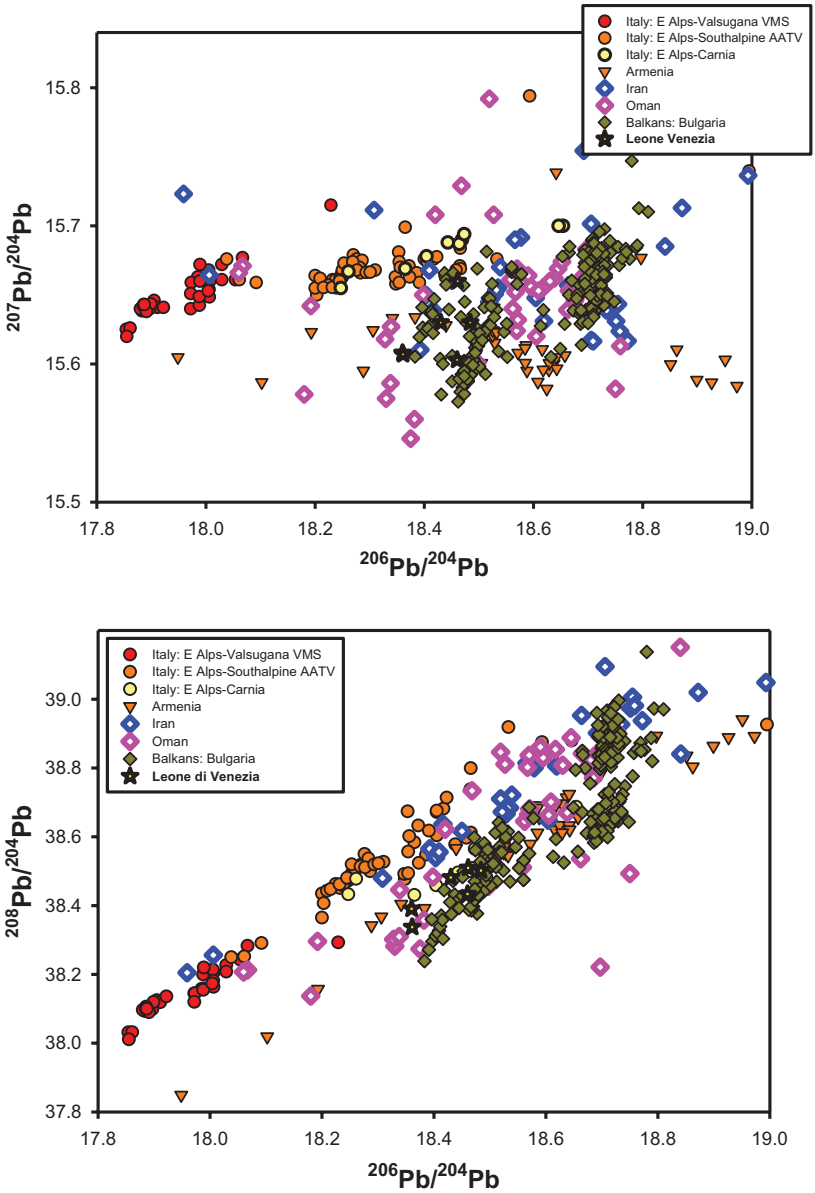

Figure 8.10 LIA plots of the measured data compared with the best-fitting European, Mediterranean and Near Eastern ores.

493) has a LI signal perfectly compatible with those measured on the lion samples. This may confirm that the cited deposits were in use in China at least since the Late Shang dynasty.

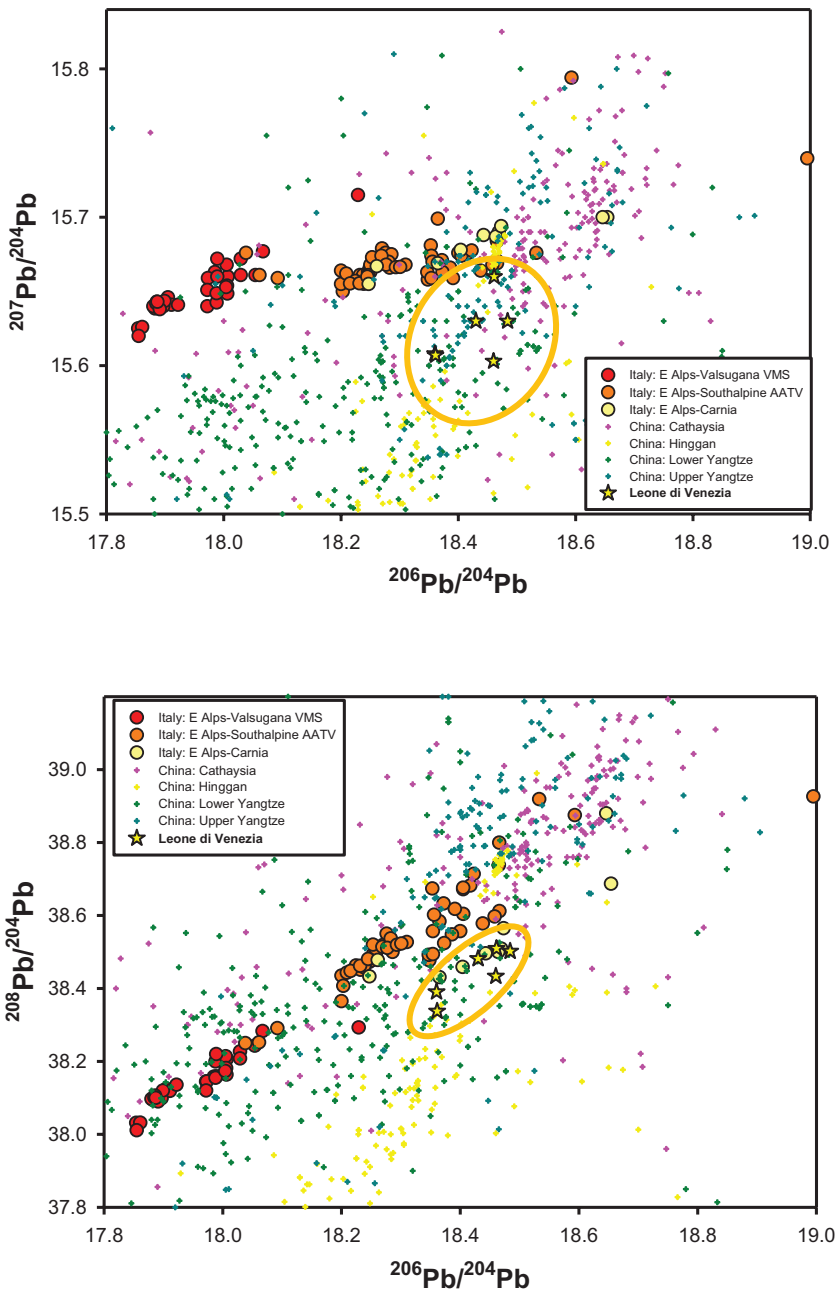

Figure 8.11 LIA plots of the measured data compared with the best-fitting Chinese ores. The Alpine data are plotted as a reference for direct comparison with the plots in Figure 8.10.

Figure 8.12 The best-fitting copper and polymetallic ore deposits for the measured LIA data on the samples extracted from the lion of St. Mark's statue.

The fantastic trip of the winged lion

Medieval Italian merchants and travellers contributed to the opening of new routes connecting the Mediterranean to different areas of Eurasia. Links established through Constantinople, Alexandria, Tabriz, and other markets by the Genoese, Pisans, Florentines, and Venetians facilitated not just the growth of long-distance trade, but also the circulation of images and artistic subjects, themes, and techniques. We can capture this historical interaction through a broader definition of the silk roads, allowing disciplines such as archaeological science to enter a fruitful dialogue with archaeology, economic history, and the history of travel writing. For example, we know that when Marco Polo eventually returned to Venice in 1295 after his long journey, St. Mark's lion was already symbolically a patron for the city and the flourishing maritime trade from above the column where it had been positioned since 1293, and possibly a few decades earlier (Scarfì 1990, 33).

Thus, according to the Chinese provenance indicated by lead isotopes signatures, it could have been transported to Venice from China after Niccolò and Matteo Polo returned from their travels in 1269. In light of the total absence of historical or iconographic records of the erection of the statue on the column, it is possible that not only its final placement, but also the arrival of the fragments at the Venetian docks had been executed with some discretion. Were the pieces of the huge statue indeed imported by the Polo, attracted by the impressive and unusual features of

bronze parts saved from a re-melting fate? The merchants may have exploited the opportunistic possibility of re-mounting and re-casting, at home, a mega-symbol of the Apostle elected as patron and political symbol of identity of Venice: an ikon of enormous visual impact, and at a rather low cost.

The route and stops made by the lion on its trip will probably remain a mystery. Its original, massive bronze scraps might have travelled inland for thousands of miles, and perhaps eventually loaded at the docks of Akko (St. Giovanni d'Acri) and shipped West, then along the Adriatic shores. The total absence of historical or visual records of the lion's arrival at Venice is indeed compatible with its low-key and unnoticed arrival, possibly as boxes and bags of highly fragmented bronze parts.

The Chinese provenance hypothesis of the amazing hybrid creature outlined here is quite plausible, but admittedly not demonstrated by detailed historical sources nor, for the reasons explained above, by conclusive iconographic comparisons. It can certainly be stated that the lion's "…eerie grin hides a thousand secrets, carried here from its bizarre beginnings and kept faithfully above the city whose identity it guards" (Wills 1999, 49). Maybe science is helping to unravel some of these secrets.

Notes

1 We would like to thank the late Maurizio Marabelli and Gisella Capponi, former Director of ISCR, Rome, for making available the three samples of the lion for further analytical research.
2 We are extremely grateful to Roberto Ciarla (ISMEO) for providing archaeological and historical information that was as crucial as indispensable for writing this section. However, the present authors are entirely responsible for any statement, omission, or interpretation included here. We are aware, in particular, that the choice of comparing the lion to artworks appearing in the antiques market is not recommended, nor ideal. Further iconographic research is ongoing, and will be included in a separate publication.
3 Inv. Cl. XXV, n. 129. After Piazza 2023, see also the contribution *La moeca più vecia* (Anonymous), undated but well-informed, accessible at the website www.veneziamuseo.it, Sestiere de San Polo, Contrada San Aponal. It shows the original location of the slab before its removal and transport to the Museum Correr.
4 The name comes from a dialectal term, in turn derived from the Latin *mollis* (soft) used for crabs that remain soft during the shedding of the carapace, and therefore can be entirely consumed with their shell.
5 We cannot exclude, in principle, that the samples might have been extracted from parts and insets of different phases. However, as the samples were taken by highly competent archaeometallurgists, the contingency is a remote one.
6 The shortest distance between two points in Euclidean space.

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Part 3

Faiths and social groups

9 Buddhist missionaries at medieval Chinese courts

State ideologists and soul savers

Junqing Wu

The Silk Road played a significant role in the East–West cultural and religious exchange. Anyone with some knowledge of Chinese Buddhist history will know the legends of the famous Tang Dynasty (618–907) monk Xuanzang玄奘 (602–64), who embarked on a great pilgrimage to the Nalanda monastery in India.[1] But Xuanzang (Figure 9.1) was not the only monk to set out on this ancient trading route. Beginning in the first century CE, numerous Buddhist monks and traders took this road to reach the Chinese lands.

At the beginning, Buddhism was marginal and foreign in the Chinese world. Only from the fourth century did Buddhism start to penetrate Chinese life because of the activities of monks from India, Parthia, Kucha, Sogdia, and elsewhere. Hagiographical sources reveal monks travelled to China for various reasons, including the propagation of Buddhism, the pursuit of spiritual enlightenment, the translation of sacred texts, and the evasion of conflicts.

From the fourth to the early seventh century, China experienced a chaotic period of disunity, marked by a division between the Northern nomadic regimes and Southern "Chinese" regimes. Conditions were harsh for early missionary monks. To propagate the Buddhist faith and ensure their survival, foreign monks had to attach themselves to members of the ruling class, sometimes even to the emperor personally. Their positions varied, from court ritual specialists to the emperor's chief advisors and ideologists. The phenomenon of monk-ministers extended into the next unified dynasties, the Sui 隋 (589–618) and Tang 唐 (618–907). The lives of these monks allow us to explore the interplay between politics and Buddhism in medieval China.[2]

Scholarship on the early transmission of Buddhism through the Silk Road is abundant. For example, Erik Zücher's ground-breaking study systematically investigates how Buddhism gained popularity among the Chinese elite in early medieval times through the work of clerical exegetes, translators, and "wonder-workers" of both foreign and Chinese origins.[3] The best-known work on Buddhist clerics of this period is Kieschnick's *The Eminent Monk*. It shows that Buddhism adapted to the existing religious culture of early medieval China, which is reflected in the sixth-century hagiography *Gaoseng zhuan* 高僧傳.[4] Although Kieschnick's work is not specifically about missionaries, many of the monks included are missionaries. Few works on individual missionaries exist, though the lives of influential

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Figure 9.1 The famous seventh-century Chinese monk Xuanzang on his way to India. Credit: A fourteenth century Japanese painting on silk in the Tokyo National Museum. Public Domain.

foreign monks An Shigao 安世高 (148–80), Fo Tudeng 佛圖澄 (232–348), and Kumarajiva 鳩摩羅什 (344–413) have been documented.[5]

The majority of works on Chinese Buddhist monks of the early medieval period focuses primarily on doctrinal achievement, such as sutra translation and the establishment of ecclesiastical institutions. While the relationship between monks and the ruling class has been acknowledged, their political and ideological roles have

received insufficient attention. This neglect is bound up with the enshrinement of Confucianism as the sole state ideology from the Song Dynasty (960–1279) onwards. Confucian ideological dominance has created an impression that political ideology was static and legitimation was a secular process, which emphasiszed that whoever emerged victorious in power struggles would gain the "Mandate of Heaven." As a result, non-Confucian sources of political legitimation in the pre-Song period have been overlooked.

Furthermore, the scarcity of imperial sources on this topic contributes to the lack of scholarly attention. The influence of Buddhism on political ideology for official scholars was an uncomfortable subject. The involvement of monks in political life is therefore inadequately documented in official historical records. Buddhist compilations are more open on the subject than official history. But their cleric authors often associated themselves with Confucian scholars and adopted a Confucian-oriented view that emphasised the benefits of Buddhism rather than its influence.

This chapter will address the gap in our understanding of the political role of foreign Buddhist missionaries at various courts. A comprehensive study of the Buddhist contribution to Chinese politics, however, is beyond the scope of this work. For analytical purposes, foreign monks can be grouped into three categories based on their functions: political ideologists who attempted to integrate the concept of Buddhist kingship into political legitimacy discourse; figures serving as sage teachers to rulers; and *fangshi* (方士) type ritual specialists who provided healing and divination services to the ruling class.[6] None of these roles were exclusive to foreign monks; they already existed in pre-Buddhist Chinese. Missionary monks exerted their influence within the existing politico-religious context.

The emperor's ideologist

Central to imperial political legitimisation was the notion of "Mandate of Heaven," interwoven with a lineage of ritual practices dating back to the Han Dynasty (202 BCE–220 CE). This framework is often encompassed under the label of "Confucianism." Before Confucianism gained exclusive status as the state ideology, political legitimacy was sourced from a range of origins, including Buddhism.

Relatively fewer works have studied the connections between Buddhism and political legitimation in medieval China. Two stand out. The first is Arthur Wright's article, which explores the ideological measures undertaken by Emperor Wen of the Sui Dynasty 隋文帝 (r.581–604).[7] The second is Antonino Forte's monograph, which examines the myth-making process that associated the Tang Empress Wu (r.690–705) with the figures of Cakravartin (*zhuanlun wang* 轉輪王), the Buddhist king who rules by turning the Dharma wheel, and Maitreya, the future Buddha.[8] These works focus on how Buddhist values were invoked to legitimise the rule of two medieval emperors, who were both devout Buddhists and sought to overcome the stigma of being perceived as "usurpers."

More recent scholarship has attempted to explore the concept of Buddhist kingship in medieval China. Antonello Palumbo discusses three distinct types of

Buddhist kingship emulated by medieval Chinese emperors: the royal ascetic, the *Cakravartin*, and the Aśoka 阿育王, the legendary Indian king who protected and propagated the Buddhist faith. These models were adaptations made by Chinese emperors and did not have direct historical counterparts in ancient Indian society.[9]

Noteworthy is a Chinese language monograph on the influence of the Davaraja Tradition on the Buddharaja Tradition by Taiwan scholar Gu Zhenmei. She systematically traces the transmission and transformation of the Buddhist kingship model, from Emperor Huan of the Han 漢桓帝 (r.147–68) to Empress Wu of the Tang.[10] This important topic is relatively unexplored in scholarship. However, Gu's analysis often falls short. For example, her judgement of Shi Hu's 石虎 (r.337–49) adoption of Buddhist kingship rests on thin evidence that associates his title of "heavenly king" (*tianwang* 天王) with a Buddhist scriptural reference.[11] Gu's work nevertheless is valuable for further research.

There was no one Buddhist kingship model in early medieval China.[12] The concept of kingship was employed in a flexible and creative manner. The emperors of the Northern Wei 北魏 (389–535) were established as the incarnation of the Tathāgata, the Buddha. Emperor Wu of the Liang Dynasty assumed the title of "Emperor Bodhisattva" (*huangdi pusa* 皇帝菩薩),[13] while Emperor Wen of the Sui proclaimed himself both *Cakravartin* and the "Emperor Bodhisattva." Empress Wu of the Tang Dynasty was associated with both *Cakravatin* and Maitreya. None of these rulers adhered strictly to any specific scriptural or historical prototype of kingship, derived from Indian sources. Buddhism, alongside Taoism, contributed to and complemented an eclectic process of imperial ideology-making.

The role of foreign monks as ideologists charged with building up a Buddhist empire, as Gu argues, is exaggerated. Some foreign monks did play a significant role in the legitimation process, often through translating sutras. The canonisation of Buddhist sutras was under imperial patronage, so which sutras to translate, and even to edit, was often a political one. Since both official histories and Buddhist anthologies tend to be silent on the topic, the connection between sutra translation and ideology-making is not easy to establish. But if one or a group of sutras containing fundamental concepts of kingship were translated at the time of an emperor's enthronement, or the sutra translation accompanied symbolic acts of an emperor, an ideological purpose can be inferred.

The most prominent example is Empress Wu. To justify her seizure of power, the only woman in Chinese history to rule in her own right, her ideological think-tank comprising ten monks annotated the *Dayun Jing* 大雲經 sutra and manipulated its prophecy about an upcoming female ruler to favour Wu.[14] Forte documents this episode extensively, and I will simply note that by the late seventh century, Buddhism had already undergone Sinicisation, and the majority, if not all, of the ten monks were Chinese.[15]

During the Northern and Southern Dynasties (420–589), some monks may have acted as ideologists to the emperor. Scarcity of sources mean we can only establish a few convincing cases. One is Tanyao 曇曜 who was the official clerical leader under Emperor Wencheng 文成 (r.452–65) of the Northern Wei dynasty. Tanyao crafted the emperor's divine persona as the Tathāgata, the Buddha. This was a

prudential measure to incorporate religious institutions into the state's bureaucratic system. Associating the emperor with the Buddha placed the emperorship above the *sangha* (Buddhist community) and the clergy.[16]

The Silk Road was a pivotal conduit in the transmission of the Buddhist concept of kingship. There were many educated monks with the ambition of spreading the Buddhist faith. They endeavoured in China to exert their influence by assisting the emperor in constructing his ideology. Narendrayaśas (490–589) is a prominent example. He was of Indian origin and had a royal background. In his youth, Narendrayaśas joined a monastery and embarked on extensive travels as part of his spiritual journey to various countries. Unable to return home westward amidst the turmoil of the Turkic upheaval, he continued eastward to China.

In 556, Narendrayaśas arrived in the capital of the Northern Qi 北齊 (550–77) and served Emperor Wenxuan 文宣 (r.550–59). He oversaw state-sponsored sutra translations and enjoyed the respect and friendship of the emperor. When the Northern Qi was annexed by the anti-Buddhist regime of the Northern Zhou 北周 (557–81), Narendrayaśas went into hiding for several years. After the establishment of the Sui Dynasty, he was invited to the court by Yang Jian, a powerful regent in the Northern Zhou dynasty who had proclaimed himself Emperor Wen of the Sui, to resume his role as sutra translator.[17] however, the new emperor faced a significant challenge. His legitimacy was in question because he was viewed as a usurper who had betrayed the Northern Zhou house.

To overcome this problem, Yang Jian sought to portray himself as a saviour figure who had united the "middle kingdom." He was eager to assume the image of a "universal ruler."[18] He turned to Buddhism to justify his rule, drawing on his own faith and the popularity of Buddhism in society at the time. While both Confucian and Taoist elements were also employed, greater emphasis was placed on the development of Buddhist ideology. Yang Jian issued an edict in the first year of his reign in which he associated himself with the figure of *Cakravatin*, the ideal Buddhist king, and depicted his planned conquests of the southern regime as a manifestation of his role as *Cakravatin*. The intention of these conquests was, he explained, to extend benevolence and create goodwill and harmony.[19]

Narendrayaśas, Yang's esteemed foreign expert, was entrusted with translating sutras to solidify the latter's image as a *Cakravatin*. In 583, the *Dehu zhangzhe jing* 德護長者經 was completed.[20] This sutra was a modified edition of the earlier translated *Shenri jing* 申日經 and *Yüeguang tongzi jing* 月光童子經, which revolved around the concept of an imminent Buddhist king.[21] In this new edition, Narendrayaśas translated passages that prophesied the arrival of a prince "Moonlight" who would protect the Buddha's teachings after his nirvana. The sutra stated that this prince would descend to the Great Sui kingdom and become its king, named Daxing 大行. It further asserted that he would spread Buddhism to all sentient beings in the Sui realm.[22] The "Great Sui kingdom" was a direct reference to the newly established Sui Dynasty; it did not exist in earlier editions.

The sutra also claimed that the "Buddha's bowl," symbolising the Dharma, would be transmitted from India to Shale 沙勒 (in modern-day Xinjiang) and eventually reach the kingdom of the Great Sui. The King of the Sui, as a *Cakravatin*,

would construct numerous statues and pagodas.[23] This portrayal positioned Yang Jian as the chosen ruler designated by the Buddha himself and made him the protector of the Dharma. This strategy held significance due to the extirpation of Buddhism from 574 to 578 in the Northern Zhou.

The decision to (re)translate this sutra was a carefully calculated move that provided the theoretical foundation for a series of actions undertaken by the emperor over the following years. The transmission of Dharma to the Sui Dynasty and the envisioned spread of Buddhism can be seen as the theoretical justification for Yang Jian's future conquests, particularly of the Southern Chen Dynasty (557–89) in 589.[24] Between 601 and 604, Yang Jian initiated a nationwide project involving the distribution of relics and the construction of pagodas, as promoted in the *Dehu zhangzhe jing*.[25] This act aimed at emulating the famous King Asoka, who was reputed to have built 84,000 relic pagodas.[26] Numerous miracles were reported by eminent monks across the country. This monastic endorsement further solidified Yang Jian's perceived status as a *Cakravatin*.[27]

Narendrayaśas was not alone in this endeavour but worked with a team of monks, foreign and Chinese, in the *daxingshansi* 大興善寺, the state monastery where the translation project took place. This functioned as an imperial "think-tank," similar to the one established by Empress Wu of the Tang had centuries later.[28] Following Narendrayaśas' death, another monk named Jñānagupta 闍那崛多 (523–600), from Gandhara 犍陀羅 (present-day northwest India), assumed the role of the sutra translation project leader and one of the leading ideologists.[29]

The sage teacher of the emperor

Some missionary monks who travelled to China along the Silk Road found themselves at the centre of the medieval court power network. They served not only as political and military advisors to the emperor but also as his spiritual teachers. We can think of them as the "sage teacher of the emperor." The sage emperor and his sage teacher were established motifs in Chinese historical and apocalyptic traditions. When historians encountered a monk-politician figure characterised by saintliness, they would draw upon this motif as a model.

The Dunhuang 敦煌 preserved manuscript, "The Transformations of Laozi" (*Laozi bianhua jing* 老子變化經), reveals that Laozi, in his various incarnations, served as a teacher to various rulers since antiquity. This was also a recognised idea within Confucianism. The sage emperor should be accompanied by a sage teacher, who was not just an official advisor but a paternal figure to the throne.[30] He would hold the Mandate from supreme authority and be relied on heavily by the emperor, both spiritually and politically. Like the emperor, the sage teacher possessed a semi-divine status. Furthermore, a lineage of sage teachers existed, paralleling that of sage emperors.

The ideal of the sage teacher is not explicitly outlined in Chinese Buddhism, especially in canonical Buddhism. In the popular Buddhist eschatology of the fourth century, there are references to the future Buddha: Maitreya descending with two bodhisattva assistants, Guanyin 觀音 and Dashizhi 大勢至.[31] This image could

be easily integrated with the image of the sage teacher in the political tradition. Indeed, the theme of the sage teacher resonates across Confucianism, Taoism, and Buddhism. It has deep roots in traditional Chinese politico-religious culture. A significant advisor to the throne could easily be connected to such a role, particularly if he was known for his moral integrity and extensive knowledge. The figure of the sage teacher became associated with certain monk-politicians during the early medieval period when Buddhism held a major position within the state ideology. A monk needed to meet two conditions to be considered a sage teacher. Firstly, he had to provide guidance to the emperor not only on political and military matters but also on the principles of rulership. Secondly, he had to be capable of prophesying the changes in the "Mandate of Heaven."

Fo Tudeng 佛圖澄 (232–348), who served in the Later Zhao (319–51), is a prominent example.[32] Hailing from Kucha (a Buddhist kingdom in present-day Xinjiang),[33] he embarked on his religious studies in renowned Buddhist centres such as Kashmir along the Silk Road.[34] His intention was to propagate Buddhism upon his arrival in Northern China which was controlled by the Jie ruler Shi Le 石勒 (274–333). The regime was notorious for its cruelty, external wars, and internal racial tensions. To achieve his missionary objectives and ensure his personal safety, Fo Tudeng aligned himself with the Shi clan. This strategic decision proved fruitful, with Fo making substantial contributions to Buddhist scholarship and the dissemination of Buddhism in Northern China. He attracted many disciples who contributed to the development of Chinese Buddhism, including renowned figures such as Daoan 道安, Seng Lang 僧朗, and Shan Daokai 單道開.

To gain the trust of Shi Le, Fo Tudeng showcased the usefulness of Buddhism to the ruling class with practical demonstrations. This was necessary because Shi Le, an illiterate nomadic ruler, struggled to grasp deeper philosophical concepts.[35] Fo Tudeng positioned himself as a "wonder-worker," someone who was capable of extraordinary feats such as making rain, healing illnesses, and predicting the future.[36] These abilities were important for an agricultural society reliant on rainfall, the health of the imperial family, and military strategies that required foresight.

Fo Tudeng's mastery of these techniques played a pivotal role in his career at the Shi court. For over 30 years, he served as a spiritual teacher and political advisor to Shi Le and his successor, Shi Hu. Both rulers held Fo Tudeng in great awe and admiration. According to the *Gaoseng zhuan*, Fo Tudeng instructed Shi Le on ruling with "virtue" (*dehua* 德化). The *Gaoseng zhuan* hagiography commented that many more lives would have been cost under Shi Le's reign without Fo Tudeng.[37]

This depiction of Fo Tudeng highlights his role not only as a political advisor but also as a mentor to the throne. He taught the "way of ruling" (*wangdao* 王道), similarly to Yi Yin 伊尹, the revered teacher praised by Confucian scholars, who mentored his lord and pupil Tang 湯 of the Shang 商 dynasty.[38] Fo Tudeng's ability to foresee changes in the "Mandate of Heaven" propelled him to the role of a sage teacher. This is a common theme in legends surrounding Chinese sage teachers. For example, Laozi, a grand astrologer of the Zhou dynasty (1046–256 BCE), is said to

have left the Zhou court and gone to the Qin kingdom to tell the Duke of Qin that his regime would replace the Zhou, which it soon did.[39]

In similar fashion, Fo Tudeng is said to have foreseen when the Shi clan would lose the "Mandate of Heaven," when the two Shi rulers would die, and when the Later Zhao regime would come to an end. According to the *Gaoseng zhuan* and *Dynastic History of Jin*, he predicted that Shi Le would defeat and replace his competitor Liu Yao (劉曜, d.329), the emperor of the Former Zhao 前趙 (304–329).[40] He correctly interpreted an omen of Shi Le's death when he observed a bell on the pagoda ringing without any wind.[41] When Fo Tudeng saw a horse with a burned tail appear in the palace and then suddenly disappear, he interpreted it as a warning sign of Shi Hu's death and the collapse of the Later Zhao.[42] He then went on to claim that thorns were growing under the palace foundation and that they would "destroy everyone's robe."[43] The "thorns" (*ji* 棘) was a reference to Ran Min 冉閔 (d.352), Shi Hu's adopted Chinese (Han) son, whose nickname was *Jinu* (棘奴). Ran Min killed the entire Shi clan within a few years. "Destroying everyone's robe" was a euphemism for the mass killing.

Most of Fo Tudeng's prophecies were shrouded in cryptic language, and that only later did people realise their true meaning. This suggested to his followers that he operated on a higher level of spiritual insight, possessing knowledge beyond that of ordinary mortals.[44] These prophesised events reinforced ideas that the will of heaven could not be altered by human intervention. Fo Tudeng's role as a sage teacher encompassed not only political guidance but also that of the interpreter of celestial signs and divine messages, providing invaluable counsel to the rulers he served.

However, from the perspective of later Confucian-minded historians, Fo Tudeng's role as a "sage teacher" may be viewed only as an analogy. The Later Zhao regime was considered illegitimate according to the Chinese historiographical tradition.[45] The Shi rulers were neither sage rulers nor worthy emperor-pupils in the Confucian sense. Thus, Fo Tudeng's role as a sage teacher may be viewed not so much as that of the ideal as an expedient relationship for self-preservation. The tense relationship between Fo Tudeng and Shi Le reflects this dynamic. He even tried to kill Fo Tudeng, which the latter foresaw and managed to evade. Only after this incident did Shi Le come to believe that Fo Tudeng possessed extraordinary qualities and should be protected.[46]

Fo Tudeng is not an isolated example in the early medieval period. There were other monk-teachers, both foreign missionaries and Chinese converts, who were greatly honoured by their rulers. Examples include the Chinese monk Daoan 道安 (312–85), advisor to Fu Jian 苻堅 (337–85) of the Former Qin 前秦 (350–94), Kumarajiva from Kucha who assisted Yao Xing 姚興 (366–416) of the Latter Qin 後秦 (384–417), and the Chinese monk Baozhi 寶誌 (425–514), the spiritual teacher and great prophet of the pious Emperor Wu of the Liang. These monk-teachers played an important role in advising and guiding their imperial pupils, both spiritually and politically. Their close association with the throne exemplified the significance of the sage teacher archetype in Chinese politico-religious culture during that period.

Fangshi-type ritual specialists

Most missionary monks at the Chinese court belonged to the third category, general ritual specialists. Their function was similar to that of *fangshi* in the Han (202 BCE–220 CE) who served and entertained the emperor with their special ritual knowledge while existing on the fringe of the official world.

In a sense, all monks at the court functioned like historical *fangshi*. Both foreign and Chinese monks commonly held marginal and often anonymous positions as courtiers. Even the very few who enjoyed great honour and respect from their imperial patrons did so to some degree based on their ritual services. Narendrayaśas, for instance, was renowned for his expertise in exorcist spells. During his service at the Northern Qi court, he helped and saved many individuals.[47] While the sources are silent, we may assume that among the people Narendrayaśas helped were members of the imperial family. Fo Tudeng was similarly known as a healer and diviner, which played a major role in gaining the trust of the Shi rulers.

Many monk-courtiers were less prominent in the historical records than figures like Narendrayaśas and Fo Tudeng. The *Gaoseng zhuan* records the arrival of Master She 涉公, a monk of "Western" (Central Asian) origin, at the court of Former Qin 前秦 in 376. He possessed the ability to predict future events. Although the source does not specify the nature of his predictions, they were likely related to political or military matters, such as the outcome of battles. Master She also possessed knowledge of a mysterious spell to summon the dragon king and make rain.[48] Whenever there was a drought, Emperor Fu Jian would invite Master She to perform the ritual. Witnesses, including the ministers, observed the descent of the dragon king, followed by immediate rainfall.[49] Praying for rain was a crucial skill for ritual specialists throughout imperial history, which was not exclusive to Buddhism. This example illustrates the successful adaption of a foreign monk to fulfil the religious and social needs of Chinese society.

Compared with foreign monks renowned for their translation and exegetical achievements, little biographical information is available on Master She. This might indicate he was a minor figure among the eminent clerical figures of his era. However, he fared better in historical recognition than the many other monks who did not enter into the historical records at all. This discrepancy in historical documentation is evident when comparing the biographies of monks like Kumarajiva and lesser-known figures like Luocha.

In the biography of Kumarajiva in the *Gaoseng zhuan*, a story is recounted about Luocha 羅叉, another foreign monk from an unknown region. When Kumarajiva was serving Lü Guang 呂光 (338–99), the warlord of Liangzhou 凉州 (in modern-day Gansu), Lü's favourite subordinate, Zhang Zi, fell seriously ill. A "foreign monk" (外國道人) named Luocha arrived and claimed he could cure Zhang. Kumarajiva exposed Luosha as a charlatan and predicted that Zhang's illness was incurable.[50] Zhang subsequently died.

Details about Luocha are sparse. His origins and reasons for travelling remain unclear. In the narrative, he serves solely as a foil to Kumarajiva. There might have been many foreign monks like Luocha, traversing various regions in the hope of

selling their purported skills to powerful patrons. They were probably less erudite, less skilled, and less lucky than those who left an imprint in the hagiographic records.

The position of court ritual specialist was not reserved solely for foreign monks; Chinese monks also held the same role. The *History of the Jin* (seventh century) relates that a monk named Wu Jin 吳進 warned Shi Hu, the "barbarian" emperor of the Later Zhao, that "the barbarians' fortune is about to decline and the Jin (a Chinese dynasty) is about to be restored. To prevent that, it is better to levy heavy *corvée* on the Jin people, who were Han Chinese in order to suppress their vital pneuma (soul/spirit)."[51] Shi Hu followed Wu's advice and levied heavy *corvée* on the people in Ye (the old Jin territory). Wu Jin and Fo Tudeng both served at the same court. Comparing their stories suggests Wu Jin was probably not as high-ranking a ritual specialist as Fo Tudeng. Neither the *History of the Jin* nor the Buddhist hagiographies contain any other biographical information about Wu Jin. Furthermore, he is reported to have spoken in a direct and unambiguous way to his patron, without any element of mystery. Unlike the prophecies of Fu Tudeng, the result of Wu Jin's prophecy could be altered. Wu's role reminds us of the court diviners, known as "pneuma-watchers" (望氣者) during the Han Dynasty, who would observe changes in pneuma to determine the likelihood of wars or uprisings.[52] These individuals belonged to the broader category of *fangshi*.

Not only did early Medieval Buddhist monks fulfil similar functions to the Han *fangshi*, but they were also recognised accordingly by Confucian-minded official historians. Monks, together with other religious professions, were usually classified under the categories of "ritual specialists" (*fangshu* 方術, *fangji* 方伎) or "arts and skills" (*yishu* 藝術) in different dynastic histories.[53] This practice followed the ancient tradition of dedicating a chapter to court ritual specialists in historical records.

Concluding remarks

This chapter examines the three roles undertaken by missionary monks within the early medieval Chinese courts: the ideologist, the sage teacher, and the ritual specialist. The adoption and adaptation of these roles reflected the intersection and fusion of Buddhist principles and indigent Chinese political culture. The historic Silk Road served as a pathway enabling this intricate exchange of cultural and religious influences. Among foreign monk-courtiers, some attained elevated positions and received honours from the emperor, while others remained low-ranking and insignificant. Some made significant contributions to political life and played a crucial role in spreading the Buddhist faith in China, while others primarily served the ruling class with their perceived "magical" skills. Certain monks were revered as holy figures and even deified, whereas others remained on the margins and were anonymous.

All three categories of courtiers existed within the Chinese historical context and historiographical tradition long before the arrival of Buddhism in China. Missionary monks had to adapt their teachings and skills to fit Chinese political

culture and religious life. Chinese historians, in turn, assimilated these monks to existing historiographical and hagiographical frameworks. This process, facilitated by the Silk Road, embodies a "double-Sinification" wherein both Buddhism and Buddhist historiography underwent Sinification, or adaptation to Chinese cultural norms.

Notes

1 For story of Xuanzang's journey on the Silk Road, see Hansen, *The Silk Road*, 84–90. His journey inspired the Ming period novel *Journey to the West*, of which one of the most famous characters is the Monkey King.
2 A general history of this period is Ebrey, *Illustrated History*, 90–113.
3 Zürcher, *The Buddhist Conquest*.
4 Kieschnick, *The Eminent Monk*.
5 Forte, *The hostage*; Wright, "Fo-t'u-têng", 321–371; Lu, "Narrative and Historicity", 1–43.
6 The meaning of *fangshi* was established by the *Dynastic History of the Later Han* (*Houhanshu* 後漢書), compiled in the fifth century by Fan Ye 范曄. It was a derogatory category that official historians used to refer to Han courtiers who were not primarily versed in the *Five Classics* but in the *Book of Change*. They possessed technical skills in medicine, divination, and magic combined with talent for storytelling. See DeWoskin, *Doctors, Diviners and Magicians.*
7 Wright, "Sui Ideology", 71–104.
8 Forte, *Political Propaganda*.
9 Palumbo, "Buddhist Kingship", 287–338.
10 Gu, *Cong tianwang chuangtong*.
11 For discussion of different interpretations of the "heavenly king" title of Shi Hu, see Hibiki Ono, "Wuhu shiliu", 31–9.
12 The 'Buddhist kingship model' is the concept of kingship that is entirely derived from sacred scriptures and divorced from the influence of the 'Mandate of Heaven' ideal.
13 The political significance of the title is discussed in Janousch, *The reform*; De Rauw, *Beyond Buddhist Apology*.
14 See, Forte, *Political Propaganda*.
15 The official history does not mention who these ten monks are. According to Forte, the names of monks are listed in the colophon of *Baoyü jing* 寶雨經. Forte, *Political Propaganda*, 69–115.
16 *Weishu*, 114: 3037. On Northern Wei's Buddhist policy and Tanyao's role, see Orzech, "A Buddhist image", 139–153; Tseng, *Northern Wei*, 41–68.
17 *Xü gaoseng zhuan*, T50. 2060. 432.
18 Arthur Wright suggests that the ideal of the Buddhist king was also to prepare Yang Jian's plan to expand to the Central Asia where Buddhism and politics were closely connected. Wright, "Sui Ideology".
19 "用輪王之兵" *Lidai sanbao ji.* T49. 2034. 108.
20 Erick Zücher, "'Prince moonlight'", 1–75.
21 There are several Chinese editions of the sutra. Zücher judges that the *Yüguang tongzi* jing was translated by Dharmaraksa in the late third century and *Shenri jing* was translated in the fifth century. Zücher, "Prince moonlight", 1–75. However, according to the *Kaiyuan shijiao lu*, *Shenri jing* was translated by Zhi Qian, but wrongly attributed to Dharmaraska 竺法護.
22 "又此童子，我涅槃後，於未來世護持我法……於閻浮提大隋國內作大國王，名曰大行 *Foshuo dehu zhanglao jing*, T14. 545. 849.
23 *Foshuo dehu zhanglao jing*, T14. 545. 849.
24 For a detailed discussion of Yang's conquests, see Wright, "Sui Ideology".

25 *Lidai sanbao ji* 1924–33652), T49. 2034. 107.
26 *Ayü wang* zhuan, T50. 2042. 110； T50. 2042. 130; Wright, *op. cit.,* 102.
27 *Xü gaoseng zhuan*, T50. 2060. (437, 496, 500, 504, 506, 507, 510, 511, 512, 513, 517, 518, 519, 520, 576).
28 For Empress Wu's think-tank, see Yamazaki, *Zui-Tō bukkyō shi no kenkyū*, 55.
29 *Xü gaoseng zhuan*, T50. 2060. 433
30 In an old text *lunyu bikao* 論語比考, there is a list of the sagely teachers of the sagely emperors in the mythical antiquity. For example, the Tang 湯 of the Shang 商 was taught by Yi Yin 伊尹; Wenwang of the Zhou was taught by Lü Wang 呂望; and Wuwang 武王 of the Zhou was taught by Jiang Shang 姜尚. Cited in Seidel, "Imperial treasures", 291–371, 342.
31 Zücher, "'Prince Moonlight'", 15.
32 For a detailed study of Fo Tudeng, see Wright, "Fo-t'u-têng", 321–71.
33 Different sources give conflicting information about Fo Tudent's birth place. Wright judges it to be Kucha. Wright, "Fo-t'u-têng", 321–71.
34 *Gaoseng zhuan*, T50, 2059, 383.
35 *Gaoseng zhuan,* T50, 2059, 383.
36 *Gaoseng zhuan* T50, 2059, 383; *Jinshu* 95: 2484–90.
37 *Gaoseng zhuan* T50, 2059, 383.
38 *Shiji* 3: 93–4.
39 *Shiji* 4: 159. For a detailed discussion of this theme, see Seidel, Falkenhausen, "The Emperor", 125–65.
40 *Gaoseng zhuan,* T50, 2059, 383; *Jinshu* 95: 2486.
41 *Gaoseng zhuan,* T50, 2059, 383; *Jinshu* 95: 2487.
42 *Gaoseng zhuan,* T50, 2059, 383; *Jinshu* 95:2490; 29: 906. The appearance of strange horse is often considered as an inauspicious sign in Chinese social religious culture.
43 *Gaoseng zhuan*, T50, 2059, 383; *Jinshu* 95:2490. "棘子成林，將壞人衣"
44 See John Kieschnick, *The Eminent Monk,* 75.
45 In the *Dynastic History of the Jin,* the biographies of Shi Le and other "barbarian" kings of the Northern regimes were called *zaiji 載紀*, not *benji 本紀*, the usual term for emperors' biographies. *Jinshu* 105: 2707–52.
46 *Jinshu,* 95: 2485; *Gaoseng zhuan* T50, 2059, 383.
47 *Xü Gaoseng zhuan*, T50. 2060. 432.
48 In Chinese folk belief, the dragon king is responsible for making rainfall.
49 *Gaoseng zhuan*, T50. 2059. 389.
50 *Gaoseng zhuan*, T50. 2059. 330.
51 "胡運將衰，晉當復興，宜苦役晉人以厭其氣" *Jinshu,* 107:2782.
52 For example, *Houhan shu*, 96: 2246. "Pneuma-watchers" used divination technique that observed atmospheric phenomena such as clouds, rainbows, and other optical phenomena to discern omens related to human affairs and their auspicious or inauspicious nature.
53 For example, *Jinshu* and *Beishi* have a section of *yishu; Jiu tangshu*, and *Beiqi shu* have a section of *fangji.* Biographies of monks are included in these sections.

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10 The Sogdians, the 'Cultural Bees' of Eurasia

Pin Lyu

Introduction

The British explorer and archaeologist Aurel Stein (1862–1943) discovered the Sogdian Ancient Letters in 1907 at a ruined watchtower to the west of Dunhuang, Gansu. The letters, dated to the fourth century CE, largely record reports to wealthy Sogdian merchants by their representatives abroad (De la Vaissière 2005, 19–20). This finding firmly proves the existence of a Sogdian commercial network across the 1500 miles between Sogdiana and northern China during this period. The existence of a commercial network on such a scale implies a formative period prior to the fourth century CE, but its investigation is difficult due to the lack of sources (De la Vaissière 2005, 13–37). Since the French Sinologist Paul Pelliot (1912, 104–05) advanced the hypothesis that Sogdians dominated medieval silk roads commerce, the hypothesis has become commonly accepted by specialists because of the scattered evidence across the broad Eurasian network of Sogdian mercantile activities. For example, the Khotanese called all merchants Sogdian (Khotanese *suli*), regardless of their origin (Sims-Williams 1996, 46).

Owing to the popular knowledge of the silk roads, in recent years, Sogdian commercial achievements have gradually become better known to the public. However, their cultural contributions are still overlooked, thus meriting a detailed survey. This chapter first provides ethnographic information about Sogdians and their history and then discusses four different cultural roles undertaken by the Sogdians.

Sogdians: geographic locations and history

The Sogdians were an ancient Eastern Iranian people whose language was also called Sogdian; this language belonged to the Iranian branch of the Indo-European language family (Ashurov 2020, 7). Their homeland, Sogdiana, was centred on the basins of the Zerafshan and Kashka Darya Rivers and the peripheral oasis states where the Sogdian language was predominant. This area corresponded to parts of modern Uzbekistan and Tajikistan (Figure 10.1).

Sogdians never established a unitary empire in their homeland. Throughout their history, they were directly ruled by a series of independent or semi-independent principalities centring on the city-state of Samarkand (Shenkar 2017, 191). Samarkand was traditionally the capital of the whole region of Sogdiana, with its ruler being the "first among equals" (Ashurov 2020, 7).

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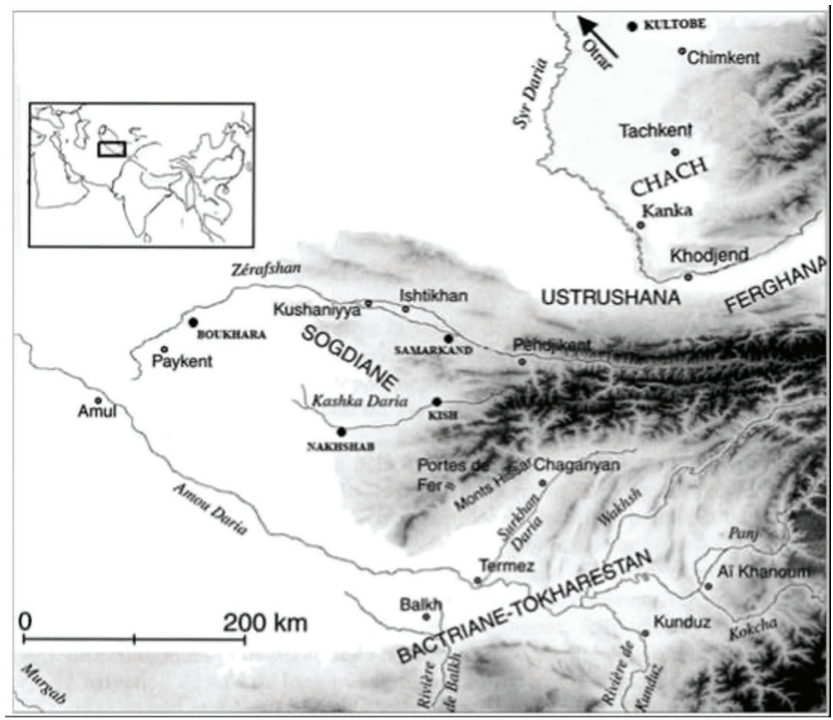

Figure 10.1 Map of Sogdiana and its major settlements. Source: Grenet and Rapin (2013), Figure 11.

Sogdiana was constantly under the control of external powers, but this control was often rather loose. The city states in this region were largely independent, and their rulers were drawn from the local nobility. The first recorded reference to Sogdiana was the Inscription of Darius in the sixth century BCE. Sogdiana was one of the satrapies of the Achaemenid Empire and provided contingents of soldiers to the Achaemenid kings, as well as the semiprecious stones of lapis lazuli and carnelian, which were used for the construction of the palace at Susa (Walter 2006, 3).

Alongside other territories of the Achaemenid Empire, Sogdiana was conquered during the military campaigns of Alexander the Great from 329 to 327 BCE. This conquest inaugurated the Hellenistic period of Sogdiana, which lasted until 146 BCE. During this time, Sogdiana was ruled by Alexander the Great, the Seleucid Empire founded by the Macedonian general Seleucus I Nicator, and the Greco-Bactrian Kingdom established by the descendants of local Greek colonists. These two centuries of Hellenistic dominance influenced Sogdians in their city construction, architecture, and art (Walter 2006, 4).

In the 400 years following the collapse of the Greco-Bactrian Kingdom, it is not certain whether Sogdiana was an independent political state or the territory of another state. Both Western and Chinese written sources attribute the destruction

of the Greco-Bactrian Kingdom to the invasion of nomadic people from the north. Western sources identify these nomadic people as the Pasiani, Scythians, Tochari, or Asii, while Chinese sources mention Sai and Yuezhi (Lyonnet 2020, 8). Debates about the identities of these invaders are ongoing.

Subsequently, Sogdiana came under the rule of the Sasanians, as attested by Shapur I's Ka'ba-ye Zartosht Inscription. The inscription of Shapur I is written in Middle Persian, Parthian, and Greek and dates to about 262 CE, after his victory over the Romans. Sogdiana was listed in the inscription as a province of the Great Sasanian Empire (Chegini and Nikitin 1996, 42). The Sasanian influence on Sogdiana was significant, as similarities in Sogdian and Sasanian metalwork designs have been found (Walter 2006, 4).

Sasanian rule in Sogdiana was threatened by the arrival of nomadic invaders in Central Asia in the second-half of the fifth century, which is recorded in both Chinese and Byzantine texts (De la Vaissière 2005, 97). Two groups of invading nomads have been identified. The first group was the Kidarites, whose rule in Sogdiana at some point during the fifth century is evidenced by certain coins from this period (Rezakhani 2017, 150). The next group was the Hephthalites, who sent emissaries from Samarkand to China around 509 CE (Marshak and Negmatov 1996, 240).

Between 557 and 561 CE, a Türk-Sasanian alliance crushed the Hephthalite Empire, and Sogdiana passed into the hands of the Türks (Sinor and Klyashtorny 1996, 327). A Turco-Sogdian symbiosis was established. It lasted from the sixth to the tenth centuries through intermarriage, cooperative trading, and shared customs (De la Vaissière 2005, 199–225). This symbiosis was beneficial to not only the Sogdians but also the Türks. The Sogdian commercial network expanded across Eurasia under the protection of the powerful Türks, which was provided in return for the Sogdians' diplomatic negotiations and other political services (Marshak and Negmatov 1996, 242). The Turco-Sogdian symbiosis was not broken when China defeated the Western Turkic Khaganate and claimed nominal sovereignty over Sogdiana in the 650s CE. The period of Turkic and Chinese rule represented the economic and cultural zenith of the Sogdian civilisation (Marshak and Negmatov 1996, 242).

Muslims conquered Sogdiana in 715 CE, which was a turning point in Sogdian history. In the early years of this conquest, Sogdians in their homeland were able to retain their cultural practices under the rule of the Umayyad Caliphate (661–750 CE), but this changed drastically when the more radical Abbasids (750–1258 CE) took power. The Abbasids' religious intolerance eliminated Zoroastrianism and other religions in the region (Wertmann 2015, 11). Moreover, the Sogdians gradually abandoned their own language and adopted Persian and then Turkic (Yoshida 2016). Ultimately, due to the death of the Sogdian language and cultural traits, Sogdians ceased to be an independent ethnic group prior to the Mongol invasion in the thirteenth century (Krippes 1991).

The outside in

Hellenic, Persian, Indian, and Chinese civilisations influenced Sogdiana, which resulted in a distinctive hybrid culture. The Sogdians did not hide their varied

influences but instead had a keen interest in portraying non-Sogdian elements in daily life, as seen in the murals of Panjikent (modern Panjakent, Tajikistan). Panjikent was the easternmost city of Sogdiana and grew during the Hephthalite period, reaching the height of its prosperity in the early eighth century CE, with reports that one house in three even had murals (Marshak and Negmatov 1996, 246).

In 1986, Russian archaeologists completed an excavation of a dwelling dated between the end of the seventh and the start of the eighth century in Panjikent. This was a three-storey house, comprising a main hall with mural paintings, while several rooms in the upper storeys were used as granaries. The house owner is believed to have derived their wealth from grain in some way (Marshak and Raspopova 1990, 127–28).

Due to the surviving murals in the ceremonial hall and associated debris, archaeologists have been able to reconstruct the principal compositions. The murals of the eastern and western walls mostly portray royal reception scenes, while the southern and northern walls primarily depict supernatural worlds. The different deities portrayed on the southern and northern walls illustrate well how the Sogdians borrowed from outside beliefs while maintaining their homegrown faith.

The space of the southern wall is occupied by a pair of massive figures surrounded by four secondary figures (Figure 10.2). A clear Zoroastrian aspect is

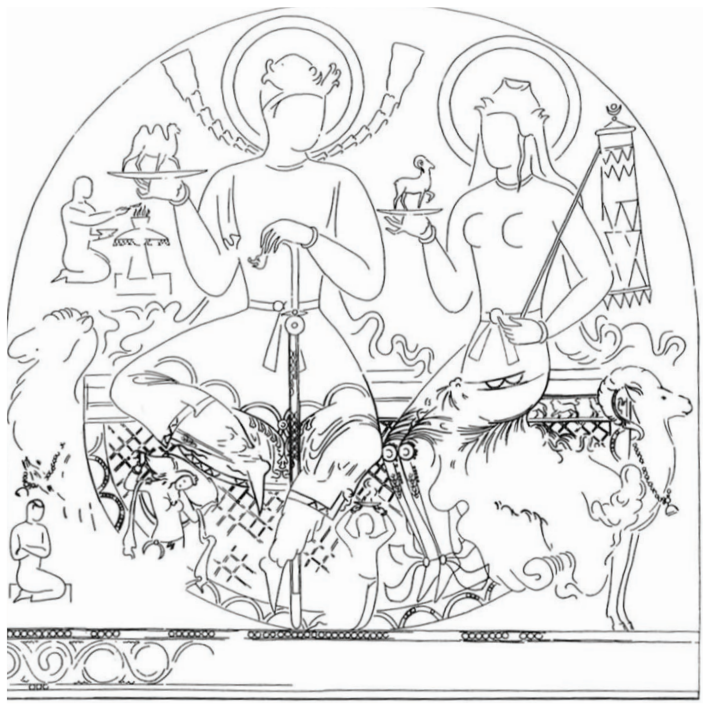

Figure 10.2 Mural on the southern wall. Reconstruction. Source: Marshak and Raspopova (1990), Figure 16.

the male figure holding an upright sword and raising his right hand with a small plate supporting a two-humped camel statue. The figure sits on a couch with a camel-head support at his side. Judging by the camel figures, the massive male figure has been identified as Verethragna, the God of Victory in Zoroastrianism, as the camel is one of the most common incarnations of Verethragna (Marshak and Raspopova 1990, 141).

Beside Verethragna, the female figure holds a banner and raises her right hand, holding a small plate supporting a mountain ram statue. Like another of the figures, she sits on the couch with a mountain ram-head support at her side. The female is usually identified as Verethragna's wife since their joint appearance was a common artistic theme in Sogdiana, and the mountain ram is also one of the incarnations of Verethragna (Marshak and Raspopova 1990, 144). However, the concepts underlying the image of the divine pair might be unique to Sogdiana. First, the *Avesta* (the sacred book of Zoroastrianism) does not mention Verethragna having a wife. Moreover, in different surviving images of the divine pair, the posture of the goddess is dissimilar (Marshak and Raspopova 1990, 144). As for the name of the goddess, Cista, the goddess of the way in Zoroastrianism, might be a likely candidate. Cista and Verethragna share several epithets in the *Avesta* (Marshak and Raspopova 1990, 145).

Next, the northern wall is separated by a row of pearls into two large registers (Figure 10.3). In the central zone of the upper register, a massive female figure with four arms sits on a lion. Her four hands hold different items, including the sun, the moon, a sceptre, and an unidentified object in her front right hand that has since been lost. This figure almost undoubtedly represents Nana as her iconic four arms and lion mount (Marshak and Raspopova 1990, 149). The ancient Mesopotamian goddess Nana was the most prominent deity in the Sogdian pantheon. She was honoured as the lady of Panjikent on the coins minted during the reign of Dhewashtich (d. 722 CE), and her image appeared in several private houses in Panjikent (Schumann and Sazonov 2022, 292). The pose she adopts on her lion mount evokes the poses of royal Sasanians, and her four arms are borrowed from Hindu iconography (Marshak 2001, 233).

Below the row of pearls, two completely different faiths are illustrated. Inside the arch, the composition includes a seated Buddha with a standing devotee on his left, and both figures are dressed in Indian garments (Figure 10.4) (Ashurov 2020, 16). The gesture of the left hand of the seated Buddha is unusual, as this hand is generally in the *adhayamudra* (a gesture of fearlessness), but the thumb here is in an unnatural position (Compareti 2008, 14).

On the right of the arch, the composition should be read from left to right on the upper half and then extended to the lower half since the two parts are not separated by anything. The image generally depicts the harvesting of grain, including gathering, weighing, and transporting grain crops and attending a feast after working (Marshak and Raspopova 1990, 155). Of the multiple figures present, only the one on the far left can be identified as a deity, as his head is decorated with a wreath of cereal grass. Ethnographic evidence reveals that the deity is the "Grandfather Tiller", a mythological and ritual character that mountain Tajiks and other peoples

Figure 10.3 Mural on the southern wall. Reconstruction. Source: Marshak and Raspopova (1990), Figure 19.

of the Pamirs believed would help them in their agricultural endeavours (Marshak and Raspopova 1990, 155).

Unlike the southern wall with its strong Zoroastrian elements in the paintings, the northern wall was designated as a dialogue space between various faiths, such as the goddess Nana, Buddha, and the "Grandfather Tiller". Seemingly, these disparate faiths were believed to bless the homeowner in different ways. An obvious association was that the "Grandfather Tiller" fits well with the source of wealth of the owner of the house, which had rooms serving as granaries. Moreover, these deities were all intentionally depicted in a seated position. They met and fused into each other harmoniously in the same scene.

The inside out

The Sogdians did not lose their unique features under the influence of powerful neighbours but promoted these features in foreign lands through frequent movements throughout their Eurasian networks. An outstanding example of the Sogdian cultural exportation was that their language was adopted by the Türks.

The First Turkic Khaganate was established on the Mongolian Plateau at the end of the 540s CE (De la Vaissière 2005, 200). The khaganate's territories quickly

Figure 10.4 Mural inside the arch. Reconstruction. Source: Marshak and Raspopova (1990), Figure 24.

expanded through Central Asia. Between 557 and 561 CE, the Türks seized Sogdiana by defeating the Hephthalite Empire with the aid of the Sasanian Empire, as noted above (Sino and Klyashtorny 1996, 327). As a result, a Turco-Sogdian milieux was firmly established from the sixth to the tenth centuries CE, especially at the elite level (De la Vaissière 2005, 198). In this context, writing was one of the most important contributions the Sogdians made to Turkic culture.

Sogdian belongs to the Iranian branch of the Indo-European language family and was originally spoken in the Sogdian region. The commercial success of the Sogdians along the silk roads spread the language widely, as it was used by different ethnic groups. From the last quarter of the sixth century CE onwards, official texts of the Turkic Empire were written in the Sogdian alphabet (Marshak and Negmatov 1996, 242).

Western and Chinese historians at that time both left relevant records indicating the linguistic similarities between the Türks and the Sogdians. In 568 CE, a Turkic mission led by a Sogdian ambassador, Maniakh, travelled to Constantinople to present the eastern Roman Emperor with offerings, including a valuable gift of raw silk and a letter (Menander 1985, 115). Menander Protector, a Byzantine historian of the sixth century CE, reported that the letter was written in the Scythian script. Modern scholars often suggest that the so-called Scythian letters were more likely written in the Sogdian script (De la Vaissière 2005, 203). On the Chinese side,

the *Zhoushu* (50. 7), the official history of Western Wei (535–557) and the Northern Zhou (557–581) states that Turkic writing resembles that of the *hu* (胡), which was a derogatory Chinese term for foreigners from the west, especially Iranian-speaking people, meaning barbarian (De la Vaissière 2005, 119).

Furthermore, two inscriptions dedicated to Turkic Khagans provide more straightforward evidence of the official status of the Sogdian language among the Türks. One is an inscription carved into a stele found in the province of Archangaj of the Mongolian People's Republic in 1956. The inscription is in the form of a monumental stele that is 198 cm high and sits on a stone tortoise that is 47 cm high. All four sides of the stele bear inscriptions. Those on its front, right, and left sides are written in Sogdian, while that on the rear is a Sanskrit inscription written vertically in Brahmi, an ancient Indian script (Kljastornyj and Livsic 1972, 69–70). Chronological indications on the preserved fragments of the inscription date, the stele to 584 CE. It was deliciated to Taspar Khagan (r. 572–81 CE), the fourth Khagan of the Turkic Khaganate (Kljastornyj and Livsic 1972, 78).

The other inscription is a Sogdian text carved into a stone figure, found in Xiao Hongnaihai (Xinjiang) in 1953. The figure is composed of an upper body and a rectangular stand that is 230 cm in height (Lin 2005, 262). The figure bears Sogdian inscriptions on its eastern and northern sides; the part below the ground is inaccessible (Lin 2005, 263). This Sogdian inscription is normally dated to the periods between the death of Niri Khagan and the enthronement of his son, Curi Khagan, with slight differences in the specific year, generally being 599, 600, or 604 CE (Osawa 2006; Lin 2005, 275).

Cultural intermediaries

The Sogdians spread various cultural traditions, not only those they had inherited but also those that were originally unfamiliar to them. Sogdian travellers did not reject alien traditions they encountered along the silk roads but absorbed and took them elsewhere during their travels. The promotion of Buddhism in China by Sogdian monks and merchants is representative of such activity. Sogdian monks transmitted Buddhism in China, while their merchants promoted its development in an indirect way.

In the religiously pluralistic Sogdiana, Zoroastrianism with local features was the mainstream religion, while Buddhism played a minor role. Taking the above-described Buddhist images in the house with the granaries as an example (see Figure 10.4), this is the only painted Buddhist representation discovered in Sogdiana to date, which suggests that Buddhist worship was rare there. Additionally, the painted Buddhist representation shows its status was secondary to the Zoroastrian deities in the same wall painting. The Buddhist images were added inside the arch, the smallest unit of the whole wall. The size of the seated Buddha is much smaller than counterpart deities, such as the goddess Nana. Perhaps due to a lack of knowledge, the painter made a mistake in making the left hand of the seated Buddha look like *adhayamudra* (a gesture of fearlessness), but the thumb is undoubtedly in an unnatural position (Compareti 2008, 14).

Xuanzang (602–64 CE) and Huichao (704–83 CE), Chinese Buddhist pilgrims who travelled from China to India and back, recorded the presence of Buddhism in Sogdiana as they passed through the region. Around 630 CE, Xuanzang arrived in Samarkand and observed that the king and his people believed in Zoroastrianism and that there were only two Buddhist monasteries but without any monks. Approximately one century later, Huichao observed that there was only one Buddhist monastery in Samarkand with just one monk (Compareti 2008, 12).

Given the rarity of Buddhism in Sogdiana, Sogdians became familiar with this religion on their way to China, most likely somewhere in Bactria, northwestern India, or Xinjiang (Wertmann 2015, 25). Chinese sources from the second to the seventh centuries CE mention a large group of Sogdian Buddhist monks. Up to 23 monks rooted in Samarkand were recorded. Many were born outside Sogdian proper. For example, Kang Senghui (222–80 CE) was born in Jiaozhou (modern Hanoi, Vietnam), and Kang Sengyuan (267–330 CE) was born in Chang'an (Walter 2006, 23–6).

Most of the pioneering Buddhist monks translated Buddhist texts from Sanskrit to Chinese and added commentaries to suit the Chinese worldview (Walter 2006, 61). Some engaged in preaching activities. When the Jiaozhou-born Kang Senghui arrived in southern China in 247 CE, he persuaded the emperor Sun Quan of the Wu dynasty to build the first Buddhist temple in southern China by obtaining and displaying some miraculous Buddhist relics (Walter 2006, 24).

Besides the monks, Sogdian merchants also promoted the development of Buddhism in China, but their contributions were more indirect. Some Sogdian merchants converted to Buddhism during their travels. For example, An Xuan was a merchant who arrived in Luoyang in 181 CE and became a Buddhist monk there (De la Vaissière 2005, 79). The abovementioned missionary monk Kang Senghui was born to a merchant family whose father engaged in trade in India before moving to Jiaozhou (Walter 2006, 24). More Sogdian merchants made donations to Buddhist activities. In the first-half of the eighth century, a Sogdian lay Buddhist in Luoyang named Chatfārātsrān sincerely requested a Sogdian monk named Jñānacinta to translate a Buddhist scripture into Sogdian (Yoshida 2018, 4). In 585 CE, a Sogdian merchant named He Yongkang paid to rebuild a Buddhist temple in Dingzhou (modern Dingxian, Hebei Province), which was destroyed during the anti-Buddhist movement in 570s CE initiated by the emperor Wu of the Northern Zhou Dynasty (Rong 2014, 104).

Buddhism was probably perceived by Sogdian merchants as helpful support during travel. Some Buddhist artefacts shaped in the form of the Buddha, such as amulets, medallions, and statues, have been discovered in Sogdiana (Ashurov 2020, 15–16). A common feature of all these artefacts is that they are small, which means that they were easy for travellers to carry (Forte 2015, 156). Buddhist murals found on the Eastern silk roads, such as in the Kizil Grottoes and Mogao Grottoes, vividly illustrate the association between Buddhism and Sogdian travellers. In these murals, Sogdian and other non-Han merchants face danger and are being saved by Buddhist supernatural powers (Kageyama 2005, 192). The Sogdian merchants likely saw Buddhism as providing protection during travel. Although they

did not transmit Buddhism as directly as missionary monks did, they were keen to financially support Buddhist activities, for example, by building a Buddhist temple, as noted above.

Acculturation in China

China was a land of possibilities that attracted many Sogdian settlers. The established settlements stretched across China, from the westernmost area of present-day Xinjiang to the easternmost area of Shandong and from cosmopolitan cities such as Chang'an and Luoyang to peripheral regions such as Sichuan Province (De la Vaissière 2005, 121–57). The acculturation of Sogdian immigrants was an interesting sociocultural phenomenon. How did the Sogdians acculturate to their new Chinese environment and retain their own cultural identity?

The discovery of Sogdian tombs in northern China provides crucial evidence for constructing a detailed picture of their acculturation from the perspective of funerary culture. These tombs are distributed across northern China and date between the sixth and eighth centuries CE. The tombs and their relics have rich cultural significance. Three areas are explored here: the tomb's construction, epitaphs, and burial receptacles.

One typical Chinese-style tomb comprised an underground substructure for storing the body of the deceased and aboveground buildings for ritual functions. Although the underground substructures varied in their material and layout, the horizontal layout of the grave chamber had been common in China since the second century CE. The chamber was formed in a square with a domed roof that was reached by a long and sloping narrow shaft or corridor (Guo 2004, 1–12).

For the Sogdians, the aboveground burial structures were not completely alien because they had a tradition of building a small, rectangular, burial chamber known as a *naus* to house skeletal remains (Shroff 2016, 11). A *naus* was a product of Zoroastrian development in Sogdiana, perhaps first appearing around Samarkand in the fourth or fifth century CE (Hansen 2012, 134–36). However, for a Sogdian to choose to be buried in an underground chamber was hostile to Zoroastrian practice. According to the ecclesiastical code *Vendidad* (3. 36–7), the action of burying a corpse, be it of a dog or a human, in the earth should be punished (Vendidad 1985). The adoption of the Chinese tomb form by the Sogdian immigrants was a sign of Sinicisation.

Although the Sogdians had adopted the Chinese tomb form, some adjustments were made to align the form with their Zoroastrian beliefs. Chinese people usually orientated tomb openings to the south and the head of the body to the north. However, few Sogdian tombs were built to face north. The heads of the deceased were turned to the south. This anomalous tomb construction probably resulted from the Zoroastrian principle that the head of the deceased should not be oriented northwards since the north is considered full of danger and evil (Shen 2009, 14–15).

Almost every Sogdian tomb found in China with archaeological contexts contained an epitaph. Epitaphs were a basic element of Chinese tombs by the late fifth

and sixth centuries CE, and the content was a biography of the owner (Lerner 2005, 31). The common use of epitaphs among Sogdians has been considered a sign of Sinicisation because the custom of writing biographies seemed to be absent in traditional Sogdian funerals (Lerner, 2005, 31).

Even so, some Sogdians highlighted their own characteristics using Chinese-style epitaphs. In the tomb of Shi Jun, a Sogdian *sabao* (caravan leader or merchant chief) who died in 579 CE and was buried in Xi'an, his epitaph was engraved in two languages: Sogdian and Chinese (Yang 2014, 192–202). This was a way to highlight his belonging to both Sogdian and Chinese cultures.

Burial receptacles for human remains found during archaeological excavations suggest that many Sogdians adopted traditions from their host societies, including wooden coffins if they were in China proper and reed mats if they were in Turfan, Xinjiang (Ma 2022, 76–80). For the Sogdians, the use of wooden coffins and reed mats was strongly contrary to the Sogdian's Zoroastrianism doctrine. Plants are considered holy creations, and they would be defiled by the decaying body (Foltz 2010, 373). When a corpse is exposed to scavengers, the *Vendidad* (8. 14–22) dictates that it be fastened by the feet and by the hair with iron to avoid scavengers carrying the bones off, where they might end up in the water or among plants.

In contrast, only a few Sogdians continued to use ossuaries, which were a particular type of container in the Transoxiana Zoroastrian tradition that held bones without flesh after excarnation using sky burial. Seven relatively complete ossuaries have been found in China, six of which were in Xinjiang, the far west of China. Only one is decorated with Han-style motifs, and it is preserved in the Palace Museum, Beijing (Chen 2018, 325–30).

The most interesting type of burial receptacle found in Sino-Sogdian tombs is stone funerary furniture, which resembles domestic furniture, primarily stone funerary beds and house-shaped sarcophagi (see illustrations in Figures 10.5 and 10.6). Stone funerary beds are couch-like stone platforms with pictorial screens. This form was probably derived from Chinese domestic beds (Zhang 2010, 443). House-shaped sarcophagi are large stone boxes mirroring traditional Chinese wooden architecture. A possible prototype was house-shaped stone coffins, which were popular in Sichuan Province in the second and third centuries and then spread to northern China due to Daoist movements and activities (Wu 2002). Stone funerary furniture often features many images, either on the screens of stone funerary beds (Figure 10.4) or on the walls of house-shaped sarcophagi (Figure 10.5). The images chosen to decorate stone funerary furniture were personal choices, and some themes derived from the Sogdian and Zoroastrian backgrounds.

The use of stone funerary furniture in Chinese history was transitory. Stone funerary beds and house-shaped sarcophagi both emerged in northern China in the fifth century and quickly faded in the seventh and eighth centuries (Müller 2019, 383). In the second-half of the sixth century, Sogdian elites, especially those with the title *sabao*, became the almost exclusive users of stone funerary furniture (Müller 2019, 383), probably because this was an appropriate burial receptacle for Sogdians, who sought a delicate balance between two contradictory traditions.

Figure 10.5 Stone bed in the tomb of Kang Ye (d. 571 CE). Source: Xi'an Municipal Institute of Archaeology and Preservation of Cultural Relics (2009), Figure 3.

On the one hand, the Sogdian use of funerary furniture may be seen as a sign of their Sinicisation even though the tradition was not as orthodox as the use of wooden coffins in Chinese burials. On the other hand, stone funerary furniture left enough space for Sogdians to maintain their ethnic and religious characteristics because it did not defile elements considered sacred in Zoroastrianism (i.e., plants and the earth). Moreover, as the name indicates, stone was the only material used to construct funerary furniture. Stone (and sometimes brick) were needed to construct the tower of silence (*dakhama*) for excarnation by vultures (Wu 2014, 9).

These Sogdian tombs and their contents represent two opposing types of acculturations: the Sogdian maintenance of their own ethnic culture and their adoption of host cultures. On the one hand, the Sogdian assimilation into Chinese society was shown in their mirroring of the funerary traditions of their Chinese hosts. On the other hand, they constructed and maintained their cultural and religious identities in anomalous yet inconspicuous ways, such as through the reorientation of their tombs and their preference for stone funerary furniture. Integration might therefore be an appropriate way to describe the specific situation of Sogdian acculturation in China from the sixth to the eighth centuries CE, during which the Sogdians combined different cultures with their own to varying degrees.

Conclusion

The Sogdians were subjugated by others, from the Achaemenid Persian Empire (550–330 BCE) through to the Arab invaders during the seventh and eighth

Figure 10.6 (a) House-shaped sarcophagus in the tomb of Shi Jun (d. 580 CE). (b) the skeletal remains on the stone divan. Source: Yang (2014), Figures 43 and 59.

centuries. Yet, they retained their separate identity in the interstices of great empires that invaded their original homeland. Seemingly on the periphery, the Sogdians, for many centuries, were successful traders along the silk roads and, moreover, played a prominent role in the interchange of cultural knowledge between Central Asia and China.

The Sogdians were "cultural bees" moving among various civilisations; propagating culture, knowledge, and religion; and carrying trading goods along the silk roads of Central Asia. They played various roles in transcultural connectivity at different locations within the vast network of the silk roads, including but not limited to cultural receivers at home, cultural exporters abroad, cultural middlemen on the road, and cultural adapters in China.

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11 Huns and Romans in the fourth century

George Woudhuysen

Late antiquity was in many ways a 'golden age' of the Silk Road, if that concept is susceptible to any chronological definition (Di Cosmo and Maas 2018, Rezakhani 2010). The rise of powerful nomadic states, especially the Türk Empire, and their interaction with the sedentary civilisations at either end of Eurasia helped to knit together networks that linked China with the Mediterranean, via Central Asia and Iran. Through these networks, people, information, goods, and ideas moved on a scale and over distances that seem to have been a step change from what had come before. Silk was indeed a significant component of what was desired, written about, and traded (De la Vaissière 2005b). The spread of new religious ideas such as Christianity and Buddhism, of new modes of legitimising political power, and of new patterns of multilingual and multi-cultural interchange created a world of kaleidoscopic complexity. This entangled history continued into the eighth century, when the Arab conquests of Khurasan, Afghanistan, and the lands beyond the Oxus reshaped the Central Asian order (Grenet and De la Vaissière 2002).

This vibrancy of the Silk Roads in Late Antiquity had its origins in the turmoil of the fourth century CE. From 300 onwards, successive nomad invasions from the steppe world had a profound and destabilising influence on the settled civilisations of Eurasia. In the 310s, the old imperial capitals of northern China, Luoyang and Chang'an, were sacked by nomads, whom Chinese sources call Xiongnu. This fearsome name harked back to the great nomadic empire that had rivalled the Han dynasty from the third century BCE onwards (Lewis 2009 and Di Cosmo 2018). In the 350s, a group called by our only (Latin) source the Chionitae, led by one king Grumbates, seemingly put considerable pressure on the eastern frontier of Sasanian Persia (Ammianus 17.5.1; Rezakhani 2017). Nomads, called Huns by the locals, went on to found powerful states in Central Asia, which posed a profound challenge to the Iranian Shahanshas (Payne 2016). By the 370s, the Romans were similarly aware of a new nomadic power on the Pontic-Caspian steppe, which they also called the Huns. These, they believed, had crushed or subordinated the various other peoples who inhabited the region – the Alans in particular – and were responsible for the flight of many Gothic refugees into Roman territory. Mismanagement of that influx led to war, which culminated in the Roman defeat at Adrianople, where the Emperor Valens and much of the eastern field army was destroyed (Heather 2001, 122–56 and Lenski 1997, chapter 7). Across the fourth century,

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then, the Chinese world, the Sasanian Empire, and the Romans faced considerable pressure from powerful nomadic groups emerging from the steppe world.

The question of whether there was any connection between these episodes has been debated ever since Joseph de Guignes suggested in the 1750s that the Xiongnu and the Huns were the same nomadic people, an idea that fired the mind of Edward Gibbon as he attempted to put Roman history in a Eurasian framework (De Guignes 1756–58, Gibbon 1994 chapter 26). Attacked forcefully and influentially by Otto J. Maenchen-Helfen (esp. 1944–45a) – titan of Hunnic studies in the mid-twentieth century – the case has been powerfully restated by Étienne De la Vaissière (2005a; *cf*. 2015). De la Vaissière invoked two major items of textual evidence. First, a reference in the so-called Sogdian Ancient Letter II, written around 313, describing the devastation in northern China caused by the Xwn, the Sogdian word for Hun (Sims-Williams 2001). Second, the decision by the Buddhist monk and translator Zhu Fahu (or Dharmarakṣa to use his Indian name) in the late third and early fourth centuries to render the Sanskrit Huṇa (a people located in Central Asia by his earlier source texts) as Xiongnu in Chinese. These texts, de la Vaissière argued, established the Huns as equivalent to the Xiongnu. Chinese sources also referred to the Xiongnu invading Central Asia about the same time as the Chionitae and other Hunnic groups were active and suggested that their homeland lay in the Altai mountains.

Turning to the archaeology, de la Vaissière acknowledged the shortage of relevant material, but pointed to close similarities in both the design of cauldrons used by the Huns and Xiongnu and their deposition near springs and rivers. The latter habit, he suggested, attested some continuity of cultural or ritual practice between the two groups. He further argued from palaeoclimatological evidence that the Altai experienced a cooling episode in the fourth century. The adverse impact of this on the traditional nomadic way of life might have prompted invasions of settled areas. Sensitive to recent work on ethnogenesis and the formation of identity, de la Vaissière was careful to reject the idea of any ethnic coherence to the Huns, let alone direct continuity with the Xiongnu Empire that had existed centuries earlier. Still, he could tell a coherent story from the fractured evidence: climate change prompted the Huns to move and move they did, to northern China and then to Central Asia and the western end of the steppe.

Aspects of this reconstruction have been challenged. The argument from the cauldrons has not found wide acceptance and more recent palaeoclimatological work has suggested that the hypothesis of cooling in the Altai mountains is probably false (Brosseder 2018). Not all are convinced that it is possible to get from Xiongnu to Hun phonologically, at least not in the way that de la Vaissière has argued (Atwood 2012). It has also been suggested that the Chinese sources call the nomads who invaded northern China at the start of the fourth-century Chieh (*jie*, 羯) or *Kir, not Xiongnu, a generic way to identify northern barbarians rather than a specific description (Shimunek et al. 2015). In general, however, the idea that the same nomadic groups – however shifting and uncertain their identities – were active across Eurasia in the fourth century seems set to become the consensus and even dissenting voices (e.g., Atwood 2012) tend to accept its core observations.

From the perspective of a historian of the Roman Empire, this is an important development, the ramifications of which have not yet been fully worked out. From the middle of the fourth century at the latest, the fate of the Roman world was intimately bound up with developments that stretched from China to the Pontic-Caspian steppe. By the 350s, the Huns were reshaping the strategic environment for Roman leaders. The appearance of aggressive new powers on the eastern border of the Sasanian Empire was a 'strategic dilemma' for the rulers of Persia from which they never completely escaped (Howard-Johnston 2010, Payne 2016). The quiescence of Shapur II (r. 309–79) in the early to mid-350s, after over a decade of almost continuous war against the Roman Empire, was seemingly owed to problems on his eastern flank (Dodgeon and Lieu 1991, chapters 7–8). The impact of the Huns on the Goths was even more obvious and significant to contemporaries, leading as it did to the catastrophe at Adrianople (Lenski 1997).

Unsurprisingly, therefore, during the later fourth century, the world of the steppe began to intrude into the consciousness of educated Romans, who had previously known remarkably little about the vast region (Traina 2018). The dénouement of this entanglement with the steppe was the spectacular career of Attila the Hun, 'that formidable barbarian' (Gibbon 1994, 1.294; Maas 2015). In the fragments of Priscus of Panium's account of an embassy to Attila's court, we see sharp ethnographic observation and a sense that the Roman order was more fragile than anyone had supposed (Blockley 1981–83). Priscus was sensitive to the complex multiethnic and multilingual nature of the Hunnic Empire in a way that contrasts with other late Roman historians (Mullen and Woudhuysen 2023, 1–2). The later nomadic groups who lived to the north and east of the Roman world never quite intruded – militarily or intellectually – in the way or to the degree that Attila and his Huns had, but the Empire remained entangled with its steppe neighbours for centuries (Whittow 2018). Menander Protector offers another fragmentary account of embassies to the Türkish rulers 'Sizabul' and 'Turxanthus' under Justin II (r. 565–78) and Tiberius (r. 574–82). Though less vivid than Priscus, Menander's narratives of the journeys of Zemarchus and Valentinus deep into Inner Asia contains some unforgettable moments (Blockley 1985). When he describes how Turxanthus, who had berated and threatened to execute Valentinus and his fellow ambassadors, next ordered them to slash their cheeks in mourning for his father Sizabul (as was the Türkish custom), one can feel the menace. Sensibly, the ambassadors opted for self-mutilation.

There is a potential trap here. From no later than the 410s, every Roman emperor was forced to think about the expanse of grassland that lay beyond the imperial outposts on the Crimean Peninsula: Huns, Avars, Türks, Bulgars, Khazars, and many other peoples were a factor in any calculation of Roman policy. These nomadic peoples also featured extensively in Roman historical writing and authors less curious than Priscus were obliged to cast an occasional glance at the steppe world. It is deceptively easy to read back from Priscus or Menander Protector into the 370s and 380s, the earliest phase of interaction between Romans and Huns. It seems natural to illuminate the customs and habits of the first Hunnic riders to cross the Volga from what we know of Attila's empire in the 440s (Maenchen-Helfen

1973). The difficulty is that the first Roman authors to grapple with the problem of the Huns did not have any inkling of what was to come. They were confronted by a terrifying and new phenomenon.[1] They had fewer tools at hand to understand this development, and certainly not the knowledge of nomadic life gained at sometimes uncomfortable proximity by later authors. We thus run the risk of misreading our evidence for the western end of the earliest stages of the Hunnic transformation of Eurasia. Instead, we need to examine the Roman sources for the Huns in the fourth century on their own terms.

The Huns themselves probably entered Roman consciousness only in the 370s. This is somewhat surprising, for Hunnic groups were causing problems for the Sasanians, with strategic ramifications for the Romans, from at least the 350s. They soon appeared on the Roman eastern frontier as well. When Shapur II invaded the Roman Empire in 359 and laid siege to the fortress-city of Amida (modern Diyarbakır, Turkey), he was accompanied by the Chionitae and their king Grumbates (the name is important: De la Vaissière 2005a, 19). We are fortunate to have a detailed account of this siege because Ammianus Marcellinus (c. 330–400), the great historian of the fourth-century empire, was involved. His account of what happened at Amida (in the nineteenth book of his *Res gestae*) is unforgettable. He vividly evokes the terror experienced by the besieged. Although he offers several vignettes of Grumbates and his Chionitae – a curious description of the death of the ruler's son and the funeral rites for him (19.1.7–11) – Ammianus does not connect them with the Huns whom he would describe later in the same work. In the 350s and 360s, in other words, the Huns were already exerting an influence on the Roman world, though the Romans had yet to grasp it.

Since Ammianus will feature a good deal in this chapter, it is worth saying a little about this frustratingly shadowy figure (Kelly 2008, chapter 3). Ammianus tells us that he was a gentleman, a soldier, and a Greek, by which he meant that he was Hellenic in culture and religion (that is, a pagan) (19.8.6, 31.16.9). He may well have been a native of Antioch. He was a young man in the late 350s, who served as a *protector domesticus* with the general Ursicinus, which was what took him to Amida in 359 (Ammianus 16.10.21). Being a *protector domesticus* was a prestigious commission, given to young men of good military family, who might aspire to positions of senior command later in life. We know that Ammianus participated in the Emperor Julian's disastrous invasion of Persia in 363. Beyond that, there is little we can say with certainty. He wrote a history of the Roman Empire, the *Res gestae*, from the accession of Nerva in 96 to the aftermath of the battle of Adrianople in 378. This is in 31 books, though the first 13 are lost and the narrative begins only near the end of 353. This was probably completed in Rome around 390. Despite his self-identification as Greek, Ammianus wrote in Latin and he shows a wide knowledge of Latin literature in his frequent allusions to many earlier authors. An acute, if not impartial, observer of the history of his own age, Ammianus had broad and deep interests. He included antiquarian, geographical, and ethnographic material in the *Res gestae*, including a lengthy digression on the Huns – and their nomadic neighbours, the Alans – in the 31st book of his history.

Ammianus included the digression on the Huns as part of his narrative of the entry of the Goths into the Roman Empire and the campaign that culminated in the battle of Adrianople. These events first put the Huns *qua* Huns firmly on the Roman map. When precisely they arrived on the Pontic-Caspian steppe and began to trouble first the Alans and then Goths is an interesting question. Our only evidence is what Ammianus tells us (31.3), for even if the archaeological material were considerably richer, it would be unlikely to offer us a chronology fine-grained enough to separate (say) the 360s from the 370s. His narrative is quite detailed but temporally imprecise: the Huns subdued the Alans, then in alliance with them warred against the Goths, fighting first Ermanaric, his successor Vithimer, and then his young son Viderichus, whose guardians were Alathaeus and Saphrax. In 376, the Goths led by Alathaeus and Saphrax sought refuge in the Roman Empire.[2] The current consensus is that the Hunnic attacks on the Alans can be dated to around 370 (Den Boeft et al. 2018, 39). That perhaps creates an unduly tight chronology for what seems to have been a good deal of warfare against both Alans and Goths, with Ammianus saying Ermanaric resisted *diu* ('for a long time') and Vithimer *aliquantisper* ('for some time') in what were only two phases of a much longer and more involved process. Without undue certainty, we should perhaps put the arrival of the Huns north of the Black Sea no later than the 360s and perhaps as early as the 350s (*cf*. Heather 1995, 6).

The first references to the Huns date to the late 370s and early 380s, all seemingly written after the battle of Adrianople. The texts are overwhelmingly Latin not Greek, something not always fully appreciated. The very first extant datable reference to the Huns is in the work of the poet Ausonius (*c*. 310–93), who mentions their 'wandering bands' in lines composed around 379.[3] There is also a mention of them (using the name Massagetae) in a speech by the orator Themistius (*c*. 317–89) in 383 (*Or*. 16.207c). Neither of these is more than a passing nod to the Huns. More substantial mentions of them are tricky to date, or come from a little later still, or both. As we have seen, Ammianus' *Res gestae* was completed in the early 390s, but Michael Kulikowski has made an intriguing case that Book 31 might have been a separate monograph, written soon after the battle of Adrianople (Kulikowski 2012, *cf*. Den Boeft et al. 2018, ix). Book 31 has an account of the battle and the digression on the Huns and Alans. The second edition of the history of Eunapius of Sardis (written after 404) contained an account of the Huns, which the author seems to have advertised (with characteristic modesty) as the first based on real research (Eunapius fr. 41 [Blockley 1981–83]). Whether the first edition of his history, written perhaps in the early 380s (Stover and Woudhuysen 2023, 390 n.91), included one as well is unclear. Ambrose, the bishop of Milan (374–97), who mentioned the Huns surprisingly often, included a paragraph about their addiction to gambling in his *De Tobia* (11.39) (Zucker 1933; Pizzolato 2011). The date of this tract is uncertain, but a convincing case has been made that it was written before 386/87 (Dunphy 1984). Ambrose might, therefore, have the best claim to offer the first extant detailed description of the Huns. The reference in the so-called *Epitome de Caesaribus* 47.3 to the Huns and Alans suggests that Aurelius Victor might have offered some coverage of them in the second edition of his *History*, probably

produced soon after the accession of Theodosius in 379, though caution on this point is perhaps advisable (Stover and Woudhuysen 2021 2023).

What did the Romans call the Huns when they first encountered them? This is more complex and interesting than it might first appear and again the Latin evidence is primary.[4] The Huns with a capital H are perhaps so familiar (at least to Anglophone scholarship) that the question of the name's orthography has escaped much attention (though see Atwood 2012; Maenchen-Helfen 1973, 447–52). Our earliest evidence suggests, however, that the name of the Huns was *Chūni*. That was the form Ausonius used, guaranteed by the metre. Ambrose also used it in both his *De Tobia* and his commentary on Luke (10.10).[5] So too did Pacatus in his panegyric of the emperor Theodosius (*Pan. Lat*. 2.11.4, 2.32.4), delivered in 389. *Huni* may very well be what Ammianus wrote, but in 31.8.4, the only authoritative manuscript (Vat. lat. 1873) offers *chinorum* for *hunorum*. In context, it is not easy to see how a palaeographical confusion could have introduced the initial c- and it is possible that the original form was *Chuni*, preserved here because a scribe did not recognise the word that he silently altered elsewhere. The only early author who consistently used *Huni* was St Jerome (*Adversus Iovinianum* 2.7, *Epp*. 60.16, 77.8, 107.2). It is possible that this was the orthography he preferred (perhaps under the influence of Greek Οὖννοι), but no other major late-ancient author is so poorly provided with modern critical editions as Jerome.[6] This might seem a tiny detail of spelling, but it could be of real significance. What sound precisely that *Ch*- was meant to represent probably cannot be recovered, but it seems rather closer to the ways in which the name of the Huns was rendered in Central Asian languages, though the difficulties of discerning this are formidable (Atwood 2012).

Scholarship has tended to take a dim view of what these late-Roman authors had to say about the Huns. The transition is most obvious in the study of Ammianus, whose Hunnic digression is our most detailed account of their origin, history, and mode of life. For Maenchen-Helfen in 1973, the digression had its flaws, but it was still 'an invaluable document', a 'stylistic masterpiece' that 'cannot be praised too highly' compared with other sources (Maenchen-Helfen 1973, 1, 9). Diederik Burgersdijk's recent analysis of the digression says, in contrast, that 'the content is deficient and almost totally fictitious', that 'it is clear Ammianus had very little factual knowledge about the Huns and Alans' (Burgersdijk 2016, 114).[7] One can infer from judgements like this that other sources, offering briefer and more selective accounts of the Huns, are even less likely to contain fragments of truth. The broad idea here is that the surviving literary sources were crushed by the weight of tradition: they recapitulated earlier authors and drew on a deep well of ethnographic stereotypes about nomads. They were engaged in a kind of literary game, reaching back at least to Herodotus, about how the world of the steppe was to be described, not describing nomads as they actually existed.

There are some broad methodological points that are relevant here. Scholars often treat any glance backwards by a later author to an earlier account of nomads as though it were proof positive of straightforward copying. Allusion is not, however, an infallible sign of bad faith and we ought to allow that someone like Ammianus – whose use of earlier literary texts was sophisticated (Kelly 2008) – chose

any allusions in his account of the Huns with care: they were not unthinking appropriations of the past. There is also a risk that we will be fooled by randomness, if we insist on regarding any parallel between two ancient texts as suspicious. Maenchen-Helfen, for example, argued that Jordanes' account of the origin of the Huns as the offspring of three exiled Gothic witches and some *spiritus inmundi* (*Getica* 24.121–2) was a literary fantasia based on the story (found throughout patristic literature) that the fallen angels invented magic and took human wives, their children being the giants (Maenchen-Helfen 1944–45b). Beyond the fact that both stories involve illicit sex between a human and non-human, little links them: almost every point of detail is different. There is also a systemic problem: if we insist that later authors derived their information about nomads from earlier ones, we still have to identify an earlier author who made all these sharp ethnographic observations. One might imagine that Herodotus (or his informants) originated this endlessly recycled factual core, since his description of those who lived on the Pontic-Caspian steppe is a landmark in accounts of nomads. The Scythian *logos* has, however, been picked apart by specialists as a literary creation, based on little personal knowledge, and drawing instead on still earlier accounts (Armayor 1978; West 2002).

To these points, there is an obvious riposte. In the 1980s, Brent Shaw argued that most extant classical accounts of nomads participated in what he called an 'ideology' of nomadism. The core proposition of this ideology was 'a complete separation' of the nomad from the settled, with minimal interaction between them, the nomad representing 'the ultimate barbaric' type (Shaw 1982/83, 7). Direct acquaintance with nomads was vanishingly rare and most of what was written about them was 'a type of *a priori* mental construct' (Shaw 1982/83, 30). In Shaw's view, the key features of the nomad ideology emerged remarkably early (in the *Odyssey*'s description of the Cyclopes) and its power was that it was more than a bundle of assumptions, clichés, and nostrums: 'a structurally consistent set of ideas' (Shaw 1982/83, 5). There is, in other words, a deeper problem with accounts of nomads like that of the Huns in Ammianus (singled out by Shaw) than their reliance on a shared intellectual inheritance. This is no ordinary case of the anxiety of influence.

Shaw's magnificently argued essay has proved enormously influential. There are, however, some problems with it. Shaw identifies a cluster of features that characterise the nomad ideology: nomads are barbaric, and lack fixed homes, cities and states, social institutions and laws; they are idle, they live on meat and milk, and do not engage in cereal agriculture (Shaw 1982/83, 22, 24). These are, however, all genuine features of nomadic societies, certainly as seen from the settled Mediterranean. Pastoralists do tend to eat meat and drink milk. Nomads are mobile and they do not generally build or live in proper urban settlements, nor do their political and social institutions resemble those of settled agricultural societies. This is the fundamental problem with the 'nomad ideology': it takes the features of nomadic society most obvious to outsiders and says that they are *ex hypothesi* evidence that those outsiders knew nothing about nomads. The only way for a source to evade the accusation of being 'ideological' is to show remarkable ethnographic precision, or to be sympathetic to nomads, a steep demand to make of someone confronted by the Huns.

Moreover, though Shaw makes broad claims for the reach of this ideology, there is a lot of late-antique evidence that can be assimilated to it only awkwardly. Ambrose of Milan offers a substantial discussion of gambling amongst the Huns (*De Tobia* 11.39). He suggests that the desire to obtain resources for gambling explained Hunnic belligerence, describing institutions (moneylending, for example) and customs that had arisen from their addiction to dice. The problem here is not so much that all this contradicts the key points of the 'ideology' as that it lies outside them: alternative ideas about nomadic life were clearly readily available. The same problem arises from a sermon of Asterius of Amasea (fl. c. 390–410). The bishop uses the diet of the Huns to encourage his congregation to fast: they can live without bread and wine, so his listeners can learn to abstain from them.[8] Nomadic diet is invoked in an argument that assumes the shared human nature of the settled and the nomad.

If we return to Ammianus' account of the Huns with a more sympathetic eye, we find that much of the criticism of it is somewhat unfair. Many readers have been unduly influenced by a short section wedged between the account of the Huns and that of the Alans (31.2.14–16), which offers an ethnography of Inner Asia that was out of date by the later fourth century, naming many of the same peoples as are found in Herodotus. This, however, is explicitly antiquarian: Ammianus is seeking to explain to his readers why tribes familiar from earlier authors had vanished, to be replaced by the Alans (31.2.13), not claiming that any of these peoples still existed in his day. As we have seen, Maenchen-Helfen was more appreciative of Ammianus' Hunnic digression than most modern scholars, but he was exercised by what it said about the political structures of the Huns. His objection was that their success in conquering the Goths was incompatible with a depiction of them as 'an anarchic mass of howling savages' (Maenchen-Helfen 1973, 12). This line of argument is common in indictments of Ammianus, who is accused elsewhere of trying 'hard to give the impression that the Huns were unorganized barbarians', an idea incompatible with their ability to menace the Roman Empire (Den Boeft et al. 2018, 23; *cf.* King 1987, 82). Other scholars have discussed the 'obvious inadequacy of this distorted representations' (Kim 2013, 19), while Shaw himself objected that Ammianus claimed the Huns had 'no political assemblies, no laws or system of justice, and no established political rulers' (Shaw 1982/83, 25). What Ammianus in fact says is (31.2.7):

> When discussion of serious affairs takes place, they all deliberate in a common body in this fashion [*i.e.* on horseback]. They are not governed by royal strictness (*severitate regali*), but satisfied with the disorderly command of their leading men (*tumultuario primatum ductu*) force their way through whatever stands in their path.

This is at most a statement that the Huns lacked widely recognised and powerful kings and it strongly implies that the Huns did in fact have both political customs and assemblies. This is probably an accurate characterisation of their political organisation: there is no good evidence for Hunnic kings in the west until the early

fifth century, when Uldin appeared (Maenchen-Helfen 1973, 59–72). He was not the only royal figure among the Huns, nor was his authority unchallenged. The historian Olympiodorus, an experienced imperial diplomat and practiced observer of barbarians, knew of another monarch, Charaton (c. 412), whom he describes as 'first of the kings' (fr. 19 [Blockley 1981–83]): clearly there were more. As Maenchen-Helfen himself showed, Attila was at most the nephew of a Hunnic king and his rise to power certainly does not suggest that there was an uncontested Hunnic monarchy (1973, 82–3). One could almost describe this system as the *tumultuarius primatum ductus*. In any case, the underlying assumptions used to indict Ammianus on this score are simply false: strong monarchical authority is not needed to ensure political and military success. Recent work on early-modern horse-riding Native Americans (especially the Comanche) has shown how extremely powerful polities can exist without any strong centralised leadership (Hämäläinen 2008). So not only is the main objection to what Ammianus says conceptually dubious, it is far from clear that he was factually wrong. Other items in the *Res gestae* have been subjected to similar treatment and similarly prove to be less inaccurate than claimed. Ammianus has often been said to claim that the Huns had no knowledge of fire (King 1987). What he in fact says (31.2.3) is that they did not need (*indigeant*) either fire or flavoursome food but were content with roots and half-raw flesh.

Ammianus is only a single example. The late fourth-century Roman sources for the Huns deserve greater sympathy and more critical scrutiny than they have recently attracted. The Huns produced a profound intellectual shock in the Roman world of the 370s and 380s. The sources insist on their novelty and strangeness, their alienation from normal patterns of not only settled life, but even from the habits of more familiar nomads. Of course, Roman authors were the heirs of a formidable intellectual tradition that gave them a framework into which the Huns could (just about) be squashed, but these new nomadic conquerors challenged inherited assumptions and pushed authors like Ammianus to think about the world of the steppe and even events in far-away Central Asia. It is not a coincidence that some Roman historians of the next century showed a remarkable degree of ethnographic sophistication, based on autopsy, when they thought about the Huns.

What Ambrose, Ammianus, and others who first grappled with the problem of the Huns say about them would be important evidence regardless of circumstance, but in the context of de la Vaissière's convincing case that the Huns' arrival on the Pontic-Caspian steppe was merely one facet of a much broader process, they take on a special importance. In contrast to the later late-antique thriving of the Silk Roads, the fourth century in Central Asia and the world of the steppe is remarkably obscure. We *need* the Roman evidence, in combination of course with material from Central Asia, China, and India. It might also serve as a useful warning to us. The idea of the Silk Roads has proved conceptually fruitful, in spite of its problems. Of the latter, the greatest for late antiquity is that the 'Silk Roads' can transform Inner Asia into a place in-between: a region that drew its significance from being the link between China, India, Persia, and the Mediterranean.[9] This role as an artery for the flow of people, information, goods, and ideas was important. Yet

it risks making Inner Asia a marginal place, a region without its own history except in the context of its neighbours. That was certainly not how Ammianus – or other Roman authors – understood it. For all the criticism of them, they had a clear sense of the lands that stretched eastwards as a distinct place, with its distinct peoples, whose customs and way of life were quite different from those in more western climes, and who needed to be understood and analysed on their own terms. The later Romans were also acutely aware that the peoples of Inner Asia could exert a powerful influence on the settled powers around them. Few who had lived through the grim aftermath of Adrianople could have been under any illusions about that. Late antiquity was a golden age of the Silk Roads, in all their mercantile and cosmopolitan splendour. It is, however, the turbulent fourth century that still offers some of the richest opportunities for understanding Inner Asia in its own right.

Notes

1 Ammianus 31.2.1, 31.3.8 and Eunapius fr. 41 (Blockley 1981–3) both insist on the novelty of the Huns.
2 The year, which might be inferred from Ammianus, is secured by the *Descriptio consulum* (ed. Burgess, *Hydatius*, 240).
3 *Precatio consulis designati* l. 31: *Qua uaga Sauromates sibi iunxerat agmina Chuni*. *cf*. *Precatio* 1.8, which might be even earlier (Green 1991, 37).
4 The fairly uniform Greek material is gathered by Moravcsik, *Byzantinoturcica*, 2.231.
5 See the *apparatus* in Schenkl, *Ambrosii opera* and Adriaen, *Ambrosii Mediolanensis opera* (which I have verified by spot-checking the early manuscripts Paris lat. 1732, ff. 130v–131r and NAL 1438 p. 266 respectively). In *Ep*. 6.30.8, which also mentions the Huns, Faller, *Epistulae* opts for *Huni*.
6 In the case of the *Adversus Iovinianum* I checked Rome, Biblioteca Nazionale Centrale Sessoriano 128 (2109) (s. VIII ex – see Lowe, *CLA* 4.426 – and I believe the earliest MS to preserve this portion), which has *hunorum* at 2.7 (f. 109r).
7 For similar negative views: Richter, "Darstellung", King, "Veracity", Guzmán Armario, "Los Hunos". Matthews, *Roman Empire*, 332–42 was more positive.
8 Asterius, *Homily* 14.11.4-12.1. See Datema, *Asterius*.
9 A point very well made by Rezakhani, "The Road".

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12 Christianity on the Silk Roads

Teng Li

A wind blowing eastward: the spread of Syriac Christianity

The Silk Road can be defined as a network that linked Scandinavia, the Persian Gulf, the Mediterranean, Africa, Central Asia, and China. It was not only goods that flowed along these arteries but also ideas, the most powerful of which were those that concerned the divine.[1]

Christianity spread eastward as well as westward, and in the process it developed various differences in doctrine and forms of worship. Along the Silk Road, Christianity was initially carried by the Church of the East, or the so-called "Nestorian Church", after the teachings of Nestorius (c. 386–451), a fifth-century Patriarch of Constantinople who was accused for his unorthodox doctrines.[2] The principal charge against Nestorius was that he emphasised the separate divine and human natures of Christ to the point that they must remain separate divine and human persons rather than unite into a single person. Dismissing the Western Church's judgement against Nestorius, the Church of the East welcomed supporters of Nestorius who came to them after the Council of Ephesus in 431. Those "Nestorians" fled to Persia and gained recognition.

The formation and development of the Church of the East were closely related to the political situation in the Roman and Persian empires. With the establishment of the Sasanian Empire in 224, Zoroastrianism, which emphasises a never-ending battle between good and evil, became the state religion in Persia. However, around 410, the Church of the East centred itself in the Sasanian capital, Seleucia-Ctesiphon, and eventually it became a separate church (independent from Constantinople and Rome) with its own distinctive hierarchy, liturgy, and theological tradition.[3] Under such circumstances, the Church of the East learned to manage interactions between different religious groups in a multicultural context, while maintaining its essential doctrinal distinctiveness. This was an indispensable skill that Nestorian Christians would rely upon along the Silk Road, and especially in China.[4]

Before officially entering China, Nestorian missionaries had already been very active in Xinjiang and Gansu. This is significant also for the history of languages in Central Asia. The Church of the East entered the Silk Road from Persia, bringing with it the Syriac language and script as its main language of worship. This was a form of Aramaic standard in Edessa, which spread to Mesopotamia

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and southeastern Anatolia, and formed the basis of the writing systems of several Central Asian languages. Therefore, in a sense, the Syriac-speaking Christians who carried the Gospel along the Silk Road into China in the seventh century also had an impact on Sogdian and Uighur culture.

In Central Asia, the Church of the East influenced the Sogdians, an Iranian people whose homeland Sogdiana was in present-day Uzbekistan and Tajikistan.[5] As discussed by Pin Liu's chapter in this volume, the Sogdians had become the commercial masters of the Silk Road and its cultural transmitters at least from the fifth century. Sogdian became the *lingua franca* of the Silk Road, spreading Christianity further east to China and northwards among the Turks. There was an advanced transportation network between China and Persia, and most of the important trade routes and cities between the East and the West had Nestorian strongholds. One example could illustrate the situation. In 591 AD, the Eastern Roman Empire sent Armenian troops to help the Persian Sasanian king Khosrow II (r. 590–628) suppress a rebellion. They captured some Turkic soldiers who had the symbol of the cross carved on their foreheads. These prisoners of war said that there was once a plague in the East Sogdian area, and some Christians told them that worshipping the cross could avoid disaster. This shows that Nestorianism had spread among the Turkic people in Kangju (康居 Kangju-Sogadiana) very early on,[6] even though we have to keep in mind that Zoroastrianism was the dominant faith among the Sogdians.[7]

At this stage, Christianity was seen as a faith of foreign, travelling merchants. The Nestorian missionaries travelled from ancient Bactria region (大夏) to Badakhshan and to the Pamirs, and from Tash-Kurghan to Khotan. Still, this perception of a faith from afar was similar to the experiences of famous Chinese, like Xuanzang's (玄奘) return journey to Chang'an. After the rise of the Tang Dynasty, the Eastern Turks and the Western Turks formed part of the Tang Dynasty (618–907), so Nestorian Christianity would inevitably move inward with the Turks.

The development of Jingjiao during the Tang Dynasty

Regarding the exact time when Christianity was officially introduced into China, the most detailed record is represented by the famous Xi'an Stele, completed in 781. According to the text on this stele, originally named "A Monument Commemorating the Propagation of the Da Qin Luminous Religion (*Jingjiao*) in the Middle Kingdom", in the ninth year of Zhenguan (AD 635)

> Alopen, a man of great virtue, came from far away from the kingdom of Da Qin[…] Holding a cloud in the blue sky and with carts loaded with the true scriptures, he looked to Rule [monastic rule of the Church of the East] for guidance, and by this means sped through difficulties and perils.[8]

This Nestorian missionary was received warmly by Fang Xuanling (房玄龄), one of the most important officials in the court of Emperor Taizong. In 638, the same emperor granted royal approval for the spread of Christianity in an imperial decree

and permitted them to build a monastery for 21 Christian monks in Yining Ward, inside the city of Chang'an.

There is no doubt that the stele's text embellishes the story and aims to be a demonstration of the intimate relationship between the Church of the East and the imperial house. At the same time, this stele also records that Nestorianism encountered different reactions in China, due to changes in policies. Emperor Gaozong (628–83) of the Tang Dynasty inherited his father's policy of religious tolerance and granted special favour to the Nestorian community. Because many of the Nestorian monks had superb medical skills, they cured the eye disease that troubled the emperor. The emperor even elevated Alopen to become Defender Lord of the Great Doctrine. As a consequence, in these decades, Nestorianism was offered a great opportunity in China, and according to the stele "The Doctrine spread through the Ten cities… temples and hundreds of cities, monasteries were built in the hundred cities".[9]

However, with the rise of Wu Zetian (reigned 690–705), the Empress regnant of China, Buddhism was rapidly elevated to a position of supremacy, and measures were taken against other religions. The persecutions against the Nestorian Church are documented in the stele's inscription:

> In the years of Shengli (698–700), the disciples of Sakyamuni [Buddha] flaunted their strength, rising up to speak [against *Jingjiao*] in Eastern Zhou (Luoyang), at the end of Xiantian (713), scholars of the lowest class laughed heartily, slandering and vilifying it in Western Hao [Chang'an].[10]

Later, during the reign of Emperor Xuanzong (712–56) of the Tang Dynasty, the Nestorian faith revived again and enjoyed several decades of prosperity. During this period, several Nestorian bishops had the chance to travel across China overland along the Silk Road. A new Chinese metropolitan province was created by Patriarch Sliba-akha (714–28), named "Beth Sinaye".[11]

In 745 AD, the emperor even specifically changed the name of the Nestorian Temple from "Bosi (Persian) Temple" to "Daqin (Syrian) Temple".[12] The Emperor Xuanzong specifically mentioned that Christianity had been circulating and practiced in China for a long time, and it should not be mixed with other religions. In fact, this claim was made principally to distinguish Christianity from Zoroastrianism and Manichaeism (both of which had a far better claim to a Persian identity) and to give Christians special protection. Moreover, the imperial edict clearly stated that in all the prefectures and counties, the Christian monasteries should also be renamed in accordance with such norms, and this is a sign of how Nestorian Christianity had been widely spread throughout the empire.[13] We also find Nestorians participating in the An Lushan Rebellion (755–63), a civil war that crippled the political stability of the Tang Dynasty. The most famous of these Nestorians is (伊斯, Izd-buzid or Yazedbuzid), who participated in the suppression of the rebellion under the command of the famous general Guo Ziyi (郭子仪), and who was granted the honours to "wear the golden fish bag and purple robes" and to enjoy the title "Military Vice Commissioner of Shuofang and Probationary Director of the

Palace Administration".[14] By colourfully depicting Yisi's rich secular and religious life, the Xi'an Stele text illustrates that Chinese Christians benefited both the state and the people.

However, in 845 AD, the emperor Wuzong (r. 841–47) ordered the total suppression of Buddhism (Huichang persecution of Buddhism), which had a profound impact on Chinese history. As a devout Daoist, the emperor believed that the founder of Daoism, Laozi, was his own ancestor. Christianity was now perceived as a foreign religion, and as such, it was negatively affected by the new policy, whose objective was to ensure that religious groups "should not mingle and interfere with the manners and customs of China". Those perceived as foreigners would be repatriated to their home countries.[15] This xenophobic psychology contradicts the popular myth of the Tang Dynasty as open and tolerant. In fact, Wuzong's policy dramatically changed Tang's foreign policy and even paved the way for "China Turning Inward".[16]

As a consequence, the Christian faith, which had spread across China for 200 years, almost disappeared. Indeed, it is possible that Nestorian monks buried the Xi'an Stele in the grounds of their monastery with the hope that they would soon be back. Yet, this monument remained buried for several centuries, until it was rediscovered in the Tianqi period (1621–27) of the Ming dynasty.[17]

Although Nestorianism was no longer practiced in China, it still existed in Central Asia and as far as the northwestern frontier of China. The Uighurized Sogdians and Uyghurs as well as other Turkic tribes inherited the earlier Sogdian commercial traditions in Eastern Eurasia and constituted the commercial network on the Silk Road from the ninth to the thirteenth centuries.[18] In this sense, Nestorian Christianity became almost a bridge to communicate with various regimes and cultures along the Silk Road.[19]

In the eleventh century, under the influence of the Arabs, a large number of Nestorians converted to Islam, and those who refused to convert chose to flee to the East. This forced migration promoted the spread of Christianity in Central Asia. Therefore, Christian communities survived among the Kerait tribe living in the Tule and Orkhon River Valleys, the Naiman tribe near the Altai Mountains, the Miriqi in the Selenge River Valley, and the Ongu Turks in the north of the Yin Mountain.[20]

Nestorianism in the Mongol Empire

In the thirteenth century, the rise of the Mongolian Empire had a massive impact on the development of world history, changing the history of Eurasia dramatically, and bringing the transformation of ancient civilisations in Europe, the Near East, and East Asia.

Among the direct successors of Genghis Khan, we see that many of them held a hostile attitude towards Islam, and Muslims were also the main external enemies of the Mongols at that time. There were even tendencies among the Mongols and Christians to form an alliance against Muslims. This trend was most evident in the early years of the Ilkhanate. During Hulagu's expedition to the West, many famous generals, such as Kitbuqa (d. 1260), were Nestorian Christians. Therefore, some

Mongol rulers adopted a more tolerant attitude towards Christians and suppressed Islam. In 1259, Kitbuqa crossed the Euphrates River with his army and in the following year occupied Aleppo and Damascus in Syria. The Armenian chronicler Kirakos of Ganja writes:

> At the capture of Baghdad, Hulagu's wife Doquz-khatun, who was a Nestorian, spoke on behalf of the Christians of the Nestorian or any other confession, and interceded for their lives. Hulagu spared them and allowed them to keep all their possessions.[21]

Kitbuqa handed over many mosques and former Byzantine churches used by Muslims to Christians, but turned a deaf ear to the complaints of local Muslims.[22] Until Kitbuqa was defeated by the Mamluk dynasty in Egypt, the Mongolian conquest stopped east of the Euphrates River, but the document by Kirakos of Ganja surely shows the resilience of Nestorianism and the persistence of links between different Christian groups along the Silk Roads.[23]

Moving back to the eastern segments of the Silk Roads, we need to remember that the Yuan Dynasty was a unique period in Chinese religious history. Yuan religious officers were far more powerful than the previous dynasties, and the religious institutions established in the Yuan Dynasty were relatively more in number. Among those institutions, *Chongfu Si* (崇福司) administrated all Christian affairs, and Jixian Yuan and Xuanzheng Yuan were responsible for Buddhism (including Lamaism) and Taoism. The first director of this office named Ai Xue (爱薛, Ngai-Sie, 1227–1308), possibly an Arabic-speaking Syrian, was recommended by the Nestorian missionary Rabban Ata to the Court of Guyuk Khan in 1246. Ai Xue had served in the Mongol court for 40 years as an interpreter, thanks to his proficiency in various languages.[24]

Under the rule of the Mongol Yuan Empire, the Nestorians at that time were in fact mainly tribes from the Western regions and Mongolia. In Mongol China, the Chinese word used in official documents to designate Christian clergy in general was *Yelikewen* (也里可温). It referred to Christians without distinguishing between those belonging to the Roman Catholic Church and those adhering to the different branches – of Eastern Christianity. Most of the believers were Semu (色目) people, which is not an ethnic group *per se* but one of the four castes of the Yuan Dynasty referring to the people who came from Central and West Asia. According to Chinese, "色目" could be interpreted as "coloured eye", as a physical description of those people from West and Central Asia or even Europe. But it also could be explained as "assorted categories" (各色名目), to emphasise the diversity of those Semu caste.

In addition, among the large number of captives brought back by the Mongolian expeditions, many of them were Christians from West Asia and Eastern Europe, who either served as slave artisans, or served as officials who at times followed the Mongolian rulers in various courts. When Italian businessman Marco Polo came to China, he saw Nestorian churches and places where believers lived in Mongolia, Gansu, Shanxi, Yunnan, and other places. Even in the Jiangnan area, especially Changshu,

Zhenjiang, and Hangzhou, there were large Christian communities.[25] Once again, this shows the continuous presence of the Christian faith across Eurasia, even during periods of political turmoil. Its reappearance in China, even after its elimination following the late Tang persecutions, can be explained only through a historical framework that takes the vitality of the Silk Roads into account and assigns agency to Central Asian actors, including unwilling missionaries such as Christian slaves and captives who moved eastwards in the wake of Mongol conquests.

The concept of Silk Roads is also useful if we wish to appreciate how Christianity did not move only from West to East, but also from East to West. In the process of establishing contact between the Yuan Dynasty and Latin Christendom, there are two important figures worthy of special mention, which are the famous Rabban Marcos (c. 1245–1317) and his friend and mentor, Rabban Bar Sauma (c. 1220–94). As a native of Koshan, Rabban Marcos was born near modern Ordos, Inner Mongolia, which at the time was the capital of the Turkic Ongud tribe. In 1275, Mark and Rabban Sauma started their long pilgrimage from China (probably from the Monastery of the Cross located in western Beijing) to Jerusalem, through the ancient Silk Road. Like the Nestorian missionaries centuries before, they moved in the opposite direction, passing through Koshang, Tangut, Hotan, and Kashgar. In Taraz, Kaidu Khan granted them safe passage through his land. Passing through Samarkand and Bukhara, these pilgrims arrived at Khorasan and went to Mosul (Iraq) and Nisibis (Turkey). At that time, there were various Nestorian monasteries dotting the shores and hills of the Tigris River.[26] However, the war between the Mongols and Mumluks prevented them from reaching the Holy Land. Patriarch Denha I of the Church of the East consecrated Markos as the bishop of Katay and Ong with the name Mar Yahballāhā. By 1280, under very special circumstances, Mark was elected in Persia as the Patriarch of the entire Nestorian world, with the official name of Mar Yahballāhā III (d.1317).

In 1287, the mission in the name of Arghun Khan (r.1284–91) headed by Rabban Sauma reached Constantinople via the Black Sea. Rabban Sauma had an audience with Andronicus II Palaeologus and visited the splendid Hagia Sophia. On his way to Europe, he witnessed the great eruption of Mount Etna on 18 June 1287, as well as a naval battle in the Bay of Sorrento on 24 June 1287. When he travelled to Rome, Pope Honorius V had just passed away. After spending the winter in Genoa, a city-state with extensive commercial networks across the Mediterranean and the Black Sea, Rabban Sauma went to France and had an audience with King Philip IV of France and King Edward I of England respectively. The mission also had a certain political purpose, that is, the hope that Western Christians could join hands with Nestorians in Persia to attack Egypt, which was occupied by Islamic forces. Although the military plan was never realised, Rabban Sauma returned to Rome in the spring of 1288. The newly elected Pope Nicholas IV welcomed him warmly and invited him to participate in religious activities throughout the Holy Week. This beautiful event was a clear instance of the universality of the Christian faith.[27]

However, while Rabban Sauma received Holy Communion in Rome, the Nestorians in China disgusted the French missionary William of Rubruck (1220–93). In general, the Flemish Franciscan had a very low opinion of the Nestorians and

their "priests". William of Rubruck documented that although the Nestorians could pray in Syriac, they did not understand its meaning at all. They committed sins of usury and drunkenness. According to William, when mixed with the Tatars and the Muslims, some of the Nestorians were even guilty of polygamy. Under the influence of Muslim rituals in all aspects of life, the Nestorians celebrated the sacrament of Eucharist on Friday instead of Sunday. And when entering the church, they also imitated the Wudu, which is a typical Islamic ritual of purity.[28] Even so, the children of Mongolian nobles also followed the Nestorians in order to learn, because their cultural level was still higher than that of the Mongolians who had just left a nomadic life. From William's narrative, we can see that the gulf that separated the Franciscan – a representative of the Latin West – from these eastern Christians is striking.[29]

Still, here we must clearly note the differences between the Nestorianism of the Tang Dynasty and the Nestorianism of the Yuan Dynasty. Chinese Historian Chen Yuan summarised them sharply:

> It is true that Nestorianism came to China in the Tang Dynasty, but it cannot be said that the *Yelikwewen* in the Yuan Dynasty is the legacy of Nestorianism in the Tang Dynasty; it is also true that the *Yelikewen* in the Yuan Dynasty flourished for a while, but it cannot be said that Matteo Ricci and others are descendant of those Nestorians in the Yuan dynasty.[30]

Interestingly, encounters and perceptions along the Silk Roads offer us a measure of significant changes that mark the history of Christianity in Eurasia, while the different experiences of Rabban Sauma and William of Rubruck represent respectively the potential universality of the Gospel and its limits.

Rubruck's report paid more attention to the reaction of the Mongols to Christianity. He also intended to make contact with some Germans who had been enslaved by the Mongols during the invasion of Hungary in 1241–42 and to bring them spiritual comfort. He appears angry that a Nestorian priest refused to give European Christian slaves the Eucharist. He begged the Great Khan to allow him to stay in the Mongol Empire for missionary work, but was eventually sent back to Europe.

Roman Catholicism and the Mongol Empire

The establishment of Mongol power in Central and East Asia was one of the most prominent factors in the spread and blossoming of Nestorian Christianity in the thirteenth and fourteenth centuries. Roman Catholicism also began to spread in the same context. Pope Innocent IV exchanged letters with the Mongolian Great Khan Guyuk (r.1246–48) and sent missionaries to China through Central Asia many times. Most of the missionaries who came to China were Franciscans. Among them, Giovanni da Pian del Carpine (c. 1185–1252) was one of the pioneers in the exchanges between the East and the West in the thirteenth and fourteenth centuries. As one of the earliest disciples of Saint Francis of Assisi, he brought two papal Letters to Mongolia Great Khan. One of these texts expounded the Catholic belief system, and the other advised the Great Khan to stop the attack on Europe. Guyuk

Khan showed the missionaries respect and courtesy, but he clearly refused to convert to Catholicism.[31] Despite the rebuff for building an alliance with the Mongols, Giovanni da Pian del Carpine offered very detailed records of what he saw and heard along the way, which provides us with precious historical materials for understanding the folk customs and internal operations of Mongolia at that time.[32]

Another famous missionary who travelled along the Silk Road at this time 因为前面有at this time，这里用过去式was可能更合适 the Italian Franciscan John of Montecorvino.[33] In 1272, he took part in the negotiation for the reunion of the Greek and the Latin Churches at the request of Byzantine Emperor Michael VIII Palaiologos. In the late 1270s to 1286, John of Montecorvino devoted himself to missionary work in the Middle East. Pope Nicolas IV, who as we have seen welcomed Robban Sauma, entrusted John with the important mission to the East. John of Montecorvino went through Persia and India, reaching China by sea in 1294. When he arrived at Khanbalik (modern Beijing), he discovered that Temür had succeeded to the throne. The new emperor took a cold attitude toward Christianity, but he still allowed the missionary to stay in the capital.

In a letter written in 1305 from Beijing, Montecorvino said: "I abode alone and without any associate for eleven years" until a German Friar joined him in 1303. According to his letter, he built a church in Khanbalik next to the emperor's palace and baptised around 6000 people. More importantly, John said that he "gradually bought one hundred and fifty boys" aged around 7–11 from pagan families, "to teach them Greek and Latin after our manner". Also in this letter, 58-year-old John of Montecorvino demonstrated that he had developed "a competent knowledge of the language and character which is most generally used by the Tartars", and the New Testament as well as the Psalter had been translated into that language.[34] Once again, here we can see how spiritual objectives could be a powerful motive behind the movement of people, ideas, and cultures along the Silk Roads.

The year 1307 is an important year in the history of Christianity in China. In this year, Pope Clement V appointed John of Montecorvino as the archbishop of Beijing and the chief archbishop (*summus archiepiscopus*) of the entire Far East.[35] Seven Franciscan bishops were sent to the East to consecrate John of Montecorvino, but only three of them survived the journey from Europe to China, namely Gerardus, Peregrinus of Castello, and Andrew of Perugia. The three bishops jointly ordained Archbishop John of Montecorvino in 1308, and then they served as bishops in the Diocese of Quanzhou. In addition to the Archdiocese of Beijing, they also established the suffragan diocese of Zaiton (Quanzhou in Fujian). This is arguably one of the most famous cities in the history of sea transportation between China and the West and in the history of the Maritime Silk Road.

While unfortunately we do not know much about the life of these Christian communities in Yuan China, there are some documents that demonstrate a sustained effort to take advantage of Eurasian networks to establish more stable relations between Beijing and Rome. After the death of John of Montecorvino in 1328, an embassy from the Yuan court arrived at Avignon in 1338. The letters carried by the ambassadors and addressed to the Pope had been authored by Toghun Temür, the last Mongol Yuan emperor of China, and by Chinese Christian nobles. These

letters expressed earnestly a desire for spiritual guidance and for a pastor sent from Rome. A large group of envoys left Avignon at the end of that year, and they arrived in the court of the Golden Horde, at Sarai on the Volga, during the winter of 1339–40. The mission sent by Pope Benedict XII eventually arrived in Beijing in 1342. In 1353, John of Marignolli returned to Avignon, and delivered a letter from the Great Khan to Pope Innocent VI asking for more priests and bishops.[36] Pope Innocent asked the Franciscan General to choose good friars for China, but nothing happened due to the disaster brought by the Black Death, which caused the death of two-thirds of the friars in just one year.

At the other end of Eurasia, the Mongols were driven away from China. With the establishment of the Ming Dynasty in 1368, Christianity in any form, Latin Catholic or Eastern Syriac, was expelled. In sum, during the century from Giovanni da Pian del Carpine's voyage to the East in 1245 to John of Marignolli's mission in the 1350s, Catholic Christianity reached China. Efforts from both sides, Rome and the Yuan court, aimed to establish direct diplomatic relations, which were possible partly, thanks to the long history of movement and encounters along the Silk Roads, and partly thanks to the universal mission of the Church to share the Gospel among all nations. Yet this important period of mutual curiosity, missionary efforts, and spiritual revival soon died out.

Conclusion

The spreading of Christianity along the Silk Road began in the seventh century with Nestorian monks and ended in the fourteenth century with the attempt to create stable Catholic communities with bishops sent from Rome. The main reasons for the eventual decline of Christianity were the rapid Islamization of the Western regions of China in the thirteenth and fourteenth centuries and the great plague in the middle of the fourteenth century. Still, the impact of Christianity on these regions was multiform and significant. In the Central Plains region of China, the decline of Christianity was mainly due to the suppression and crackdown on foreign religions by the new regime during the Yuan-Ming transition. For instance, the spread of Nestorianism along the Silk Road played an important role in the standardisation of the Sogdian language, and the mature Sogdian script had itself an important impact on the creation of Uighur identity.[37]

Since the fourteenth century, the political situation along the entire Silk Road had undergone major changes. When Catholic missionaries arrived, Catholicism mainly spread among the Mongols and Semu people. For the majority of the Han people, this religion was something practiced by their upper class and alien rulers, and at this stage, the Church documents and holy scriptures were hardly translated into Chinese. With the decline of Yuan Dynasty, the trade routes guaranteed under the protection of "Pax Mongolica" were impassable, and the Holy See became unable to send new missionaries, which led to the virtual extinction of the Catholic Church. The spiritual ties between Rome and China would be restored only in the Late Ming period, when the Jesuits and other missionaries eager to share the Gospel and to save souls reached East Asia by sea.

Notes

1 Foltz, *Religions of the Silk Road*, 2.
2 Baum and Winkler, *The Church of the East*; Mingana, *The Early Spread of Christianity*.
3 Thompson, "How Jiingjiao Became Nestorian", 417–41.
4 Payne, *A State of Mixture*.
5 Vaissière, *Sogdian Traders*.
6 Chavannes, *Documents sur les Tou-Kiue (Turcs) occidentaux*, 29.
7 Rong, "Sogdian Merchants and Sogdian Culture on the Silk Road," 84–95.
8 Morrow, *Negotiating Belonging*, 193–220.
9 Morrow, *Negotiating Belonging*, 203.
10 Morrow, *Negotiating Belonging*, 203.
11 Wilmshurst, "Beth Sinaye", 253–266.
12 Lin, "A Brief Discussion on the Policy of the Three Barbarian Religion in the Tang Dynasty", 106–119.
13 In Shu Yuanyu, *Stele Inscription for Chongyuan-si [temple] in Yongxing county, Ezhou* (in Quan Tangwen, Vol. 727).
14 Morrow, *Negotiating Belonging*, 210–11.
15 Bary and Bloom, eds., *Sources of Chinese Tradition*, 585–86.
16 Yang, *Late Tang China and the World*.
17 Feng, *Jingjiao bei kao*; Keevak, *The Story of a Stele*.
18 Sims-Williams, *From Liturgy to Pharmacology*.
19 Lieu and Kim, "'Nestorian' Christians and Manichaeans as Links between Rome and China", 80–107.
20 Halbertsma, *Early Christian Remains*, 31–70.
21 Grousset, *The Empire of the Steppes*, 356–357.
22 Ibid., 363.
23 Jackson, "The Crisis in the Holy Land in 1260", 481–513.
24 Yin, "The Institution of Chongfu Si of the Yuan Dynasty", 318.
25 Polo, *The Travels of Marco Polo*, 77, 83, 191, 209–213; Lieu, "Nestorians and Manichaeans on the South China Coast", 71–88.
26 Baum and Winkler, *The Church of the East*, 221–25.
27 Borbone, *History of Mar Yahballaha and Rabban Sauma*.
28 Jackson and Morgan, *The Mission of Friar William of Rubruck*, 150-164, 187–89, 192.
29 Jackson, "William of Rubruck in the Mongol Empire", 54–71.
30 Chen Yuan, *The Collections of Chen Yuan*, 70.
31 Dawson, ed., *Mission to Asia*, 85–86.
32 DeWeese, "The Influence of the Mongols", 41–78; Montalbano, "Misunderstanding the Mongols", 588–610.
33 Moule, *Christians in China*, 166–68.
34 Yule, *Cathay and the Way Thither*, 45–51.
35 Moule, *Christians in China*, 183–88.
36 Öliger, "De anno ultimo vitae Fr. Iohannis," 29–34.
37 Johnson, "The Languages of Christianity on the Silk Roads", 206–19.

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13 Dzhankent (Kazakhstan) – an early medieval trading node on the Northern Silk Road?

Irina Arkadevna Arzhantseva and Heinrich Härke

While the more southerly routes of the Silk Roads have understandably been the focus of most scholarly and public interest, it needs to be borne in mind that the route along the Syr-Darya and around the northern shores of the Aral and Caspian Seas, leading ultimately to the Black Sea and beyond, was of paramount importance for early medieval trade and communications across Eurasia. On the little-known middle reaches of this Northern Silk Road, in the delta of the river Syr-Darya (the Jaxartes of Classical Antiquity), there is a small cluster of deserted towns just east of the former coastline of the Aral Sea as it was before 1960 (Figure 13.1).

The best-explored of these sites is Dzhankent (Djankent, Jankent, or Zhankent in other transcription conventions) about 30 km south of the modern town of Kazaly (Russian Kazalinsk), next to the village of Urkendeu (recently re-named Dzhankent). Its walls enclose a broadly rectangular area which has not been built over in later medieval or modern times (Figure 13.2).

Visitors to the site therefore have an unobstructed view of the interior and will first notice a prominent citadel taking up the northwestern corner of the town. A closer look will also reveal a semicircular annexe attached to the northern perimeter wall, but otherwise there are no remains of standing buildings or other large structures immediately visible above ground.

Early exploration and ideas

In spite of this unassuming appearance, Dzhankent has attracted the attention of military topographers, antiquaries, and historians since the eighteenth century, not least because it has long been assumed to be the town of Yengi-kent mentioned by tenth-century Arab geographers, as well as the mythical home town of Korkyt-ata, an icon of Kazakh cultural history. Early fieldwork since the nineteenth century did not produce much in the way of tangible results, and there appears to have been some confusion in the minds and reports of early explorers between Dzhankent and the nearby site of the Golden Horde town of Mon-tobe (Arzhantseva and Gorshenina 2018). Sporadic work by members of the Khorezmian Expedition of the Academy of Sciences of the USSR between the 1940s and 1960s produced results which became the starting point of initial interpretations and later work. They took an aerial photograph (a pioneering achievement in 1946), produced a topographic

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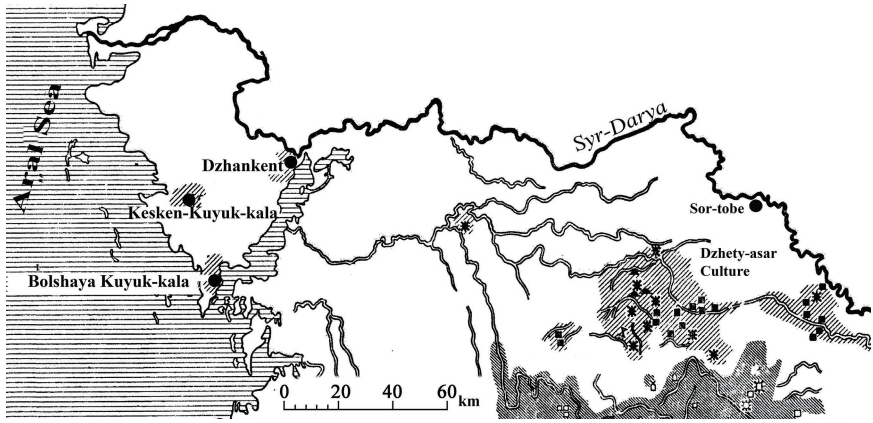

Figure 13.1 Map of Syr-Darya delta, with locations of Dzhankent and other key sites. Courtesy (copyright) Institute of Ethnology and Anthropology RAN.

plan (1963), and collected surface finds which confirmed a tenth-century date for settlement at this place, but also hinted at one or more earlier phases (from Classical Antiquity and seventh century CE; Tolstov 1947, 1962; Levina 1971, 1996).

More systematic fieldwork at Dzhankent was started by Russian and Kazakh institutions in 2005, focused on a couple of trenches within the walls, and with pedological research accompanying the excavations as early as 2006 (Kurmankulov et al. 2007; Akhatov et al. 2008). But in the absence of radiocarbon dates, and with trenches limited to single-layer excavations even in the citadel (see Bajpakov et al. 2012), their results amounted by default to a confirmation of the old view based on written sources and stray finds. This held that Dzhankent was the tenth-century capital of the nomad state of the Turkic Oguz, founded after their migration from Mongolia onto the steppes north of the Syr-Darya, and built possibly with the involvement of native population elements after the end of the local Dzhety-asar Culture. The abandonment of the town was explained with the collapse of the 'Yabgu state' (*yabgu* being the title of the Oguz ruler) in the process of Islamicisation since the tenth century and the emigration of substantial parts of the nomad population in the eleventh century (Agadzhanov 1969; Golden 1992). Until recently, little effort was made to include the nearby similar sites of Kesken-Kuyuk-kala and Bolshoya Kuyuk-kala in the picture, nor to integrate the location and duration of Dzhankent into the wider geographical and historical contexts.

Archaeological evidence: the new picture of Dzhankent

Such questions therefore became the starting point of a new international and interdisciplinary project which since 2011 has explored the development and function of Dzhankent with a broader geoarchaeological approach.[1] Integral to this was close cooperation of archaeologists with geophysicists, geomorphologists, and soil

Figure 13.2 Dzhankent in its landscape today (drone photo). Photo Martin Goffriller.

scientists, and reliance on an extensive series of radiocarbon dates and a preliminary analysis of some of the large quantities of animal bones from the site. On this basis, we can now sketch the history and appearance of the settlement from its beginnings to urban floruit and eventual decline (for interim reports, see Arzhantseva et al. 2012; Arzhantseva and Tazhekeev 2014; Härke et al. 2020; and the website of the project at https://uni-tuebingen.de/de/199591).

The first settlement on the site appears to date back to the sixth century; there are no earlier ^{14}C dates from the occupation layers at the citadel wall and in the centre of the lower town (*shahristan*). This is confirmed by finds from Trench 1 in the lower town which has been taken down to natural, producing sherds of Afrigid pottery of sixth–seventh century date from Khwarazm. The lay-out of this earliest settlement phase (*Dzhankent I*) cannot yet be reconstructed because of the small extent of excavated areas in the lowermost layers. The types of small houses in these layers are similar to Khwarazmian domestic buildings further south; regional Dzhety-asar houses in the Syr-Darya delta may have been another model, but comparative analysis is still in process. This earliest phase was probably an open settlement: the southern town wall, at the point of its characteristic 'kink', was found in Trench 4 to stand on top of an occupation layer with eighth-century pottery, implying the absence of a defensive wall before that date.

Among the finds, regional Dzhety-asar pottery styles predominate, with some admixture of Khwarazmian and Kerder types, but there are also a few belt fittings

Figure 13.3 Cat remains from Dzhankent. Courtesy Ashleigh Haruda.

of eighth–ninth-century nomad type suggesting the presence and involvement of Turkic elements even before the construction of the town fortifications. The increase of fish remains in the lowermost layers of the site suggests a higher reliance on fishing in this early phase. A special find reflecting the proto-urban nature of the settlement later in this phase is the almost complete skeleton of a cat from the lower town next to the citadel wall (Figure 13.3). It was probably a true domestic cat rather than a hybrid, and it had been cared for after serious injury (Haruda et al. 2020; Figure 13.3).

Dating to the late eighth century, the find – apart from being the earliest domestic cat of the region – has two significant implications: a sedentary urban, or at least non-nomadic, population (cats do not belong to the nomad range of animals and livestock); and direct or indirect links to the southwest, and more specifically to Iran (where the ancestors of the cat are likely to have originated).

The hallmark of the next, main phase (*Dzhankent II*) is the substantial town rampart and wall built in the late ninth or very beginning of the tenth century, enclosing 16 hectares of lower town and citadel. Its construction coincided with a probably new, regular lay-out of the interior of the town: geophysical prospection has shown a chequerboard pattern of blocks of houses in the western half of the interior intersected by a grid of streets and lanes, but a less regular lay-out and some larger buildings in the eastern half (Figure 13.4).

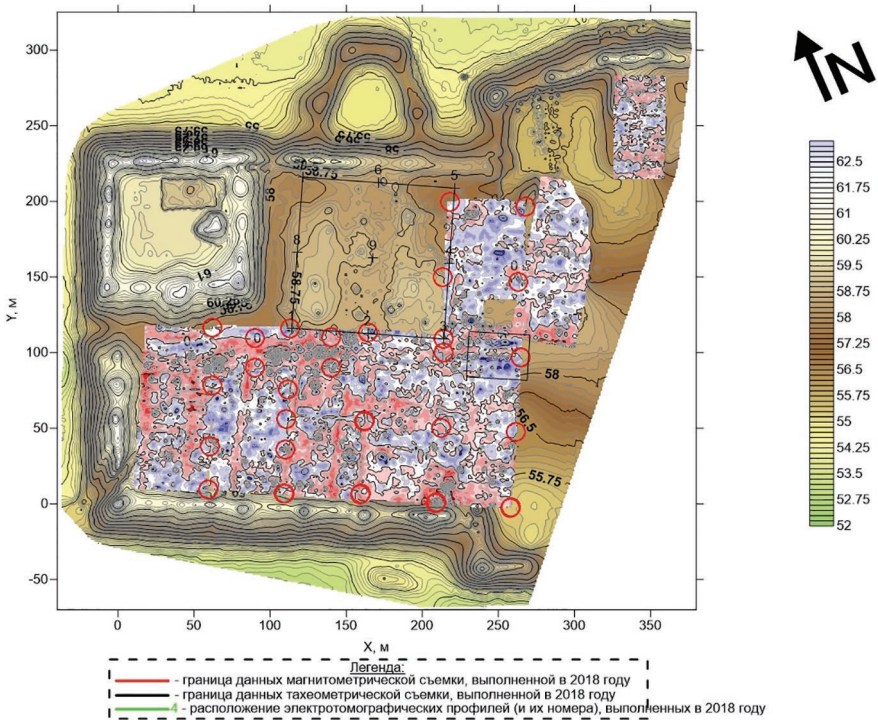

Figure 13.4 Geomagnetic anomalies superimposed on topographic plan of Dzhankent (work 2011–18 by Igor Modin). A colour version of the figure can be viewed in the eBook.

A probable metal workshop has been identified in a residential quarter of the lower town. Fortification and small domestic houses are of Khwarazmian type, as is the corner location of the citadel and the peculiar, T-shaped lay-out of the town wall circuit. A walled annexe is attached to the outside of the northern wall. Neither geophysics nor trial trenches have produced any other external features or quarters: no unenclosed suburb (*rabad*), no workshops, and no cemeteries. This may partly be due to large-scale modern disturbance around the site by road and canal constructions and by twentieth-century rice cultivation. Palaeobotanic evidence points to the local production of grain, probably by the town's inhabitants themselves because there is no evidence of contemporary villages or agricultural estates near Dzhankent. A tenth-century text notes that vessels loaded with grain and bread go on the Syr-Darya to the 'New Settlement' (i.e. Yengi-kent; Ibn Hawqal, quoted by Agadzhanov 1969, 99, 134).

The absence of data on the town's suburbs makes it difficult to estimate the total population during this phase. On the assumption of a typical population density for Central Asian towns in the Early Middle Ages (200 people per ha; see Belenitskij et al. 1973, 266), we can calculate for Dzhankent an approximate population of 3,000 inhabitants in the enclosed parts of the town. Allowing for quarters

with a lower occupation density in the eastern half of the interior, the actual figure may have been closer to 2,000. This population included some wealthier elements, based on the evidence in the lower town of a couple of decorative wall paintings, finds of glass vessels (including at least one made of glass of Near Eastern origin; pers. comm. Julian Henderson, Nottingham), a bronze cauldron from a dwelling near the west gate, and a leather bag with decorated metal studs from a trench with large quantities of storage vessels. But there are no unambiguous elite dwellings or prominent public buildings known so far: no palaces, no temples, or mosques, no central storage facilities in either the lower town or in the citadel. An exception may be a series of buildings (incompletely excavated) on a massive clay platform erected against the inside of the northern town wall. Future fieldwork may provide further information on the nature of this curious construction, but it is clearly not a conventional palace.

The large quantities of ninth- to tenth-century pottery provide hints about the composition of the population within the walls. The three styles apparent in the Dzhankent pottery assemblage have conventionally been interpreted in geographical and ethnic terms: Dzhety-asar types of regional Iron Age tradition; Khwarazmian wheel-turned ceramics from the southern civilisation on the Amu-darya; and hand-made 'Oguz' pottery with distinctive curvilinear decoration (Figure 13.5).

Their relative quantities and distributions within Dzhankent are the object of ongoing research (see Amirgalina et al. 2021), but it is already clear that all three styles have been found in all parts of the site, in some cases together within the

Figure 13.5 Pottery styles at Dzhankent. (a - regional, b - Oguz, c - Khwarazmian).

same contexts. In the final phase, vessels of Muslim ritual significance (*tazar*) appear, too. While the origin of 'Oguz' pottery is still awaiting confirmation, there are other finds which seem to indicate the presence of nomads at Dzhankent, including belt fittings and a quiver suspension hook. Different connections are indicated by three chicken eggs bearing Arabic lettering, found in a tenth-century pot placed against the outside of the northern wall of the citadel that is outside the walled town area altogether, and by about half-a-dozen vessels with Arabic graffiti (one in Kufic script of the late ninth century; pers. comm. Vladislav Kuleshov) from several trenches.

The regular lay-out of extensive parts of the interior, the enclosure of Dzhankent with a defensive curtain wall, and the construction of a high corner citadel on a hillock in the delta are likely to have happened at the end of the ninth century. This was followed by very intensive building activity, with four successive phases of domestic buildings in the course of the tenth century found in Trench 1 in the centre of the *shahristan* (lower town; Arzhantseva and Tazhekeev 2014). Radiocarbon dating of samples from mechanical coring on a grid across the lower town suggests that there are no occupation layers in the interior later than the tenth century. This bracket is confirmed by coin finds which are predominantly tenth-century Samanid copper coins from Bukhara (e.g. *fels* issued by Abd el-Malik 343–50 AH/954–61 CE, stamped Bukhara 347 AH). The latest radiocarbon dates from the stratigraphic sequence of the eastern citadel wall (facing the lower town) belong to the late tenth or early eleventh century. An extensive destruction layer which was identified by using electrical resistivity seals the top of the citadel stratigraphy, but there is no trace of major destruction on this scale in the lower town of Dzhankent (although neighbouring Kesken-Kuyuk-kala may have ended in a conflagration around the same time; Bajpakov et al. 2012).

Sherds of glazed pottery from the citadel may well be later and belong to an apparently short period of re-fortification in the thirteenth century when, according to C-14 dating, the east gate of the town wall was refurbished. It is surely significant that this phase (*Dzhankent III*) coincides with the building of the Golden Horde town of Mon-tobe, only some 2 km to the southwest of Dzhankent. By this time, Dzhankent was no longer the place of a functioning urban community, but its remaining walls and citadel may have served for a while as an interim stronghold or refuge during the building of Mon-tobe, or later as an outpost guarding the access from the east to the new Mongol town.

Interpretation: from written sources to dating and location

No fieldwork project on a known site of some significance can start with a clean slate, and Dzhankent has been no exception. Initial interpretation of the site by early travellers, explorers, and the first archaeologists who visited had been shaped by written sources of the tenth to twelfth centuries, mainly the Arab geographers Ibn Rustah, Ibn Hawqal, and al-Masudi. They mention in this region a 'town of the Guzz' (Oguz) called Yengi-kent ('New Town' in Turkic) which was the seat of the *yabgu*, the head of the Oguz tribal confederation (Ibn Rustah, Ibn Hawqal),

or his winter quarters (Hudud-al-Alam; Barannikov 1939). This 'new town' has long been identified with Dzhankent (Bartol'd 1963; Agadzhanov 1969), making it the 'capital of the Oguz state' in publications which tried to serve the post-Soviet search for the roots of a distinct Kazakh identity (e.g. Bajpakov et al. 2012). It is widely accepted that a nomad state does require towns for its functioning, but what the sources refer to is not necessarily a state, and doubts persist specifically concerning Oguz state formation (pers. comm. Peter Golden, Rutgers University, and Anatolij Khazanov, University of Wisconsin; Kradin 2014 and pers.comm.).

While the interpretation of new data has to consider written sources to some extent, it should also acknowledge earlier historical contexts which may have had a bearing on the origins and functions of this fortified town. The first of these is the mysterious end of the regional Late Iron Age culture of the Dzhety-asari ('Seven Fortresses') between the sixth and eighth centuries AD (Goffriller et al. 2023), a socio-political systems collapse which has been suggested by at least one earlier researcher to have supplied some of the population of Dzhankent and the other 'marsh towns' (Levina 1971). This event or process coincided, in turn, with the rise of the first Turkic Kaganate (Golden 1992). The next historical context for the entire region is provided by the eighth-century expansion of Islam from the south-west, the contemporaneous T'ang incursion from the east, and the collision of these two global forces in Central Asia, culminating in the Battle of Talas in AD 751.

It is even doubtful to what extent the tenth-century reports about the 'nomad capital' of Yengi-kent can be taken at face value (for discussions of nomad capitals and courts, see Khazanov 2005; Golden 2013). The size and lay-out of Dzhankent does not agree with accepted ideas about nomad capitals of this period: it lacks the sprawling size of Karabolgasun and Karakorum in Mongolia (Rogers et al. 2005; Honeychurch 2015), or the open spaces in the interior such as ones that appear to exist for nomad yurts in the more compact Khazar sites on the Pontic steppes (Flyorov 2010). Nor does Dzhankent conform to the model of a regional capital in early medieval Central Asia such as those found and excavated at Hulbuk (Siméon 2010). Two decades of geophysical prospection and archaeological excavations at Dzhankent have failed to find the large buildings and monumental structures typical of such central places; the lack of these features is most significant in the citadel where they would be expected (Figure 13.4). The massive clay platform inside the northern town wall does not make up for this lack because its buildings are not monumental by any standards, and its function is unclear. In fact, from appearance, lay-out, and even much of the composition of the finds assemblage, Dzhankent II looks more like a Khwarazmian town than a 'nomad capital', with its closest analogies at sites such as Bazar-Kala, Fortress no. 136, and Toprak-Kala, as well as Kurgancha-Kala and Khajvan-Kala in Kerder (Arzhantseva et al. 2023, 168 footnote 101). Such doubts call for a closer look at the new dating evidence now available for Dzhankent, and for a fresh assessment of its location and geographical context (Härke and Arzhantseva 2021).

The origins of settlement at this site can now be firmly placed in the sixth century CE, well before any attested nomad presence here; and what is known so far about the nature of this settlement (perhaps an open fishing village) is in sharp

contrast to the defended urban settlement of the Oguz period. On the other hand, this earliest phase (Dzhankent I) coincides with the beginnings of the operation of the Northern Silk Road from late sixth century (Kovalev 2005). By the time the Oguz nomads appear on the steppes north of the Syr-Darya, in the late eighth century (Golden 1992), there may have been an increasingly complex settlement here with close links to, and influx from, civilisations in the south and southwest. The re-planning of this nucleated settlement into a fortified town from the late ninth century onwards (Dzhankent II) happened during a period in which Oguz control of the region was at its peak. Its comparatively short floruit in the tenth century overlaps with the establishment of north–south trade and communications from the middle Volga (Bolgar) to Khwarazm; this much is clear from the contemporary testimonies of Ibn Fadhlan, al-Muqadassi, and Ibn Hawqal (Lunde and Stone 2012), and from the archaeological evidence of the 'silver flow' of Central Asian coins to Scandinavia (Jankowiak 2017; Kilger 2008). This phase comes to an end in the eleventh century when the supply of *dirhams* to the north declined sharply, and the Oguz realm disintegrated, ostensibly because of internal disagreements over the adoption of Islam (Bartol'd 1963; Golden 1991 - see Jankowiak's chapter).

The chronology of Dzhankent has implications for the interpretation of its location and geographical context. Throughout its existence, Dzhankent and the other two 'marsh towns' would have been on the border between steppe lands to the north, and river delta and oases with some intervening desert to the south, and thereby on the interface of nomad world and civilisation. From their proto-urban development in the eighth century onwards, and even as late as the tenth century, these towns were a small archipelago of urbanism in a sea of sand and water, some 500 km or so from the nearest contemporary towns in Khwarazm and Mawarannahr, perhaps with the exception of Dzhend, the main phase of which, however, dates to the eleventh century (Figure 13.6).

As such, they were perfectly placed to channel goods and foodstuffs (including meat on the hooves) from the north to the south. Shepard has used the term 'nexus' for locations of this type on the Silk Road, including specifically Dzhankent (Shepard 2018, 138).

The Northern Silk Road along the Syr-Darya corridor appears to have operated from the late sixth century onwards (Kovalev 2005), which is as close to the foundation date of Dzhankent as existing radiocarbon dates place it. This may or may not be coincidence, seeing that the first phase of settlement at this place may not have been more than an open fishing village of a displaced Dzhety-asar population. The question is how long it could have remained such a backwater. It certainly could not have beyond the late eighth century by which time Khwarazmian pottery was in use at the site, and an injured domestic cat of possibly Iranian origin was cared for there. This also happens to be the time at which the Oguz nomads appeared on the steppes north of the Syr-Darya. They are likely to have been in full control of the town, and indeed the region, by the time Dzhankent was re-designed and fortified on a Khwarazmian model around 900. The Oguz may have commissioned Khwarazmian architects or builders for this task (Khazanov 2005), but – in addition to controlling the east–west trade along the Syr-Darya – they undoubtedly

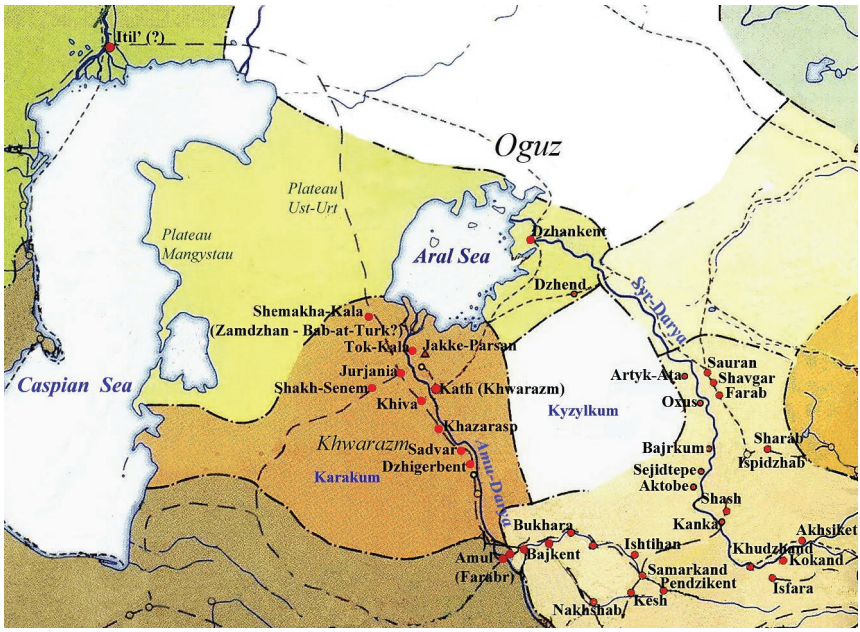

Figure 13.6 Distribution map of Central Asian towns with finds of tenth-century coins.

also availed themselves of the opportunities offered by the north–south trade between the Volga and Khwarazm when that route opened during the first half of the tenth century.

While Ibn Fadhlan's *Risala* has focused our attention on the western branch of the north–south route, between the Caspian and Aral Seas, it is unlikely that a risk-averse slave trader (or even cattle herder) would take his precious cargo across the dry, barren, and life-threatening high desert environment of the Ust-Urt Plateau. Camel caravans transporting select luxuries would have been a different matter, of course, but the route east of the Aral Sea would have offered an alternative for the movement of livestock of any kind. The quantities of silver *dirham* coins distributed between the Volga and southern Scandinavia highlight the scale and importance of the Viking-period trade from the Baltic to Central Asia. Written sources of the tenth-century record the prominent role of Khwarazm in the trade of slaves and livestock from the north to the south (Al-Muqaddasi 2012, Ibn Hawqual; Lunde and Stone 2012, 169–70, 177), but the exact route of the slave caravans across the Aral Sea region is not mentioned.

The suggestion that Dzhankent played a role in the infrastructure of this slave trade would therefore be mere speculation, were it not for one intriguing piece of archaeological and pedological evidence. Attached to the outside of the northern town wall of Dzhankent, there is that above-mentioned, curious walled annexe of broadly trapezoidal shape which does not seem to have any parallels in the region. Even more curious is that its roughly 60 by 60 m interior does not contain any

built structures at all, but coring and test pits have revealed the presence of a thick occupation layer buried by erosion from the higher town wall. The evidence of keratin-eating microfungi in the soil samples from this layer proves the presence of animals or humans in this enclosure (Ivanova et al. 2014), while the low phosphorus levels suggest humans rather than animals (pers.comm. M. Bronnikova). This is probably the closest to a slave pen (i.e. where slaves were kept) that has been found so far on either side of the Aral Sea.

Conclusions: a trans-shipping port on the Northern Silk Road?

The slave pen identification, if confirmed by further analyses which are in process, need not mean that Dzhankent was the place of a slave market, nor of any other type of market where goods were exchanged. The relative paucity of coin finds (about two dozen from regular fieldwork since 2005 and an unknown number from earlier surface collections and illegal metal detecting) may be an argument against lively market transactions at this place. But its development and geographical context clearly suggest three functions within exchange networks within and across the Aral Sea region. First, a 'nexus' for channelling foodstuffs and products from the northern steppes and forests to the towns of the south (from the late sixth century onwards). Second, a junction on the Northern Silk Road for Khwarazm which was not served directly by a Silk Road branch of its own (perhaps also as early as sixth century, certainly from the eighth century onwards). And third, a tenth-century transhipping port for slaves (and possibly other goods) from the far north, located at a point where these could be transferred to transport on or along the Syr-Darya in the direction of Samarkand and Bukhara, or onto ships south across the Aral Sea towards Khwarazm, or southwards by the more demanding land route across the river channels of the Syr-Darya delta.

This chrono-geographical model may also explain the baffling concentration of three contemporary urban settlements within a circle of no more than 40 km in the Syr-Darya delta, close to the Aral Sea coast, but far from any other urban settlements of the region. Rather than being sleepy fishing villages which were surprised by the first caravans passing them on the newly operative Northern Silk Road on their doorstep, these places may well have originated before the Islamic conquest as entrepôts of competing Khwarazmian towns, much in the way Greek colonies were concentrated around key locations such as the Cimmerian Bosporus (Kerch Straits). Their further development would then have been determined by the succession and fates of local steppe powers to the north: initially the First Turkic Khaganate, then after an interval by the Oguz realm, both of which would have had an obvious interest in controlling and taxing trade, and probably also in supplying animal protein to the towns of Khwarazm and Mawarannahr, much like an early medieval 'Texas' for Central Asia (Luke Treadwell, Oxford, in a conference discussion, Oxford, 15 March 2016). The later opening of the northern slave route created a junction of transcontinental trade corridors which turned Dzhankent for about a century into a re-designed 'boom town' (C. Kilger, Gotland, pers.comm. to author, ca. 2012).

While this may look like a persuasive scenario, the written sources do not provide any direct evidence for such a key role of Dzhankent in the trade of the region. Foreign traders among the Oguz on the Syr-Darya are mentioned in such sources (*Hudud-al-Alam* and Gardizi; Göckenjan and Zimonyi 2001), and while these reports do not specifically link the traders to Dzhankent, their confirmed presence in the region and among the nomads means that the idea of the town operating more generally as an entrepôt for distant Khwarazm is not at all far-fetched. But concerning further proof of the link to the slave trade from Bolgar to Khwarazm, the final history of Dzhankent still remains to be written.

Note

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14 Replacing the Silk Road?

Central Asian merchants between China and Scandinavia, 840–1000 CE

Marek Jankowiak

"Le chemin est difficile et écarté, et les émissaires [rencontrent] beaucoup de contrariété."

Zhang Xichong, commander of the Shuofang Army, to the khagan of Ganzhou Uyghurs, October 934 (Hamilton 1955, 122)

The Eurasian landmass is not particularly well suited for long-distance communications. As if mountains, deserts, and other physical obstacles were not enough, the multiplicity of polities, ways of life, and languages created boundaries that, although not impassable, hindered the contacts. Direct long-distance communications were thus only possible when specific conditions were met – for instance, when they were facilitated by an overarching political structure, a diaspora network, or military power – and even then, they were never particularly stable.

Two early medieval systems count among the longest such connections: the Silk Road and the connection between Central Asia and northern Europe, in particular, the Baltic area, that can be conveniently labelled as the "dirhams for slaves" system. The former term is as well known as it is imprecise. In the context of the second half of the first millennium (500–1000 CE), however, it has a concrete meaning: it denotes a bundle of routes that connected the central lands of imperial China, in particular the Tang capital of Chang'an, via the Hexi Corridor and the oases strung along the northern and southern edges of the Tarim Basin, with Sogdiana and, by its intermediary, with Persia and the Mediterranean (see Figure 14.1). It is this specific itinerary that came to personify the Silk Road, even if other connections were possible, in particular via the steppe to the north of the Tarim Basin and Sogdiana (Rong 2013, 64). As for the "dirhams for slaves" system, it is known primarily from the finds of hundreds of thousands of Islamic silver coins (dirhams) in northern Europe – in Rus, around the Baltic Sea, and as far as the British Isles. These coins were mostly minted in Central Asian cities such as Samarqand or Tashkent (in Arabic, al-Shash) in the ninth and tenth centuries, and were exchanged for such commodities as the northern Europeans were able to offer, in the first place Slavic slaves and furs of animals living in the taiga (Jankowiak 2021).

While the two systems that are shown in Figure 14.1 operated along different logics (as we will see below), they shared important similarities. Firstly, their

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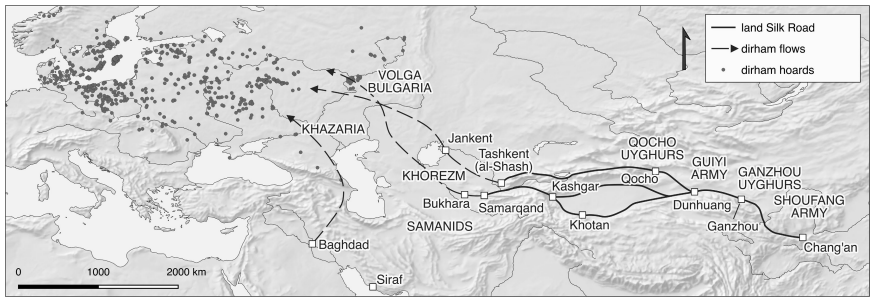

Figure 14.1 Map of the silk roads and the "dirham for slaves" system.

survival depended on the initiative of a merchant community, even if neither the Scandinavians nor the Sogdians were just merchants: the former's drive to obtain silver by any means made them, depending on the circumstances, merchants, warriors, or mercenaries; as for the Sogdians, they were instrumental in running the empires of the steppe as diplomats, providers of rare goods, or courtiers (De la Vaissière 2005). While the modern perspective privileges the movement of goods resulting from their activities, trade was merely a facet of a broader complex of contacts that were often motivated by non-commercial considerations. The second characteristic shared by the two systems is the pivotal importance of the cities and states of Central Asia founded on, but not limited to, their geographical location at Eurasian crossroads. Their merchant and political elites catalysed and sustained the exchanges: without their engagement, neither system could have functioned.

Such similarities raise the question whether the two systems were related. Did they co-exist, or did one cannibalise the other? Were the same Central Asian actors involved in both? Can the "dirhams for slaves" system be seen as a northern branch of the Silk Road, or rather its replacement? This chapter will attempt to address such questions by paying a close attention not only to the chronology of the two systems, but also to the evidence for various types of communications and, perhaps more importantly, for their absence.

Disconnection: the Silk Road after the fall of the Uyghur Khaganate

The golden age of the Silk Road in the seventh and the first half of the eighth century was to a large extent the product of the domination of the Tang and Turk empires over much of eastern and Central Asia (De la Vaissière 2005, 199–225). Although communications and trade between China and Central Asia were affected by a series of upheavals in the mid-eighth century – the replacement of the Turks by the Uyghurs as the main power in the steppe (744), the increased interest of the Islamic Caliphate in Central Asia, the revolt of An Lushan in China (756–63), they endured and adapted to the new political situation. The Uyghur Khaganate continued to command access to vast quantities of silk obtained through frequent embassies to the Chinese court and a more or less voluntary sale of horses to the Tang

government. This offered attractive opportunities to merchants who were primarily of Sogdian origin (Moriyasu 2016, 324–71).

This period of relative stability ended abruptly in 840 with the collapse of the Uyghur empire, crushed by its northern neighbours, the Kirghiz. Deprived of the Uyghur support, Sogdian merchants vanished from the sources at a speed that continues to puzzle the historians (De la Vaissière 2005, 284–90, 322–31). Political chaos engulfed the central section of the Silk Road. It was not until the beginning of the tenth century, when a new political configuration emerged, that communications between at least Dunhuang and the Tarim Basin were re-established (e.g. Rong 2023, 435–58). At that point, however, the Tang dynasty was drawing its last breath, and the Five Dynasties that succeeded to it on the Central Plain (907–60) controlled neither the territory nor the resources that had been available to the Tang emperors in their heyday.

As a result, the final century and a half of the first millennium (850–1000 CE) saw a decrease in long-distance communications along the Silk Road. The low point was reached in the second half of the ninth century, but even after Dunhuang and the Tarim Basin had re-connected, their contacts with imperial China remained, as implied by the phrase quoted in the epigraph above, very limited. Interactions with the city-states of Sogdiana across the formidable Pamir Mountains were affected to an even larger extent, judging from the silence of the sources about such contacts and, above all, from the unusual scarcity of information about China available to the otherwise erudite and curious Muslim geographers of the ninth and tenth centuries (Miquel 1975, 71–126).

The best-informed Muslim description of China comes from the "Account of China and India" (*Akhbar al-Sin wa l-Hind*), a work composed in two stages. Its first book, composed in 851/2, depicts the "maritime Silk Road" that connected Siraf on the Persian Gulf with Guangzhou on the Chinese coast. This route was particularly lively in the ninth century, as evidenced by the circulation of Islamic glass and Chinese pottery, and finds such as the Belitung shipwreck (Henderson 2021; Krahl et al. 2011). The second book, added several decades later, is written in a different mood: in the words of a commentator, it "is haunted by the knowledge that the good old days were over" (Mackintosh-Smith 2014, 9). The "good old days" were terminated by the dramatic massacre of the Muslim colony at Guangzhou by the rebel Huang Chao in 879 (Levy 1961, 109–21); and even if this event did not put an end to the profitable trade across the Indian Ocean – as suggested, among others, by the fabulous fortune reportedly amassed by the merchant Ishaq ibn Yahuda through trade with southern China in the decades after the sack of Guangzhou (Freeman-Grenville 1981, 62–4) – full recovery was prevented by the disintegration of the Abbasid and the Tang empires (Heng 2009, 35–6; Chaffee 2018, 51–65). The network fragmented into local circuits, and end-to-end travel was difficult, as attested by a Nestorian monk sent to China who complained on his return to Baghdad in 987/8:

> Sea voyages have changed and sea travel degenerated, so that the persons who understand these things are few in number. Accidents have made their

> appearance, with fear and with islands to bar the voyages, so that only a person willing to brave dangers undertakes travel.
>
> (Dodge 1970, 837)

If sea travel was perilous, land communications between the Muslim world and China were, according to the "Account", well-nigh impossible:

> Regarding Khurasan and its proximity to the land of China, between the latter and Sogdiana there is a journey of two months. The way, however, is via a forbidding desert of unbroken sand dunes in which there are no water sources and no river valleys, with no habitation nearby. This is what prevents the people of Khurasan from launching an assault on China.
>
> (Mackintosh-Smith 2014, 103–05)

This is no doubt why the "Account" reports a land journey between Samarqand and Guangzhou as a marvel:

> We have seen one of the people who entered China, who reported that he saw a man carrying on his back a skin bag filled with Tibetan musk; this man had come on foot from Samarqand, passing through one Chinese city after another until he finally arrived in Khanfu [Guangzhou], the meeting place of merchants coming from Siraf.
>
> (Mackintosh-Smith 2014, 105)

This is, as far as I can see, the only commercial journey by land from Central Asia to China in the ninth and tenth centuries reported by a Muslim source. The difficulty of communications by land and, after the sack of Guangzhou, also by sea explains why fresh information about China was difficult to obtain, and why the "Account" remained the main source for later Arabic descriptions of China (Mackintosh-Smith 2014, 11–13).

It is thus no wonder that little information circulated along the land Silk Road. While in the mid-ninth century, Ibn Khurdadhbih still had some knowledge of the Uyghurs (*Tughuzghuz*), Tibet and China (from the first book of the "Account"), his tenth-century successors such as Ibn Rustah or Ibn Hawqal hardly had anything to say about the eastern flank of the Islamic world (Iakubovskii 1947). Only in the final decades of the tenth century was a better informed work produced: the geographical treatise known as the "Boundaries of the world" (*Hudud al-'alam*) that, in addition to a chapter on China, contains a detailed tribal geography of the steppe (Minorsky 1970, 83–6, 94–101). Although this information is usually considered to have been sourced from the lost geographical work of the early tenth-century Samanid vizier al-Jayhani, much of it seems original and probably came directly from Turks integrated into the sedentary states of Muslim Central Asia as soldiers and recent converts to Islam (*pace* Minorsky 1970, li–lii, but see 23–5).

The flow of information was minimal also in the opposite direction, from Central Asia to China. The "Old" and "New Tang annals" contain descriptions of routes

leading both by land and by sea to *Dashi* – a rendering of "Tajik", the Persian ethnonym for the Arabs – but this information pre-dates the dislocation of the land and maritime Silk Roads (Wan 2017). The horizon of the next dynastic chronicle, the "Records of Five Dynasties", ends at Khotan, the description of the boundaries of which does not include the Islamic world:

> The southwest of this country is close to the Pamir Mountains (*Congling*) and neighbours on the Brahmins (*Poluomen*), but they are still more than 3,000 *li* apart. In the south, it borders on Tibet (*Tubo*) and in the northwest it reaches Kashgar (*Shule*) which is more than 2,000 *li* away.
>
> (*Xin Wudai shi*, ch. 74)

Here too, it is only at the end of the tenth century that more information started to reach the Chinese court: in the account of his embassy to Qocho Uyghurs in 981–83, the Song envoy Wang Yande listed among their neighbours Khotan (*Yutian*) in the south and the Arabs (*Dashi*) and Persians (*Bosi*) in the southwest (*Song shi*, ch. 490).

This picture of a very limited flow of information and merchandise along the land Silk Road is consistent with the absence of known diplomatic contacts between Muslim rulers and their eastern neighbours for almost a century after the fall of the Uyghur Khaganate in 840. Faced with disconnection from China, the Sogdian merchants had to look elsewhere for business opportunities.

Reorientation: from Central Asia to Scandinavia

It is intriguing that the atrophy of the overland Silk Road coincided with the emergence of a direct connection between Central Asia and northern Europe. The evidence for these contacts consists primarily in the almost 2,000 dirham hoards found in Rus, Scandinavia, Poland, and other parts of northern Europe. By combining the chronology of the production of the coins (provided by the dates inscribed on them) with that of their deposition in the North (resulting from the dates of the hoards), it is possible to reconstruct the dynamics of the flow of the dirhams northwards (Jankowiak 2021). This requires, however, much caution. Within the unified monetary market of the Abbasid Caliphate, dirhams struck in one province circulated widely and it is thus difficult to decide if the presence of Central Asian coins in northern hoards implies direct contacts or rather exchanges mediated, for instance, by the Abbasid capital Baghdad.

The latter was certainly the case in the first decades after the dirhams started to flow northwards in c. 800. They followed a route that led from Iraq, via the Khazar Khaganate on the lower Volga, to Rus and the Baltic Sea. This early flow contained a small admixture of Central Asian dirhams – less than 10 percent – which probably reflects the monetary stock circulating in the central lands of the Caliphate. The situation started to change in the 840s and 850s when the proportion of Central Asian coins in northern hoards started to grow. This, and the appearance of dirham hoards on the Kama River, in the part of the forest zone that could be

relatively easily reached from Central Asia, suggests that a more direct route from Central Asia was then emerging, no doubt still leading through Khazaria, but not any more via Iraq. The importance of coins from Samarqand and al-Shash continued to increase during the acute crisis of the Abbasid state in the 860s, as if the Central Asian merchants were stepping in to sustain the faltering trade with the North. The issues dated to 867/8 are particularly prominent in the northern hoards (Jankowiak 2021, 114–16).

The exchanges collapsed nevertheless in c. 875, seemingly due to disorders in the North. The "dirhams for slaves" system vegetated for a quarter of a century, until it was suddenly called back to life by the decision of the Samanid emir Isma'il ibn Ahmad (892–907) to produce very large quantities of high-quality dirhams. It is unclear whether this step was motivated by Isma'il's willingness to assert his independence or by commercial considerations, but as a result, coins from the Samanid mints, in the first place Samarqand and al-Shash, literally inundated northern Europe in the first half of the tenth century. They flowed initially via Khazaria and then, from c. 910, through Volga Bulgaria, an emerging polity situated at the confluence of the Volga and Kama rivers. Even though the quantities exported by the Samanids steadily decreased over time, the flow of dirhams continued until c. 980.

The logic of these exchanges is known from the writings of Muslim geographers and travellers, who were much more talkative about northern Europe than China. The most significant among them is the report of Ahmad ibn Fadlan about his journey from Bukhara to Volga Bulgaria in 922 (Shepard and Treadwell 2023). It describes a relatively easy journey down the Amu Darya to Khorezm, followed by a strenuous, 70-day crossing of the steppe to the market of Volga Bulgaria, where he met the "Rus" (Scandinavians who settled in eastern Europe) who offered Muslim merchants slave girls and fur in exchange for dirhams and beads.

These merchants mostly came from Khorezm, a fertile region situated at the inflow of the Amu Darya into what was the Aral Sea. In their dealings with the Rus, they used coins from Samarqand, al-Shash, and other Samanid mints, but it is not known how they obtained them. The provenance of these dirhams from the main cities of Sogdiana suggests that the same merchant elites that had been involved in trade along the Silk Road participated also in the "dirhams for slaves" system. It is, however, difficult to substantiate this conjecture, as our sources consistently name the Khorezmians as the main agents of the trade with the North (De la Vaissière 2005, 292–9). Perhaps the Sogdians played the role of bankers and distributors of the imported slaves and furs.

It is also possible that the Sogdians participated directly in the trade with the North, via a different route than that described in such detail in the authoritative report of Ibn Fadlan. On their way to Khazaria or Volga Bulgaria, caravans from al-Shash would have followed the Syr Darya and then crossed the steppe to the north of the Aral Sea. No source describes such a route, but Muslim merchants are mentioned in the Turkic steppe in c. 907 (Treadwell 2005, 154). A further confirmation comes from the flourishing cities located at the inflow of the Syr Darya into the Aral Sea, in the first place the fortress of Jankent (or Yangikent), apparently the

winter residence of the ruler of the Ghuzz, a Turkic grouping nomadising on the steppe (Härke and Arzhantseva 2021 and their chapter in this book).

The "dirhams for slaves" system survived for two centuries, an astonishingly long period given its geographical extension and the political fluidity of the lands through which it ran. This resilience is perhaps due to the relative simplicity of the exchanges between the Scandinavians and the Khorezmians: they involved little more than, on the one side, slaves and furs, and, on the other, dirhams and glass beads. Everything else, from Baltic amber to Islamic textiles or steppe bronze vessels, was an admixture. It is precisely the homogeneity of the commodities imported by the Scandinavians from Central Asia, their quantity, and the relative ease of provenancing them – thanks to the inscriptions on the dirhams and, recently, the chemical signatures of the beads (Henderson and Jankowiak forthcoming) – that, despite the scarcity of written sources, allow a more granular reconstruction of the "dirhams for slaves" system than can be envisaged for the Silk Road.

The commodities exchanged between Central Asia and northern Europe had thus little in common with those that transited along the Silk Road, even though the latter also knew slave trade, albeit on a smaller scale (Moriyasu 2016, 231–65). This makes it difficult to see the route towards the North as an extension of the Silk Road. If the two systems were at all connected, such a connection operated at a deeper level. By the time the highly profitable silk trade ended in c. 840, the Central Asians involved in it must have accumulated enough capital to reinvest in other ventures: primarily no doubt in closer connections with the Islamic world, which accounts perhaps for the accelerated Islamisation of Sogdiana, but also in the trade with the North.

Reconnection? The Silk Road in the tenth century

If the fall of the Uyghur Khaganate broadly coincided with the increased presence of Central Asian coins in northern Europe, is it also possible to relate the decline of the "dirhams for slaves" system with a revival of east–west communications? By the 930s, the gap between the northern demand for silver and the decreasing supply of Samanid coins could only be reduced through a large-scale production of local imitations of dirhams at the market of Volga Bulgaria (Jankowiak 2023). It looks as if Central Asian merchants lost their interest in the trade with the North, partly no doubt because they had access to a closer reservoir of slaves on the Turkic steppe, and partly perhaps due to the limited resurgence of communications along the Silk Road.

This partial reconnection was due to a relative pacification of relations between the states that filled the political vacuum created by the fall of the Uyghur Khaganate in 840: the two Uyghur successor states in the east in Ganzhou (eastern part of the Hexi Corridor) and in the west around Qocho (north-east of the Tarim Basin); the region of Dunhuang between them, controlled by a Chinese loyalist army known as the "Returning-to-Righteousness Army" (*Guiyijun*); and the Buddhist kingdom of Khotan in the southern part of the Tarim Basin (Wen 2023, 25–33). These relations are documented in the main archive of the Silk Road, the library of a Buddhist

monastery from the vicinity of Dunhuang (Rong 2013). By the beginning of the tenth century, some connectivity along the Silk Road was re-established. Khotan, invisible in the ninth century, reappeared in the Dunhuang documents in 900 and entered an alliance with the ruler of Dunhuang in 936. Despite some 1500 km that separated them, the two cities remained in close relations until the Qarakhanid conquest of Khotan in c. 1000, as demonstrated by the presence of a significant body of documents in the Khotanese language in the Dunhuang archive (Rong 2013, 44–6, 327–30; Hansen 2012, 222–8).

Also in the 930s, the Silk Road states reopened communications with central China (Hamilton 1955, 127–37). In 938, the first Khotanese embassy in two centuries reached the imperial court and was accompanied on its way back by Chinese envoys. One of them, Gao Juhui, left an account of the dangers that the envoys confronted on their way to Khotan, from waterless deserts to roaming Tibetan detachments. The mission took four years and inaugurated regular exchanges between Khotan and China (Hamilton 1955, 134–6; Wen 2023, 25–33).

Intriguingly, it is to this very time that a rare description of a diplomatic contact between the Samanids and the "king of China" belongs. Very few such embassies are mentioned in our sources. The first took place somewhat earlier, in the reign of Caliph al-Muqtadir (907–32). When an unnamed Samanid ruler formed the intention to kill Manichaean refugees who fled al-Muqtadir's persecution in Iraq, he received an embassy from a neighbouring ruler:

> The king of China, who I [al-Nadim, the author of the *Fihrist*] suppose was the lord of the *Tughuzghuz*, sent to him, saying, 'There are more Muslims in my country than there are people of my faith in your land.' He also swore to him that if he [the Samanid ruler of Khurasan] should kill one of them [the Manichaeans], he [the king of China] would slaughter the whole community [of Muslims] who were with him, and would also destroy the mosques and appoint spies among the Muslims in the country as a whole, so as to slay them. So the ruler of Khurasan left them alone except for exacting tribute from them.
>
> (Dodge 1970, 802–03; see also Baumer 2014, 315)

The Manichaean confession of the Uyghurs (*Tughuzghuz*) makes their ruler, no doubt that of Qocho, a plausible candidate for the "king of China". Incidentally, this is probably the earliest mention of a Muslim community among the Uyghurs.

The next known embassy dates to 938/9 when envoys of a "king of China" unexpectedly appeared in Ferghana and requested overdue tribute for 27 years (Qaddumi 1996, 155–63). The Samanid ruler Nasr ibn Ahmad (914–43) had them brought to Bukhara and received them with such extravagance – if we believe the detailed report in the eleventh-century "Book of gifts and rarities" (*Kitab al-hadaya wa'l-tuhaf*) – that modern historians have doubted the reality of this embassy (Bosworth 1969). Such scepticism is unwarranted (Treadwell 1991, 165–6); moreover, it has not been noted that the date coincides with that of the embassy of Gao Juhui to Khotan. The Chinese envoy may well have been tempted to explore the other side of the Pamirs, but the embassy may have also have originated with

the Qocho Uyghurs, who are more likely than the Chinese to have been in contact with the Samanids in c. 912, the date implied by the demand of overdue tribute for 27 years.

Modern scholarship is similarly sceptical about another detailed description of an embassy exchanged between the Samanids and their eastern neighbours. Its author, Abu Dulaf, claims to have accompanied an embassy sent by Nasr ibn Ahmad to Qalin ibn al-Shakhir, the "king of China", in order to escort back to Transoxiana the latter's daughter who was promised to Nasr's son and successor Nuh ibn Nasr (943–54). The Samanid embassy is said to have journeyed through the territories of a number of Turkic tribes before arriving to "the capital of China", Sindabil or Sandabil. It returned home little after the accession of Nuh with the princess who soon bore him a son, the future emir ʿAbd al-Malik (954–61), whereas Abu Dulaf travelled southwards, reached the coast of the Indian Ocean, and returned to Sijistan, where his account ends (Rohr-Sauer 1939).

The sulphurous reputation of Abu Dulaf, the poet of the Baghdadi underworld, cautions against too literal an acceptance of his account. Indeed, his tortuous return from "China" via India to the Muslim world can hardly be taken *à la lettre*. But it may be a step too far to follow the modern scholarship in the wholesale dismissal of Abu Dulaf's account as an elaborate pastiche of a travelogue, a genre much in vogue in the tenth-century Islamic world (e.g. Minorsky 1955, 11–18). Several arguments can be opposed to this view, quite apart from the reductive tendency to treat texts as mere literary creations. Abu Dulaf's itinerary, although not easy to follow, is not inconsistent: the Samanid embassy appears to have taken the northernmost branch of the Silk Road that passed next to lake Issyk-Kul and then skirted the northern slopes of the Tianshan Mountains before reaching Sindabil – irrespective of whether we identify it with Dunhuang or Qocho. One has the impression that it tried to avoid the kingdom of Khotan that was perhaps already on hostile terms with the Muslims. Furthermore, Abu Dulaf's chronology is confirmed by a source that places the birth of ʿAbd al-Malik in 944 or 945, as well as, more indirectly, by the broader context of a war between the Samanids and neighbouring Turks that may have suggested to the former an alliance with Qocho Uyghurs (Frye 1954, 98; Pritsak 1951, 293–4).

These three or four (if we accept the reality of an embassy in c. 912) known diplomatic contacts between the Samanids and their eastern neighbours, no doubt the Qocho Uyghurs, give an idea of the difficulty of communications along the Silk Road in the tenth century. Political fragmentation, persistent warfare, and lack of access to Chinese goods did not offer too many opportunities to merchants, even if envoys continued to be sent by the Silk Road states to the Chinese court: the official Chinese histories mention in total a dozen Khotanese embassies in 938–90, and many more from the Uyghurs (Kumamoto 1982, 63–5; Hamilton 1955, 61–93). Such communications continued also in the Qarakhanid period (Duturaeva 2022). As in the heyday of Silk Road diplomacy before the fall of the Uyghur Khaganate, these embassies carried various goods, such as jade, the export commodity of Khotan (Wen 2023, 63–93). But there was no common measure between these exchanges and the earlier annual embassies from the Uyghur khagans to the Chinese

court accompanied by hundreds of merchants (Baumer 2014, 301). Moreover, communications were easily disrupted, as shown, for instance, by the vicissitudes of seven Khotanese princes whose journey to the Chinese court in 966 was interrupted in Dunhuang due to disorders in Ganzhou (Hansen 2012, 222–5; Kumamoto 1982).

Finally, religious antagonism also had its part in restricting contacts along the Silk Road. After the conversion of Turkic Qarakhanids to Islam around the mid-tenth century, their conflicts with the sedentary kingdoms took on a religious character legitimised by the hostile Muslim perceptions of "polytheist" Buddhism and east Asian religions (Elverskog 2010, 82–95). Their conquest, at an unknown date, of Kashgar, a city at the western extremity of the Tarim Basin must have not only further disrupted communications across the Pamirs (Pritsak 1951, 290), but also involved them in a bitter conflict with the Buddhist kingdom of Khotan. The city eventually fell to the Qarakhanids little before 1006, an event seemingly accompanied by such violence towards Buddhism that it may have provided the impulse for the sealing of the monastic library in Dunhuang, 1300 km to the east (Rong 2013, 131–2; Hansen 2012, 227–8).

Despite the revival of diplomatic activity along the Silk Road in the 930s, sustained communications between China, the Tarim Basin, and Muslim Central Asia were not re-established. Political turbulence continued, if not deepened, with the advent of religious wars and an increased pressure from steppe nomads on sedentary populations. Khotan was not the only victim of this new balance of power, and the Samanids themselves were unseated by the Qarakhanids around the year 1000. The texts no longer speak of long-distance trade, suggesting that with the end of the "dirhams for slaves" system at the end of the tenth century, Sogdiana ceased to be involved in supraregional commerce on a significant scale.

Were the two systems connected?

Was it, then, a mere coincidence that Central Asian merchants joined the "dirhams for slaves" system a little after the fall of the Uyghur Khaganate had dealt a near-mortal blow to the overland Silk Road? Was their gradual disengagement a century later related to the increased integration between the Samanids and their Turkic neighbours? In the absence of texts that would describe the commercial logic of Sogdian or Khorezmian merchants, such questions cannot be answered. But it is possible, by way of conclusion, to make several observations.

Neither the Silk Road nor the "dirhams for slaves" system ever existed in a final, immutable form. Both systems were highly dynamic, with evolving geographical routes, volumes of trade, and specific organisation. Our understanding of these short-term fluctuations and, consequently, of the interplay of the two systems is at its beginnings. It can only be advanced through a detailed study of archives such as that of Dunhuang and assemblages of material such as the dirhams or the glass beads.

It appears, nevertheless, that the two systems were disjointed. No Samanid dirhams were found on the Silk Road, and no piece of silk of a verifiable east Asian provenance is known to have been imported to northern Europe in the ninth or tenth centuries. They did not overlap chronologically, which lends support to the

view that one system replaced the other, even if such reorientation was slow and new opportunities took time to emerge. But the vacuum created by the decline of the Silk Road was no doubt filled not that much by the "dirhams for slaves" system as by the increasing integration of Central Asia into the Islamic world. Although difficult to measure, this process is reflected in the seemingly decreasing interest of its elites for the non-Muslim world and, above all, in the progress of Islamisation of Central Asia in the Samanid period (Tor 2009). Notwithstanding these reservations, it is likely that the end of "cheap silk" in western Eurasia caused by the interruption of the Silk Road triggered a set of reorientations, of which the opening of an unlikely trade route from Central Asia to Rus and the Baltic was one.

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15 Slavery and human trafficking along the medieval Silk Roads, c.800 to c.1350 CE

Claire Taylor

Introduction: scope and concepts for Silk Road slavery

Slavery was ubiquitous and integral within Medieval Afro-Eurasian societies. "Chattel slaves", people who were "owned", were part of everyday life. They were of foreign or local origin, and of diverse ages, colours, and genders. They were made, taken, traded, deployed, and circulated within, between and beyond our conceptual Silk Road societies. This was a partial continuity from the earlier world, in that maritime trade circuits linked China, India, Southeast Asia, and East Africa. Central Asian routes had become less vibrant, but this would change. Nonetheless, the Black Sea now connected merchants of Scandinavia, the North Sea, and Russia with the Mediterranean basin, and thereby Iberia, sub-Saharan Africa, and above all, the Islamic World, and more indirectly with Asia. Indeed, although the "silk roads" invokes East–West movement, the new North–South routes were more direct and dynamic in the earlier medieval period. Specifically, Turkic and Slavic peoples were traded by the Samanids of Transoxiana via the Dneiper River to the Caspian Sea, and increasingly from the seventh century by the Khazars, Bulgars, and Rus down the Volga River to the Crimea to be purchased and sold on by Muslims, Christians, and Jews. As such, Silk Road slavery was very much part of the "world-system" reading of medieval economy, as a horrific form of entanglement with the wider world.[1]

We cannot put an end date on Silk Road slavery. Furthermore, in the medieval period, slavery was not considered "wrong". Shared humanity did not necessarily entail legal or social freedom. Slavery was simply an unfortunate fate for those subjected to it. This was tempered somewhat from c.1100 CE as the Christian Northwest moved towards serfdom as its major form of "unfree" labour. However, chattel slavery thrived in the Christian-run Mediterranean as elsewhere in Afro-Eurasia. Slaves were most typically deployed in domestic contexts rather than in plantation-style or gang labour. Indeed, the reader should arguably picture a young woman as indicative of the "owned person".

Models and sources for understanding Silk Road slavery

Historians have developed models for defining and understanding slavery historically. Moses Finlay distinguishes "slave societies" or economies, such as the later

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Americas, from "societies with slaves", wherein slavery was of significance but did not typify economic activity. Orlando Patterson views slavery as "social death". The slave is removed from their community context, either by abduction, sale, debasement, or birth, and becomes symbolic of their owner's status, without the right to property or even family of their own. Patterson also refers to "intrusive" slavery, where a slave is introduced from outside a society, and "extrusive" slavery, where she is in origin a member of that society. Slavery was "social death" to the vast majority of those enslaved on the Afro-Eurasian continents in the Middle Ages, which were societies "with slaves", both "extrusive" and "intrusive" in origin. We can usefully follow Perry *et al.* in considering slavery as a *practice* or a *strategy* emerging out of variable human *processes*, rather than a fixed institution. Slaves in the Indian Ocean context may be viewed as part of "hierarchies of dependency" rather than a distinct category, and it was only one form of servility, another being debt bondage. In the Christian West, on the other hand, the distinction was legally clearer.[2]

Slaves were possessions in economic and legal terms. They were indicative of consumption rather than production. They were nonetheless individuals, and historians approach them from this perspective too, although the historical sources present different opportunities and problems. Susan Whitfield demonstrates in a chapter called "The Unknown Slave" that we lack a body of *individualised* Silk Road slave stories. We do have examples of slaves who surmounted their station or played enigmatic roles, such as Ziryāb, a slave from Bagdad, who supposedly brought asparagus to Europe, or the famously talented musician Shāriya. But there are also almost no sources written from a slave's point of view, let alone any composed by one. An exception is the Armenian monk Kirakos Gandzakets'i, abducted by the Mongols in the 1230s. Another is the recorded declaration by Manjŏk, the leader of a failed Korean slave revolt in 1198, asking, "Why […] should we only work ourselves to the bone and suffer under the whip".[3]

Manjŏk also exhorted his comrades to "[…] kill your master and burn the record of your slave status". Such a record might be a bill of sale or a record in a ledger. These administrative sources are invaluable to us. They include many found in the Cairo Geniza governing the Jewish trade between India, the Arabian Peninsula, North Africa, and Persia (although it is generally acknowledged that Jewish trade routes did not officially operate beyond the eleventh century). The *Lekhapaddhati* documents of ninth- to fifteenth-century Gujarat record the making, selling, and treatment of slaves. Tang dynasty (618–907) codes were influential well into our period in China. These divided society into three levels with slaves as the lowest and liable for the harshest punishments for crimes, being "like money and goods … for their owner to dispose of". Codes also regulated travel, transfer to third parties, and the legality of the enslavement and manumission. They varied across Eurasia. When the Jewish Yemenite merchant Ben Yijū returned from Mangalore having married his manumitted Indian slave, Berakhā, there was consternation at home about her legal status and that of their children.[4]

Amongst the most vivid sources are travel narratives. The Persian Ibn Rustah (d. 903) described how well the Rus dressed their slaves, "because for them they

are an article of trade". In 921–2 CE, Ibn Fadlan, an Abbasid official, was shocked by the mistreatment of women as they were passed from hand to hand by Rus merchants and their clients along the Volga. Although the travel narrative views the world through the author's eyes, in highlighting what was notable and strange about the "other", we can infer what was normal and familiar to the writer. We would know nothing about the inhumation of living slaves with the bodies of Mongol khans were it not for the horror of travellers like Jordan of Severus at the practice. It is not noted in Mongol sources.[5]

Next, we consider who slaves were and how they became slaves, and then what their experience of slavery might have been.

Slavery and human trafficking, c.800–1200

In contrast with later centuries, black skin was not perceived as synonymous with slavery. What we might recognise as "racism" began to emerge during the Middle Ages, but this did not transfer into somatic connections with slavery until the Early Modern era. "Black" slaves certainly appear in Mediterranean, Middle Eastern, and West Asian contexts. From the island of Pemba, off the coast of Tanzania, they were seized by Arab merchants and even exchanged for Chinese and Persian pottery at ports such as Guangzhou. "Black" slaves taken from Madagascar are also recorded in China. But such accounts relate to their "unusual" appearance and thus indicate that they were atypical.[6]

Two related factors were more significant than "race". One was geopolitical influence and the integration of the slave trade into emerging, neighbouring, and/or rival polities. Iberia is a good example. Despite the South–North trade routes from Africa bringing gold and other valuable objects to Europe via the Iberian Peninsula, slaves in south-western Europe were not typically African but Slavs and Greeks, or were Christian, Jewish, or Muslim subject peoples. Such slaves were even trafficked to West Africa. Inseparable from this, religion determined who might be enslaved. The monotheistic faiths did not condemn slavery. The Bible spoke of kindness to slaves but not an end to slavery, and medieval Church leaders themselves had slaves. Mohammad and his followers owned and traded slaves. But Christians, Jews, and Muslims were forbidden in law to enslave or sell a co-religionist. Fynn-Paul therefore posits that religious identity was an indicator of "enslaveability" and created "no slaving zones". This meant that markets at which foreigners of other faiths could be bought and sold were of key importance to slavers, and that the easiest slaves to dispose of were from outside the Abrahamic world.[7]

Slaves as insiders and outsiders

Slave systems might reproduce themselves "extrusively" within a society, to use Patterson's framing. A slave might be born into the condition of servitude, perhaps as a result of the rape of a mother by a master. Criminals might be enslaved as punishment, and, in China, this could extend to their family. Parents might abandon an unwanted child for her to be "found". She might also be sold by desperate

parents, for example in war-ravaged India in the thirteenth century. A Byzantine law of 1095 notes that Bulghar children could claim their freedom if they could prove free origins, although how they might do this is another matter. "Self-sale" was illegal in many societies, but nonetheless people might submit to a creditor or to someone who would relieve them of the impact of natural disasters: *Lekhapaddhati* documents include the voluntary enslavement of a girl experiencing famine and harassment.[8]

Because of psychological damage and subjection to overwork, violence, and mistreatment, slaves died relatively young and often without reproducing, and so slave societies were rarely self-sustaining. Most slaves began their experience "intrusively", as stolen and trafficked. Slave raiding was rife in borderlands and less well-defended territories. Communities living along coasts or rivers were especially vulnerable. For example, Levantine Jewish settlements were frequently raided by Byzantine pirates, and Korean women were trafficked by Chinese pirates to Shandong. Whilst the Latinate word for "slave" derives from that for "Slav", telling us much about the European trade, the Persian word was the same as that for a captive "foreigner", stressing the condition of prisoners of war. But war was not always good for the slavers. Prices fell when there was a glut after a battle. Because of fluctuations, markets were highly regulated by rulers who benefitted from the trade in secondary ways, for example through the issuing of contracts and evidence of legal purchase, such as the licences regulating the sale and redemption of captives in twelfth-century Barcelona.[9]

The market was by-passed when slaves were given as diplomatic "gifts" or as tribute. An early tribute was the *baqt* payment in slaves to the Egyptians by Nubian kings between 652 CE and the twelfth century. The Jin made demands for slaves on Song China, and Mongols would do so when they conquered Korea. A feature of the Islamification of North Africa and West Asia was the payment of slaves as part of tribute by people who would not convert to Islam. In 1026, a slave was among the valuable gifts given to the Ghaznavid ruler Mahmud as part of a failed attempt to unite the Buddhist and Muslim worlds. In 845 CE, Caliph al-Wāthiq supplemented prisoners of war he had taken with slaves originally captured in Byzantine territory to balance numbers in a prisoner exchange. Slaves were also created to be exchanged during the defeat of the Fifth Crusade in Egypt in 1220. When the port of Damietta fell to the Franks, the captured Muslims were used in this way, and when the Crusade was eventually defeated, Muslim slaves at Christian Acre and Tyre were exchanged for the "True Cross".[10]

Domestics, concubines, and the "de-gendered"

As already noted, most slaves were domestic servants, and most of these were women and girls. Girls attracted huge prices, meaning that they were a luxury item, but were not unique to elite households. Sometimes they came highly skilled in exotic and creative arts, and, in China, even in writing. Probably the high-medieval story of the slave girl Tawaddud, traditionally included in the Arabian Nights, is not realistic evidence for the exemplary education of female slaves, but it was evidently plausible.[11]

Domestic slave labour often involved legal rape by buyers. The "fairness" of the trade was regulated in his favour. A thirteenth-century manual for market inspectors in Islamic Malaga describes a three-day get-out clause because merchants sometimes cosmetically enhanced slaves. Strict codes also governed sex between slaves, and between slaves and free people. On the one hand, Jewish masters were not permitted to have sex with their slaves or even to live in the same house, but *should* intercourse take place, any resulting children were deemed slaves as well. On the other, Islamic law promoted sex between masters and slaves, but any offspring was free, and the slave (thence *umm walad*, "mother of the child") was exempted from re-sale and freed upon the death of her master. Al-Idrīsī wrote in the twelfth century that Nubian women were so desired by Egyptian rulers that they would outbid other purchasers in order to father children from them. However, Christian slave mothers could only attain freedom if their master approved. This led to confusion in multi-faith regions. In 1261, Christian slave-owners in Valencia chose to adopt Islamic practice. But free women could rarely own, let alone have sex with a male slave. In the tenth century, a poetess, Balki of Balkh, fell in love with a Turkic slave and was killed by her brother.[12]

The mass abduction of women was common. The 1127 "Humiliation of Jingkang" in Kaifeng, China, forced noble women into concubinage. But sexual slavery occasionally enabled female agency. The courtesan 'Arib al-Mamuniyya ran a household of female slaves in ninth-century Baghdad. The hanging of a female slave in Egypt for murdering her mistress shows an extreme but not uncommon expression of agency. Less straightforward is Ibn Fadlan's account of the funerary rituals at a Rus nobleman's burial. A slave girl volunteered to be brutally and elaborately put to death. She had volunteered for this, we are told. But why? The act wins her a speaking part in the proceedings and even in the traveller's account, bringing her a moment of spiritual authority.[13]

Genital mutilation was a common form of violence against slaves. Ibn Butlan described horrific assaults on slave girls in Sudan and Ethiopia. But the castration of male slaves was more commented on, reflecting the gender identity of authors. Because the practice was forbidden in Islam, eunuchs were reportedly made by Jewish merchants in Spain, despite their own laws prohibiting the practice. But eunuchs might rise to positions of significant power, for example the Nubian Abu al-Misk Kafur (d. 968) in Egypt.

Slave soldiers

Slave soldiers could also surmount their status. They were, in Lewis's words, the "aristocrats of the slave population". Most famous were mamluks (*mamlūks*). They were young males, usually Slavs and other non-Muslim Central Asians, trained in the art of war by their captors, thereby adding value before sale to Islamic generals. Non-Muslims at the point of sale, mamluks were later converted and eventually freed, and some then rose to positions of rank, benefitting from networks of comradeship and political affiliation. But this one-generational system meant that new slaves had to be constantly replenished. The trade formed one of the most significant aspects of Silk Road traffic, with its North–South/East–West node in

the Black Sea, where Rus ("Vikings"), Bulghar and Saminid raiders, Muslim and Italian merchants, Byzantine emperors, and, later, Mongols perpetrated the traffic in soldier slaves. The trade-shaped polities as well as economies, but arming slaves posed obvious dangers. Soldiers left an already failing Samanid authority in 998 and chose Mahmud, the son of a slave, to lead them. Thus, the Ghaznavid dynasty was established in Afghanistan, and itself began exporting the slave–soldier system into India. Most famously, a coup in Egypt in 1249 established the Mamluk sultanate. Again, they did not put an end to the slave–soldier system, which endured into the sixteenth century.[14]

Routes out of slavery

Slave rebellions were few and rarely successful. The Zanj rebellion in Iraq of 868–83 was the work of slaves from East Africa who, untypically, were made to work in gangs on Iraqi salt flats. Legal sources from Spain and Italy in 998 indicate the murder of slave masters, declarations of liberty, and even the establishment of maroon communities (autonomous escaped slave communities). Polities cooperated to deter escape. An Arab-Byzantine treaty of 969 attests to an agreement to return escaped slaves at the rate of 30 dinars for a man, 20 for a woman, and 15 for a child. Far more slaves were freed through manumission. In both Christianity and Islam, it brought spiritual rewards and smoothed the way to Heaven. In the late twelfth century, Usamah ibn Munquidh bought slaves whilst at the court of King Fulk V, the Crusader king of Jerusalem, and sold them to other Muslims so that they might free them to this end. Slaves could sometimes buy freedom for a regulated price. In Islamic law, the contract was known as *mukātaba*.[15] Like self-sale, self-redemption reminds us that the slave recognised herself as an individual with agency, if not necessarily real choice. But if in early-medieval Afro-Eurasia, the essential humanity of slaves was acknowledged, at least in law, this would change in the thirteenth century.

The Mongols, c.1200–1350

The Mongols would dominate two-thirds of the Eurasian landmass. Paradoxically, their destructive expansion brought new trading opportunities. Resources and luxury goods flowed into and across Asia as never before as part of trade and tribute systems, protected by the implied threat of violence under the *Pax Mongolia* ("Mongol Peace"), which revitalised Central Asian traffic and reduced costs. Mongol capitals became nodes for the trade in Chinese, Central and West Asian, and European slaves. The new economic and material infrastructure across Central Asia involved safe routes and caravanserai, paper money which traders throughout the empire were compelled to accept, and passports and protection. This saw the southern West–East–West networks move northwards. Uighurs and Central Asian Muslims made up the majority of the *ortaqs* (traders or trading companies) which acted as partners to the Mongols themselves. Slaves taken from the steppe were now trafficked to India and Indian slaves brought in return to Central Asia, Afghanistan, and Persia.[16]

The origins of Mongol slaves

The Mongol word for slave is *bo'ol*, as opposed to rulers *(khans)* and commoners (*qarachus*). But slaves were relatively few in traditional nomadic societies. The pastoral economy of the warriors of Central Asia was based on the family unit, with limited human power needed to herd even large numbers of animals. The few slaves were often taken as trophies to humiliate other families or clans. Chinggis Khan's own wife, Börte, was once abducted as a concubine by another clan. Early in life, he had himself been rotated between households, wearing a cangue. He was once saved by his own personal slave, Jelme, who later also saved his son Toloui from being kidnapped. In 1206, Jelme himself was promoted to a high military rank. Another of his personal slaves, Muqali, became regent in northern China. Child slaves formed an important political glue between the khans and branches of the wider *ulus*, to the extent that *bo'ol* might be used in a positive sense, as in *otegu bo'ol*, "senior slave", used with pride.[17]

None of this inclined the Mongol khans towards compassion for non-Mongol slaves. The expanding *uluses* of the thirteenth century needed soldiers and labour to support the conquerors' elaborate households. In the mid-1240s, the Papal envoy John of Carpini reported that after a city fell, those not massacred with axes were enslaved, information he had gleaned from Christian captives. The Franciscan envoy William of Rubruck had hoped to minister to some German slaves in the 1250s, but they had been deployed elsewhere as gold miners, and others were perhaps used as agricultural slaves. Some he did meet feared for their souls, having not received communion since their captivity, and having had to steal from their Mongol masters for food (for which he forgave them). Slaves were also acquired as tribute. Chinggis Khan demanded, for example, one out of every 10 Tangut boys and girls in 1211, 500 from the Jin in 1213 (one leader gave up three sons as "slaves of the threshold"). "Little slave" (*seüse*) was a derisive nickname given by Chinggis and his successor Ögödai to defeated enemies, who were in turn despoiled of their own slaves. Korean women made up most of the country's slave tribute rendered to Qubilai Khan. In 1262, Hülegü Khan freed enslaved Christians held by the Sultan of Aleppo and Damascus as a diplomatic gesture to King Louis of France.[18]

What of the resistance? Rubruck tells us that some Ruthenian, Hungarian, and Alan slaves, "band themselves together in groups of twenty and thirty and run away by night and they have bows and arrows, and whomsoever they come across by night they kill. By day they stay in hiding". They cannot have been rare, for he adds, "our guide was very much afraid of meeting such men".[19] But we have few such examples. Instead, we turn to the more typical experience of Mongol slaves.

Categories for Mongol "slaves"

Michal Biran identifies three main categories of captured and forced labour. Firstly, the Mongols themselves were relatively few and their military machine depended on arming slaves. In 1237, the Hungarian friar Julian observed that soldiers defeated in battles were typically absorbed into Mongol armies and forced to fight even against their co-religionists (unrealistically, William of Rubruck would urge

Christian captives to refuse). The empire also trafficked cultural expertise. We learn of Armenian wrestlers, and of "Muslim" lion tamers and singers at the itinerant Mongol courts. Those producing luxury foodstuffs such as sugar and sherbet were "Muslim" and "Nestorian", and there were "Muslim" vintners. Notable were people who could work metal. One silversmith, Cosmas, met by Carpini, had made Güyük Khan's throne and seal for the coronation of 1238. Another, William Buchier of Paris was making an alcohol-dispensing fountain for Mönke Khan when encountered by Rubruck. The Yuan dynasty had access also to the astonishing legacy of Chinese artistic talent.[20]

But were this latter group "slaves" in the sense of fully owned "chattel", or "saleable" slaves, which is Biran's third category? This would include most of the women routinely taken and degraded as sexual and domestic slaves in the *Secret History*. It would also describe the French, Flemmings, and Hungarian domestics and the "young single and married women" whom Simon of Saint-Quentin notes were forced to work as "kitchen maids…naked and hungry". We cannot always distinguish the more obviously "servile" domestics from "artisan"-level slaves. For example, at the court of Mönke Khan, William of Rubruck encountered a woman, Paquette of Metz, abducted from Hungary.

> [She] made us big a feast for us as she could [and] told us of the unheard of privations she had endured before she came to court. But now things were going fairly well for her, for she had a young Russian husband by whom she had three little boys, and he was skilled in making houses which is a profitable craft among them.[21]

Was Paquette, seized in the early incursions into Europe, still a "slave", or is she now freer in her life at the capital with her new family? If so, were they free to return westward, perhaps with the merchants transporting goods and people back across the empire? Rubruck notes that even someone of William Buchier's high status was classified as a "slave", but Carpini paints a more complex picture. The Mongols, he says, directly supported the very best artisans whilst less skilled ones sold their work and paid taxes but were, nonetheless, still regarded as slaves. So, it seems that "slaves" could be variously employed (Buchier), self-employed (Paquette's husband), or more traditionally (and anonymously) servile.

Biran helps us here. She notes that not everyone captured by Mongols became "slaves" in the traditional sense, but those like the artisans, builders, and weapon makers were known as "sons of the *ger*" (the Mongol pavilion), "of servile status, somewhere between free men and slaves". Whilst highly esteemed and paid, they "were nevertheless frequently transferred like goods between various locations and owners". She makes a further distinction between these and an implicitly higher rank of natural philosophers, entertainers, linguists and administrators, religious practitioners, and merchants, who were both "among their captives" but "not enslaved", and that many would have voluntarily submitted in order to save themselves. She even suggests that pressed soldiers should not be considered "slaves": the *Secret History* implies that Chinggis Khan incentivised warriors with plunder, not servility. Perhaps, as Peng Daya and Xu Ting observe, this is why in battle,

"Military chiefs and able-bodied slaves voluntarily gather into five-man units, which specially guard the commanding generals on left and right".[22]

What Biran shows us is that the Mongol Empire had a sliding scale of freedom-to-slavery among trafficked people different to what we encountered in the first part of the chapter: *everyone* under them was unfree and subject to their desires to some degree. They were formally and informally categorised in terms of usefulness to the state and household. Even female domestics like Paquette could see improvements in their situation, but the need for manual and military work within the rapidly expanding empire saw many wretched male slaves. As Carpini wrote, "it is their object to overthrow the whole world and reduce it to slavery", a slavery, tellingly, "unbearable for men of our race".[23]

Concluding remarks on a western slave master

To round off this brief survey of slavery in Afro-Eurasia, let us view it from the perspective of the religious adventurer Ibn Battuta (1304–69). Between 1325 and 1354, he travelled in search of intellectual fame and fortune, with a side interest in the slave trade. He is a crucial source of casually misogynistic information about the traffic in young women. His idyllic description of 50-odd slave girls accompanying a Mongol *khatun* (queen) cleaning cherries in gold and silver bowls, follows a lurid anecdote about her vagina. Close to Tripoli, he joined a caravan with 600 slaves and notes the high value to Berbers of educated women among them. As we saw for Malaga, Islamic law permitted him to possess them for three days before deciding whether to buy. He exercises this right himself, testing and choosing between them. From his response to the nudity of female slaves at the court of Mali, we can infer that his own concubines adhered correctly to Islamic dress codes.[24]

Ibn Battuta took many wives and routinely abandoned them in favour of slave girls, who were expected to make the more arduous journeys. He "collected" slaves, and they are studied as a group by Marina Tolmacheva. One of the few (perhaps the only one) whom he names, is a Greek called "Margalita". She is taken to Constantinople, then to Sarai, and onto the *steppe* in winter. She was probably the "favourite", who rode with him in a covered wagon whilst pregnant. Attended by other slaves, she bore him a girl at Bukhara. He procured more concubines at Delhi, taking two with him to China. When travelling by sea, he arranged private cabins for himself and his girls. A dramatic accident sees him assist in the rescue of two of them by a tiny raft. One of them he describes as "the girl I love" and he prioritises her safety (the other, fortunately, can swim). Later, in the Maldives, he is offered a choice between girls of different ethnicities as presents, expressing a preference for Marathis. As well as other concubines, he takes on four wives there. Using aphrodisiacs, he has sex with each of the slaves during the days and spends the nights with the wives in turn, implicitly placing lesser demands upon them.[25]

We do not find Ibn Battuta freeing his slaves very often. They were property that he bought, sold, and cast aside routinely as gifts to other people. Tolmacheva notes that the bond formed by the exchange is between the giver and receiver, not the slave and her owner. The everyday casualness in the treatment of his slaves shocks the modern reader. It can be difficult for the historian to be grateful for the details

gleaned from accounts such as his. Nonetheless, we need every scrap of evidence we can find about these otherwise 'lost' people, traded, and exchanged as human cattle along the medieval Silk Roads.

Notes

1 On World Systems, Abu-Lughod, *Before European Hegemony,* and Frankopan, *The Silk Roads.*
2 Finley, *Ancient Slavery*; Lambourne, "Slavery"; Lenski, "Framing"; Orr, 'Slavery and dependency; Patterson, *Slavery*.
3 *TMS* "the-stories-of-shariya-in-the-book-of-songs-kitab-al-aghani"and "the-capture-of-vardapet-vanakan-by-the-mongols"; Whitfield, *Silks*, 250-71. See also Kye, Seung B., 'Slavery'.
4 *Lekhapaddhati*; Fancy, "Captivity", 723, 727; Frenkel, Miriam, 'The Slave trade'; Hansen, *Negotiating;* Watson, "Chinese market", 240–1.
5 Ibn Fadlan, 46-7; Ibn Rustah, 126; *The Wonders,* 47; Taylor, "Production".
6 *TMS*, "foreign-slaves-of-guangzhou"; Epstein, "Attitudes"; Kaplan, *Figuring Racism*; Heng, *The Invention of Race*; Lewis, *Race*; Patton, "What did medieval slavery look like?"; Ramey, *Black Legacies*; Segal, *Islam's Black Slaves*; Whitaker, *Black Metaphors*.
7 Fynn-Paul, *Empire* and "Greater Mediterranean".
8 *TMS* "al-Fumari-on-enslavement-in-the-golden-horde"; *Lekhapaddhadti*, 158-9. O
9 Pahlitzsch, Johannes, 'Slavery and the slave trade'; Schottenhammer, "Pirates".
10 *Letters*, 117–23, 123–5.
11 Gordon and Hain, *Concubines*; Li Guo, "Tales"; Marmon, "Intersections"; Mosher Stuard, "Women" 80–4; Stanfield-Johnson, "From One Thousand".
12 *TMS* "slavery-and-masculinity-in-the-jewish-community-of-medieval-egypt".
13 *TMS* "the-jingkang-incident" and "execution-of-a-slave-woman"; *Ibn Fadlān*, 50–3.
14 *ASR*, 102–19; Amitai, *Mamluk Sultanate;* Anooshahr, "Military", 363–7; Barker, Hannah, 'The trade in slaves'; Conerman, "Slavery; Frenkel, "Some notes"; Mazor, "Early experience"; Petry, *Mamluk Sultanate.*
15 Hansen, *Year 1000*, 118–9; Lewis, *Race and Slavery*, 14, 31–2, 56–7; Perry, "Slavery", 15, 35; Rotman, *Byzantine Slavery*, 55; Segal, *Islam's Black Slaves*, 35, 42–5.
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19 *The Mission*, 127–8.
20 John of Plano Carpini, 66, 208-12, 215–6; *The Mission*, 183.
21 *The Mission*, 182–3, 223.
22 Biran, "Forced migrations", 81–2, 91; Peng Daya and Xu Ting, 117.
23 John of Plano Carpini, 45.
24 *The Travels of Ibn Battuta*, 125–6, 290, 293–4.
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Part 4

Patterns of Eurasian trade

16 Mapping European knowledge about the Silk Roads in the fifteenth century

Georg Schindler

Mapmaking in the fifteenth century

During the late fourteenth and the entirety of the fifteenth century, the travel from Europe to East Asia seems to have slowed down. Very few accounts were written. And often, we are unsure that the author made it as far east as the reports would have the reader believe. Niccolo dei Conti and Johannes Schiltberger are among the few travellers who wrote accounts about eastern Asia in the fifteenth century. While both do mention China or the Chinese, neither of them ever reached its borders. It seems more likely that dei Conti's information of all lands beyond Java is derived from other sailors or earlier sources.[1] Schildtberger mentions encountering Chinese envoys while in the employ of Tamerlane, but never travelled to China himself. There were many reasons for this decline in travel: the Black Death in the second-half of the fourteenth century, the fall of the Chinese Yuan dynasty which was succeeded by the mostly inwards-focused Ming dynasty, Mongolian infighting in Central Asia, Tamerlane's conquests, the expansion of the Ottomans in Asia Minor, and their eventual capture of Constantinople in 1453.[2]

Nearly everything the Europeans knew about Central and East Asia in the fifteenth century had come from an earlier time when the Mongols controlled the region. Mapmakers both in Italy and in the German-speaking countries relied heavily on them for the creation of their world maps. This chapter will explore how the German world maps created in the fifteenth century were shaped by the limited availability of information. Local traditions and approaches to mapmaking also played an important role. A comparison between world maps made in the Mediterranean region and two surviving German world maps from the fifteenth century shows that distance from the Mediterranean trade ports played a large role in which sources were used in the depiction of China in these maps. The two maps, the Walsperger map and the Zeitz map are unique. They represent the only surviving examples of world maps from a network of cartographers based in modern-day Austria and Germany.

Despite the decline of contacts, the European interest in trade remained, and efforts to secure new trade routes were spearheaded by the Portuguese. These efforts led to them sailing around Africa,[3] and to the 'discovery' of the Americas by Christopher Columbus in 1492. At this time, many maps in a variety of styles were

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produced in Europe. New mapping techniques gradually replaced those of medieval maps. Many of the earlier medieval world maps were not primarily made to communicate distances between locations. Instead, the maps were meant to communicate a Christian image of the world and its parts. Woodward classified these types of maps as tripartite maps. They are also commonly referred to as T-O style maps.[4] The name is derived from the encircling of land by the ocean and divided into its three main parts, Europe, Africa, and Asia by a T-shaped assembly of bodies of water. Asia is located at the top, occupying half of the map, and separated from Europe by the river Don and from Africa by either the river Nile or the red sea. Africa and Europe are divided by the Mediterranean. The centre of the map was the city of Jerusalem, which reflects the Christian worldview of its makers.

The new style of world maps which emerged in the fourteenth and fifteenth centuries was heavily influenced by portolans. These sea charts had been produced in Europe since the end of the thirteenth century and are remarkable for their accuracy in depicting distances and shorelines.[5] World maps of the later fourteenth and the fifteenth centuries began to incorporate knowledge and techniques of portolan making into world maps.[6] Shorelines became markedly more accurate, leading to better depictions of the overall shape of continents. Despite the new world maps being more accurate in their depiction of the known world, they did not entirely replace older techniques. Medieval style maps continued to be made throughout the fifteenth century and into the Renaissance.[7] And the new maps were not perfect. They often lacked knowledge about the relative sizes of continents as well as information about shorelines other than the European Atlantic coast and the Mediterranean.

The heavy reliance on older knowledge in the depiction of Central and East Asia in the world maps created during this period exemplifies the scarcity of new information. Most, if not all rely on earlier accounts of the East, such as those of Marco Polo, the Alexander Romance, and biblical stories and the writers of antiquity like Herodotus.[8] In 1295, the rediscovery of the *Geographia* (or Geographike Hyphegesis) from antiquity started a process that would add a new type of map and new information about the East to the repertoire of European mapmaking. The *Geographia*, written by Claudios Ptolemaios in Alexandria in 150 CE, had been forgotten in most parts of Europe in late antiquity and the Middle Ages. A manuscript of the *Geographia* was discovered in Constantinople, and numerous Greek copies were made, some of them including maps.[9] One of those copies was brought to Western Europe in 1400 by Manuel Chrysoloras, which was translated into Latin by 1406 and titled *Cosmographia*. The text became widely popular, with more than 80 manuscripts surviving, half of them including maps. What made Ptolemy so popular was that the *Geographia* not only covered theoretical aspects of mapmaking, but also contained an extensive list of toponyms for rivers, cities, and mountains as well as their relative distances to one another.[10] Older scholarship often describes the *Geographia* as the origin of grid-based mapmaking in fifteenth-century Europe. This interpretation is questionable, since there are surviving examples of grid-based medieval European maps. However, their grid was not based on latitude and longitude like the one proposed by Ptolemy. [11] The toponyms

of the *Geographia* became an important source of information for the depiction of East Asia for the German mapmakers since other information about this area of the world was not easily obtainable.

Central and East Asia in the Mappae Mundi of the Vienna-Klosterneuburg "school"[12]

The Vienna-Klosterneuburg "school" was a network of scientists and cartographers centred around the figures of Johannes von Gmunden, a teacher at the University of Vienna, and Georg Müstinger, prior at the Augustinian monastery of Klosterneuburg. The exact nature of this network, as it was proposed by Durand, has been questioned because of lack of evidence.[13] The three sources discussed here, two world maps and one set of geographical coordinates, which were attributed to this supposed "school" by Durand, share some fundamental characteristics and distinct differences from the Mediterranean cartographic tradition. It is therefore safe to assume that they belonged to the same network of knowledge. The set of coordinates, originally discovered by Durand, can be found in the Bavarian National Library in the Codex Clm 14583. It contains a list of legends, including names of cities, kingdoms, mountains, rivers, and short descriptive sentences combined with a set of radial coordinates which allows for precise placement on a map. The two maps are the world map of the Salzburgian Benedict friar Andreas Walsperger, made in Constanz in 1448, and the *Mappae Mundi Cicensis*, a world map by an unknown author directly attached to a manuscript of Ptolemy from 1470 located at the Abbey of Zeitz near Leipzig.[14] What makes these two maps unique is that they are the only surviving examples of Mappae Mundi from Germany in the fifteenth century. Furthermore, both maps are so similar to each other that either the author of the map of Zeitz must have seen the Walsperger map or both maps relied on a third, now lost, map as a primary source.[15] Both maps share some general characteristics with other European maps of their time. Like some maps produced in southern Europe in the fourteenth century, the German maps are facing south.[16] And the European tradition of inhabiting the remote regions of the world with mythical creatures and peoples was still prevalent and depictions or descriptions of them can be found on most maps produced in the fifteenth century.

However, the amount of detail and information on Central and East Asia differs widely between southern European and the two German maps. In the German maps, the areas east of the Black Sea and Asia Minor are almost exclusively inhabited by mythical peoples or misplaced Ethiopians.[17] This stands in stark contrast to Italian maps of the fifteenth century, which could draw on a much larger corpus of knowledge on these regions. While not all of them were as detailed as the map of Fra Mauro, they still contained far more information about the East. Southern Europe, particularly the Italian cities of Genoa and Venice, played an important role in the medieval silk roads trade network. Goods from the maritime silk roads were brought into Europe via the Mediterranean and inevitably ended up in southern Europe before being traded northwards. Southern European control over trade into Europe was not limited to the maritime silk roads. The City of Caffa

on the Crimean Peninsula, which served as a European terminus of the overland silk roads, was a Genoese colony. Tana, another, originally Venetian, merchant settlement on the coast of the Sea of Azov, had been restored to the Genoese in 1313 and, like Caffa, benefitted from trade privileges given to the Italians by the Jorchid rulers of the Golden Horde.[18]

Their participation in Eurasian trade is reflected in the amount of information and written testimonies of travel along the silk roads available in Italy. Information from Marco Polo, Odorico de Pordenone, Nicolo dei Conti, and other merchants and travellers allowed Mediterranean mapmakers to depict the East that could be filled with historical, rather than mythological peoples. Mythical beings are mostly found in Northeastern Asia and the islands of Southeast Asia, remote regions even for those engaged in the silk roads trade. The influence of trade on the availability of information is explicit in Fra Mauro's world map. He included multiple mentions of where to obtain specific trade goods into his depiction of Asia, something missing from the German maps. The discrepancy in information between Mediterranean and German mapmakers was worsened by censorship. Knowledge about the silk roads was valuable and guarded to protect the trading routes.[19] Mapmakers in southern Europe worked for families or kings who had access to specialised knowledge. The German mapmakers most likely did not. Those working for the Portuguese, like Fra Mauro in 1459 and Henricus Martellus in 1489, even had access to recent portolans of the African coast.[20]

The maps not only differed in the amount of information available, but also in their purpose. Italian mapmakers had a different connection to geographical Asia compared with the scholars of the Vienna-Klosterneuburg "school". Their cities had engaged in trade along the silk roads for centuries and Eastern wares came into Europe via their ports and travellers to the East embarked and returned there. Travel to the East was not limited to merchants. Pilgrims and missionaries played an important role in collecting and relaying information about Asia. Compared with the connections formed over centuries of trade and travel via the Mediterranean, the German mapmakers were more removed from Asia. They engaged with these areas through study of texts ranging from antiquity to the more recent accounts of the late-medieval travellers rather than through commercial contacts or firsthand accounts. They were more likely to include names and peoples from older traditions such as the Bible or classical antiquity. The names of cities on the maps as well as in the surviving table of locations in Clm 14583 provide insight into the sources that the German mapmakers had access to. While they had copies of some of the accounts that were available to Fra Mauro or Henricus Martellus such as Odoric of Pordenone and Haython, their overall corpus of available sources from the medieval period was considerably more limited.

Local concerns and intellectual traditions played a role in how the available sources on the political geography surrounding the silk roads were used. Neither the Walsperger nor the Zeitz map contains all the information that could have been gained from a detailed study of those accounts. They were only consulted in passing, which shows that the depiction of Asia was an afterthought rather than the focus of their endeavours to create an image of the known world. This resulted in the

former Mongol khanates east of the Levant becoming geographically displaced and condensed into one political entity: the kingdom of Cathay. In maps from southern Europe, China, or Cathay, as it was referred to in the Middle Ages and the early modern period, is generally located on the eastern coast of Asia and the names of the cities and locations within, if there are any, are taken from Marco Polo.[21] The two German maps are different. Here, China or the "kataya magnum imperium",[22] is located in Central Asia, just north of the Caspian Sea and surrounded by a ring of mountains as can be seen in Figure 16.1.

This placement might seem arbitrary to the modern reader. Yet, it is understandable when the availability of sources is taken into consideration. Most of the medieval travel accounts, except Marco Polo, were vague on the geographical location of China, just that it was somewhere in Asia. A passage from the Latin version of Hayton suggests that China is bordered by the sea in the South rather than the East.[23] This was a common description for the location of China. William of Rubruck, who travelled to Karakorum (the Mongol capital, 1235–60) in the mid-thirteenth century, contains a similarly vague description.[24] Mandeville describes several places, including the land of Prester John, as located east of China, suggesting that it is not on the eastern coast of Asia.[25] Mandeville's description is further substantiated by the then recently rediscovered *Geographia*, which describes other countries in East Asia. Ptolemy was not entirely ignorant of China, since the *Geographia* describes the city of Seres in the East as being the origin of silk. However, the cartographers of both German maps were unable to identify the "Seres" of antiquity with the Cathay of the medieval travel accounts. The Walsperger map even shows the Ptolemian city of "Seres" in the Far East, outside of the borders of the Central Asian kingdom of Cathay and beyond the stone tower.

Even in other areas of Asia, the Zeitz and Walsperger maps show a far greater reliance on the *Geographia* compared with maps made in the Mediterranean. The overall shape of the eastern coast of Asia is similar in both maps, and both prominently feature a large stone tower, which is located at an isthmus in Central Asia. This tower, which also originated in the *Geographia*, splits Asia into two parts, with the far east of Asia consisting of India, the Christian Paradise, the land of Prester John, and other places taken from Ptolemy.[26] The overall construction of East Asia provides insight into the available sources for the mapmakers and exemplifies the lack of interaction between their makers and contemporary Mediterranean cartographers. General trends, such as the southern orientation of the map, are shared, despite the large disparities in the overall structure. Naming conventions point to the German maps as being independent from other European mapmaking conventions.

The German maps were created in a region of Europe that was not directly tied into the silk road trade network. This is reflected in the maps. Trade along the silk roads played only a small role in their creation, except for the general statement that China was a rich or powerful country. In the table of places in Clm 14583 it is described as rich.[27] In the Zeitz world map, the whole realm it titled "kathaya magnum imperium" alluding to medieval descriptions of the grandeur of the Mongol court in China. On the Walsperger map, the kingdom is called "kataya imperium"

Figure 16.1 The Zeitz world map.

Source: Zeitzer Weltkarte, Hist. Fol. 497, fol. 48 r, Stiftsbibliothek Zeitz, Zeitz. South at the top. ©Vereinigte Domstifter zu Merseburg und Naumburg und des Kollegiatsstifts Zeitz, Foto: Stiftsbibliothek Zeitz. Used with the copyright holder's permission.

without the use of "magnus". However, a short description next to the capital mentions it as being the location, "where the great Khan lives".[28] Instead, the German maps rely heavily on older conceptions of East Asia. The use of the term "khan" for the emperor of "karaya" shows that the mapmakers had some information about

the Mongols. However, despite them having access to recent sources, the knowledge contained in them does not supersede older conceptions of Asia as a continent. Instead, the entirety of the Mongol empire is condensed into the empire of Cathay, which is relocated to Central Asia to avoid a restructuring of East Asia.

Places within "Katay"

The only similarity between the German and Mediterranean maps can be found in the assertion that it is ruled by a khan and possibly the name of one city. Within the encircling mountains, several cities and rivers are marked on the maps, but only the city of "Quincai" in the Walsperger map and one called "Kaiton" in Clm 14583[29] bear a name that can be traced back to Marco Polo. The Zeitz map has a city marked at the same location on the coast of the Caspian Sea, but it is called "Sachiv" instead, indicating that the maker had no knowledge of Marco Polo since no other locations from the *Travels* appear on the map.[30] The capital of the kingdom of Katay on both maps is either "Valdaco"[31] or "Waldach".[32] This naming convention does not match with any other naming convention for the capital of the Yuan, which was usually referred to as some variation of "Khanbaliq".[33] The name "Waldach" seems to be a new creation. It is likely that this was due to an error in transcription of "Baldach". "Baldach" was an alternative name for Bagdad that had been in use in Europe for a long time.[34] How does Bagdad end up in China? Two German travel accounts to the Holy Land from the 1330s, written by William of Boldensele and Ludolph von Suchem, provide a possible explanation. We cannot say with certainty if the mapmakers had access to both accounts, but we can safely assume that they were at least familiar with William of Boldensele since manuscripts of his account dating to the fourteenth and fifteenth century are in the Austrian National Library.[35] Boldensele briefly mentions "Baldacum" as a city which some believe to be the Babylon of antiquity that lies in "the lands now ruled by the khan".[36] Ludolph von Suchem expands on this short mention. He dedicates an entire chapter of his *Itinerarium* to the City. In the chapter, he recounts the siege and conquest of Bagdad by the Mongols in 1258 as it is described in Haython's *Flos Historiarum*. Ludolph states that the Emperor of the Tartars rules in "Baldach", and that it is close to the cities of "Susa" and "Cambeleth", which would explain how it became the capital of "kataya". "Cambeleth" could possibly be a variation of Khanbaliq, the capital of Yuan China and is described as "richer and better than all the realm of the soldan[Sultan]".[37]

While neither the Zeitz nor the Walsperger map features the names "Susa" or "Cambeleth", the Zeitz map shows a city called "Sula" to the West of "Waldach" and the Walsperger map, the city "Samborteg", which could conceivably be a variation of "Cambeleth" in a similar location. Further research into the possible origin of these names is necessary in order to definitively identify them and establish a direct link between the report of Ludolph of Suchem and the maps. Another city that should not be located in China can clearly be identified in the Walsperger map: "Samarchat" or Samarkand. It can also be found in Clm 14583[38] and on the Zeitz map, the city "Sichamara" is marked on the same spot. The reason for the

relocation of Samarkand into Cathay is the same as it had been for "Waldach": it had been the seat of a Mongol ruler.

The placement of Bagdad and Samarkand shows that for the German mapmakers, the kingdom of "kataya" encompassed not only Yuan China, but also the other great Mongol Khanates of Central Asia of the medieval period. The capitals of both the Ilkhanate and the Chagatai khanate are placed within the borders of "Kataya" instead of being cities in their own kingdoms. The regions of Asia that were controlled by these khanates are either kept empty or filled with places and peoples from other, often older, sources which predate the existence of the khanates. For the cartographers, the concept of "khan" and the association with the Mongols seems to have been intimately linked to the kingdom of "kataya". This leads to a distorted image of the Mongols in which they are solely present within the borders of "kataya" instead of being depicted as a wider phenomenon that encompassed large areas of Asia. This condensation of the Mongol world into one single entity was possible because German knowledge about "kataya" was limited. And even where information was available, it was not necessarily included in the mapmaking process.

The notable omission of the Golden Horde in this condensed depiction of the Mongols can be explained by their proximity to Central Europe which led to more and better information. The lands of the Golden Horde are referred to as "Tartaria imperium" in the Walsperger map. The Zeitz map does not show a designated kingdom, but it features "Sama" the "capital of the Tartars" outside the border of the kingdom of "kataya".[39] This indicates that the Golden Horde was seen as a separate entity which was not directly linked to China as were the other Mongol khanates. The impact of the Mongols was significant enough to warrant their inclusion on world maps of the fifteenth century. However, the distance from the Mediterranean ports and the associated travel and exchange system of the medieval silk roads shaped how they were depicted on the German maps. This shows in the lack of detail and the inaccuracies made. The mapmakers based their maps on older texts and conceptions and local pilgrim accounts. More recent travel accounts, like those of Marco Polo or Odorico de Pordenone were consulted only in passing to fill gaps and provide the barest minimum of information.

Conclusion

Overall, the Walsperger and Zeitz world maps show a highly distorted, but informative depiction of the far east of Eurasia. The capitals of three of the four Mongol khanates were placed into the kingdom of Katay, which was moved closer to Europe, being located north of the Caspian Sea. Outside of "Cathay", the depiction of East Asia in both German maps remained almost untouched by accounts of travellers of the medieval silk roads. It remained inhabited primarily by biblical and mythical peoples just as it had been in the European imagination since antiquity. In contrast, the Mediterranean mapmakers knew more about Central Asia than their German counterparts and were able to fill existing empty spaces with real locations and peoples.[40] This disparity of information and detail in depiction

can be explained through the silk road exchange, which reached Europe mostly via Italian ports.

The "kingdom of kataya" of the Zeitz and Walsperger world maps is placed in an Asia that is predominantly shaped by older knowledge derived from a partially different set of sources compared with Mediterranean maps of the same period. Even though some recent travel accounts were available to them, the German mapmakers chose to prioritise the *Geographia* over them. The past century of contact with the Mongol world led to its inclusion into the otherwise very traditional image. It is described as a rich and powerful kingdom ruled by the great khan, encircled by mountains and home to cities that had become familiar to Europeans as seats of a rich and powerful, potentially Christian, ruler. In this aspect, at least, the German world maps are very similar to Mediterranean writings, since it was precisely this kingdom, an amalgamation of the positive aspects of the Mongol world, that Christopher Columbus set out to find.[41] Both depictions of Asia, the very traditional-mythical image of the German maps and the far more detailed Mediterranean maps were only made possible by the silk roads. The main difference lies in the degree to which the more recent medieval period of contact had altered older perceptions of Asia.

Notes

1 The notion that Conti did reach Asia can mainly be found in older publications, such as: Bagrow, *The History*, 72. Recent scholarship tends to see Java as his furthest eastern point: cf. Britannica, T. Editors of Encyclopaedia. "Niccolò dei Conti." *Encyclopedia Britannica*, January 1, 2023. https://www.britannica.com/biography/Niccolo-dei-Conti.
2 The political unrest between the Golden Horde and the Ilkhanate began in the late thirteenth century, John of Monte Corvino warns against taking the overland route in a letter sent back to Europe in 1305. Leca, "Cartography," 135; Golden, *Central Asia*, 89.
3 See Matteo Salonia's chapter in this volume.
4 Woodward, "Medieval Mappaemundi," 296; Brincken, "Mappamundi," 363–367.
5 Akerman, "Finding our Way," 52. For a more detailed history of portolans and portolan charts and their integration into mapmaking see Unger, *Ships on Maps*, 37–49.
6 Unger, *Ships on Maps*, 48; Dalché, "Les cartes," 166.
7 Woodward, "Cartography", 10.
8 Baumgärtner et al.,"Maps and Travel," 8.
9 Dalché, "The Reception," 285–364.
10 Vereinigten Domstiftern (eds.), *Handschriften*, 22. The table of relative distances required a more geometrical approach to mapmaking, where the overall map was drawn out in a grid of latitude and longitude. Brotton, *Trading Territories*, 32.
11 Hoogvliet, "The medieval texts," 8. For a more detailed history of the Geographia's reintroduction to Europe and the addition of maps, see Larner, "The Church," 26–39, or more recently Roberts, Printing a Mediterranean World, 22–6.
12 Dana Bennett Durand first coined this usage in his *The Vienna-Klosterneuburg map corpus of the fifteenth century* (Leiden: E.J. Brill, 1952). I distance myself from Durand's characterisation of a distinct "school". See Bernleithner, "Austria's Share," 66; Dalché, "The Reception," 309 n161, 312 n178, 313.
13 Dalché, "Reception", 307.
14 Walsperger Map, Biblioteca Apostolica Vaticana Pal. lat. 1362 B, Rome; Zeitzer Weltkarte, Hist. Fol. 497, fol. 48 r, Stiftsbibliothek Zeitz, Zeitz. Durand, *The Vienna-Klosterneuburg Map Corpus*, 209–15.

15 The idea of a primary source was postulated by Durand in his book *The Vienna-Klosterneuburg Map Corpus*. Cf. Edson, *The world map*, 180–81.
16 Other examples would be the map of Fra Mauro and the so-called Borgia map.
17 As is the case on the Walsperger map.
18 Ho "Overland trade," 490–495.
19 Kimble, "Portuguese Policy," 653–9.
20 Vogel, "Fra Mauro," 81–92; Alegria et al., "Portuguese Cartography," 1006; for Martellus see: Van Duzer, *Henricus Martellus's World map*, 125.
21 E.g. the Fra Mauro map, or Henricus Martellus world map of 1491.
22 "kataya imperium" on the Walsperg map.
23 Hayton, *Haithoni Armeni Historia Orientalis*, book 1, Chapter I, 2. The Austrian National Library in Vienna contains a codex with a Latin version of Haython bound together with William of Boldensele from the fifteenth century, and the abbey in Klosterneuburg houses an early German translation by Michael Velser. This means the first generation of the Vienna-Klosterneuburg "school" had access to this text. Codex 1083, Chorherrenstift Klosterneuburg, Klosterneuburg, Austria; Codex 3529, Österreichische Nationalbibliothek (ÖNB), Vienna, Austria.
24 "Cataia est super oceanum. Et narravit mihi magister Willelmus […]" Rubruck, "Itinerarium," Chapter XXIX, 270.
25 John Mandeville, *John Mandeville*, 161.
26 Folker Reichert, *Asien und Europa im Mittelalter. Studien zur Geschichte des Reisens* (Göttingen: Vandenbroek & Ruprecht Gmbh & Co, 2014), 224; Edson, The world map, 186.
27 Clm 14583 276v. Describes Cathay as a "wealthy empire" ("Kathaia ayn reich kaisertum").
28 "ubi magnus chan morat"
29 Kaiton is missing on Durand's reproduction.
30 See Figure 16.1.
31 Clm 14583, 259v.
32 On the Walsperg and Zeitz maps.
33 Also found as Cambaluc or Cambalech.
34 van den Wyngaert (ed.), *Sinica Franciscana*, Vol. 1, 282 n1.
35 Cod. 3529 is dated to the fiftheenth century and contains not only Boldensele, but also excerpts from Mandeville and a Latin version of Hayton. A second, older copy of Boldensele dated to the fourteenth century can be found in Cod. 523.
36 "illius patriae dominus nunc est chan" Boldensele, "Itinerarius Guilielmi," 247.
37 von Suchem, *Ludolph von Suchem's*, 73–76.
38 "Samarkat," Clm 14583, 233r.
39 cf. Figure 1.1: "Sama caput Tartaros".
40 Fra Mauro even has to omit "many kingdoms and many provinces" in Asia Maior. Winter, "Fra Mauro", 24–5.
41 The idea that Columbus was influenced by Toscanelli and the recruiting of a presumably Christian ruler of China to liberate Jerusalem is discussed at length in Carol Lowery Delaney, *Columbus*.

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17 The Silk Road in Northeast Asia

Courtly gift-giving, 668–1449

James Fujitani

Introduction

This chapter discusses the eastern end of the Silk Road—China, Korea, Ryukyu, and Japan—from the seventh to the fifteenth centuries. It focuses specifically on courtly gift-giving. Bulk trade only appears peripherally in these pages, for it involved very different types of merchants and goods. Gift-giving between the countries of Northeast Asia was part of the political rituals of diplomatic exchanges. Over time, we see shifts in the types of gifts, their origin, and the role these played. And some exchanges had a commercial market orientation.

Research on the Silk Road in Northeast Asia is rich, but it tends to be fragmented both regionally and chronologically. The regional fragmentation often reflects the national traditions of each respective country. For example, Chinese historians have produced wonderful research on the history of ports such as Guangzhou and Ningbo (Huang, 2003; Li, 2006). Japanese historians have studied the port of Hakata (Oba, Saeki, & Suganami, 2008), and the Koreans, the Goryeo period international port of Byeongnando (Lee, 2012). In the last 30 years, several Japanese historians have been developing a more robustly transnational approach, as exemplified in the work of Murai Shosuke (1997), and more recently Haneda and Oka (2019). But this movement is still in the minority. As it is now, there is much research on national trade traditions, but less on their interaction with each other.

From a chronological perspective, a similar fragmentation occurs in regard to periodisation. For example, in China, there are excellent books on Song maritime trade and on Ming maritime trade, but fewer studies that join them together (Huang J., 2003; Zheng, 2004). Similarly, Japanese historians tend to divide history along the traditional lines of "Classical," "Medieval," and "Modern (Edo)." Even Western historians have used these periodisations. Janet Abu-Lughod (1989), for example, famously focused on the Yuan dynasty for her history of world trade. The result of such periodisations is that the chronological ruptures and the successive booms and busts are well known, but the continuities between periods are much less studied.

This chapter thus joins in the on-going efforts to overcome this national and period fragmentation to build a transnational history of East Asian trade. It is a small contribution that will give a succinct overview of the period 700–1500 CE focused

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on the ancient polities that now comprise China, Korea, and Japan. In the spirit of the Silk Road, I will particularly focus on the connections. Rather than discussing the numerous wars and disputes between the countries, I will discuss the development of a shared commercial culture. And rather than making strong contrasts between each era and each dynasty, I will trace a steady, consistent development. Over the 800 years of this study, across these countries, the courts were increasingly becoming aware of international trade, and increasingly commercialist in their attitude towards it.

The eighth century: ceremonial gift exchange

During the long eighth century, roughly 668–779, the United Silla Kingdom (Korea), the Tang Empire (China), and Nara Japan had formal diplomatic relations with each other. Ryukyu, the island kingdom that was centred on modern-day Okinawa, was not yet participating in the network. However, at this time, there was not much of a shared commercial culture. Rather, gift-giving was fundamentally ritual and political in nature. The reason was that maritime travel was difficult: Chinese navigators lacked the geographical knowledge to locate Japan, and Japanese navigators lacked the technology to safely sail to China (Mori, 1949). An oceanic voyage was an expensive enterprise which required specialised staff and equipment. Only the royal courts had the resources to take on the challenge.

Accordingly, gift exchanges were linked to diplomatic exchanges. In the case of China, such exchange came through the tribute system: Silla and Japan sent embassies to the Tang capital at Chang'an and presented gifts to the emperor. In return, the emperor showered rewards upon them, recognising them as supplicating vassals: formal titles, clothes, and precious goods (Tōno, 2007; Hamada, 2010). Silla and Japan also exchanged diplomatic gifts with each other. However, these were only polite gestures—not tribute offerings—for the two countries viewed each other as equals, at best (Kang, 2011).

Gifts were formalised and ritualistic during this period. Table 17.1 summarises the types of goods that diplomatic embassies gave in a matrix design, identifier the giving and the receiving parties. It is based upon the official histories of each country, as well as a Japanese rules book *Engishiki* and a register of gifts from Silla to Japan (*Bai Shiragi Butsuge* 買新羅物解):

The table shows the powerful influence of the tribute system, and in particular the tribute protocol surrounding the gifting of silk. The Tang Empire had standardised the use of silk as a gift, granting it to all visiting embassies (Iwami, 2005). This protocol also reflected the domestic importance of silk, since the Chinese empire also used it for purposes such as payment of taxes and military-official salaries (Tōno, 2007). For these reasons, it became the standard gift for all diplomats, even in exchanges between Silla and Japan.

Another aspect of diplomatic protocol that can be seen in the table is the ceremonial role of immaterial gifts, which include titles and offers bestowed. This is clearest in the case of Tang diplomatic envoys. While they sometimes gave material goods, they did not always do so. Sometimes, they simply gave honorary titles

Table 17.1 Diplomatic gifts during the eighth century

	China (Tang) giving	*Korea (Silla) giving*	*Japan (Heian) giving*
China (Tang) receiving		Horses, cattle, ginseng, silk, seal fur, gold, and silver (*Samguk sagi*, 第8)	Silver, course silk, fine silk, embroidery, cotton textiles, crystals, agate, iron, shellfish oil, arrowroot, lacquerware (*Engishiki*, 卷30)
Korea (Silla) receiving	Titles, silk, books (*Samguk sagi*, 卷06, 卷09)		Silk, course silk, embroidery, gold, pearls (*Engishiki*, 卷30; *Samguk sagi*, 第11)
Japan (Heian) receiving	Titles, "local [Chinese] precious goods" (*Shoku Nihon-ki*,卷35)	Silk, silver, copper, medicinals (買新羅物解, as cited in Park, 2009)	

(冊封) or letters from the Tang Emperor (Guan, 2006). Such gifts had enormous political and symbolic significance, but little direct market value. In addition, the Chinese court often granted other immaterial gifts which are not recorded in the table. For example, they invited Japanese and Korean students, as well as Buddhist priests, to come to study in China (Mori, 2010). This nurtured intense cultural exchange. Across the region, there developed a Confucian cultural sphere, as well as an international Buddhist network which would enable cross-cultural exchange for nearly a millennium (Murai, 2013).

An important factor behind the choice of gift items is the idea of "local goods 方物." Korea and Japan each offered unique products from their own home region. For example, Korea gave Jeju ponies, seal fur, and ginseng. Japan gave agate, pearls, and gold. This practice had a definite ritualistic aspect, as can be seen in a letter that the King of Silla sent to the Tang Emperor in 724:

> My hometown is on the ocean coast, on a distant corner of the land. Fundamentally, it has no mermaid's treasures. Intrinsically, it lacks any pirate's hoard. Nonetheless, I dare offer these locally produced goods, although they besmirch your imperial officials.
>
> (*Samguk sagi*, 卷8)

Doubtless, there is much exaggeration here, but the idea is clear: giving local goods is a ceremonial expression of the giver's humility. It is another sign that protocol was predominating over business, for visitors did not necessarily offer the most expensive items, but rather the most socially appropriate ones.

Nonetheless, we can detect that commercial goals sometimes did lurk beneath the surface. For example, in Japan, under the Ritsuryō system, officials could legally make private transactions as part of their public duties (Farris, 1998). Consequently, the Japanese officials may have quietly traded with incoming diplomats (Fuqua, 2004, p. 139). Similarly, Park (2009) noted that a Silla envoy to Japan in 752 carried a small amount of Southeast Asian incense, which hints at luxury trade. But such commerce was small scale compared with later centuries.

The twelfth century: open private trade

By the ninth century, diplomatic gift-giving was fading and private trade was expanding. In 814, the first reported private merchant ship from Silla arrived in Japan. And in 819, a private ship arrived from the Tang Empire (Mori, 1949). The ocean-crossing voyages that had once seemed so daunting were becoming more familiar (see map Figure 1.1). Navigators began to cross the open sea rather than follow the coastline. Accordingly, the Tang Empire in 738 opened a new foreign trade bureau at the port of Mingzhou 明州 (today's Ningbo), directly across the waters from Hakata (Lin, 1981). Around the same time, Silla merchants began settling on the Chinese coast in Shandong, under the leadership of the powerful Jang Bo-go 張保皐 (Kondo, 2011).

These developments paved the wave for increasing maritime commerce over the next few centuries. Accordingly, the twelfth century—the focus of this section—became an age of flourishing private trade between Song China, Goryeo Korea, and Heian Japan. While Ryukyu was now recognised as a legitimate political entity, it will not be considered here because it was little engaged in maritime trade. The *History of Song* has a harsh judgement: "Since it has no precious goods of its own, merchants do not go there" (*Songshi*, 卷250).

During this period, private individuals shuttled back and forth across the sea, not diplomats, because political relations had largely collapsed. After 894, Japan was simply not interested in diplomacy (Kawazoe, 1990,399), and wars with the nomadic Khitan and the Jurchens often cut off communications between China and the Korean peninsula (Bai, 2013). The primary agents of communication were the Chinese merchants, empowered by the Song Empire's pro-trade policies (Schottenhammer, 2015). They spread across the region, forming large "Chinatowns" in Japan's international port, Hakata (Murai, 2006), and in Goryeo's western port, Byeongnando (Lee, 2012). Similarly, the Buddhist temple networks remained active, and Japanese and Korean priests came to study in China, while Chinese priests proselytised in Japan and Korea (Kitagawa, 2002, pp. 319, 351–2). During their voyages, these people would visit their host country's court, not as political representatives, but rather as honoured individuals.

The following table summarises the courtly gifts of this period presented by merchants, Buddhist monks and other honoured supplicants. Sometimes, the official sources give precise information, but sometimes they do not. For Chinese gifts to Japan, I have thus used a list of foreign goods that the powerful samurai Taira Kiyomori 平清盛 was rumoured to have accumulated, and for Chinese gifts to

Table 17.2 Courtly gifts during the twelfth century

	China giving	*Korea giving*	*Japan giving*
China receiving		Embroidered bedding, lacquer helmet, embroidered saddle, course cloth, medicinals, bow and arrows, famous horses (*Songshi*, 第246)	Amber, crystals, rosary beads, ornate lacquerware, silver incense burner, coloured glass, incense, sandalwood, silk (*Songshi*, 第250)
Korea receiving	Embroidered silk, medicinal plants, incense, ivory, cattle, peacock, silver box filled with incense (*Goryeosa*, 卷18)		Pearls, mercury, precious sword, livestock, bow and arrows, swords (*Goryeosa*, 第10)
Japan receiving	"Gold from Yangzhou, pearls from Jingzhou, silk from Suzhou, embroidery from Sichuan" (平家物語, as cited in Kawazoe, 2010)	"Elegant objects and trade goods, including a horse from the country" (*Nihon kiryaku*, 後篇6)	

Goryeo, I have used a passage in which one of the king's favourites showed off his exotic wealth. Such sources at least give a taste of what elite court officials desired to get from China (Table 17.2).

The table shows that Tang protocol has weakened. For one thing, silk gifts are no longer so prevalent. In addition, while the tradition of "local goods" persists, it has taken a luxurious turn. For example, the Goryeo embassies still offer horses, but they no longer give simple local ponies; they now offer "famous horses名馬," with fine embroidered saddles. Similarly, the Japanese embassies still offer lacquerware, but much more exquisite in craftsmanship. For brevity's sake, the table says "ornate lacquerware," but the precise wording of the *History of Song* is "a flat, flower-shaped lacquerware box inlaid with nacre (螺鈿花形平函)." This is a piece of fine craftsmanship. Clearly, the courts did not simply want gifts to be humble expressions of gratitude, but rather expensive objects.

Indeed, the principle of "local goods" is no longer absolute. For example, the Chinese visitors to Goryeo offered peacocks, incense, and rare medicinals, items which must have come from Southeast Asia, rather than China proper. Apparently, the Goryeo elite did not want Chinese goods anymore. The reason is perhaps that, by the twelfth century, private merchant bulk trade was booming, and Chinese ware had become rather common. For example, the Sinan shipwreck, a Chinese

ship which sunk off the southwestern coast of Goryeo around 1323, was carrying 20,691 pieces of Chinese ceramics (Fan & Li, 2020). In such a well-supplied market, the courts wanted even more exotic items, such as Southeast Asian products.

In short, gifts in the twelfth century still partially adhere to the traditions of the past, but not fully. The elites are clearly becoming more interested in foreign goods as luxury consumption items rather than as ritual objects. A more commercialistic attitude is rising. Court protocol is no longer dictating the choice of items, but rather consumer preference and tastes.

The fifteenth century: commercialised diplomatic gifts

By the fourteenth century, the vibrant commercial trade had collapsed. As the Yuan Empire crumbled, piracy and warfare made the oceans extremely dangerous. For example, in the region around Mingzhou (see Figure 1.1), a smuggler named Fang Guozhen 方國珍 seized power (Mote, 1988). Across the sea, the Japanese pirates were savagely attacking the Goryeo shores, looting without mercy (Tanaka, 2012). The central governments watched such happenings in helpless dismay, unable to intervene (Tanaka, 2012, pp. 31–3). Many officials doubtless wondered if the costs of private trade outweighed the benefits.

Accordingly, the fifteenth century—the focus of this final section—became the age of strong central governments: Ming China, Joseon Korea, Muromachi Japan, and the united Ryukyu Kingdom. After 1368, the first Ming emperor implemented a series of radical policies—the maritime ban or haijin (海禁)—that prohibited Chinese private merchants from trading abroad and restricted foreign merchants from entering except as part of a tribute mission (Atwell, 1998; Danjō, 2013, pp. 69–161). Large-scale private sea-going commerce in Northeast Asia collapsed for several decades, and diplomatic gift exchange via tribute trade was again at the heart of international trade.

In Korea, the Joseon kingdom broadly followed the Ming. Joseon tribute embassies were restricted to the land route over the Liaodong peninsula after the Ming capital was relocated from Nanjing to Beijing in 1421 (Hou, 2009, pp. 68–72). Maritime trade between China and Korea all but ceased. Joseon similarly sought to rein in trade with Japan and the activities of Japanese pirates. It limited the number of ships that were allowed to come each year, and restricted them to just three ports (Araki, 2017).

Among the four East Asian countries, Japan emerged from the chaos of the fourteenth century with the weakest government. Although the Shogun Ashikaga Yoshimitsu unified the country, he could only do so by appeasing regional lords, granting them authority and privileges (Hall, 1990). But he and his vassal lords accepted Ming vassalage and Japan re-entered the international diplomatic (and gift-giving) network (Kawazoe, 1990, pp. 432–40).

In the Ryukyu Islands, the King of Naha unified the three warring kingdoms of the islands in 1429 (Kerr, 2000). Ryukyu sent a tribute embassy to the Ming and received the privilege to send tribute every year. This gave them almost unrivalled access to Chinese goods. They exchanged these goods with Japan for swords, silver,

Table 17.3 Diplomatic gifts in the fifteenth century

	China giving	*Korea giving*	*Japan giving*	*Ryukyu giving*
China receiving		Horses, gold and silver dishes, lacquer boxes, silk, course cloth, fine mattresses, seal fur, otter fur, paper, ginseng (*Da Ming Huidian*, 卷 105)	Horses, helmets, armour, swords, spears, folding screens, decorative boxes, golden kettle, fans, agate, crystal, sulfur, sandalwood, cow hide (*Da Ming Huidian*, 卷 105)	Horses, swords, decorative boxes, agate, ivory, seashells, fans, copper, tin, cow hide, incense, sandalwood, ebony, pepper, sulfur (*Da Ming Huidian*, 卷 105)
Korea receiving	Titles, seal, Silk, course cloth, yak tail, purple feathers, Buddhist sutras, Jade belt, coral, silk, course cloth, agate, precious woods, incense (*Joseon sillok*, Sejong 32년 윤1월 5일)		Iron, dishes, swords, sulfur, cinnabar, ivory, incense, calamine, wild turmeric, pepper, orange peel, incense, medicinals (*Joseon sillok*, Sejong 5년 6월 21일)	Tin, sandalwood, pepper, incense, shark skin, ebony, Cinnabar, iron, ivory (*Joseon sillok*, Sejo 7년 5월 30일)
Japan receiving	Titles, seal, ceremonial robes, embroidered silk, fine silk (*Taizong Shilu*, 卷24)	Silk, course cloth, gold inlaid jade, tiger fur, seal fur, ginseng, honey, pine nuts (*Joseon sillok*, Sejong 25년 2월 21일)		Incense, silk, robes (滿濟准后日記, as quoted in Koto, 1957)
Ryukyu receiving	Titles, seal, embroidery, coins, embroidered silk, fine silk (*Mingshi*, 卷 323)	Silk, hemp cloth (*Joseon sillok*, Sejong 19년 7월 20일)	Long sword, horse (島津史料, as quoted in Kuroshima, 2000)	

and agate, which they shipped south to Southeast Asia in exchange for pepper, sandalwood, and ivory. Ryukyu became a classic middleman trader in the South and East China Seas (Takara, 1998, pp. 60–68). The kingdom directly managed official state ships that carried letters from the king, and strictly controlled access to the Nara port (Akamine, 2004, pp. 50–52; Kuroshima, 2000, p. 44).

By 1429, a new period of court-centred exchange had begun. Let us now examine the tribute goods and royal gifts that were exchanged during this period. The following list is mainly based upon the Ming and Joseon court records, and the Ming legal code. Information is scarcer for Japan, and sources more diverse (Table 17.3).

The fifteenth century has often been portrayed as a period when official ceremony choked private trade. This was certainly true for bulk trade, and the table suggests that this was perhaps partially true for courtly gifts as well. Silk has returned as a major item of exchange. Immaterial gifts proliferate as well, with the Ming envoys to Ryukyu, Japan, and Joseon often granting titles and imperial seals. In a similar spirit, the Japanese *daimyō* Shimazu Takahisa 島津貴久 gives a politically symbolic gift to the King of Ryukyu: a horse and long sword, the traditional gift of a Japanese lord to a retainer.

Nonetheless, the table also shows that the commercial culture has not only survived, but even deepened. Alongside the ceremonial gifts are highly luxurious items. For example, for concision's sake, the table simply says that Joseon and Japan gave "boxes" to China. However, the *Ming Law Code* actually lists an array of fine containers. For example, Joseon gave a "nacre inlaid box for combs 螺鈿梳函," and Japan gave a "gold engraved brush box 描金筆匣," etc. These were clearly luxury goods for personal use and not simply ritual objects.

Even more than during the twelfth century, the gifts now tend to be "delocalised." Ryukyu, for example, gives both Southeast Asian and Japanese goods to China. Similarly, China gives not only Chinese silk to Korea, but also Southeast Asian goods (incense, coral, and coloured feathers), and even Japanese ones (agate). Japan gives both Japanese and Southeast Asian items to China (sandalwood). In other words, the courts were not very interested in the local origins of products. Instead, they simply wished to receive the most precious gifts possible, no matter where they came from. It should be remembered that although the central governments held official monopolies over foreign trade, they nonetheless did share some of the incoming goods with local merchants (Zheng, 2004, pp. 109–18). Accordingly, this desire for exotic gifts might partially reflect market demand.

The diplomats sometimes struggled to harmonise the competing exigencies of ceremony and luxury. For example, the Joseon Annals contain an awkward conversation with a Ryukyu envoy, from 1462. The officials knew that Ryukyu was bringing goods from Southeast Asia. But did the country have any local goods of its own? Apparently without blinking, the Ryukyu envoy responded that his island produced "gold, coral, amber, sulfur, and iron" (*Joseon sillok*, Sejo 8년 2월 28일). To put it bluntly, he lied: all those items (except for coral, and perhaps sulfur) came from Japan. The envoy knew that his hosts wanted to receive luxury goods—even if outsourced—but he nonetheless felt compelled to portray them as local goods.

Similarly, in 1406, an envoy from Tsushima (in Japan) offered sandalwood, pepper, and some peacocks to Joseon, explaining they had taken those goods from a captured ship from Southeast Asia. The royal censorate declared: "such rare and exotic beasts are not raised in their country according to ancient tradition. All the worse if they are pillaged items! We should reject the gifts and not accept them" (*Joseon sillok*, Taejong 6년 9월26일). Nonetheless, the King of Joseon ordered the peacocks to be sent to his royal gardens. Henceforth, whenever Japanese envoys offered Southeast Asian products, the Joseon court accepted them as "local goods" without asking questions. The tradition had become somewhat empty; beneath the ceremonial surface, it was the commercial attitude that was prevailing.

Conclusion

In summary, this chapter has focused on the "shared culture" of gift-giving at the Northeast Asian end of the Silk Road routes. Over the 800 years surveyed in three broad periods, the shifts in the character of the exchange between China, Korea, Japan, and later Ryukyu, reflect in part the change in political relations and maritime logistics within the region, and, in part, the change in the political economy along the overland and maritime silk roads far to their west and south. During the earliest period in the eighth and ninth centuries, gift-giving was ritualistic and political between the courts of China, Korea, and Japan, shaped by the tribute protocol of the Tang court. The types of goods exchanged were dictated by court protocols. By the twelfth century, greater involvement of merchants in the trade exchanges progressively diminished the importance of court protocol in the choice of goods exchanged. Personal tastes if not consumer demand of a broader social elite came to the fore. Increasingly, Southeast Asia and Indian Ocean products figured in the gifts exchanged and those that seeped into the market. During the fourteenth and fifteenth centuries, the exchange of goods was once again dictated by tribute protocol rather than those of commercial demand. The courts increasingly desired personal luxury items, but were also attentive to their market value, which meant that the products from more distant places along the silk roads were valued over those of products that were representative of local produce in the country of the giver. Although the role of court protocol had come full circle, dictating the character of court exchanges in both the earliest and latest periods, the growth in the variety of products from far beyond their borders had reshaped that tastes and preferences and increased the demand of those able to consumer the traded goods from along the Silk Road.

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18 Iberian Silk Roads

Spices, silver, and souls

Matteo Salonia

In his 1515 *Suma Oriental*, the Portuguese apothecary and diplomat Tome Pires (c.1465–1524) confidently began a list of valuable goods coming from China with the following words:

> The chief merchandise from China is raw white silk in large quantities, and loose coloured silks, many in quantity, satins of all colours, damask chequered *enrolados* in all colours, taffetas and other thin silk cloths called *xaas*, and many other kinds of all colours […][1]

The *Suma* is one of the first detailed European descriptions of Asian human geographies and economies, from the Red Sea to the Moluccas. Pires's text is also an eyewitness account of the sixteenth-century expansion of intercontinental contacts across vast distances. Indeed, one of the main consequences of the age of European explorations was the beginning of a process of globalisation, which ultimately connected through maritime routes the sophisticated and wealthy Asian markets to Europe and the Americas. In a volume on the long history of mobilities and contacts across the Silk Road, it should go without saying that Europe and Asia had already exchanged faiths, ideas, commodities, peoples, and diseases for several millennia. Yet, the role played by Portugal and the Kingdom of Castile, two relatively poor and apparently unimportant backwaters of Eurasia, is unique. This being the case, I propose the concept of Iberian Silk Roads to discuss the decisive 150 years between Vasco da Gama's first voyage to Calicut in 1497 and the completion of the first cycle of standardisation in the global prices of silver around 1640. The latter date coincides with two other turning points: the end of the Iberian Union (1580–1640), and the end of the Portuguese presence in Japan.

A working definition for the idea of Iberian Silk Roads is in order. The Iberian Silk Roads are two networks of maritime routes meeting and overlapping in the South China Sea (see Figure 1.1). The first network connected Asia to the Atlantic from the West. It had the Cape of Good Hope as its main node, proceeding across the Indian Ocean, then across the Bay of Bengal and south through the Andaman Sea to the Malay Peninsula entrepôt of Malacca; from there, it stretched further in two directions, to the Moluccas in present-day Eastern Indonesia and to Macao. Portuguese Macao was a springboard for Portuguese Nagasaki. The second Iberian

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Silk Road found its starting point in Acapulco, and it crossed the vastness of the Pacific to include both the Spanish Philippines and Portuguese Macao. In the first two parts of this essay, I will sketch the early history of these Iberian Silk Roads focusing on their importance to the formation of a global economy. I will then conclude with a brief reflection on Catholic missionary networks.

From Lisbon to Nagasaki

In 1479, with the Treaty of Alcáçovas,[2] for the first time, Castilian monarchs recognised Portugal's monopoly of the maritime routes along the African coast.[3] Two years later, in 1481, John II (1455–1495) acceded to the throne. Up to that time, the Portuguese Crown had had two objectives in West Africa: the diversion of the gold trade from the trans-Saharan caravans to the Guinean coasts and the finding of Prester John, the legendary Christian king-priest whose domains were supposedly tucked somewhere in the East and who – this was the hope – could help Christendom to fend off the Islamic threat.[4] John II added to these aims a determination to reach 'the Indies'. In 1488, Bartolomeu Dias (1450–1500) finally proved the existence of a cape that led to Asia, and in 1497, an expedition to Calicut led by the aristocrat Vasco da Gama (c.1469–1524) eventually set sail from Lisbon.[5] This first voyage and other less famous ones at the turn of the century determined much of the shape and character of this Iberian Silk Road. At this stage, during the reign of Manuel I (1469–1521), the Portuguese were accompanied by Italian merchants and agents who co-funded the voyages and whose entrepreneurial know-how was invaluable.[6] They found an Indian Ocean world where spices and other goods could be obtained, but where they were not welcome. Commerce along the Malabar Coast of India and beyond was mostly controlled by Muslim merchants from Gujarat. In addition, Asian markets were complex and dispersed, involving a myriad of economic actors and intertwined flows of capital and goods.

An earlier generation of scholars believed that as early as 1499, King Manuel had determined to use military force to redirect the entire spice trade[7] and that the Portuguese were responsible for the decline of spice supplies to Egypt in the first half of the sixteenth century.[8] However, Sanjay Subrahmanyam has compellingly explained that such a decline was due to civil wars in Islamic areas (especially in the Hijaz and Yemen) and that as late as 1509, the Portuguese viceroy Francisco de Alameida (c.1450–1510) did not favour the systematic conquest of tens of cities and outposts.[9] Furthermore, as late as 1510, the Portuguese court was issuing licences to private merchant fleets to navigate directly to Malacca and peacefully trade there.[10] Three problems, however, quickly emerged. First, the Portuguese attempted to set a price for the spices and did not bring anything particularly interesting to barter. Their only assets were gold and military support in local conflicts, through their superior firepower at sea.[11] Second, while the Gujaratis did not possess an armed fleet, they were able to influence rulers with whom they had long-standing relations, so when the first group of Portuguese led by Diogo Lopes de Siqueira attempted to trade in Malacca, they were attacked and robbed, and some of the survivors were imprisoned.[12] Third, the Portuguese arrival in the

Indian Ocean was not good news for the states that had benefited from the flow of spices through Indian markets and the Red Sea. In 1508, a large fleet armed by Mamluk Egypt and the Gujarat Sultan surprised and destroyed the Portuguese forces at Chaul (India).[13] In the wake of these events, from 1510, the new Viceroy of India, Alfonso de Albuquerque (c.1452–1515) launched attacks on strategic city ports around the Indian Ocean world. The Portuguese conquered Goa (1510), Malacca (1511), and Hormuz (1515).[14] The sheer determination of the Portuguese was astonishing – as in the case of Goa, where they were expelled from the city but immediately regrouped and launched a second desperate attack.[15]

Albuquerque aimed to turn the Indian Ocean trade into a Portuguese monopoly. The Portuguese Crown would get spices at convenient prices, while merchants could trade only after purchasing Portuguese *cartazes* (licences). The fee for a *cartaz* was very cheap, but it forced merchants to call at a Portuguese fort, usually Goa, Hormuz, or Malacca, to pay custom duties. However, this state-centred system of trade was difficult to enforce. Albuquerque's failure to capture the fortress of Aden at the entrance of the Red Sea stymied the Portuguese from controlling the Indian Ocean. Further, evasion of duties was widespread, and local Luso-Asian communities could effectively resist the plans of Lisbon.[16] But there was a more important reason for the eventual collapse of this strategy. No central authority could ever gather enough information about prices and local production, nor coordinate the numberless actors involved in the cultivation, harvest, and transport of cinnamon, pepper, nutmeg, and cloves. Even after the Portuguese had established a string of warehouses along the Malabar coast, they did not control the production of pepper in the highlands or its payment. Similarly, the timely transportation of goods to the coast, where the Portuguese ships' arrival and departure had to consider the monsoons, remained a problem. Hence, Portuguese merchants relied on local capital, middlemen, and know-how. Centralism and violence had to progressively leave room for integration into existing business patterns and for collaboration with Indian, Jewish, and local Christian partners.[17] A similar development occurred further East, as the Portuguese tried to stretch their networks beyond Malacca.

In order to locate this Iberian maritime Silk Road in the sixteenth century, we would have to start from Antwerp and Lisbon, then moving down the African coast through a few forts and coastal communities reach and round the cape. The East African coast was punctuated by Muslim city ports acquiring slaves, gold, and ivory from the interior and exchanging them for Gujarati cloth.[18] Along this coast, the Portuguese secured gold in Soffala (Mozambique), built a warehouse, and found pivotal logistic support in Malindi (present-day Kenya), a city-state whose Muslim ruler welcomed the Portuguese as allies in the struggle against Mombasa.[19] Further North, the Red Sea was controlled by the declining Mamluks until the 1517 Ottoman conquest of Egypt. Then moving East, one could encounter the expanding Persian Empire under the Safavid dynasty. Hormuz was a rich entrepôt where horses coming from Arabia and Persia and spices from India were exchanged; the trade continued after the Portuguese takeover.[20] Gujarat was the heart of the most far-reaching and financially vibrant commercial network encountered by the Portuguese. Its merchants had the most to lose from the Portuguese arrival, but in the

end, they maintained their trading networks, and Surat continued its economic rise throughout the sixteenth century.[21] Gujarat eventually lost its political independence in the 1570s with the expansion of the Mughal Empire.[22] On the Malabar Coast, the Portuguese found many small polities. In cities like Cochin and Quilon, they established friendly relations with the local rulers, while Goa and other strategic ports were the theatre of military clashes. The conquest of Goa, the most important Portuguese city in the East, was, however, suggested by a local Hindu ally, and Hindus were promptly appointed by Albuquerque to key administrative positions. Following their expansion in Ceylon, the Portuguese obtained large quantities of cinnamon.[23] Further East, the Portuguese obtained permission to build warehouses in places like Hooghly (in Bengal). They next conquered Malacca, Southeast Asia's largest entrepôt, and barely repelled an attack by the Javanese navy in 1513.[24] From Malacca, the Portuguese promptly reached the clove-producing islands of Ternate and Tidore in the Moluccas, whose Sultans were often at war with each other. Back in Malacca, much of the government of the city was left to representatives of different local communities and national groups.[25] From Malacca, the Portuguese also moved North-East, towards China and, later, to Japan.

Despite the delusional plan for a state monopoly and the decline of Malacca after the conquest, the Portuguese did not disrupt the older maritime silk roads. Rather, older networks were lengthened and integrated. While in the first half of the sixteenth century Lisbon imported enormous quantities of spices, already by the second half of the century, most of the products coming from China and Indonesia on Portuguese ships were sold to Asian traders in Goa and Hormuz.[26] The Iberian Silk Road extending from the Atlantic had a twofold consequence: it globalised the reach of maritime connections and of the flow of capital and it enhanced the internal integration of Asian markets. This was something often done on Asian actors' own terms, as made clear by the destruction of two Portuguese fleets by the Chinese navy in 1521 and 1522, or by the precarious presence of Portuguese merchants in Japan. But the fact that Iberian merchants would set up links from Africa to East Asia remains significant: these links were not unprecedented, but they were now part of a global grid.

At Goa, the headquarters of the *Estado da India*, one could find a community of Portuguese who had settled, besides the seasonal merchant population that came and went with monsoons and business deals. Still, because of the aristocratic values of *fidalguia*, there were always some Portuguese eager to establish direct links between existing colonies and markets beyond. Malacca had just been conquered, and already the Portuguese launched expeditions to set up factories in the Moluccas (1512) and a merchant colony on the islands at the mouth of the Pearl River delta (1513). Even more striking is the Portuguese *persistence* in China, where ports were mostly closed to foreign trade. After the failure of the 1517 embassy, the Portuguese were banned from visiting the Ming Empire.[27] However, for about 50 years, the Portuguese would not take no for an answer. They mapped the coast of China, kept in touch with complicit Ming officials, hid among the islands infested with pirates, and smuggled pepper and ivory to get Chinese silk and porcelain. When it suited them, they cooperated with Japanese pirates, while on other

Figure 18.1 A hidden bay in Taohua Island, Ningbo.
Source: Picture by Matteo Salonia.

occasions, they helped Chinese fleets to fight them in the hope of getting trade concessions as a reward. When Chinese officers in Canton enforced the imperial decrees more harshly, the Portuguese moved up to Fujian, and then even to Zhejiang and the Zhoushan islands near Ningbo (Figure 18.1).[28] When the situation deteriorated there, they moved back to Canton. Their grit and flexibility eventually paid off: in 1554, the Portuguese reached an agreement with local Chinese officers in Canton and were allowed to trade as if they were Siamese, and a few years later, they settled in Macao. The Iberian Silk Road, therefore, soon covered waters and ports from Soffala to Macao, and this added a new element to the integration of intra-Asian markets. In fact, Portuguese routes were soon meeting, competing, and merging with the Castilian routes that crossed the Pacific Ocean. This leads us to Nagasaki, the Philippines, and the second Iberian Silk Road.

Sino-Iberian trade and Iberian-Asian culture

At the Castilian court, the desire to find an alternative route to the Spice Islands, around the American landmass, grew urgent in the 1510s. The famous expedition led by Ferdinand Magellan (1480–1521) sailed from Seville in September 1519, and one of the five ships, commanded by Juan Sebastian Elcano, was able to complete the first circumnavigation of the world in September 1522. Although

Magellan himself was killed in the Philippines, the circumnavigation was a historic feat: it found a strait at the southern tip of America, proving that all the oceans are connected, it crossed the largest stretch of water in the world (the Pacific), and it gave for the first time an accurate idea of the size of the planet.[29] This extraordinary voyage was the crowning achievement of the Iberian age of explorations and the true fulfilment of Columbus's plan, albeit his calculations about the distance between Europe and Asia were shown to be spectacularly mistaken.

Magellan's route would turn out to be a false start for the second Iberian Silk Road. Not only was the Strait of Magellan remote and far from any Spanish settlement, but for almost 50 years, the Spanish were unable to find a return route across the Pacific. A breakthrough came in 1564 when Miguel López de Legazpi and the Augustinian friar Andrés de Urdaneta (1508–1568) sailed across the Pacific from Mexico. Urdaneta had studied astronomy, had taken part in a previous failed Spanish attempt to navigate to Mexico from the Philippines, and had spent eight years in the Moluccas before returning to Spain across the Indian Ocean.[30] Although nearly 60 years old, Urdaneta's knowledge and experience were invaluable, and King Philip II (1527–1598) asked him to join the 1564 Legazpi expedition. In 1565, Urdaneta was entrusted to lead the return to Mexico on the ship *San Pedro*. Sailing from Cebu on June 1, he headed north towards Japan and then turned east to catch the winds along the 38th latitude. On October 8, the *San Pedro* reached Acapulco. Urdaneta had found *el tornaviaje*, the northern latitudes return route to Mexico. This was the true beginning of the second Iberian Silk Road. It allowed reliable sailings between New Spain (Mexico) and Asia. Soon, the Spanish founded Manila (1571) and conquered Luzon with the help of Visayan allies.[31]

In the economic geography of Iberian East Asia, Macao and the trans-Pacific silver trade are good examples of regional and global integration respectively. By the mid-sixteenth century, the Ming court had interrupted all Sino-Japanese communications and trade.[32] This was partly the result of Japanese raids on the coasts of China. 'Japanese' fleets, which were actually manned by multi-ethnic crews, attacked ships, kidnapped people from coastal areas, and broke Ming regulations on the frequency and size of tribute embassies.[33] Portuguese merchants turned a profit by selling Chinese silk in Japan and importing Japanese silver from the Iwami mines and Sado Island into China.[34] Iberian traders soon had to face a shortage of capital and increasingly burdensome regulations. For instance, the Portuguese king and his government at Goa attempted to impose a monopoly by naming a *Capitão-mor* (Head Captain) for the Macao–Japan trade. And from 1604, the Japanese authorities devised their own monopoly by selecting a group of local merchants as the only ones allowed to purchase Chinese raw silk at a fixed (low) price – this price-fixing mechanism was the *pancada*.[35] The Portuguese responded with intelligence and adaptability. They increasingly relied on Cantonese money-lenders,[36] and they imported less raw silk and more silk piecegoods (fabric rolls) of various kinds.[37] Furthermore, a private, 'illicit' trade ran parallel to the 'licit' one approved by the *Capitão-mor* at Macao.[38] Regional integration was slowed down by the mercantilist actions of three governments (Ming, Japanese, and Portuguese), but in the end, the exchange of Japanese silver for Chinese silk did take place. Even in the

seventeenth century, after the trauma of the expulsion from Japan and the isolation from Goa due to Dutch attacks, Portuguese Macao survived and thrived, partly because as it was severed from the first Iberian Silk Road, it became more strictly linked to the second one through Manila.[39]

From the 1540s to the 1640s, Iberian merchants imported enormous quantities of silver into China. This silver came from Japanese mines, but also from Potosí, across the Pacific Ocean. Large amounts of silver mined in Peru reached Asia on the Manila Galleon, along this second Iberian Silk Road.[40] This global silver trade was stimulated by the difference between prices in China and the rest of the world: the value of silver in China was higher – often twice as high as in Spain. While the Iberians brought silver, they purchased Chinese silk, textiles, gold, porcelain, and sometimes copper.[41] What were the major consequences of these exchanges along the second Iberian Silk Road? The quantity of silver that entered China during this cycle was so vast that by 1640, a process of arbitrage had been completed, and prices of bullion stabilised around the world. The silver imported by the Chinese favoured the monetisation of the Ming economy.[42] Hard money with salability across time and space constituted a better medium of exchange and a better technology for private savings than inflated paper money or randomly cut lumps of silver. Secondly, the export of silk and porcelain guaranteed a steady income for Chinese industries.[43] In 1630, the Ming officer, He Qiaoyuan (1558–1632) noted that the silver trade guaranteed employment in countless industries and higher standards of living.[44]

The impact of silver flows along the Iberian Silk Roads has been nicely summed up by William S. Atwell:

> Many of the economic advances, social changes and even cultural monuments of the late Ming period can be properly understood only in light of the vast amounts of silver which flowed into China from such faraway places as Iwami and the mountains of Upper Peru.[45]

The trajectory of Chinese economic history was altered, triggering specialisation both in rural and urban areas, and furthering regional integration as well as participation in a global division of labour.[46] This process, sustained by a new disequilibrium of silver prices and by the development of Mexican mining, would repeat itself in a second cycle, from 1700 to 1750.[47] In the meantime, China doubled its population, thanks to the arrival, along the trans-Pacific Iberian Silk Road, of sweet potatoes, peanuts, and maize.[48] In sum, we need to move away from the obsession with the Opium Wars (1839–1842 and 1856–1860) that has characterised many of the discussions on Sino-Western relations. These narratives, besides belittling China's agency, incidentally echo the Chinese government's reinventions of history along the goofily intertwining lines of victimology and nationalism. Yet, nothing can obfuscate the fact that, before the Opium Wars, there were *three centuries* of mutually beneficial Sino-Iberian trade and mutually enriching intellectual encounters.[49]

Two other issues deserve to be mentioned here: cartographic knowledge and Iberian-Asian heritage. The Portuguese quickly systematised and expanded geographic

knowledge through the production of *roteiros* and maps. This extraordinary work is forgotten because of the secretiveness of the Portuguese. As exemplified by Jan Huygen van Linschoten (1563–1611), who travelled across the Portuguese world from the Azores to Goa and collected plenty of information about maritime routes, the Dutch dissemination of cartographic and navigational descriptions would have been unthinkable without the solid basis offered by Iberian science.[50] The issue of an Iberian-Asian heritage also requires further investigation: to what extent can we talk about an Iberian-*Asian* culture? The groups of settled Portuguese that I mentioned above lived across vast areas even completely beyond Portuguese control, like Cambay. And because Portuguese men married local women, soon a racially mixed population and a Luso-Asian identity and dialect emerged.[51] This leads one to a second question: is it possible to locate a truly *Iberian*-Asian culture, instead of two separate cultures (one Luso-Asian and one Spanish-Asian)? Pedro Luengo has illustrated the truly transnational, Iberian careers and movements of Portuguese and Spanish artists and architects in Asia, especially during the period of the Union of the Crowns (1580–1640).[52] Luengo also evidenced the agency and contribution of Asian craftsmen and artists. Cultural encounters between Iberian and Asian traditions showed remarkable dialogue, flexibility, and borrowing from both sides, creating hybrid architectural and artistic solutions, such as the inventive use of oyster-shell windows.

Catholic missions and spiritual networks

The definition of the Iberian Silk Roads offered above should be integrated by dedicating some space to global Catholicism. Since the sixteenth century, the Catholic Church built throughout Asia a network of churches, hospitals, orphanages, schools, libraries, and later also universities, astronomical and seismological observatories, weather stations, and other scientific facilities.[53] This story integrates the tale of political and commercial expansion, and it gives to the Iberian Silk Roads a dimension that is in line with the role played by religion in the other 'silk roads'. On the other hand, this story is unique insofar as Christianity had always had a missionary worldview rooted in the Gospel, in its openness to all races and nations. After the momentous voyages of Columbus and Magellan, this claim to universality suddenly turned from potency to actuality: the opportunity to bring the Gospel to all the peoples of the world seemed real, and the age of global Catholicism had begun.[54] It is true that the Church was formally under the control of the state (through the Portuguese *padroado* and the Spanish *patronato*)[55] that the Jesuits sometimes were pivotal economic actors,[56] and that in India the clergy allied with the colonial government to destroy Hindu temples.[57] Nevertheless, Catholic missionaries had overall different priorities and a very different mindset than those of Portuguese officers, Spanish governors, and Iberian and Asian merchants. The Jesuits, Augustinians, Franciscans, and Dominicans who left everything behind with the near certainty of dying far from home did so not to seek spices and porcelain, but rather to save souls. If we want to study this group of men that moved along the Iberian Silk Roads, and that in fact contributed to change the very shape

of Iberian networks in Asia, we have to make an effort to understand their value system and their faith.

Christian soteriology – teachings concerning the salvation of souls – and charity must be considered to unpack the multiform roles of the Catholic Church in Asia. As pointed out in an important study by Luke Clossey, respecting and reconstructing the intentions of missionaries living in the past should precisely be the task of historians of early modern Catholic networks.[58] In addition, spiritual motives explain many events in the history of Iberian Asia, especially those taking place beyond the formal boundaries of colonial possessions. These events include the fate of the Catholic missions in Japan. Even after it had become clear that the Japanese government would not tolerate the growth of local Christian communities, Catholic missionaries insisted in their effort to evangelise. As a result, both foreign and local Catholics suffered persecution and martyrdom, while Iberian lay merchants were expelled and lost a profitable trade. Such attitude would remain inexplicable from a merely materialist perspective. Likewise, the universality of the Gospel inspired the mission to China led by Matteo Ricci (1552–1610), an Italian Jesuit priest who disseminated European science and initiated a fruitful dialogue with Confucian philosophy and Chinese civilisation.[59]

Conclusion

Between the 1490s and the 1640s, Portuguese and Spanish networks formed two distinct yet partly overlapping maritime silk roads, which connected for the first time the Atlantic world to the Indian Ocean world, and the Americas to Asia. The Portuguese soon relied on Asian partners to expand and integrate flows of capital and goods, from East Africa to Macao and Nagasaki. On the other side of the Eurasian landmass, Magellan's voyage stimulated the Spanish to find a viable route across the Pacific, linking Mexico to the Philippines. Taking advantage of local circumstances such as the Ming ban on Japanese merchants as well as of international discrepancies in the prices of precious metals, the Iberians contributed decisively to the emergence of global silk and silver markets. The legacies of Iberian Asia include also an extraordinary expansion of geographic knowledge and the appearance of Iberian-Asian populations, languages, and cultures. Another dimension of these Iberian Silk Roads is spiritual, because along them also moved Catholic missionaries who were interested in the salvation of souls and who waved religious networks, at times in opposition to political and economic interests.

Notes

1 Pires, *Suma*, Volume I, 125.
2 Mendonça, "De Alcáçovas a Tordesilhas," 21–34.
3 On the Portuguese empire, see Russell-Wood, *A World on the Move*; and Pearson, *The Portuguese in India*, especially the first two chapters. In Portuguese, see Chaudhuri, "O estabelecimento," 163–191.
4 Panegassi, "Naturalização," 25–37.
5 Subrahmanyam, *The Career*.

6 Salonia, "The First Voyage," 3–18.
7 Boxer, *The Portuguese Seaborne Empire*, 37.
8 Magalhães Godinho, *Os Descobrimentos*, vol. 3, 115–33.
9 Subrahmanyam, "The Birth-Pangs," 261–80.
10 Salonia, "A Dissenting Voice," 189–207.
11 For instance, the Portuguese obtained permission to build a warehouse in Cochin by offering its ruler military support against Calicut.
12 Chaudhuri, "O estabelecimento," 176.
13 Subrahmanyam, "The Birth-Pangs," 275–78.
14 For a nuanced discussion of the Portuguese presence in Hormuz, see Tazmini, "The Persian–Portuguese Encounter," 271–92.
15 I discuss episodes of Portuguese violence in Salonia, "A Dissenting Voice."
16 In Chaul the local merchants resisted for more than forty years the metropolis's order to set up a customs house. Pearson, *Merchants and Rulers*, 49–50.
17 Mathew, "Indian Merchants," 1–12.
18 Pearson, *Merchants and Rulers*, 12.
19 An explanation of the importance of Mozambique as a "vital way station" for this first Iberian Silk Road is in Pearson, *Port Cities*, 133.
20 Pinto, *Suma*, 19–21.
21 Subrahmanyam, "A Note," 23–33.
22 Hasan, *State and Locality*, 12–30. Besides Gujarati Muslims, there were also groups of Gujarati Hindu merchants trading and living across the Indian Ocean world, including the Swahili coast. Pearson, *Port Cities*, 42.
23 Biedermann, *(Dis)connected Empires*.
24 On the Portuguese presence in Bengal, see the British perspective in Crawford, *A Brief History*, 4-11; and a more sympathetic view in Campos, *History*. On the Portuguese conquest of Malacca, see Salonia, "Dissenting Voice," 199, 201, and for important primary sources see notes 57 and 64.
25 Desai, "The Portuguese," 501–12.
26 Boxer, *The Portuguese Seaborne Empire*, 61–62.
27 Fujitani, "The Ming Rejection," 87–102.
28 See James Fujitani's chapter in this volume.
29 Salonia, "Encompassing the Earth."
30 Mira Toscano, "Andrés de Urdaneta," 107–22.
31 Phelan, *The Hispanization*.
32 The decrees were promulgated by the Ming court in 1557. Souza, *The Survival*, 48.
33 Shapinsky, *Lords*, 215–28; Haneda and Oka, *A Maritime History*, 139–44.
34 For an in-depth discussion of the changes in production patterns, see Kobata, "The Production," 245–66.
35 Souza, *The Survival*, 59.
36 Souza, *The Survival*, 62.
37 Souza, *The Survival*, 61.
38 Cooper, "The Mechanics," 49–63.
39 See for instance the lamentations penned by the *procurador general* in Manila concerning Portuguese trade between Canton and the Philippines (and even Mexico): "Petición del Cabildo," N. 16.
40 According to von Glahn, the quantity of Spanish silver entering China through Manila increased from the 1590s and peaked in the 1620s. von Glahn, "Myth and Reality," 437-438. A more recent summary can be found in von Glahn, "Changing Significance." Important quantities of American silver reached China also from the Atlantic ports of Buenos Aires and Sacramento, around the Cape of Good Hope.
41 Among the many issues that I have no space to discuss at length here, I have to mention at least two. The first is the role taken by Chinese merchants, whose junks continued to visit Filipino ports and whose communities in Manila were key economic actors. The second issue is that trade between Manila and Acapulco was constrained by regulations

of the Spanish government, which were partly a response to protectionist lamentations coming from the metropolis. See Giráldez, *The Age of Trade*, 154–7.

42 von Glahn, *The Economic History*, 308.
43 Zurndorfer, "Encounter and Coexistence," 44.
44 von Glahn, *Fountain*, 127.
45 Atwell, "International Bullion," 90.
46 Flynn and Giráldez, "Cycles of Silver," 402. It is unfortunate that Flynn and Giráldez end their fine article with the wrongheaded assertion that silverization constituted a "drain of wealth" (419). They claim that to argue otherwise would commit one to the mercantilist attitudes towards bullion rightly rejected by Adam Smith. Yet this ignores that the enormous benefits brought by silverization have nothing to do with the positive balance of trade promoted by mercantilism, but rather with the demand for sound, reliable money. The Chinese were aware of the inflationary spiral of fiat money. Atwell, "Time, Money," 86-87. Discussing the positive impact of silverization on early modern China, von Glahn labels Ming paper money an "abject failure" and stresses that in fifteenth- and sixteenth-century China "the effective demand for silver came from the private economy, not the public fisc." von Glahn, "Myth and Reality," 430,
47 See Brading and Cross, "Colonial Silver," 545–579; and the thought-provoking article by Dobado and Marrero, "Role of the Spanish," 855–84.
48 Spence, *The Search*, 95. Tobacco was another American crop introduced into China through the Iberian Silk Roads. Benedict, *Golden-Silk Smoke*.
49 Ptak, "Portugal and China," 225-242. Also Sino-British relations were initially based on peaceful trade, a trade that through the Canton System was beneficial to a monopoly of Chinese merchants and the Chinese court. Platt, *Imperial Twilight*.
50 Vila-Santa, "Jan Huygen van Linschoten," 736–57.
51 Bawden, "An Eighteenth-Century Chinese;" Cardoso, *Indo-Portuguese*.
52 Luengo, "Architectural Hybridity," 353–374.
53 See Witek and Reis, *Religion and Culture*. For an assessment of the positive long-term impact of Jesuit missions in South America, see Valencia Caicedo, "The Mission," 507–556. See also: Waldinger, "Long-run Effects," 355–378; and Dulay, "The Search," 1–36.
54 On global Catholicism, see: Po-Chia Hsia, *A Companion*.
55 Boxer, *Church Militant*; Paiva, "The Appointment," 461–83.
56 Portuguese authorities explicitly asked the Jesuit Fathers to help in the delicate negotiations with Japanese merchants when the silk arrived at Nagasaki. Dias, *Report Concerning the Armação or Agreement by Which the Citizens of Macao Send their Silk to Japan*, in Cooper, "The Mechanics," especially 432–3.
57 Barreto Xavier, "Disquiet," 269–95.
58 Clossey, *Salvation*, especially 6–10.
59 Hosne, *Jesuit Missions*.

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19 Southeast Asia, China, and the 'maritime Silk Roads', c.900–1650

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Southeast Asia was at the centre of the largest trade flows of the medieval and early modern period, whether measured in volume or value. The region linked the maritime routes that crossed the Indian Ocean west to east with those northward across the South China Sea to China, Japan, and Korea. Various ports in Sumatra, Java, and the Malay Peninsula were vital entrepôts where ships laid over to wait for the monsoon winds to change and to take on board Southeast Asia products. These included fine spices (cloves, nutmeg, and mace) from present-day Eastern Indonesia and pharmacopeia, fragrant woods, and other exotic products from the region's forests. The focus of this chapter is on the exchanges along the 'maritime silk road' or 'spice road', especially the trade between Southeast Asia and China from c.900 to the early 1600s.

Maritime links between China, Southeast Asia, and India have spanned more than two millennia. The official history of the Han Dynasty (BCE 206–CE 220) reports that Chinese sailed from Guangdong to the Gulf of Siam, crossed the Kra Isthmus (Thailand), and boarded vessels to sail to India (see map Figure 1.1). By the fifth century, the route through the Strait of Melaka allowed direct sailing between South Asia and China. Chinese monks and merchants travelled in Malay-Javanese vessels (*kunlunbo*, 崑崙舶) at this time. Arab, Persian, and Indian vessels came to dominate between the ninth and eleventh centuries (Heng 2009, 28–30; Sen 2014, 40–1; Ng 2017, 13). Seaborne trade with China began to exceed the overland caravan trade by the late Tang Dynasty (618–907) and exports of Chinese porcelain and other manufactures eclipsed silk (Liu 2022, 239). From the late tenth century, sailings of Chinese-designed vessels to Southeast Asia increased quickly. Trade expanded in the Song (960–1279), Yuan (1279–1368), and early Ming (1368–1644) dynasties. This growth of trade and cultural contact was the "most notable feature of the eleventh century" (Findlay and O'Rourke 2007, 69). The Ming voyages of Zheng He in the fifteenth century transformed Southeast Asia and stimulated an "Age of Commerce" before the Dutch secured control over Insular Southeast Asian trade, though Chinese merchant vessels would continue their intra-regional trading (Reid 1988, 1993, 1999; Ng 2017).

Foreign trade at this time was a tiny share of local economies compared with domestic trade; estimates rarely exceed one percent of national economic output. The Song foreign trade reached a high of 1.7 percent (von Glahn 2016, 272;

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Schottenhammer 2022, 640). While foreign trade was relatively small, it was not trivial for the economy of ports and their hinterlands. Export-oriented ceramics manufacture in Fujian during the Song may have employed 7.5 percent of the provincial population (Hansen 2020, 216). In the first millennium, the main frontier trade was horses for silk (Liu 2022). Other traded goods were luxury items for the court and social elite. By the early second millennium, the Song and Yuan expansion of maritime trade had increased the share of lower-value goods and broadened consumption to a wider population (Heng 2009; Reid 1993, 2009).

A lack of local sources constrains our telling of the story of Southeast and South Asians in the early world economy. We rely on Chinese sources for the early periods, along with stone inscriptions and archaeological artefacts, and European sources for more recent times (Wolters 1967; Reid 1988; Christie 1998; Sen 2017). Statistical data are scarcer and problematic (Bulbeck et al. 1998; Henley 2015, 128–9). This chapter will nevertheless survey two discrete periods – c.900–1350 and c.1400–1650 – and conclude with a review of trading networks.

An early "age of commerce" – c.900 to late 1300s

Extensive trade, religious, and diplomatic exchanges had developed between Southeast Asia and China from the fifth century (Wolters 1967; Heng 2009; Lo 2012; Ng 2017). During the Tang, Malay-speaking communities, whom the Chinese called "island barbarians," lived at ports in Guangdong, Fujian, and Zhejiang (Heng 2009, 31–2). The four centuries from c.900 were an "Early Age of Commerce" during which trade boomed in Southeast Asia (Christie 1998; Wade 2009). The financial and trade policies of the Song and Yuan hugely increased trade between Southeast Asia and China and Southeast Asia and India. Increased trade propelled the development of Southeast Asia (Wade 2009, 222, 238–58) and the Song "medieval economic revolution" (von Glahn 2016, 3–4, 208–54 passim).

At the start of this period, China was oriented towards Central Asia, as it had been since Han times (Liu 2022). Nomad invasions during the Northern Song (960–1127) reduced access to Central Asia and forced merchants and the Song court to turn towards the "South Seas" (Nanyang, 南洋). The caravan overland route ceased entirely with the fall in 1127 of Kaifeng, the Northern Song capital. The Southern Song (1127–1279) with its capital at Hangzhou relied on maritime trade for revenue to sustain defence against the nomad threat and so encouraged private sea-going merchants (Lo 2012, 91–2). Although the early Yuan maritime policies from 1284 to 1323 oscillated between state control and encouraging private trade, in the later years of the dynasty, private maritime trade grew strongly (Heng 2009, 64–5).

Maritime trade was important for the Song from the start. The Song administration of trade shifted quickly from a state-centred monopoly to "state stewardship" of private maritime trade (Heng 2009, Chapter 2). In 971, the Song established a mercantile shipping superintendency (*shibosi,* 市舶司) at Guangzhou, and later at Hangzhou and Mingzhou (Ningbo). These stimulated trade with Arabia and India via Southeast Asia, of which the most important entrepôt was Srivijaya in Sumatra.

Between 976 and 982, the Song court prohibited Chinese merchant voyages and held a monopoly over the domestic trade in foreign goods brought in on Arab and Malay vessels. In 982, the court relaxed its monopoly, and scaled back import duties and the court's share of imports, which increased the participation of Chinese private traders. State involvement was reduced again in the 1030s. By the mid-eleventh century, about half of China's foreign trade was in the hands of private traders (Heng 2009, 39–41). The Song thus had moved rapidly from ritualised state-level exchanges conducted at court to commercial exchanges conducted at the port of entry. Tribute missions declined from 71 between 960 and 999 and 31 between 1000 and 1020, to only 14 between 1020 and 1050 (Heng 2009, 39, 42).

Policy liberalisations in 989, 1072, and 1090 stimulated trade with Southeast Asia. From 989, the court allowed Chinese private shipping to trade abroad. Merchant vessels needed to register at a *shibosi* port and return to the same port for customs inspection. This was costly for traders from other ports as it prolonged the voyage (Heng 2009, 42–3). The 1072 reforms – part of the Wang Anshi fiscal reforms to streamline revenue collection – aimed to increase foreign trade, expand maritime-related industries, and increase the role of private traders. Foreign trade was monetarised, the ban lifted on the export of copper, and copper cash payment to foreign merchants replaced barter exchange. Further cuts to customs duty left the court with no more than 35 percent share of imports. Heng (2009, 47) reckons the Wang Anshi reforms "were fundamental to the growth of Song China's maritime economy." The value of foreign trade more than doubled in the 1080s as did the court's income.

The 1090 liberalisation lifted control of the superintendencies over private shipping. Ceramic and metalwork industries of the port hinterlands were drawn even more into the maritime economy to supply the increase in trade goods for Southeast Asia. One major effect of this policy was a two-fold jump in customs revenue. The increase in private merchant shipping was assisted by the advance in Chinese ship building, navigation aids, and geographical knowledge of Southeast Asia and beyond (Heng 2009, 49; Lo 2012, 103–11). These Chinese innovations "wrested the monopoly of the sea lanes from the Arabs, and they were able to maintain their lead through the Yuan and early Ming" (Lo 2012, 111). Another effect was the increase in the scale and variety of imports and exports. China was freed from being dependent on foreign merchants for imports. Chinese traders began to reside in foreign ports to buy goods for the China market. "China could now shop abroad" in Southeast Asia, which increased the importance of lower-value items and the volume of imports (Heng 2009, 50). Although Chinese merchants could reside abroad, the court in 1064 restricted Chinese vessels from remaining away for more than nine months, or one monsoon cycle. Ship masters could sail no further than Java or Sumatra on the northeast monsoon and return on the following southwest monsoon, which stopped them sailing westward into the Bay of Bengal (Heng 2009, 51–2, 126–8).

In 1127, the Southern Song court temporarily banned foreign trade as an austerity measure. But by 1130, the court again encouraged and rewarded private traders, including official ranks for Chinese and foreigners whose imports exceeded a

specified value (Heng 2009, 54–5). The 1164 rise in the customs duties and state compulsory purchases for luxury goods made dealing in these unprofitable for Chinese merchants, who switched their focus to non-luxury items. An unintended effect of this policy was a surge of low- and high-value non-luxury imports from Southeast Asia (Heng 2009, 59–62).

A remarkable development of the twelfth century was the transformation of the Mongols into a maritime power. This enabled their defeat of the Jin (1115–1234) and the Song (Lo 2012, 212). Their Yuan dynasty (1279–1368) departed from the Song stewardship of foreign trade to direct participation in sponsoring overseas voyages and intermittent bans on private shipping (1284–94, 1314–20, and 1322–23). Official trade was in the hands of Central Asian traders favoured by the Mongols. Quanzhou became the leading international port at this time, eclipsing Fuzhou and Guangzhou. Taxes were about half the Song rate, and there was no compulsory state purchase of imports. When the last of the restrictions on private trade was lifted in 1323, private maritime trade and related industries grew rapidly through to the end of the dynasty (Heng 2009, 65–70).

After failed attempts to conquer Japan and Annam, Kublai Khan despatched envoys to India and Java to persuade them to submit tribute. King Kertanagara of the Singhasari Kingdom (1222–92) in East Java, then the most powerful polity in Maritime Southeast Asia, branded the envoy's face and sent him home. In 1293, Kublai ordered a punitive invasion of Java. The Chinese force allied with Wijaya who would later establish the Majapahit Empire (1293–1527). Wijaya then turned on them. Defeated, the Chinese fleet returned to Quanzhou with 100 royal prisoners, spices, batik cloth, and gold (Lo 2012, 303–8).

The failed invasion of Java had many consequences for settlements, technology, and trade in Island Southeast Asia. Many of the 3,000 Chinese said to have been killed by Wijaya probably surrendered and began new lives in Java (Reid 2010, 313). The Chinese merchant Wang Dayuan 40 years later reported Chinese lived there "mixed up with the natives" and Ma Huan, the translator and chronicler for Zheng He, described Chinese settlements in East Java (Reid 2010, 313, 321–2). These Chinese engaged in the proselytisation of Islam in Java, transferred ship-building technology that resulted in new hybrid designs, and intensified trading in spices from Eastern Indonesia (Reid 1996, 17–21, 1999, 56–62; Manguin 2010; Ptak 1993, 8–9).

Mongol maritime policies increased the prominence of Quanzhou and Fujian-based merchant vessels, which stimulated the use of the eastern route towards Taiwan before vessels diverged north to Ryukyu and Japan or south to the Philippines, Borneo, the Sulu Zone, and onto Sulawesi and Maluku islands (see map Figure 1.1). Vessels then sailed south-southwest from the Maluku towards Java and returned along the western route through the South China Sea. Chinese vessels in the 1330–40s are reported to have bought cloves in the Maluku islands. Direct trade stopped later in the century and merchants from Makassar and Java instead collected cloves for re-export. Reid (2010, 314) suggests that Chinese traders did not so much stop coming as that they were assimilated into the East Javan trading families. Cloves from the Maluku thereafter went via Java. Exports to Europe and China "leapt" around 1400 (Reid 1993, 4–5; Ptak 1993, 10–12).

At a macro level, Southeast Asia mostly exported to China raw materials grown or collected in the region, while China exported to Southeast Asia manufactured goods such as porcelain, metalware, medicines, and fine textiles. During the Tang and early Song dynasties, maritime Chinese imports were mostly luxury items from the Indian Ocean littoral and West Asia. Court and elite consumers were familiar with these via the Central Asian land route, such as aromatics (frankincense), storax, glassware, ivory, gems, pearls, and foodstuffs (rosewater and dates). Wheatley (1959) records a trade inventory from 1141 that listed 339 import items from the Southeast and West Asia. Southeast Asia items added during transhipment at Srivijaya included aromatic woods (gharu and sandal), camphor, benzoin resin (a storax substitute), pine resin (a frankincense substitute), and rhino horns, ivory, colourful bird feathers, deer skins, and pharmacopeia. China's exports included ceramics, silk textiles, metalware and iron ingots, and foodstuffs. Porcelain often had designs to suit West Asian consumers (Wheatley 1959; Heng 2009, 32–4, 192ff).

The composition of trade changed rapidly from the late eleventh century (Heng 2009, 50–1; Schottenhammer 2022, 644). Luxury items became the preserve of the Song court and foreign merchants, while Chinese merchants focused on non-luxury goods. These included cloves, nutmeg, camphor, aromatic woods, pharmacopeia, sappanwood (a dye and medicine), betel nuts, coconut mats, and cotton textiles from both Java and re-exported from India. Some imports substituted for domestic products, such as rattan and camphor-coated woods used in furniture making (Heng 2009, 59–62, 104–5, 192–4, 199). The variety of Chinese exports to Southeast Asia expanded: metalware (precious metals, copper coinage, and ironware and iron ingots); textiles (silks and brocades); and high-quality ceramics (celadon, qingbai, and blue-and-white wares) and domestic stoneware (Heng 2009, 151–90).

Shipwrecks have provided new evidence for the diversity of inter-regional trade. The Belitung wreck off Sumatra, an Arab or Indian ship dated to c.826, was laden with Chinese ceramics and gold and silverwork designed for West Asia. The tenth-century wreck at Cirebon, Java, was a Southeast Asian ship carrying Chinese ceramics, Persian glassware, and Indian Ocean pearls and precious stones. The c.1300 Pulau Buaya wreck near Singapore was a Southeast Asian ship sailing from China to Java or Sumatra laden with Chinese ceramics, iron wares, bronze gongs, and lead and silver ingots. The Java Sea wreck (thirteenth century) was a Southeast Asian vessel sailing from South China with 100,000 pieces of ceramics and 200 tons of iron pots and bars (Wade 2009, 239–40).

This four-century trade boom changed the economy and society of Southeast Asia and China. In Java, trade spurred technological change in the ceramics (borrowing from China), textiles (borrowing from India), double cropping of rice and other cash cropping for exports, and commercialisation that stimulated demand for coinage such as copper coins from China (Christie 1998; Wade 2009; Heng 2009, 151–67, 213–4). In China, fast-ripening rice introduced from Champa contributed to Song commercialisation, freeing labour from agriculture to engage in manufacturing and trading, which made China the world's then richest country (von Glahn 2016, 223–5).

Maritime trade slowed around 1300. Many explanations have been advanced, including the shock of the Mongol invasion of Java, climate change, and political upheavals in Southeast Asia, West Asia, India, and China. The "little ice age" of cooler temperatures from the 1340s caused the Asian monsoon to fail, resulting in harvest failures, famines, and social upheaval in Southeast Asia and China (Wade 2009, 264; Heng 2009, 207; von Glahn 2016, 284). In Central Asia, the Mongol federation began to crumble while the bubonic plague, carried across Central Asia along trade routes to Europe, killed a third of the European population between 1347 and 1353 (see the King chapter).

The "age of commerce" from c.1400 to 1650

The Ming period voyages of Zheng He between 1405 and 1433 introduced an "Age of Commerce," a near three-century trade boom in Island Southeast Asia (Reid 1988, 1993). Spices, cotton textiles, porcelain, and silver fuelled the boom. The voyages stimulated commerce, diversified production, and created new ports, most notably Melaka on the Malay Peninsula. New polities arose on Mainland Southeast Asia too. The Ming maritime and diplomatic policies between the 1370s and the 1430s were an astonishing departure from the past. They were expansionist and violent without seeking to colonise, unlike the Europeans who followed them from the next century. The turning point early in the dynasty was the proscription of private maritime trade (*haijin,* 海禁), which lasted from 1372 to 1567. Chinese merchant seaborne trade was banned, and foreign trade became a state monopoly conducted through tribute exchange. The great voyages of Zheng He were intended to project Ming claims to cultural and political superiority (Chan 1988; Wade 2008; Liao 2019; Schottenhammer 2021). While most scholarship focuses on the Zheng voyages to the Indian Ocean, other expeditions went east to the Philippines, Borneo, and Eastern Indonesia.

The first three voyages of Zheng (1405–07, 1407–09, 1409–11) visited Southeast Asia – Champa, Siam, Java, Melaka, Samudera, Palembang, and Lambri – and South Asia, including Ceylon, Cochin, and Calicut. The fourth (1413–15) sailed onward from Calicut across the Arabian Sea to Hormuz (Persian Gulf), Dhofar, Aden (Red Sea), and Mogadishu (East Africa). The fifth expedition (1417–19) returned 18 envoys who had come to China with the previous expedition and brought back exotic tribute including a giraffe. The sixth voyage (1421–22) returned envoys from as far as East Africa. The last in 1431–33 during which Zheng died visited East Africa again (Chan 1988, 232–7; Wade 2008, 584ff; Sen 2016).

The motivation for the voyages was a complex mix of political, military, cultural, and commercial aims (Chan 1988, 232–3; Finlay 1991, 5–6; Wade 2008, 608ff). Emperors Hongwu (r.1368–99) and Yongle (r.1402–24) were strident in projecting Ming power along China's southern land borders, through Maritime Southeast Asia and into the Indian Ocean. They saw themselves as "divinely sanctioned" to rule China and beyond, to demand other polities to recognise their legitimacy and submit tribute, and in reward to enfeoff rulers of these polities (Wade 2008, 581–3, 587ff; Liao 2019, 132–5).

As the fleets of Zheng would show time and again, refusal or insufficient deference would be met with lethal force, recalcitrant rulers replaced with pliant ones and, as with Ceylon in 1411, the capture of the king who was taken back to the Ming court (Wade 2008, 596; Lo 2012, 338; Liao 2019, 136).

> Wealthy and heavily armed, the Chinese [fleet] overawed potential opposition and crushed those unwise enough not to be willing to submit to a dependent status. … [the absence of colonisation] should not obscure the Chinese use of massive military power to impose their will throughout Southeast Asia and the Indian Ocean.
>
> (Finlay 1991, 10)

The Ming maritime policies were integral to Hongwu's desire to suppress the inherited market economy and restore an autarkic village economy of an idealised Confucian past. Tribute fitted this ideal: the court monopolised foreign trade, permitting only the import of exotic and valuable goods (spices, incense, aromatics, and exotica) for imperial use and consumption of the social elite. The ban on Chinese private merchants' foreign trade was to protect the state monopoly, but frequent reiterations suggest it was ineffective (Wade 2008, 586–7; von Glahn 2016, 285–7; Schottenhammer 2021, 137–8, 2022, 648). After the last voyage, the tribute missions became increasingly commercial. Foreign trade was increasing by stealth, often labelled piracy by Ming officials, and the domestic economy grew as markets revived (Wade 2008, 586–7; von Glahn 2016, 308; Schottenhammer 2022, 657–9).

The Ming voyages had a big economic and political impact. One of the most stunning was on the price of pepper in China and Europe. T'ien (1981) tells us that so big were the fleet's purchases of pepper on the Malabar Coast in South India that prices in China fell steeply, turning a luxury into an everyday item. Meanwhile, insufficient stocks in Malabar, the origin of black pepper and the sole source for Europe until the sixteenth century, led to spikes in European pepper prices (O'Rourke and Williamson 2009). Figure 19.1 shows the nominal price of pepper in Venice and England. The 1411 price in England reflects that just one sale was recorded that year, half a pound at eight shillings at Oxford, when a few years earlier, a shilling or less could buy 12 pounds (Rogers 1882, 518). Clearly, there was almost no pepper to be had in England.

Two related effects, one in China and the other in Southeast Asia, followed from these big purchases of pepper. Black pepper had been imported to China from the Malabar via Srivijaya and other ports in Southeast Asia since the Tang. It was used initially as a medicine. Trade in pepper and sappanwood was a court monopoly. From the mid-Yongle reign, pepper was substituted as currency to pay civil and military officials to offload at official monopoly prices the large quantities in imperial warehouses. Officials sold on the pepper in local markets at prices one-tenth or less of the official price of one tael of silver for a catty of pepper (T'ien 1981, 188–90).[1] These developments reduced local pepper prices and indirectly helped to revive markets, reversing Hongwu's autarkic policies. Chinese demand encouraged Southeast Asian tribute missions to include more pepper. By the 1540s,

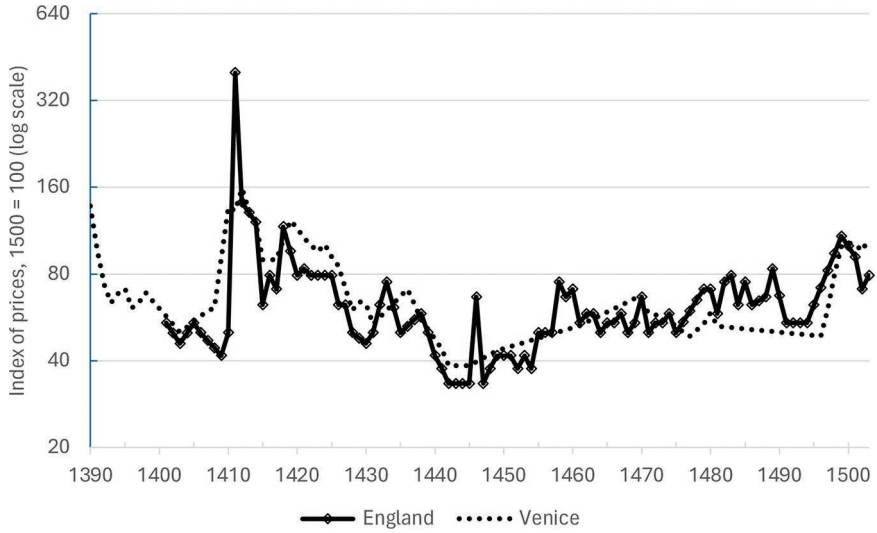

Figure 19.1 Index of nominal prices of pepper in England and Venice, 1390–1503.

Source: O'Rourke and Williamson, 2009 (data courtesy of Kevin O'Rourke).

Notes: The index is logarithmic because the price spike in England was extraordinary even compared with that of Venice.

the pepper–silver exchange rate fluctuated with the arrival of Southeast Asian vessels and was as low as 7.5 taels for 100 catties, a tiny fraction of state prices (T'ien 1981, 193).

The second effect was the expansion of pepper cultivation in Southeast Asia to supply the China market (Tien 1981, 197n54; Reid 1993, 7–8, 12, 20; Findlay and O'Rourke 2007, 134). Chinese sources mention pepper imports from Java before the twelfth century. Although the re-export port may have been mistaken for the source, which was common for Song and Yuan authors reporting natural produce (Wheatley 1959, 14), an early eleventh-century charter regulating merchants in East Java specified the volume and weight standard for black pepper, which was exported to China (Christie 1998, 353n8, 373–4). The Zheng purchases of pepper seemingly stimulated the spread of pepper cultivation in Sumatra and West Java. Most pepper was consumed locally or shipped to China (Reid 1993, 7–8). By the mid-fifteenth century, Chinese vessels did not travel beyond Melaka to buy pepper. The Portuguese by the 1560s mainly bought pepper in Southeast Asia, while Aceh sent pepper direct to Red Sea ports for trans-shipment to Europe. Pepper became Southeast Asia's most important export and by the early 1600s, its cost in Sumatra and Java was half of that grown in India, which began to import pepper too (Reid 1993, 8–9; Findlay and O'Rourke 2007, 140–1; Bulbeck et al. 1998 for production and export statistics).

Melaka became a Chinese tributary polity in 1405 when the ruler asked for protection from Siam and Yongle enfeoffed him (Schottenhammer 2021). The port

was the logistic base for Zheng's fleets, though vessels also laid over in East Java (Liao 2019; Wade 2008). Melaka was the premier entrepôt of Southeast Asia in the fifteenth century. Other ports developed in Burma, Siam, and Java too. Melaka's growth stimulated rice production and ship building in Burma and Siam, the import from India of cotton textiles and from China of silk, ceramics, and metalware (Findlay and O'Rourke 2007, 135, 139). Its role as the main spice entrepôt accelerated the diffusion of Islam to Eastern Indonesia (Reid 2010, 314–5, 323).

The Ming withdrawal from Southeast Asia after the 1430s led to a loss of maritime knowledge in China and a waning of Chinese influence in Southeast Asia. Overseas Chinese communities were left isolated, though they traded among themselves (Reid 2010, 327; Findlay and O'Rourke 2007, 137, 139). Chinese ceramics vanished from the region for decades, the so-called "Ming gap," and new ceramics centres emerged in Burma, Siam, and Vietnam that traded substitutes in the region on vessels crewed by Chinese diaspora (Brown, 2010). The Ming exit left the region open to the Portuguese several decades later (see the Salonia chapter; Liao 2019). In 1511, the Portuguese capture of Melaka disrupted spice and pepper exports. Exports revived several decades later. Gujarati merchants shipped more pepper from Aceh to the Red Sea than the Portuguese around the Cape by the 1560s, though total imports of all spices to Europe increased over the century (Findlay and O'Rourke 2007, 202). The 1620s was the peak of international trade for Southeast Asia before the late nineteenth century. Pepper and spices accounted for half of the cargo bound for Europe and a large share of trade to China and Japan (Reid 1993, 288).

While the Portuguese opened the sea route to Asia from Europe, they were unable to dominate the trade in pepper and spices. The Dutch VOC (Verenigde Oostindische Compagnie 1602–1795), however, during the early seventeenth century violently excluded European, South Asian, and West Asian traders from Island Southeast Asia. In 1621, they slaughtered the Banda islanders to establish a nutmeg monopoly (Reid 1993, 274; Findlay and O'Rourke 2007, 180). Next, in 1623, they massacred the English on Ambon to enforce their clove monopoly (Reid 1993, 172, 174); then forced the rulers of Aceh and Java to an accommodation in 1629; took Melaka from the Portuguese in 1641; captured Makassar in 1667, and in 1683, subdued Bantam, the West Java centre for pepper exports (Reid 1993, 274, 278, 279–80). But a pepper monopoly eluded them still (Reid 1993, 281).

Although the seventeenth-century downturn in Southeast Asia maritime trade is often blamed on the VOC violence and exclusion of islanders and other merchants, Europe, China, India, Japan, and Southeast Asia were engulfed in a "general crisis" (Reid 1993, 285–311 passim; Parker 2013). The causes were many: some economic, some political, some environmental, and often a mix. The turmoil might credibly be linked to the emerging globalisation, an outcome of the conquests, international trade, and flows of silver since the Iberian voyages 150 years earlier. In China, droughts, famines, and economic crisis would topple the Ming. In Southeast Asia, cooler temperatures led to smaller harvests, increased food prices, and raised mortality. Pepper prices crashed in the 1650s. Southeast Asian islanders retreated from trading and cash cropping to self-sufficiency, and incomes fell, reflected in a decline in their demand for Indian cotton textiles (Reid 1993, 291, 293, 299, 301–2, 2009, 38, 40–1).

Trading networks

Asia's maritime trade can be imagined as overlapping networks of traders and diasporic port communities comprising three "interlocking circuits of interactions" (Sen 2014, 34; Abu-Lughod 1989, 33–5). The west-most circuit was the Arabian Sea littoral from East Africa around to India, the central "circuit" encompassed southern India, the Bay of Bengal, the Melaka Strait, and Mainland Southeast Asia, and the third "circuit" encloses all Maritime Southeast Asia from the Melaka Strait to the South and East China Seas (see Figure 1.1). Multiple networks of merchants and diaspora communities linked these circuits.

The Dutch historian of maritime Indonesia J.C. van Leur (1955) described the Southeast Asian trade networks as a type of "peddling," which Heng (2009, 124) reiterates. Hansen (2020) called the serial buying and selling along medieval trade routes "trickle trade." But neither "peddling" nor "trickle trade" captures the sophistication and scale of Asian merchant networks. Intra-regional trading was lower risk and more profitable than point-to-point long-distance voyages for both Asian merchants and later European ones. Trade occurred in stages or sub-networks determined by the monsoon season and rarely spanned from one end to the other.

Early long-distance trading faced two major business risks. The first was the problem of agency related to recruiting honest partners and agents for these ventures. The second was raising capital to finance long-distance trade over months or even years. Kinship ties were a partial solution for both challenges, as seen in the prominence of family firms and partnerships to organise business in Asia and Europe. Network diasporas of sojourning merchants developed in Chinese ports, such as those of Malays in Tang and Song, Arabian and Persian ones in the Song and Yuan, and Chinese ones in Southeast Asia from the eleventh century. Membership of networks created a club-like fraternity based on kinship, native place, and religion that reduced agency and transaction costs.[2]

When information travelled no quicker than people and goods, these networks of diaspora communities underpinned long-distance commerce. Layovers in ports of several months to wait for the monsoon wind to change were a time for merchants to buy and sell goods, and to learn of new opportunities and risks. The profitability of intra-regional Asia trade was recognised by the Portuguese, Dutch, and English, who soon learned to buy cotton cloth in India to exchange for pepper and other spices in Indonesia. Indian cloth "more than any other single article of import" opened Southeast Asia to long-distance trade well before Europeans arrived (Reid 2009, 34). Profits earned on intra-region trade allowed Europeans in Asia to avoid shipping silver bullion around the Cape to buy spices, silks, and ceramics, and to pay for their overseas administration (Chang 2019, 229–30; Findlay and O'Rourke 2007, 170, 178–9, 182–3; Heng 2009, 128; Reid 1988, 90; 1993, 26–31, 2009, 35–7).

We know a lot about the networks of Chinese traders operating from Guangdong and Fujian ports (Ng 2017; Chang 2019; Heng 2009), and those of Europeans from the sixteenth century, but far less about Southeast East Asian traders (Reid 1993, 48–52). Artefacts from shipwrecks show Chinese participants in maritime

trade ranged from wealthy merchants to sole traders and agents in the service of others. The c.1278 Quanzhou wreck contained wooden ownership tokens of sole traders, agents, and business groups, including the southern branch of the royal family. Chinese living abroad during the Yuan engaged in intra-Asian trade in Thai ceramics, for example, as found in the Turiang wreck near Singapore (Heng 2009, 126–8; Hansen 2020, 220–2). Later Dutch accounts of Chinese vessels show a similar pattern. A junk left Jambi (Sumatra) in the 1620s with hundreds of traders on board each with a cargo worth just 22–42 Spanish reals (a Spanish eight-real coin was about 25 gm silver). A junk arrived at Makassar in 1755 with Chinese manufactures and left with mostly trepang. Chinese *kongsi* (partnerships) owned 16 percent; the skipper, clerk, and first mate 9 percent; and 14 individual merchants held 75 percent with about 16 picul each of trepang (Ng 2017, 34–5).

Conclusion

This chapter focused on the maritime trade and economic ties between West and East Asia centred on Southeast Asia from c.900 to the 1650s. The reliance on rich Chinese records makes less visible the merchants and vessels of Southeast Asia in this story, though archaeological findings in recent decades have added much to the record. Still, the region was not only the origin of the fabled fine spices but the fulcrum for sea routes and networks that linked merchants and producers along the 'maritime silk road'. Through the ports of the region passed merchants, goods, and other travellers, along with the region's natural produce. In that role, the region could be imagined as a giant entrepôt. Goods came from the west for re-export north to China, Japan, and Korea, while others came from the north for re-export to South and West Asia. Small quantities went onwards to Europe. Meanwhile, Southeast Asia was a consumer of manufactured goods from China and India and a supplier of spices and forest exotica.

Many goods in the first millennium were luxury ones. At least that is the common story. Early in the second millennium, the trade in lower-value goods increased in volume within Southeast Asia and with China. Household ceramics and metalware from China were in big demand in Southeast Asia, while cotton textiles from India clothed Island Southeast Asians and were even re-exported to China. China imported specialty woods and rattan cane for furniture from Southeast Asia, and later rice. The Portuguese rounding of the Cape in 1498 would eventually restructure markets globally, but only during the seventeenth century after the Dutch had secured control of Insular Southeast Asia, were Europeans ascendant actors in this Asia drama and the primacy of Asians in Asian trading networks eclipsed in long-distance trade if not entirely in intra-regional trade. Two conclusions arise from this study for trade between the tenth and seventeenth centuries. First, seaborne trade was large between Southeast Asia and India – the exchange of spices and forest exotica for Indian cotton textiles – and onward to West Asia, even Europe. And second, the region's trade was even larger with China, the vast market that for centuries motivated merchants and vessel captains to brave the Indian Ocean, the seas of Southeast Asia, and the South China Sea.

Notes

1 A tael (*liang* 兩) is a Chinese ounce (31.25 gm) and a catty (*jin* 斤) – also *kati* in Malay – is a unit of dry weight (1.32 lbs or 600 gm) at this time; 100 catties equal one picul (also *pikul*; *dan/tan* 石).
2 For a concise introduction to transaction costs and to Chinese and Asian business networks, see Landa (1985) and Morgan (2021, 136–43).

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Part 5

Historical myths and reconceptualisation

20 The birth of Silk Road studies in China

Hedin, Andersson, and Sino-Swedish collaboration in Republican China

Jan Magnus Romgard

The 1901 rediscovery of the city of Loulan by Sven Hedin (1865–1952) was a major find. His account of the discovery caused a number of international archaeologists to follow in his footsteps, among them British Aurel Stein (1862–1943) who then conducted far more extensive excavations.[1] But archaeology was not Hedin's aim *per se*. His primary agenda was to solve contemporary research issues about the geography and historical geography of Inner Asia. When he discovered Loulan, for instance, he was surveying the area for the lost lake Lop (Lop Nor), which over the centuries had mysteriously vanished and appeared again in different positions on antique maps (Figure 20.1a and 20.1b). Upon seeing the ruins, he decided not to do any large excavation, but to focus on finding written texts that could identify the site, because, he explained, that "would give me the key to the entire solution of the Lop Nor problem." The geographical investigations showed that

> Here in the desert a large lake had been located and here among the ruins people had lived. But the […] documents would […] reveal when this lake did exist and which people lived here, under what conditions they existed, with what parts of Inner Asia they were connected, maybe even the name of their land.[2]

Hedin's issues were related to questions earlier asked by his mentor, Ferdinand von Richthofen (1833–1905; figure 20.2). In 1877, the German geographer had attempted to recreate the historical geography of Central Asia using information from classical sources. He argued that the texts proved that prospering trade routes had existed since the dawn of civilisation across Eurasia, which he called the Silk Roads.[3] On the eastern end of this system, Han Dynasty China had set up watch towers and trading posts far westwards in the Tarim Basin, including at a city called Loulan, in order to control these routes, he reasoned.[4] However, the exact whereabouts of many of the cities, lakes, and rivers given in the historical sources were unknown. Richthofen's student Hedin therefore set out to Central Asia to rediscover these sites. Hedin's travelogues on his adventurous discoveries along the Silk Roads became widely read and popularised the concept.[5] But why did Hedin become an explorer and what did he discover?

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Figures 20.1a and 20.1b The Loulan ruins photographed by Hedin in 1901. Courtesy of the Sven Hedin Collections, Museum of Ethnography, Stockholm.

As a 15-year-old, Sven Hedin had attended the celebrated return of the Swedish Vega Expedition 1878–80, which had explored and discovered the Northeast Passage between the Atlantic and Pacific Oceans, sailing along the northern coast of the Eurasian continent. He then dreamt of becoming a Polar researcher. By chance, however, in 1885, he was offered a position in Baku, where he studied Russian, Persian, and a local Turkic dialect. On his return, he studied geology and geography at Stockholm University College before pursuing his studies from 1888 with

Figure 20.2 Photo of Richthofen with dedication to Hedin, dated 1890. Courtesy of the Sven Hedin Collections, Museum of Ethnography, Stockholm.

Richthofen in Berlin. Hedin soon undertook three Central Asian expeditions in 1893–97, 1899–1902, and 1905–08. During the first expedition, he mapped glaciers and lakes in the Pamirs, attempted to cross the Taklamakan Desert in a venture that ended in disaster, discovered two ancient cities in the Tarim Basin, crossed the Kunlun Mountains and mapped 23 lakes that had been previously unknown to the Western scientific community.[6] The second expedition focused on hydrological and geological studies of the Tarim Basin and Lop Nor, during which he discovered Loulan. Hedin then travelled across the Tibetan high plateau to Ladakh and returned to Kashgar across the Karakorum Pass, mapping the area.[7] Hedin's third expedition in 1905–08 first surveyed the salt desert Dasht-e-Kavir in eastern Persia before doing cartographic work in Tibet in the next two years. He discovered what he called the Transhimalaya Mountain system, traced the sources of the Brahmaputra and Indus Rivers, and collected mineral samples to understand the geological history of the region.[8]

While Hedin's early Central Asia expeditions were primarily aimed at geographical discoveries and cartography, they also researched the connection between hydrological changes and the archaeological sites in the Tarim Basin that he found during his journeys. Furthermore, Hedin's geological research in the mountain

ranges of Central Asia was again influenced by Richthofen who assigned to him the collection of data for the German's continued *China* series.[9] Hedin also collaborated with Swedish institutions in examining his material, work that followed contemporary Scandinavian research aims rather than those of himself and his German mentor. Sand and clay samples from the Tarim Basin were, for instance, analysed by the Quaternary geologist and Polar researcher Gerard De Geer (1858–1943), who had invented the method of geochronology, using sedimentary layers that he called "varves" (resembling dendrochronology).[10] He needed further samples from around Earth to test his theory that ancient climatic changes could be dated and studied through such varves. Moreover, the data raised new questions about the hydrological and geological history of the region that later were pursued by the Sino-Swedish Expedition 1927–35, explained below. To complement the data, and to solve these and other new issues, Hedin revealed – as early as 1912 to his German publisher, Albert Brockhaus – that he planned a multidisciplinary expedition to Central Asia during which he would take with him experts in geography, astronomy, magnetism, geodesy, zoology, botany, and anthropology.[11] However, he was firstly preoccupied with the work on the *Southern Tibet* series. Later, World War I and a lack of funding prevented him from realising his plan.

Andersson, the mining adviser, and the Swedish foreign policy in China

While Hedin's early research focused on Inner Asia, his contemporary Swedish colleague, the geologist Johan Gunnar Andersson (1874–1960), was engaged in Polar exploration, and belonged to the same research network as that of De Geer.[12] However, Andersson would soon also become associated with archaeological research and studies in line with the Silk Road concept. In the 1920s, his pioneering interdisciplinary field collaborations with the Republican Government of China resulted in discoveries of prehistoric cultures, as well as theories about long-distance exchange of ideas across Eurasia that he argued could have contributed to the spread of the Neolithic revolution. His results sparked the setting up of indigenous geoscientific and archaeological institutions in China. What is important when looking at this process is that it was propelled by both the stream of scientific breakthroughs presented by Andersson's team, contemporary political changes, and by geopolitical events. But how did Andersson become so deeply involved in researching China's ancient past? And why did he get the position that enabled the large Sino-Swedish scientific exchanges?

Andersson's work in China was very different compared with Hedin, whose initial field expeditions to the northwestern regions during the late Qing rule were done much on his own initiative. Andersson, on the other hand, worked between 1914 and 1926 as a mining adviser to the newly established Republican Government, and thus an employee within the Chinese administration. Furthermore, his arrival was the result of direct negotiations with China and part of Swedish foreign office policy advocated by the envoy Gustaf Oscar Wallenberg (1863–1937). This

Figure 20.3 Andersson during fieldwork for the Chinese Government in Henan Province, 1918. Courtesy of the Museum of Far Eastern Antiquities, Stockholm, F3289.

foreign policy background is vital to understanding why Sweden gained such influence in Chinese geosciences from 1914 to the 1930s.

After the fall of the Qing Dynasty, Wallenberg began to promote Sweden as a neutral, technological ally to the new Republican Government. This geopolitical positioning was explicit in his talks on Andersson's position with Chinese cabinet ministers. Wallenberg emphasised Sweden's neutrality vis-à-vis the Big Powers, pointed to the largely foreign control of China's steel and mining industry, and to China's lack of a national geological survey. He suggested that Swedish expertise could assist in reform work and in surveying that would lead to newly discovered resources being under better Chinese control, which in turn could be mined with improved methods that enhanced economic output. Wallenberg offered to send the competent field expert and top Swedish civil servant Andersson – then head of Sweden's Geological Survey – to lead this reform work. Wallenberg believed that this would prove Sweden's competence and good will, which in turn would benefit further economic exchanges and trade between the two nations. The Chinese side, represented by the minister Zhāng Jiǎn 张謇 (1853–1926), was positive to the idea. It was agreed that Andersson's immediate tasks were to establish an indigenous Chinese geological survey along the "Swedish model," to develop China's mining

industry and its regulations, and to set up a Swedish team of prospecting experts to search for new natural resources until the state survey was in place (Figure 20.3).[13]

Andersson quickly fulfilled the wishes of both sides. He discovered a series of rich iron ores and advised on how to increase national control of these assets – results that made him popular within the administration, so his contract was prolonged. As hoped for, there were soon Chinese requests for further Swedish expertise, and discussions began about engaging Swedish companies to further develop the sector. In this work, Andersson ensured to keep in line with Sweden's neutral foreign policy. A crucial turning point that proved this strategy successful and ultimately led to an increase of the Sino-Swedish scientific exchanges was the Sino-Japanese crisis of 1915. Andersson was then in talks with the Chinese cabinet on giving a potential mining contract to a Swedish company. The Chinese minister in charge, Zhōu Zìqí (周自齊, 1869–1923), was positive to this, but geopolitical events complicated the matter. In early 1915, Japan made its secret 21 demands of the Republican Government. Were these agreed, Japan would gain full control of its mining interests, steel works, and railways and that areas within Japan's interest spheres would be reserved to Japanese exploitation. Leaking of the demands led to public outcry. Japan then mobilised troops to pressure Peking, and the risk of war was imminent.[14]

On 16 January 1916, Andersson wrote to the Swedish company in Stockholm to explain the situation. Clearly showing the Swedish standpoint, Andersson suggested ways to go ahead with a contract, which was the desire of the Chinese government and the Swedes, but warned that Chinese "public opinion" was against foreign mining because of a perception that "foreigners" in China "strive for permanent possession of the assets, often with [geo]political aims acting in the background." He argued the Swedish proposal must "be appealing both to the central government and to public opinion in the country," any permits asked for "must be limited in time," and, importantly, the affected province must "in an indisputable and clear way" get "increased income" out of the project.[15] The Swedish firm eventually cancelled the plan because it deemed the political risks too high to engage in such an investment. Zhou Ziqi then told the company that he hoped it would return as soon as the situation had stabilised. "When mining conditions are improved, I hope you and your Company may do much to help us in the work of prospecting and development," he wrote.[16] There was a belief at this time that the exchanges with Sweden, including potential economical ones, would benefit both sides. Although the tension with Japan blew over, at least temporary, internal instability and China's entrance in the World War continued to make it too hazardous for Swedish investors to pursue. However, this contemporary geopolitical situation combined with Sweden's attitude strengthened Sweden's position as a neutral technological partner to the Republican Government. The Swedish foreign policy and partnership with China therefore continued and became stronger through until the mid-1940s.

During 1916, Andersson's original adviser mission was fulfilled when China's Geological Survey was successfully set up and the Swedish survey team was dissolved the following year. However, Peking wanted Andersson to stay. He was offered a multi-year adviser contract, and permanently resigned from his Swedish

post. One of his conditions for taking this step was that he would engage in scientific field research alongside his adviser duties, a wish that had been put forward during the negotiations in 1913.[17]

Andersson's scientific collaborations

The interdisciplinary undertaking that now began was strongly supported by the new directors of the national Geological Survey, the reform-minded civil servant and scientist Dīng Wénjiāng 丁文江 (1887–1936), and the geologist and politician Wēng Wénhào 翁文灝 (1889–1971).[18] Like Andersson, they were scientists and shared the same passion for multidisciplinary exploration that had dominated the field sciences since the days of Linnaeus and Humboldt. While Andersson wished to follow up research goals that were on the agenda of the Scandinavian Polar community, the Survey heads needed data on the nation's natural history to do an effective job. The parties therefore agreed to a solution that would benefit both Swedish and Chinese research: Andersson promised funding, expertise, sharing of discovered material equally between Swedish and Chinese institutions, and to jointly publish and finance the results in China in new scientific magazines that were being set up and published by the Survey. In Peking, the returned Chinese material was used in setting up a geological museum, curated by Andersson, to build a foundation for research. To Ding and Weng, the project engaged foreign scientists within the framework of a state institution, the Survey, enhanced the knowledge production and trained their own cadres in interdisciplinary fieldwork, while the publications would promote both the Survey and China's position nationally and internationally as a nation embracing modern science.

Indeed, this early scientific collaboration between Republican China and Sweden became remarkably successful. Within the next few years, Andersson's bilateral team had unearthed some of China's first dinosaurs, discovered the first remains of Peking Man and found China's first-known prehistoric cultures (such as the Yangshao and Majiayao Cultures). The many sensational reports published by the Survey made the institution famous as the nation's leading scientific entity. A younger generation of researchers from both China and Sweden were schooled in the project. Andersson successfully received financial support for both parties, created a network of Swedish and Chinese field teams together with the Survey, engaged experts at various institutions in Sweden to study the data, and arranged and paid for transportation forth and back between laboratories in Stockholm and Uppsala and Peking.

However, studying the ancient Silk Roads were at first not at all on Andersson's agenda. He initially approached the field research in China from a Scandinavian perspective and from his background as a Polar explorer and primarily a Quaternary geologist.[19] By the turn of the century, practically all members within Andersson's Swedish research network were engaged in interdisciplinary fieldwork that mapped past climate changes, especially since the latest Ice Age and its relation to archaeology. Quaternary geology and archaeology were therefore closely connected. In China, Andersson also turned to the existing scientific literature on the

region to determine found data and to plan for further research. His objectives thus combined his own professional background, previous discoveries, and the new issues that he encountered in the material. Like Hedin 20 years earlier, he was determined to solve loose ends.

In early 1919, Andersson developed his aims in a "General plan for natural history collections in China," which was distributed to colleagues and sponsors in Sweden. Referring to Richthofen who, in his by then classical studies on the Chinese loess soil, had concluded that it had been transported by winds from the deserts of Central Asia, Andersson noted that the question of the geological age of the loess was uncertain, as well as some of the climatic conditions that formed it. Andersson argued that "the Quaternary Ice Age […] in Central Asia took the form of a cold steppe climate, with a remarkable development of the wind-carried sedimentation" and pointed out that it was "necessary to try to collect the fossil contents" to "test this working hypothesis."[20]

Andersson also explicitly looked for traces of early Man. The German palaeontologist Max Schlosser (1854–1932), had in 1903 published the first large-scale inventory of Chinese fossil mammals using "dragon bones" bought in drug stores in China.[21] In 1919, Andersson referred to Schlosser's study pointing out that none of those fossils had been found *in situ* and explained that this was what made the Sino-Swedish fieldwork truly pioneering. Furthermore, he stressed the prospect of finding prehistoric humans in China and that he was already searching cavities in the northern parts of the country for such traces.[22] In 1921, the Austrian palaeontologist Otto Zdansky (1894–1988), a previous exchange student at Uppsala University, was recruited to reinforce the Sino-Swedish work. Andersson sent him to Zhoukoudian where Zdansky soon unearthed humanoid teeth belonging to what in 1926 was popularly named Peking Man. By that time, however, Andersson had already re-directed his research into archaeology.

Archaeology and the Silk Road

In 1921, Andersson made the pioneering discovery of a prehistoric Neolithic culture in China, near Yangshao village in Henan Province, which is today considered to be the first official modern archaeological excavation in China. The Yangshao material unexpectedly now threw Andersson right into the issues of cross-continental exchanges along "the Silk Roads." Andersson noticed surprising parallels in the design between the Yangshao pottery and early Neolithic ceramics excavated at Anau in Central Asia. Based on this comparison, he argued in 1923 that the Yangshao culture, which he defined as proto-Chinese, may have had connections to Central Asia through migration of technology and art designs or of people.[23] Andersson's thinking in terms of migration was common in contemporary understanding of the spread of the Neolithic revolution, and was also supported by Chinese sources.

Once again, it was Richthofen who had already suggested in 1877 that data in the *Shujing* [The Book of Documents; often attributed to Confucius (551–479 BCE) where some of the oldest and possibly legendary Chinese kingdoms are described]

indicated that a proto-Chinese group indeed had migrated from Central Asia into present China. Moreover, Richthofen deduced that this migration had continued further eastwards to find fertile lands for "the newcomers to develop the agriculture that they had brought with them from Central Asia."[24]

Furthermore, the American geologist Raphael Pumpelly (1837–1923), had in 1908 suggested that Central Asia could have had the most favourable climatic and environmental conditions for key events of the Neolithic to first evolve, which then had spread to the Near East.[25] To the Quaternary geologist Andersson, this made a lot of sense. As the Central Asian Neolithic cultures seemed to be significantly older than what he had found, he concluded that the most logical transfer of technology must have been through Central Asia to the East. If this was true, then, proof for the transfer would be found somewhere between West Turkestan (present-day Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) and Henan in central China.

In 1923 and 1924, Andersson set out to northwestern Gansu Province to test this theory. His pioneering discoveries of archaeological cultures spanned from the Neolithic to the early Bronze Age, which he believed supported his thesis.[26] With more data from the Sino-Swedish Expedition (see below) and Chinese excavation reports, Andersson would later abandon his original idea, as he noticed that Neolithic migration of designs and of crops also had originated from the opposite direction. However, he was still convinced that the first metals, discovered by him in Gansu Province, had been introduced to China through connections with Central Asia. This later invention in turn, he argued in 1943, had led to a population increase enabling larger settlements that gave rise to the formation of the first Bronze Age dynasties in China.[27]

The growth of modern archaeology in China

Andersson's work explored not only trade, migrations, and religious exchanges, but also the long history of transfer of scientific knowledge within Eurasia. Therefore, while he rarely wrote on the Silk Road per se, he moved beyond Richthofen and expanded the concept. Andersson's archaeological reports of the 1920s received very wide attention both in China and in the west. Not only had he discovered *actual* Neolithic cultures from Henan to Gansu provinces that brought alive the classical question on the origin of the Chinese civilisation, but his work promised to propose a coherent answer. Furthermore, for the development of modern science in early Republican China, Andersson's role cannot be overestimated. The publications of Ding Wenjiang as head of the Geological Survey – by then the leading scientific entity in China – and the joint Sino-Swedish fieldwork, the sensational discoveries of Peking Man and Andersson's unravelling of prehistoric China, caused a rapid awakening of modern archaeology in the country. This process was further propelled by the rise of Nationalist China. By the mid-1920s, Andersson's interdisciplinary researches had touched the very essence of the Chinese identity, the birth of the nation. Although Andersson collaborated with the Chinese government, Ding and Weng supported his work, and the publications of the Survey were

effective propaganda tools to promote modern science in the country, the times were changing.[28] A new generation had indeed been inspired by the reports and wanted to embrace these sciences too. Paradoxically, they began to question the foreign influence in studies that were so intimately associated with the nation. This conflict came to a head in 1927, when Sweden wanted to continue the collaborations with China in yet another expedition to the northwest.

Nationalist China and the Sino-Swedish Expedition

In late 1926, Hedin returned to China with funding to realise the multidisciplinary expedition that he had envisioned 14 years earlier. Through his connections to the Weimar Republic, German Lufthansa agreed to sponsor him, as it wished to survey the region for possible fuel stations for a proposed airline between Europe and China. To the Peking Government, the airline plans were of interest for the nation's modernisation efforts, but highly sensitive since China had been at war with Germany during the World War. No air surveys were therefore allowed, but an agreement with Hedin on a joint land expedition with the Geological Survey was signed in January 1927, and preparations began.

However, on 5th March, a group of researchers, of which the majority were involved in studying the history of ancient China, assembled for a large gathering at Peking University.[29] The participants formed what they called a Federation of Scientific Institutions of China (Zhōngguó xuéshù tuántǐ xiéhuì 中国学术团体协会) and demanded the expedition be stopped. They sent appeals to the press, to the Survey, and to the government. The group questioned the aims of the German sponsorship, argued that the Survey engaged in too many disciplines that should be handled by specialised departments, and that exploration of the nation should be in the hands of and under full control of Chinese participants. Andersson and Hedin turned to the Chinese Premier and Foreign Minister Wellington Koo (Gù Wéijūn 顧維鈞, 1888–1985) for advice. He suggested that they should talk to the Federation members and explain the plans. This led to negotiations between Hedin, Andersson, and the Federation that lasted for one month and 20 days before a new and updated agreement was signed.[30]

The protest against the Sino-Swedish Expedition was connected to the political development and rhetoric of the Nationalist party, the Guomindang. At that time, the nationalist general Chiang Kai-shek led a military march to unite the nation and had, according to Hedin, initiated an anti-foreign campaign to strengthen the nationalistic feelings as Chiang was expected to soon take over the entire country.[31] Indeed, when the talks in Peking between Hedin and the Federation reached its peak, dramatic political events simultaneously occurred in Shanghai and Nanjing, where Nationalist troops on March 22 and 24 respectively took over these cities, followed by local riots and attacks on foreigners and foreign assets. In Peking, however, reform-minded leaders sought to calm anti-foreign feelings. On March 30, for instance, Weng Wenhao told Hedin that Wellington Koo had asked Federation members to reach a friendly agreement with the Swedes. In Nanjing,

Figure 20.4 The Sino-Swedish Expedition leadership in the field 1927. From left to right, the geologist Yuán Fùlǐ 袁复礼, the Swedish team leader Sven Hedin and the Chinese team leader Xú Bǐngchǎng 徐炳昶. Courtesy of the Sven Hedin Collections, Museum of Ethnography, Stockholm.

the Nationalist party sought legitimacy for its regime by inviting influential elderly reform leaders, who were promised scientific reform in return for their support. One of them was Cài Yuánpéi (蔡元培, 1868–1940), chancellor of Peking University who had employed key leaders of the Federation. On 17 April 1927, Cai Yuanpei was elected to the new Central Council in Nanjing, where a national research academy was proposed with Cai chairing a committee that would draft its regulations. The following day plans for the new academy, Academia Sinica (Zhongyang yanjiuyuan 中央研究院), was presented. Eight days later in Peking, on 26 April, Hedin and the Federation members met at Cai Yuanpei's university to sign the contract for the Sino-Swedish Expedition, which soon would develop close connections with the new central research academy (Figures 20.4 and 20.5).[32]

Compared with the initial deal, and Andersson's agreements with the Survey, the Federation contract was augmented to meet the expanding number of available Chinese expertise. It included the appointment of joint Chinese and Swedish mission leader, that all the work should be overseen by a committee consisting of leading Federation members, which also ensured Chinese control of the material. With the fall of the Peking Government the following year, Academia Sinica was established in Nanjing, with Cai Yuanpei as its first head. Then key Federation members and Chinese fieldwork participants came to be affiliated to the specialised

Figure 20.5 Signing of the contract between Hedin and the Federation members, 26 April 1927 at Peking University. Hedin signs with Zhou Zhaoxiang sitting next to him. Liu Bannong standing. On the opposite side, among others, Xu Bingchang. Courtesy of the Sven Hedin Collections, Museum of Ethnography, Stockholm.

national departments, especially at Academy Sinica, but also at Peking and Tsinghua universities.[33]

Despite the initial strong nationalistic rhetoric, the contract was extended several times. Swedish and Chinese scientists worked side by side for almost nine years between 1927 and 1935. The exchanges with the Federation turned out to be just as successful as the collaboration with the Survey had been up to 1926, but on a larger scale and with broader Chinese participation. Now, the Chinese side fully embraced the same interdisciplinary approach as that adopted in Western countries, and their field scientists were connected to increasingly specialised departments at various national institutions. Most importantly, it was the scientific aims that were the focus of both teams as the archaeologists, palaeontologists, geologists, meteorologists, among other experts, who jointly explored China's borderlands, and then returned to study their data in their national laboratories.

In 1928, the German Lufthansa sponsorship, which Andersson opposed, was dropped. Instead, the Swedish government funded the collaborations between 1928 and 1932, which reined in Hedin's project within the foreign policy agenda pursued by Wallenberg and Andersson.[34] The final phase of the expedition again mirrored the changing times. Between 1933 and 1935, it was the Nanjing Government

that paid for an additional field project. This signified an important shift that explicitly involved geopolitical aims. By then, the rising political tension with Japan and interference from Soviet Russia in the Central Asian borderlands had dramatically changed the geopolitical landscape. When Japan invaded Manchuria in 1931, Nanjing lost four-fifths of its iron production and one-fifth of its total territory.[35] That same year, civil war broke out in Xinjiang causing the deaths of an estimated 100,000 people.[36] Japan quickly used the increasing lack of central control to further continue its expansion across Northern China, and soon its troops were positioned near the former capital of Peking. Nanjing needed to counter the development.

In negotiations directly with the Nanjing Government in 1933, Hedin suggested renewed scientific studies of the shifting Lop Nor, which then had reappeared, but also an infrastructure project. He and Chinese engineers should map the northwestern provinces for suitable routes to build roads and railways to modernise the transportation system between Central China and its western-most territories. In his popular book *The Silk Road*, Hedin described this mission as an effort to revive the heydays of the ancient Silk Roads. When modern motorways one day would stretch from Europe to East Asia, it would give a boost to trade and modernisation throughout the entire region, he argued.[37]

To the Nanjing Government, however, studies of the ancient Silk Roads were at this time less interesting than the efforts to modernise communications. The ultimate outcome of such infrastructure projects could of course – just as the Loulan outpost once was described by Richthofen – be aimed not only at controlling the trade routes but also to gain further central influence in the borderland regions. Although the last expedition was a much smaller project compared with the previous years, and the envisaged roads were not realised until later, the final fieldwork marked an important trend change. The inland northwestern connections and studies of the fieldwork data became increasingly important to the central power in Nanjing in the rapidly changing geopolitical situation across Northern China that soon turned into full-scale warfare, the Second Sino-Japanese War (1937–45).

Concluding discussion

Hedin's main focus was on geographical exploration. His rediscovery of locations on the historical Silk Roads, suggested by his mentor Richthofen, along with his popular publications, were instrumental in establishing the Silk Road concept. Andersson had wider archaeo-geological perspectives on the Eurasian exchanges of ideas, technologies, and people from prehistoric times, instead, rather than the Silk Roads per se. His pioneering studies of China's early Neolithic and metal ages in relation to the late Quaternary climate made him look broadly for intercontinental connections and environmental changes that could explain scientific problems encountered in his fieldwork. This approach – to some degree present also in Richthofen's and Hedin's early works – located the Silk Road concept in an even broader interdisciplinary study of Eurasian human activities and exchanges.

Andersson's and Hedin's contribution to the development of modern archaeological and geographical sciences in Republican China resonates with previous

Sino-Western exchanges, such as the Jesuits' promotion of cartographic and astronomical knowledge in the Late Ming period, and the role of Protestant missionaries and engineers in the late Qing.[38] Republican China, in turn, became a period of extraordinary openness and development in which the use of foreign knowledge for modernisation excelled to unprecedented proportions. Frank Dikötter has concluded that this input by foreign experts lead to the "most impressive transfers of skills and technologies which turned a millennial empire into a more or less modern state in less than a century."[39] His observations, based on the many contemporary sources and works of an increasing number of historians referenced to, refute the view – especially nurtured in present China – that the pre-1949 period was characterised only by failures and foreign humiliations.[40] The Sino-Swedish collaboration explained here is another example that supports Dikötter's argument. The extraordinary geopolitical strategy of Sweden, a neutral power, in China during the years between the two world wars fostered intense international collaboration and institution building, such as the Geological Survey and Academia Sinica. The important role of the geosciences in Republican political history, the time span of the interdisciplinary exchanges, the progress of archaeological research along with the pioneering discoveries and their relations to the concept of Eurasian interchanges make the data from these collaborations most interesting sources on twentieth-century China.

Notes

1 Stein, *Serindia* I: 369–449; Wahlquist. "Seeiki kōkogaku," 28.
2 Sven Hedin, *Asien* 2:129–130.
3 Richthofen identified both land and sea routes. *China* 1, 496ff.
4 Richthofen, *China* 1: 459–463.
5 Albert Herrmann also contributed to establish the Silk Road concept. Waugh, "Richthofen's 'Silk Roads,'" 14–16. Wahlquist, 28; 32.
6 Hedin, *Die geographisch-wissenschaftlichen*.
7 Hedin, *Scientific results*.
8 Hedin, *Southern Tibet*.
9 Norin, "Sven Hedins forskningsresor," 12.
10 De Geer, "A geochronology," 1:241–257.
11 Romgard, "For Science and for Nation," 215–216; Hedin to Albert Brockhaus 12 September 1912, reprinted in Brockhaus, *Sven Hedin*, 211–213; Hedin, *Lop-Nor*, 465 and 470.
12 Fiskesjö and Chen, *China before China*, 10–12; Romgard, "From geosciences to prehistory," 24–26.
13 Romgard, "For Science," 81–92; 105–106. The Swedish strategy in China was further developed in Swedish foreign policy deployed in other countries in the 1920s and 1930s, such as in Turkey and Iran. Romgard, "Svenska Orientsällskapet."
14 On the demands, see, for instance, Xu Guoqi, *China and the Great War*, 93–98; Chinese public reactions well given by Luo Zhitian, "National Humiliation."
15 Andersson to Lorens Carlson, 16 January 1916, G. O. Wallenberg Archives, Swedish State Archives.
16 Chow Tse Chi (Zhou Ziqi) to Mr. Erikson, 18 March 1916, Swedish Embassy Archives, State Archives.
17 Wallenberg to Andersson, 12 November 1913, Swedish Embassy Archives, State Archives.

18 Ding and Weng occupied leading positions in the Republican administration throughout their careers. Ding later became general secretary of the Academia Sinica 1934–1936 while Weng Wenhao held several ministerial posts in the Nationalist Government until 1949, including that of Premier. Boorman, *Biographical Dictionary* III: 278–282; 411–412.
19 For discussion of Andersson's motives in China, see Romgard, "From geosciences to prehistory." Some of the information here is elaborated in the popular science book, Romgard, *Polarforskaren,* which recount the development of Andersson's scientific fieldwork and the historical changes he witnessed in Republican China.
20 Andersson. "Allmän plan för naturvetenskapliga insamlingar i Kina [General plan for natural history collecting in China]." *Peking*, 1 February 1919, 4–5, China Committee Archives. A first version of the plan was written and distributed in August 1918.
21 Max Schlosser, *Die fossilen Säugethiere Chinas*.
22 Andersson, "Allmän plan", 10; Ebbestad and Romgard, *Otto Zdansky*, 19, 46, 50–51.
23 Andersson, "An Early Chinese Culture," 35.
24 Richthofen *China* 1, 340–41.
25 Hiebert with Kurbansakhatov*, A Central Asian Village*, and Trigger, *A history of archaeological thought*, 248.
26 Andersson, "Arkeologiska fynd i provinsen Kansu," 34–35.
27 Romgard, "From Geosciences," 51–54; Andersson, "Researches into the prehistory," 283–91, 297.
28 Romgard, "For Science,"153–57.
29 Among the members were, for instance, Liu Bannong (1891–1934), the group's spokesman who had researched documents from the Dunhuang caves brought to France by the sinologist Paul Pelliot (1878–1945) and Li Ji (1896–1979) who had followed up Andersson's Yangshao studies, and, from 1928, would lead the Anyang excavations. He was, according to Hedin, among those who most favoured renewed collaboration with Sweden.
30 Romgard, *Polarforskaren*, 309–328; "For Science," 170–84.
31 Hedin, *History of the expedition in Asia 1,* 16, 20.
32 On the political background in China – from the Beiyang government in Peking to Nationalist Nanjing, see Romgard, "Sven Hedin, J.G. Andersson och politiken bakom den Svensk-kinesiska expeditionen," forthcoming, 2025.
33 Romgard, "For Science," 205–207.
34 The Swedish-American Vincent Bendix also supported the mission, especially the ethnological studies.
35 Kirby, *Germany and Republican China*, 86.
36 Lattimore, *Pivot of Asia*, 67. The situation in the multi-ethnic Xinjiang and Gansu Provinces was highly complex. Warfare broke out between warlords of Han Chinese and Hui descent wanting to increase their power at the expense of local groups and the central government, while Japanese and the Soviet Russian interferences exacerbated the internal conflicts and local chaos.
37 Hedin, *The Silk Road*, 232–34.
38 Spence, *To change China*, 9, 15, 29.
39 Dikötter, *The Age of Openness*, 43.
40 Dikötter, 2–3, 7, 43; Callahan, "National Insecurities," 202.

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21 The Belt and Road Initiative at ten (2013–2023)

A crucial juncture for China's infrastructure geopolitics

Benjamin Barton

Launched by the People's Republic of China (PRC) in 2013, the Belt and Road Initiative (BRI) – also known as 'One Belt, One Road' (*yi dai yi lu*) that combines the land-based Silk Road Economic Belt (*sichou zhi lu jingji dai*) with the twenty-first-century Maritime Silk Road Initiative (MSRI) (*21shiji haishang sichou shi lu*) – celebrated its tenth-year anniversary in September 2023. Considered by some as the brainchild of current PRC President Xi Jinping, the BRI has evolved over the past decade from the aggregation of a set of land and maritime cross-country infrastructure projects to a sprawling mass of interconnected endeavours of seemingly endless magnitude and scope. So much has been written about it in official texts, commentary, and scholarly material that one is easily overwhelmed by the wealth of information available. Indeed, it is this emphasis on scale which has not only allowed the Chinese leadership to dream big about the BRI, but also stoked the fears of some of the PRC's harshest critics, many of whom have attempted to portray it as Beijing's concealed design to recalibrate world order along more Sino-centric lines.[1]

From this snapshot, we can easily be misled into drawing the two following assumptions. First, that the launch of the BRI marked the Chinese state's first ever large-scale infrastructure initiative. This assumption is erroneous, for Xi's impetus was not only inspired by the like-minded efforts of previous administrations,[2] but the BRI is by and large the result of the internationalisation of the Chinese infrastructure business model from the 1980s onwards.[3] In effect, in what would later inspire the design of the 'Go-out' strategy, Chinese infrastructure actors, notably State-Owned Enterprises (SOEs), began venturing into African markets during the 1980s.[4] This drive was initially spurred by the need to secure access to natural resources and to help meet foreign demand for infrastructure, before internationalisation became a must for Chinese firms striving to diversify company portfolios against the backdrop of an increasingly congested domestic market.[5] Fast-forwarding four decades, it is this vast network of existing projects coupled to the comparative advantage of the Chinese infrastructure business model which forged the BRI's backbone.

The second assumption is the grey area between the BRI's ever-expanding geographic scope and the extent of the geostrategic ambitions harnessed for it by Beijing. In light of the PRC's customary secrecy surrounding strategic intent,

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narratives and counter-narratives on the BRI have frequently descended into sparring matches between those who portray the BRI as a tool for development and those who depict it as a tool for subversion. For instance, whereas Xi sought to reassure audiences at the 2015 Boao Forum for Asia that the BRI was not designed to "replace existing mechanisms" but instead "help countries align their development strategies,"[6] the initiative's critics have claimed that it represents nothing more than "Chinese subterfuge, masked as sacks of Yuan."[7] To a certain extent, the polarisation of the geostrategic debate surrounding the BRI has been reflected in the burgeoning body of scholarship dedicated to it.[8] Within this critical mass though are studies rejecting Manichean interpretations of the initiative, which instead invite further reflection on the BRI's own dynamics as a social and political process.

This chapter will therefore seek to capture the essence of these debates by reviewing the state-of-the-art of BRI research from the perspective of the study of International Relations (IR). It will do so in two sections. The first section will present the geopolitical context in which the BRI emerged and evolved. The second will delve deeper into overlooked variables flagged by more recent strands of IR scholarship on the BRI. The chapter will close with speculative comments regarding the BRI's prospects in the decade to come.

Xi's touch: the re-imagined Silk Roads as strategic reordering?

Before Xi acceded to power in 2012–13, the Chinese presence on Global South infrastructure markets had already made itself felt. Up until then, Chinese construction companies – since the advent of the 'Go out' policy (specifically designed to accelerate Chinese outwards investments)[9] – had been winning an increasing number of tenders to build infrastructure in Asia, Africa, and in the Americas.[10] Since this process evolved gradually, in disconnected fashion and in parts of the world which seldom got mainstream attention, its disaggregated nature meant that it was largely interpreted as a source of intrigue for onlookers. Quizzical assessments as to why Chinese infrastructure actors were willing to take risks investing in paving roads in war-torn states (e.g. Angola), prospects which traditional financiers would balk at, were not uncommon.[11] Early bemusement did eventually make way for more serious attention from stakeholders and specialists alike.[12] But even then, the political significance of a specific "China model" or "Beijing Consensus" underpinning this infrastructure drive lacked bite not only because it received short shrift in Beijing,[13] but also because some of the projects meant to serve as the physical representation of the "China model" were doing it a disservice.[14]

Only when Xi began to drop the PRC's strategic self-restraint – captured in Deng Xiaoping's dictum of *tao guang yang hui* (keeping a low profile) – did the internationalisation of Chinese infrastructure endeavours began to take on a semblance of strategising on a global scale. At which point the PRC's critics began sounding the alarm about the subversiveness of the Xi silk roads project as a tool to undermine existing world economic and institutional order.[15] Leaders in Beijing undeniably did bring a degree of geographic coherence to these infrastructure

endeavours, which increased the plausibility of the BRI serving as a strategic fulcrum. After all, it united a previously disparate ensemble of Chinese infrastructure projects and, at the very least, offered a degree of territorial orientation for future planning for the infrastructure actors in tow. It is also undeniable that such coherence was elevated by the seeming desire at the central level to put aside an elastic pool of funding, estimated in some quarters in the trillions[16] of US dollars – figures which sent alarmists into a frenzy.

Yet, this semblance of coherence has masked the inherent uncertainty over the true extent of the actual strategic design at play. For example, during his 2013 speech in Astana (Kazakhstan),[17] Xi heavily alluded to the collaborative and peaceful nature of the silk roads, the result of "over 2,000 years history of exchanges" and "jointly written [*sic*] chapters of friendship," encapsulating the degree of "solidarity, mutual trust, equality, inclusiveness, mutual learning and win-win cooperation" prevalent among "the people of various countries along the ancient Silk Road."[18] Presenting his imagined silk roads in this manner would help to diffuse potential criticism of the BRI as tantamount to encroachment on the sovereign rights of participating states. Such criticisms were further abetted by the absence of any kind of definitive official map delineating the outer limits of the BRI.[19] It should not be forgotten either that the MSRI was initially designed to appeal to ASEAN member states as an assuaging factor mitigating more assertive Chinese behaviour in the South China Sea.[20] Furthermore, many of the projects which would later come to populate the BRI took place in nation-states that originally had not been given any consideration as per the BRI's original design, thus serving as proof that the BRI prioritised business before politics.[21] As the decade has progressed, more states (notably, albeit not exclusively, from the Global South) have been drawn to the allure of the never-ending horizon of project and funding pipelines of Xi's new silk roads. In return, the Chinese leadership has encouraged this process of international legitimisation by securing signatories from all continents.[22] This has become symptomatic of the BRI's all-encompassing mantra, thus further eroding the sentiment of strategic coherence.

Indeed, no guidelines had ever been designed to shape the type of infrastructure project sought after, which led to a free-for-all (roads, railways, condominiums, amusement parks, among other projects). It is only recently that Chinese authorities have begun to express the desire to mitigate risk.[23] This move was not altogether unsurprising. The accumulation of high-profile controversies have sullied the BRI's reputation despite the Chinese government having little to no direct day-to-day involvement in the projects.[24] Ironically though, at the same time that Xi and others were demanding more circumspection, they were expanding it thematically. The Xi silk roads in their contemporaneous set-up now extend far beyond infrastructure to encompass the realms of digital[25] and health projects.[26] Such increase of the BRI's scope only serves to further polarise perspectives, between those who associate scope with China's external ambition and those for whom the catch-all dilemma confronting the BRI smacks of short-term political opportunism rather than grand strategy. Regardless of where the pendulum swings, the only certainty to be drawn from this debate relates to the fact that under Xi, any discussion

on overseas Chinese infrastructure endeavours will necessarily entail questions on the geostrategic motives at play.[27]

Policy fragmentation and spatial fixes

The enthusiasm with which some have embraced the "BRI as grand strategy" argument is surprising given its haste.[28] As the previous section demonstrated, geopolitics and Chinese infrastructure endeavours is only as recent a development as the BRI itself. Barely had the BRI begun finding its feet as a policy that suggestions about the dawn of a new era of IR started to emerge.[29] Such prognostications were formulated against the backdrop of the BRI operating in a vacuum where its trajectory was necessarily an upward one. Although this type of hypothesising about the BRI's prospects is not altogether ill-founded, they have lent as a corollary to the skewering of the debate over the BRI's core drivers. When reconfiguring the BRI's origins and the context in which it emerged, this should put the brakes on taking the BRI at face value as the expression of a grand strategic design. Two main reasons have been advanced to temper such hastiness in recent scholarship amidst the flurry of BRI-related publications:

- Even if the party-state sits at the apex of the policy process related to the BRI, scholars have observed a process of policy "fragmentation" and "decentralisation," where leadership is diluted across several competing nodes of policy initiative and implementation.[30]
- The BRI is the product of a "spatial fix" and of "sociospatial restructuring" – in other words, its purported instrumentalisation for strategic motives is contingent on the participation of many external actors beyond the party-state, whose interests may diverge from, if not undermine, that of the Chinese Communist Party (CCP).[31]

On the first counter-postulate, scholars have applied a fine-tooth comb to the decision-making dynamics undergirding the BRI within a domestic context, before extrapolating the effects of this process on China's grand strategy designs overseas.[32] This approach matters on different levels. For one, it reminds readers about the origin of the BRI. The BRI was triggered in response to domestic macroeconomic concerns: congestion, saturation, and overheating in the Chinese infrastructure market.[33] A relatively straightforward mechanism for circumventing this predicament was to grease the wheels of opportunism for this infrastructure ecosystem to other parts of the national market (towards central and western China) as well as overseas. Moreover, by putting domestic dynamics under the microscope, not only does this implicitly water down the "BRI as grand strategy" line of reasoning, but it brings to the fore the multiplicity of domestic actors (and their own respective interests) involved in the policy process. Such studies have shed light on the idiosyncratic role of unorthodox provincial actors working hand-in-hand with SOEs and policy banks to secure slices of this elastic pot of financing to fund infrastructure endeavours overseas. The party-state operates in this context more as a metronome

controlling the allocation of financing while the bulk of the process is driven by actors situated at lower rungs of the policy hierarchy. Although this recognition in itself does not come across as a significant revelation, what it does reveal is a dearth of absolute top-down policy-making control and, subsequently, an: "[…] evolving [*sic*] struggle between disparate actors within a fragmented, poorly co-ordinated governance structure."[34] Fragmentation thus becomes the order of the day as the void between central guidelines and the cacophony of competing voices from across the policy echelons creates uncertainty. Because of this uncertainty, those ultimately responsible for bringing the BRI to life, the infrastructure-building SOEs, are virtually free to bend policy to meet company interests, which at times may conflict with party-state goals.[35]

In this regard, the BRI has only accelerated a trend which scholars had discerned well before its launch in 2013, whereby SOEs and policy banks have consistently placed their bottom-lines and competitiveness at the top of their list of priorities, and state-devised strategic targets are at best a secondary consideration for overseas projects.[36] Other than helping to create new business avenues for companies facing a domestic crunch, the BRI projects are designed to support the government's drive to consolidate the position of its national champions in key markets of the future.[37] Within this set-up, the incentives overwhelmingly land at the feet of the implementing companies since a degree of financial hazard is absorbed by the government promises. From a political vantage point, this can produce ambivalent outcomes. In best-case scenarios, SOE behaviour will prove beneficial or neutral to the state's strategic aims.[38] In worst-case scenarios, their "freewheeling" attitude may result in the reckless pursuit for profit margins to such an extent that their actions may both impede the roll-out of the BRI and sully the PRC's global repute.[39]

One such example of "freewheeling" behaviour unintentionally sponsored by the BRI can be seen in the way China Merchants Port (CMP) in Djibouti handled the legal disputes pitting the Republic of Djibouti against the Emirati firm Dubai Ports World (DPW) over the Doraleh Container Terminal (DCT).[40] The disputes were caused by a contractual stand-off between Djibouti and DPW.[41] CMP would enter the fray around the time of the BRI's inaugural year, by adopting a two-pronged strategy which would ultimately set it on a legal warpath with DPW.[42] Although the example of this legal dispute represents the exception to the rule insofar as the BRI's success rate is concerned,[43] its empirical value added is significant. The episode confirms the thesis mentioned earlier concerning the "freewheeling" attitude of some Chinese SOEs. Indeed, CMP's decision to involve itself in this dispute was driven by the desire to bolster profit margins and diversify portfolios. Yet in so doing, CMP walked all over a legitimate contractual arrangement it was not a party to, which then triggered an international campaign targeting CMP, the BRI, and the PRC as proof of the existence of a successful "debt trap."[44]

The tables were turned here as the Chinese state only played a facilitating role at most in the scope of CMP's relationship with the regime in Djibouti.[45] The main protagonists to this ordeal were CMP and Djibouti – a state of affairs which confounds the "BRI as grand strategy" idea and instead leads us to the second counter-postulate: the BRI is the product of a "spatial fix"[46] and "socialspatial

restructuring,"[47] which entails a loss of control over the production of the BRI.[48] In turn, this leaves considerable room for the agency of exogenous actors to shape the fate of individual BRI projects and, ultimately, the initiative as a whole. This variable is relevant to the Doraleh quagmire, where the centre of decision-making on all matters starts and ends with the Djibouti state.[49]

What next for the Xi silk roads?

Celebrations marking the tenth anniversary of the launch of the BRI were met with much fanfare. The celebrations served to further the initiative's legitimacy by allowing the party-state to laud its many deliverables and justify its prolonging. The timing of these celebrations came at a critical juncture for the PRC, however, as much has changed in a decade and not necessarily in the harmonious manner the narrative in Beijing seeks to propagate.[50] The leadership is faced with a set of unfavourable domestic and external challenges that are beginning to place the "strategic opportunity"[51] rhetoric under duress. At home, China's macroeconomic performance continues in its post-Covid 19 trend of oscillating between sluggish and flitting growth.[52] Matters have not been helped by the damaging effects of the global slowdown triggered by the outbreak of the Covid-19 pandemic and the subsequent lockdown measures, including the PRC's draconian attempts to eradicate the virus. Like the rest of the world economy, China has been hit by knock-on effects on prices caused by supply chain disruptions and the skyrocketing of energy bills.[53] The difficulties China has faced in responding to these shocks have also begun raising eyebrows over Xi's ability to steer China in the face of adverse conditions.[54] Externally, the geopolitical environment is forcing China to walk a tightrope with the Russian invasion of Ukraine putting Beijing in a bind between Xi's allegiance to Putin and the PRC's desire to preserve a degree of relative neutrality.[55] As a corollary, the ante is upped further over the possibility of a Chinese invasion of Taiwan.[56] All in all, the landscape is fast constraining the PRC's room for manoeuvre in a geopolitical environment vastly different to that of the BRI's launch.

All of the above have implications for the BRI's prospects. The BRI has become less of a source of opportunity and instead is beset by the need to manage expectations. This is not altogether unsurprising. An endeavour of the BRI's magnitude could anticipate crises, disruptions, and, thereafter, the adoption of a degree of conservatism. As the legal disputes over the DCT have shown, some projects have become mired in controversy. Not all projects have been successfully completed, while the added value of some others has been questioned.[57] In China, grumblings of discontent have been heard about the excessive spending on questionable projects even before the government began raising the bar for risk mitigation under the aegis of "BRI 2.0."[58] In any case, China's economic slowdown does not bode well for the prospect of generous financing. Finally, whereas a decade ago China was almost single-handedly helping to meet an obvious demand for infrastructure financing and construction in the Global South, rival initiatives have since emerged, such as the G7's "Build Back Better" and the European Union's "Global

Gateway," to challenge not only the BRI's market capture but also the foundations of its competitive business model.

When factored collectively, the odds would not seem promising for the BRI a decade into its existence. Much of its ability to ride these choppy waters will ultimately rest with domestic political will. After all, the BRI remains tied to Xi's legacy as PRC President who has had it enshrined into the CCP's constitution.[59] The decade to come will represent a far sterner test of the party-state's resolve for rolling out the BRI. Although it certainly is not at risk of extinction, come celebrations of its twentieth anniversary, its scope and depth will inevitably have faced a modicum of contraction. Thus, a more sober reading of the BRI is what is now needed above all else. We need to engage in a nuanced fashion with a global public good of significance to the quality of human livelihoods, especially for those in the Global South.

Notes

1 Maçaes, *Belt and Road*.
2 Jiang Zemin launched the 'Great Western Development' (*xibu da kaifa*) campaign in 1999 in a bid to reduce economic disparities between provinces in the east and those in central, southern, and western China, as noted by Clarke, "The Belt and Road," 73.
3 Low and Jiang, "Chinese construction enterprises".
4 Meidan, "China's Africa policy".
5 Alden and Alves, "China and Africa's natural resources"; Barton, *The Doraleh Disputes*.
6 Xi, "Full text".
7 Cruz, "Sen. Cruz pens letter".
8 A cursory glance for BRI and "power" within the extant literature will lead to many outputs, such as on "great power" (Gloria, "The Silk Road Spirit"), "soft power" (Turcsanyi and Garlick, "The BRI and China's soft power"), and "structural power" (Lairson, "The global strategic environment") to name a few.
9 Huang and Wilkes, "Analysis of China's overseas".
10 Low and Jiang, "Chinese construction enterprises".
11 As captured, for instance, in Traub, "China's African adventure".
12 Stakeholders such as the World Bank (Broadman, *Africa's Silk Road*) and specialists such as Joshua Cooper Ramo (Ramo, *Beijing Consensus*).
13 Ramo, *Beijing Consensus*; Zheng, "Great-power status".
14 In was not unusual for early Chinese infrastructure projects to be mired in some form of controversy. Some were not warmly received either (for example, riots in Algeria in 2009). See Zambelis, "China's inroads into North Africa".
15 The Asian Infrastructure Investment Bank was initially perceived as a threat to the Bretton Woods institutions. See Subacchi, "The AIIB".
16 Hillman, "China's Belt and Road?".
17 Foreign Ministry of the People's Republic of China, "Xi Jinping: Promote friendship".
18 Xi, "Promote friendship".
19 With the exception of maps produced by the state, which soon became outdated.
20 In Xi's speech to the Indonesian parliament, only ASEAN member states were mentioned in relation to the MSRI. China Daily, "'President Xi gives speech to Indonesia's parliament".
21 Djibouti serves as an intriguing example here. Barton, *The Doraleh Disputes*.
22 For an up-to-date list of the countries that are part of the BRI, see Green Finance & Development Center, "Countries of the Belt and Road".
23 China Daily, 'Xi delivers keynote speech at second B&R forum".

24 For a detailed study of the Hambantota (Sri Lanka) debacle – including an assessment of the role of the Chinese state – Lim and Mukherjee, "What money can't buy", and for Doraleh (Djibouti), Barton, *The Doraleh Disputes*.
25 The Digital Silk Road was first mentioned by Xi in 2015. Giovanini, "The Digital Silk Road's".
26 The Health Silk Road was first mentioned by Xi in 2016. Ngeow, "Health Silk Road".
27 For more alarmist studies, Hemmings, "Reconstructing order"; Schindler et al, "The new cold war".
28 Clarke, "The Belt and Road"; Adornino, "The Belt and Road Initiative"; Beeson, "Geo-economics with Chinese".
29 Maçaes, *Belt and Road*.
30 Jones and Zang, "Understanding China's".
31 Mayer and Zhang, "Theorizing China-world integration"; Oakes, "The Belt and Road".
32 Jones and Zang, "Understanding China's".
33 Tasak and van der Linden, "The effectiveness of the 'Belt and Road'".
34 Jones and Zou, "Understanding China's," 744.
35 Oakes, "The Belt and Road".
36 Barton, "Agency and autonomy".
37 Hillman and Sacks, "China's Belt and Road".
38 Nie, "China's SOEs".
39 Zhu, "Demystifying the role".
40 Barton, *The Doraleh Disputes*.
41 Ibid.
42 CMP purchased the regime's 23.5 percent stake in the DCT for US$185 million (2012), which DPW contested as contrary to the terms of the 2006 Concession Agreement. That same year, CMP signed a Strategic Partnership Agreement (SPA) with the Djibouti Port and Free Zone Authority to: "[…] develop and operate seaports in Djibouti and for the development of a new multipurpose terminal" (Barton, *The Doraleh Disputes,* 167). The multipurpose terminal refers to the Doraleh Multipurpose Port (DMP). DPW would later argue that the spirit of the SPA went against the terms of the 2006 Concession Agreement. The deposition made by DPW's legal representation in Hong Kong suggested that CMP had induced the regime to breach the terms of the 2006 Concession Agreement. This breach was intended to free DPW from its involvement with the DCT, thus removing the only obstacle left between CMP's supposed takeover of the terminal and its ability to strengthen its: "[…] strategic position in East Africa as part of the Silk Roads" (Ibid). This scenario was meant to hold sway because of the exorbitant levels of outstanding debt owed by Djibouti to Chinese policy banks.
43 According to the consulting firm Refinitiv, in 2019, 76 percent of BRI projects were ongoing, 22 percent had been completed while less than 1 percent were on hold, delayed, or cancelled. Refinitiv, *BRI Connect*.
44 Barton, *The Doraleh Disputes*.
45 Ibid.
46 Oakes, "The Belt and Road," 282.
47 Mayer and Zhang, "Theorizing China-world integration".
48 This is because the drive to locate new markets, to alleviate pressure domestically, by reinvesting the over-accumulation of excess resources, capital, and materials involves a degree of engagement with parties and intermediaries situated physically and socially outside of the Chinese infrastructure constellation (Mayer and Zhang, "Theorizing China-world integration", 975–6).
49 Djibouti's leadership was at the heart of every decision related to the combined fates of the DCT and DMP: from securing investment from the United Arab Emirates, to the eventual falling out with DPW via the decision to bring CMP onboard (Barton, *The Doraleh Disputes*).
50 The Global Times, "BRI benefits".

51 Cui, "Historic opportunities".
52 Tan, "China posts".
53 Riordan, et al, "China's energy crisis".
54 Shephard and Dou, "Swirling doubts herald".
55 Myers, "Ukraine invasion tests".
56 CNBC, "China risks miscalculation".
57 Wang, "Assessing the Belt".
58 Schrader, "Domestic criticism".
59 Shepard, "Why China just added".

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22 The road which binds

The BRI, nationalism, and the securitization of Xinjiang

David O'Brien and Melissa Shani Brown

Introduction

The key to understanding the Belt and Road Initiative (BRI)[1] – the 'New Silk Road' – is that it is amorphous, comprising numerous tangible and intangible projects. These range from building coal mines and road and rail networks, to developing digital technologies, to promoting a "community of common destiny for mankind" (人类命运共同体), to UNESCO world heritage nominations of natural parks or ethnic music. The BRI links these through evocation of a trans-historical myth of the 'silk roads'. Succinctly, it "gives disparate Chinese projects overseas the veneer of being part of a grand strategic plan…. It is not a centralised initiative, so much as a brand… Everything and nothing is Belt and Road" (Robertson cited in Kuo and Kommenda 2018). This 'everything and nothing' is key to how the CCP mobilises and legitimises the project in different contexts: 'failed' projects can be ignored through emphasis on 'successful' ones.

In this chapter, we begin with a review of key criticisms of the BRI's infrastructural and investment projects. We next consider the BRI as a vehicle for 'soft power': an attempt by the CCP to represent China as a rising, but inherently benign, world power. We argue that one of the main audiences for this narrative is actually the Chinese domestic population, making the BRI a nationalist project more than an internationalist one. We then turn to examine the role of the BRI in the securitisation of Xinjiang (XUAR), where it has been integral to the CCP's systematic repression in the region.

The success of the new silk road?

President Xi Jinping announced what would become the BRI as the 'Silk Road Economic Belt' in September 2013 in Kazakhstan (Curtis and Klaus 2024). The initiative's official name is the 'Silk Road Economic Belt and 21st-century Maritime Silk Road Development Strategy' (丝绸之路经济带和21世纪海上丝绸之路发展战略), which was abbreviated to the 'One Belt One Road' (一带一路) or 'OBOR Strategy', and changed in English translations to the 'Belt and Road Initiative' OBR in 2016. The project has been described by Xi Jinping as the "project of the century" and "a road for peace, prosperity, opening up, and innovation, connecting

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different civilizations" (in Malik et al. 2021). Rose-tinted rhetoric aside, it has been described as a "Chinese Marshall Plan" (Kuo and Kommenda 2018), which will impact "75% of the world's population and account for more than half of the world's GDP" (Caridi 2023: 192).

But in the decade since its inception, the ambiguous scale and a lack of transparency has made it difficult to evaluate, even focusing on more tangible projects such as infrastructure. Early examples, such as the participation of Italy and the development of Trieste port, which were much celebrated by China, have now been rolled back. Italy announced it would not renew its MOU at the end of 2023 (Nadalutti and Rüland 2024). While broader shifts within the EU towards 'de-risking' dependencies on China and security concerns were a factor, so too was the fact many of the benefits originally promised – such as increasing Italian exports to China and Chinese investment in the country more broadly – had failed to materialise (Nadalutti and Rüland 2024). Other significant BRI strands, such as the Polar Silk Road (PSR), have stalled with the cancelling or suspending of most of its projects (Lanteigne 2022).

The reasons in the PSR case are complicated yet revealing. Besides Russia's invasion of Ukraine stalling the Russian strands, others have been suspended for a variety of reasons. In Greenland, the Chinese company General Nice was stripped of its licence to the Isua iron mine after "inactivity" and because it failed to make the agreed guaranteed payments, while its attempts to purchase a naval station were blocked due to security concerns (Jonassen 2021). Meanwhile, the development of the rare-earth and uranium Kuannersuit mine was halted due to environmental impact (Gronholt-Pedersen 2021). Similarly, the 'Arctic Connect' project to lay a submarine communication cable along the Northern Sea Route – billed as part of the Digital Silk Road and the PSR – has stalled around security issues, since it would dramatically increase Chinese intelligence-gathering capabilities, with companies obliged by PRC law to collaborate with intelligence services (Jüris 2020). The Norwegian-Finnish Arctic railway from Kirkenes to Rovaniemi, meant to ship cargo via the Arctic from Asia to markets in Europe, was cancelled. It was rejected due to concerns over environmental damage, and because it was vetoed by the indigenous Saami communities in both countries whose lands it would traverse, but also because a Finnish-Norwegian working group concluded that current cargo volumes do not justify the costs (Nilsen 2020).

Although cumulatively leading to a series of dead-ends, the diversity of reasons for the cancelled projects is telling. A critical take might not in fact see them as 'failures', despite cancelled projects challenging Xi's grandiose claims to be radically transforming the global community through infrastructural investment. Many of the reasons for the cancelled PSR projects are *successful* cases of checks and balances and the agency of local communities and national governments making decisions in the face of this larger project. There are of course other BRI projects which have gone ahead and been relatively successful. However, many of these have also attracted debate over issues of violations of labour laws, environmental damage, or questions of the long-term benefit to local communities (Malik et al. 2021; Shi and Seim 2021).

The PSR examples reveal recurring questions around the environmental impact of the BRI. Five years after its initiation, amid increasing criticism by environmental agencies of the project's massive contribution to global warming, there was a turn to 'greening' the BRI. The Belt-and-Road International Green Development Coalition, co-initiated with the UN Environment Programme, was meant to align the BRI with the UN Sustainable Development Goals (Nakano 2019; Zoï 2019). Official CCP sources increasingly frame the BRI as an inherently 'green' project, through which China "share[s] the ecological civilization philosophy" with the world (Belt and Road Portal 2017). However, ongoing pollution scandals, and failure to enforce green guidelines or fulfil key promises, point to 'greenwashing'. Despite hype around hydro/solar power projects, even several years after the announcement of the Green Silk Road more than 90 percent of energy sector investments were in fossil fuels (Nakano 2019). A revealing criticism of the inherent 'green-ness' of the PSR was that "an increasingly ice-free Arctic" was the basis of "the economic profitability of the region due to untapped oil and gas resources [as well as] its shorter international transit routes," so it relied on continued global warming as a *desirable* process (Sharma 2021; Lanteigne 2022).

Accusations of corruption have also been a serious issue (Hillman 2019; Malik et al. 2021). The BRI was first announced in Kazakhstan, but a decade later, the vast but stalled monorail system in Astana became a local symbol of the problems of the BRI. Building only began in 2017, which was the year it was meant to be completed. Construction was stopped in 2018 after the bank holding the loan collapsed, followed by the project being put on indefinite hold amid a corruption scandal in 2019, leading to ongoing court cases (Lillis 2023). Reviews of the planning stage have resulted in questions over inflated numbers, as well as the proposed route (Lillis 2023). Corruption is a side-effect of the lack of transparency of the BRI. But the CCP has not moved towards greater transparency to address this, because this also works in China's favour. As argued by Hillman (2019): "the BRI is opaque by design. By limiting outside scrutiny, the initiative's lack of transparency gives Chinese companies an edge in risky markets, and it allows Beijing to use large projects to exercise political influence." This includes potentially leveraging debts – including those created by corruption or embezzlement.

Drawing on a dataset of 13,427 projects worth US$843 billion across 165 countries, Malik et al.'s (2021) significant report on the BRI found more than one-third (35 percent) of BRI infrastructure projects faced major implementation problems, such as "corruption scandals, labour violations, environmental hazards, and public protests," and these problems were more likely to occur where the project was being overseen by Chinese organisations rather than ones from the host country or a third party. Malik et al. (2021) also found that Chinese debt burdens were being vastly underreported. Largely because most BRI lending was not to sovereign borrowers but to state subsidiaries (state companies or joint ventures), these debts have been systematically underreported to the World Bank's Debtor Reporting System. These debts amount to around US$385 billion or more (Malik et al. 2021). As noted by Malik et al. (2021), this is not only an issue for countries carrying such debts but could have global economic effects if they cannot be met.

The lack of reliable figures is a recurring issue. Drawing on what is available in the Chinese government's official statistics around the BRI, Scissors (2019) notes disparity even between what are likely to be exaggerated numbers and the rhetoric surrounding the project:

> From 2014 to 2018, total Chinese investment in all BRI countries was $190 billion. Again, this is a deliberately high estimate. At this rate, it will take until 2040 for investment to reach the $1-trillion goal often bandied about – if this is a new Marshall Plan, it's a slow one. … Investment is not the main economic activity in the BRI, construction is. Chinese construction activity in the full set of BRI countries was worth twice as much, at $388 billion for 2014–8… [These] construction figures are impressive but, at this pace, it would still take 50 years for the BRI to be the $6-trillion program [described by some].

The lack of clarity about the initiative is more than a failure of communication. For Malik and Parks (2021), the lack of transparency around lending agreements and non-disclosure of accurate statistics constitutes one of the greatest failures of a project claiming to (re)create global order: it *compromises*, rather than creates the possibility for the international community to engage in collective action or make informed decisions in the face of either national or global challenges.

BRI as metanarrative: soft or sharp power?

This is where it is useful to recall the BRI is also a metanarrative: a 'brand' linking disparate projects, while making a claim that China is reworking the global order by 'rejuvenating' a historic 'Silk Road Spirit' based on 'mutuality' (Oakes 2021; Freymann 2021). If we consider Nye's definition of 'soft power' as "the ability to affect others and obtain preferred outcomes *by attraction and persuasion* rather than coercion or payment" (2017: 2), then the metanarrative is an attempt at 'soft power'[2] (though investment and the leveraging of debts is certainly 'sharper'). By linking the BRI to the romantic idea of the historic 'silk roads', the CCP attempts to make Chinese investment, and China broadly, seem appealing. But in this area too, it has not had straight-forward success. Traditional propaganda, such as promotional ads distributed online, have not been effective in mobilising it to broader populations (Freymann 2021). While politicians and company elites refer to BRI when communicating with Chinese counterparts, on the ground, they see it more prosaically as 'Chinese investment', absent grand visions, metanarratives, or symbolic cultural capital (Shi and Seim 2021).

But the BRI has been more successful promoting a surge of attention around the historic 'silk roads'. Indeed, Jing Feng, coordinator of UNESCO's Silk Roads project, stated that the success of Chinese World Heritage Silk Roads nominations constituted "an important achievement in the cultural field of the OBOR initiative" (in Nakano 2022: 11). China is reframing the 'silk roads' as "a Chinese invention," founded upon their "values of peace and cooperation," which "was a Chinese gift to the world" (Freymann 2021: 23–4).

The history of the 'silk roads' in recent Chinese discourses is that they were initiated around 138 B.C. when emperor Han Wudi sent Zhang Qian to the 'western regions' (*Xibu*, now Xinjiang), 'opening' a trade route for Chinese products (particularly silk), connecting China with Rome. The narrative is that this route was maintained 'peacefully' by subsequent dynasties, but expansion of European powers after the fifteenth century put an end to it. As widely noted, none of these points are historically accurate. Extensive organised trade and exchanges across Eurasia existed for several millennia before Han Wudi, and there is little evidence that China and Rome had direct knowledge of each other. Most trade was organised by merchant and nomadic groups, not empires, and silk was neither the most common nor important commodity traded. The history of these routes is one of imperial expansion, conflict, and slavery, and European colonialism was a direct outgrowth and did not put an end to these routes (see Mishra 2020). The Chinese narrative of the historic silk roads is not substantiated by historic evidence but enables promotion of a romanticised lost 'golden age' that the BRI is rebuilding.

China has been the greatest financial contributor to UNESCO since 2019. Many scholars have criticised its use of World Heritage and Intangible Cultural Heritage to make UNESCO complicit in its political agenda (Mayer and Zhang 2021). For example, the UNESCO webpage introducing the 'silk roads' largely covers the history of the domestication of silk in China, and its export along the 'silk roads', implying "the history and civilizations of the Eurasian peoples" (UNESCO nd) resulted from this single luxury commodity. Such framing by UNESCO confers legitimacy to these narratives despite being contrary to historical evidence. The Sino-centric narrative of the silk roads is increasingly prevalent in cultural heritage and tourism ventures, partly due to the courting of Chinese tourists (Winter 2022; Brown and O'Brien 2024).

But characterising the BRI as primarily a metanarrative – particularly one linked to a Sino-centric history – reveals one of the most significant audiences for this story is the Chinese population. This is clear in Chinese domestic propaganda, where the BRI is depicted as a story of the future which 'rejuvenates' the past (see Freymann 2021). The initiative is depicted as a vast project personally developed by Xi Jinping that is "restoring China to the original glory and hegemony which is its due" (Omrani 2021). This links it to ethno-nationalism within China and to a much longer history of Sino-centrism (*Tianxia*), since at its most basic level, it becomes a narrative of Chinese supremacy (Cheng 2019; O'Brien and Brown 2022). Thus, the BRI is best understood as a *nationalist*, rather than internationalist, project. It is less about creating a global community, than revising China's place within that community. This is a reason for much of the obfuscation around the project; it is necessary to present the project as a success *within* China, as evidence of China's rising (or 'rejuvenating') power in global affairs than it is for projects to actually succeed in other countries.

There has been increasing concern over China using 'debt book diplomacy'; the leveraging of ongoing investments or debts to achieve political ends (Davidson 2018). Hayes (2023) argues this is not a hypothetical potential but is already occurring, notably around the trans-national repression of Uyghurs. In July 2019, 22 states signed a letter to the president of the United Nations Human Rights

Council, calling on China to uphold its obligations as a member of that council and condemning human rights violations in the Xinjiang region. Beijing responded by mobilising 37 other signatories to a letter praising China's "remarkable achievements in the field of human rights" and its "contribution to the international human rights cause" (quoted in Hayes 2023: 192). Almost all signatory states of the 'Beijing Letter' were BRI partners. Despite China's curtailing of religious freedom in Xinjiang targeting Muslim ethnic groups, many BRI partners who are Muslim majority countries have endorsed China's policies. Furthermore, some have detained and repatriated Uyghurs from their countries, including Saudi Arabia, which has repatriated Uyghurs on Hajj pilgrimage, and the United Arab Emirates, accused of hosting a 'black site' for Beijing where Chinese authorities hold Uyghurs in extra-judicial detention and interrogate them (Hayes 2023: 189–92). As argued by Hayes (2023), while many have characterised the Uyghur crisis as localised within Xinjiang, this trans-national targeting reveals the wider 'sharp power' of the BRI.

The 'New Silk Road' and the securitisation of Xinjiang

The region now called Xinjiang has a complex history. Despite being described as one of China's 'peripheral' 'borderlands', at approximately 1.6 million km², the region is larger than Spain, Germany, France, and Britain combined, and constitutes one-sixth of China's contemporary territory. For millennia, this was an important trading zone, home to numerous peoples as well as a series of kingdoms and khanates maintaining trade and diplomatic relations with the likes of Persia, Byzantium, India, as well as Chinese states. Though regularly depicted in Chinese discourses as an "empty wilderness" before Han Wudi 'opened' the 'silk road', these routes were already highly interconnected (Brown and O'Brien 2024). Indeed, Buddhism moved into China through this region, and it was long a meeting place of different religions.[3] In Chinese, the term '*xibu*' (western regions) was used to refer to this region, and everywhere 'westwards' of it (Millward 2007). Although Beijing now asserts that Xinjiang has been 'inseparably' part of China since the Han dynasty, Chinese imperial presence ebbed and flowed over time. It was not formally incorporated until the Qing Dynasty, as part of the Qianlong emperor's military expansion into the region and the conquest of the Dzungars, who were political rivals. The Dzungar leadership was not only defeated, but the people were ethnically cleansed[4] and the region was renamed 'Xinjiang', meaning 'New Territory' (Millward 2007). After the collapse of the Qing, there were briefly two East Turkistan Republics declared within the region in the 1930s and 1940s, prior to being brought under control by the CCP in 1949 (Millward 2007). When China's economy began to develop after the reforms of the 1980s–90s, much of this was confined to China's eastern coast, and economic development in Xinjiang lagged. Despite government investment in the region since the 2000s, there was a rise in ethnic violence that challenges the official narrative that the problems in Xinjiang are solely economic in origin (O'Brien 2011).

The BRI is described as central to the 'transformation' of the region in recent years: "[this] western hinterland … is now a booming centre of traditional and

renewable energy, technology and commerce, and its capital, Urumqi, has become the largest city in greater Central Asia" (Zoï 2019: 8). Such descriptions fail to mention that Xinjiang is also China's most rigidly controlled region, and grand development plans have been indelibly intertwined with systemic securitisation and repression.

After a spate of ethnic violence, the CCP introduced harsh security clampdowns which increased after 2017. Academics, human rights groups, and journalists drew attention to a mass campaign of imprisonment, with more than one million Uyghurs and other Muslim minorities imprisoned without trial in 're-education' camps (Human Rights Watch 2018; Roberts 2020; Byler 2022). This has been attended by allegations of forced sterilisations aimed at eugenically "optimising" "ethnic ratios" by reducing the proportion of ethnic minorities in the region, alongside systematic rapes, and forms of physical and mental torture reinforcing political indoctrination (Roberts 2020; O'Brien and Brown 2022; Hayes 2023). Beyond the camps is an extensive expansion of surveillance, involving security checkpoints, monitoring with face and voice recognition, iris scanners, DNA sampling, and phone searches (Hayes 2020; Byler 2022). Alongside this, the 'Sinicization' campaign has razed mosques, Muslim shrines, and graveyards, and banned or policed religious practices such as fasting during Ramadan, and even traditional Islamic personal names. Scholars have characterised this as a programme of cultural genocide, potentially leading towards genocide (Klimeš and Smith Finley 2020; O'Brien and Brown 2022; Hayes 2023).

Although the Chinese government initially denied the existence of the camps, they shifted towards portraying them as an educational programme. In 2022, then United Nations Human Rights Commissioner Michelle Bachelet stated that evidence for these crimes against humanity was credible (OHCHR 2022). Many camp inmates have been moved into high-security prisons, and onto forced-labour programmes, particularly in the cotton and solar panels industries (Murphy and Elimä 2021; Cockayne 2022).

These aspects of the recent 'development' of Xinjiang – its transformation into a 'booming centre' of commerce and the site of alleged crimes against humanity – are intertwined. The former is often used to obscure the latter. Partly, this is achieved through propaganda focusing on infrastructural development, implying this self-evidently demonstrates economic and other benefits for local communities.

An interesting case is the city of Kashgar, the site of extensive urban development and transport infrastructures, a Special Economic Zone, and the reconstruction of the old city into a tourist destination. It was a much-publicised sub-venue for the 2024 Spring Festival Gala. Instead of concealing cotton or solar panel industries that have been linked with forced labour, the Gala segment opened with computer-generated images of cotton fields, and ended with the hosts proclaiming, "The windmills, the ports, the solar energy of Xinjiang carry it across mountains and seas to resonate with the world" and calling on viewers to unite around the CCP and Xi Jinping (CGTN 2024).

Kashgar's history as a trade-hub on the ancient silk roads long predates the region's incorporation into Chinese territory. It is a city of cultural and religious

importance to Uyghurs. Its history is appropriated within Chinese discourses framing the BRI as a direct continuation of these ancient routes, though it bears no resemblance to them: "[for Kashgar] despite the difference in time and space, the connection between the ancient Silk Road and the modern BRI… is natural and continuous" (National Development and Reform Commission 2021). The development of Kashgar was billed as a project that would alleviate local poverty, moving Uyghur residents into modern housing and creating employment through tourism. But it has been shown that inequality in Kashgar has dramatically increased over the past decade, with forced relocation resulting in increased debt and marginalisation among the Uyghur community (Steenberg and Rippa 2019). Many of the developments for the Kashgar Special Economic Zone have stalled, and while tourism has certainly boomed much of the development has been led by Han entrepreneurs,[5] leaving mostly low-paid service roles to ethnic minorities (Szadziewski et al. 2021; Salimjan 2022; Brown and O'Brien 2023). Such failings are not unique to Xinjiang: many BRI projects in sub-Saharan Africa, despite promises to reduce local poverty, resulted largely in the creation of low-wage jobs, have been accused of violating labour laws, and have favoured importing Chinese labour (particularly for higher-level positions) instead of locals, leading locals to question the direct benefit from such projects (Shi and Seim 2021).

Some have characterised the BRI as operating under a colonial logic of 'extraction' – of resources, labour, and profit – a logic especially clear in Xinjiang (Byler 2022). The BRI is a key contributing factor to the continuing human rights violations in the region. The CCP has long faced challenges of ethnic tension in Xinjiang, but to transform it into a key node of cross-border transport connections, oil pipelines, and other industries within the BRI, the Chinese state needed to dramatically extend its control over segments of the population in order to 'stabilise' the region (Hayes 2020).

This inter-relationship is clear in the use of forced labour in Xinjiang's 'booming' BRI industries, such as cotton and solar industries (Cockayne 2022). Many of the previously mentioned 're-education' centres housed factories, and relatives were pressured to take factory jobs if they hoped for their family members' release (Murphy and Elimä 2021: 10). Many internees – and numerous members of the broader Xinjiang ethnic minority population – have been moved onto what the CCP has called "surplus labour" (富余劳动力) or "labour transfer" (劳动力转移) programmes. A 2020 official government report documented the "placement" of 2.6-million minority citizens into jobs in factories and farms within Xinjiang, but also other regions (Murphy and Elimä 2021: 10). Described as a "poverty alleviation" (扶贫) initiative, many transferees, however, were not 'underemployed', but include "university graduates, film makers, dentists, nurses, medical professionals, restauranteurs, businessowners, engineers, marketing professionals, [and also] retirees" (Murphy and Elimä 2021: 12). Families have been separated, with children placed in boarding facilities or foster care. Characterising this as 'forced labour' is further supported by evidence that minority workers are not permitted to leave factories or farms voluntarily, their IDs are held by security or local police, as well as the work being "either unpaid, paid far less than the minimum wage, or [told] that they owe a debt to their employers for food or transport" (Murphy and Elimä 2021: 12).

In the past ten years, China has moved from producing a negligible amount of polysilicon (a core component in solar panels), to the Xinjiang region alone producing 45 percent of the world's polysilicon in 2020. Cockayne (2022) estimated that Xinjiang-made polysilicon accounted for 95 percent of photovoltaic energy supplied to the world's top 30 solar-power-producing countries. He furthermore estimated that about 18 percent of globally traded pressed tomato products were produced from farms in Xinjiang, and Xinjiang cotton was to be found in around one in every five garments. In this respect at least, the BRI has certainly had a profound global reach.

As noted by Murphy and Elimä (2021: 17), while one factor is the "competitive advantage" of forced labour, the exponential growth of industry in Xinjiang has been heavily incentivised by government grants, subsidies, and tax-waivers, if companies "absorb" this "surplus labour." These programmes have a two-fold aim. Besides production of a physical labour force giving China a competitive advantage in increasingly important sectors, they continue the work of the 're-education' centres and the 'Sinicization' campaigns in another guise – maintaining and extending control over the Muslim minority population, and the Xinjiang region.

Beijing denies that its policies or practices are crimes against humanity, and instead asserts that the region has been stabilised and everyone is 'happy' (Hayes 2023). This fits the metanarrative within the BRI, as 'a story China tells itself about itself'. Beyond the desire to increase its international influence and economic power, the CCP needs to represent itself as altruistically 'developing' its border regions, and minorities as unambiguously 'happy', to maintain its self-image as a benevolent state. It repeats this narrative it tells its domestic population, encouraging them to see their role as part of an exceptional and virtuous endeavour, both within Xinjiang and beyond its borders through the BRI, encouraging them to feel fortunate to be Chinese and subjects of the CCP.

Celebratory rhetoric that Xinjiang is 'booming', returning to its lost 'silk road' glory, thanks to Xi's grand vision and BRI investment, not only serves to obscure human rights violations by white-washing them. We should understand the CCP's actions towards its ethnic minority population, justified as necessary for economic development and social stability, as signs of the means the CCP deems *acceptable* to achieve its grand visions of its 'New Silk Road', and its own hegemony within that initiative. And besides the outcry that this ought to provoke, this should serve as a warning particularly to those within the BRI, of what the CCP is willing to do within and beyond its borders.

Conclusion

This chapter has offered a review of criticisms of China's BRI. The cancelling of projects and ongoing issues around corruption, debt, environmental damage, and lack of transparency, not only challenge the official CCP narrative that this project aims to create a new global order founded on 'mutuality' and 'openness' but also have serious international repercussions for individual nations and the global community in the long run. The mythologising of the historic silk roads is also problematic, not only for its lack of historical accuracy but for its attempt to place China

at the centre of world history. In this, the BRI is a vehicle for the CCP's stoking of nationalism within China. And in Xinjiang, the BRI is closely connected to the allegations of crimes against humanity occurring there as part of China's 'securitisation' of its western regions. Diverse products in global supply chains are linked back to its forced-labour programmes. Ironically enough, its cotton, tomatoes, and solar panels do connect the world to Xinjiang, though that connection – or complicity – should not be celebrated.

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Notes

1 The project is referred to by different names / acronyms: 'One Belt One Road' (OBOR) and 'Belt and Road Initiative' (BRI). We use BRI, but both are regularly found in the wider literature.
2 See Nye (2017) for a more detailed discussion of this concept, and in particular its complex reception in China.
3 For example, in the 800s, the Uyghur society centred in what is now Turpan (Turfan) was Buddhist, Manichean, and Nestorian Christian.
4 Levene (2008: 188) describes the systematic destruction of the Dzungars as "arguably the eighteenth century genocide par excellence".
5 Among those sent for 're-education' from Kashgar during this time were four of the wealthiest Uyghur businessowners (Hoshur 2018; O'Brien and Brown 2022). This challenges the CCP's position; this was a 'poverty alleviation' initiative, but it fits a broader pattern where local leaders, and others challenging the CCP's displacement of ethnic communities to facilitate tourist development disappeared into the camps and then prisons (Salimjan 2022).

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23 Visualising the Silk Roads

Julian Henderson, Stephen L. Morgan, and Matteo Salonia

A fascinating way to approach the history of Eurasia is through its material cultural heritage. In this chapter, we offer a selection of archaeological sites, historical objects, artworks, and buildings that display the value to be gained from a broader definition of the silk roads. We have selected images that illustrate the manifold ways in which, from the third millennium BCE to the present, Asia, Europe, and parts of Africa have built and shared a past that is the product of intense and continuous relations, but also of local adaptations and reactions to encounters and transfers of goods and knowledge. Making space for both economic and non-material motives, such as religious faiths, in these pages, we aim to stimulate further research and to suggest classroom discussions as well as student-led projects.

As we note in the Introduction, the historiographies of land and maritime route networks have usually remained separate. Instead, we seek to reimagine the silk roads and propose a historical framework that considers both land and maritime routes, appreciating their mutual influences, their interconnected ebbs and flows. A new definition of the silk roads calls for a broader array of geographies and historical imageries. In the minds of researchers and in museum exhibitions, oceans and ports should take their place next to pathways across mountains and deserts. The establishment of Arab and Iranian maritime communities in twelfth-century Quanzhou, or the historic trans-Pacific trade through Manila starting in the sixteenth century, should be integrated with more classic silk roads themes like the Buddhist caves at Dunhuang or the ancient cities of Petra and Palmyra. In this chapter readers will find evidence of classic themes such as the transformations of Buddhist architecture alongside more unexpected pictures, which include high-valued ceramics that were exchanged by sea through Southeast Asia. Similarly, if Central Asian peoples like the Sogdians are to be given adequate space, an account of their pivotal roles and of their movements between Eurasian civilisations is necessary but not sufficient; students and scholars should become familiar with the visual evidence of Sogdian cosmopolitanism and acculturation (Figure 23.2). Readers should refer to the online open access edition of this volume to see the colour version of the figures.

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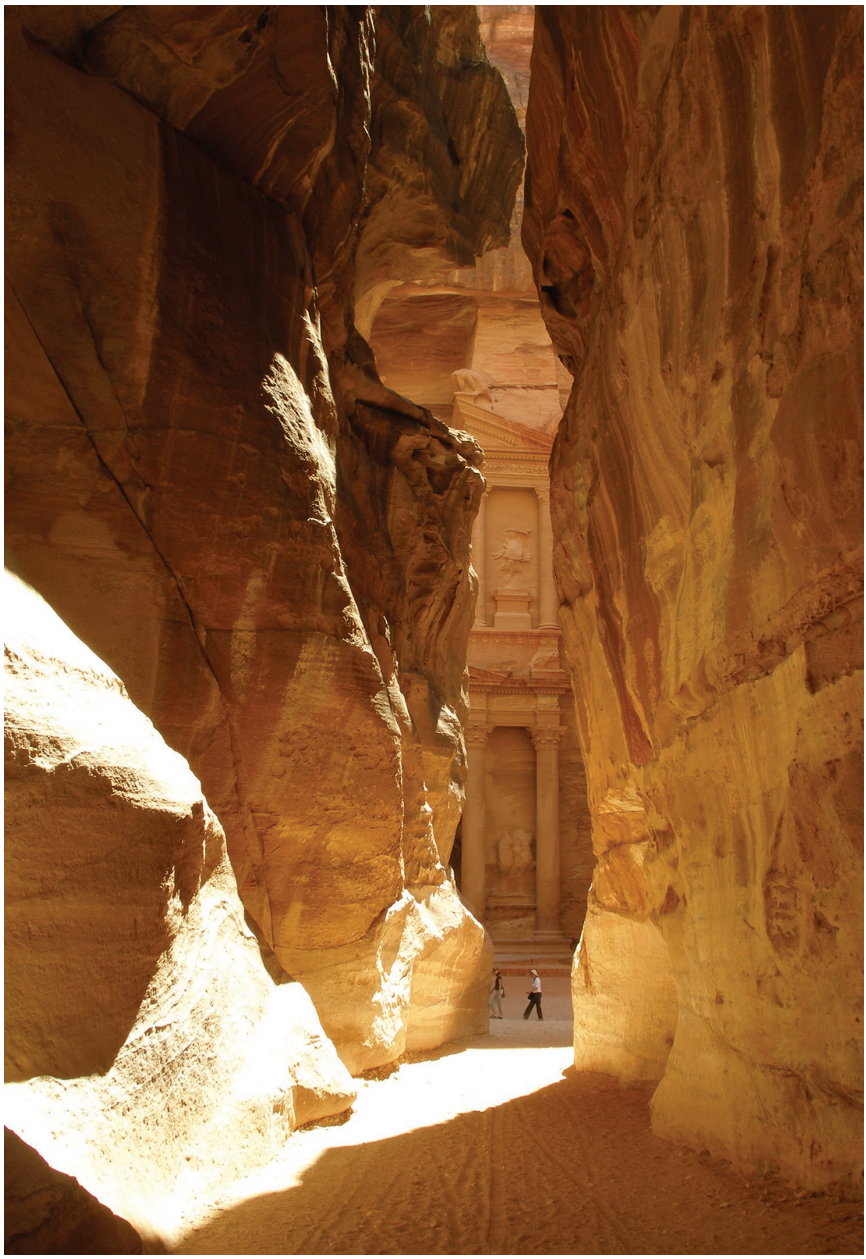

Figure 23.1 Petra in Jordan is a UNESCO world heritage Nabataean (fourth century BCE to first century CE) city that is in a narrow valley called the Wadi Musa located between the Dead Sea and the Red Sea. It is carved and built out of rose-coloured sandstone. During the Hellenistic and Roman periods, Petra was on an important caravan route. It was a hub between Syria-Phoenicia, Egypt, and Arabia for the trade of incense (such as frankincense and myrrh), spices and silks, with connections extending via India as far as China. The temples and tombs reflect a fusion of West Asian and Hellenistic influences.

Source: © Vyacheslav Argenberg.

Figure 23.2 The desiccated remains of the Yingpan man were discovered in 1995 in a tomb north of the Xiaohe cemetery in the Lop Nor region in Xinjiang, China. He dates to between 245 and 385 CE (the Western Jin Dynasty). Based on his rich garments, he might have been either a very wealthy Central Asian Sogdian merchant or a military official. Study of his highly decorated and well-preserved clothing and other objects reveals that he was familiar with aspects of life, customs, and symbols associated with China, Persia, Greece-Rome, India, Central Asia, and possibly southern Russia, and so he was truly someone with connections (however indirect) across the Eurasian Silk Road.

Source: Photograph courtesy of Chunlei Qin.

Figure 23.3 Ying Zheng, the first (Qin) emperor of China took to the throne in 246 BCE. He unified the country and is reputedly buried in the enormous mound behind the terracotta army in Xian. The army deposited in four pits consisting of generals, officers, infantrymen, kneeling archers, and cavalry is accompanied by 600 clay horses, more than 100 war chariots, and weapons. While the bodies of the warriors have standardised designs, each of their faces is different and apparently based on people who lived more than 2,000 years ago. The painted bodies of the soldiers, of which it is estimated there are more than 8,000, would have been very colourful when first installed. These were the first life-sized figures to have formed part of burial rituals in China. It has been suggested that the inspiration for them is derived from Classical Greece.

Source: Photograph Julian Henderson.

Figure 23.4a The extensive ninth- and tenth-century maritime trade networks between Africa and West, South, and East Asia included a key stop at Cham Island northeast of Hoi An, central Vietnam. Here excavations by the Showa Women's University in Japan have revealed evidence of intensive trade with West Asia, especially in ceramics and glass. This small polychrome glass bead from the excavations was made in western Asia, perhaps in an Islamic glassmaking centre such as Samarra. It combines opaque yellow, red, white, and dark blue glass with a deep translucent brown (recycled) translucent core.

Figure 23.4b The deep translucent glass core of the bead seen here contains pieces of scrap red and blue glass; evidently all the effort went into decorating it. At the western end of the silk roads, large numbers of Islamic glass beads have been found in Viking burials on Gotland, Sweden.

Source: Photographs Julian Henderson.

Figure 23.5 This lustre-decorated plate dates to the late twelfth to first-half of the thirteenth century. The plate, with its underglaze decoration painted in translucent blue and turquoise, may have been made in al-Raqqa, Syria. Chinese high-temperature fired ceramics were in great demand in western Asia and both their technology and designs influenced the production of ninth-century CE and later pottery. The body of his plate has a higher firing temperature and a harder body than terracotta: it is known as stonepaste. The introduction of stonepaste ware around the eleventh century is another influence that Chinese potters, along with the import of Chinese pottery, had on Islamic potters: an attempt to create an equally high fired pottery body incorporating a network of glass. The introduction of imported Chinese ceramics in the ninth century probably also had an impact on Islamic dining rituals in western Asia.

Source: public domain.

Figure 23.6 Even though Buddhism was adopted (and adapted) by the Chinese intellectual elite only from the fourth century CE, its initial arrival in China dates to the Han Dynasty (206 BCE–220 CE). The Qiyun Pagoda is part of the White Horse Temple in Luoyang, one of the ancient capitals of China. The temple was originally built in the first century CE, and it is a witness to the movement of faiths and rituals along the land Silk Road. The original stupa was destroyed, but in the twelfth century, it was rebuilt in the form of the present pagoda, whose style, shape, and height show the influence of traditional Chinese architecture and the local transformation of Buddhist temples and worship.

Source: Public domain.

Figure 23.7 Shown here is the upper section of the Xian Stele, which was erected by Chinese Christians in 781. The stele provides evidence of the early presence of Christianity in East Asia and describes in Chinese and Syriac the existence of Christian communities in north China over the previous 150 years. The Church of the East, which was originally located in Persia, adopted the Nestorian interpretation of Jesus Christ's nature.

From the sixth century, its missionaries brought the Gospel across Central Asia, through Sogdiana, to Khotan, and eventually to western China, where Sogdian and Chinese Christians had established bishoprics at Xian and Luoyang, as well as several monasteries nearby. This Stele, which summarises the history of the first Christian communities in China, was buried by local Christians in the ninth century, when they were facing persecution. Rediscovered in 1625, it was recognised as evidence of the origins of Chinese Christianity by Chinese Catholics like Xu Guangqi and Catholic missionaries like Álvaro Semedo.

Source: David Castor, public domain.

Figure 23.8 This image of the 'Polo Brothers Leaving Constantinople' comes from the *Livre des merveilles et autres récits de voyages et de textes sur l'Orient*, an illuminated manuscript produced in France in the 1410s. The book, which collected narratives written by Marco Polo, Odoric of Pordenone, and other Christian travellers, exemplifies late medieval Europe's genuine curiosity and openness toward the East. The Polo brothers, Niccolò and Matteo, left Venice in 1259, stopped by Constantinople, and then travelled first to Bukhārā and then to the Mongol capital Khanbaliq (Beijing). After returning to Venice in 1269, the two merchants undertook a second journey accompanied by Niccolò's son, Marco. Marco's narrative, *Il Milione*, became the most famous text about the beautiful cities and wealthy markets of the East, and it remains a fundamental document for the study of intercultural dialogue and perceptions on the silk roads.

Source: Public domain.

Figure 23.9a This 'Nanban byōbu' (screen of the Southern Barbarians) represents the arrival of a Portuguese vessel in Japan. From the mid-sixteenth century, Portuguese merchants traded between Macao and Nagasaki, exchanging mostly Chinese silk for Japanese silver. This commerce, which allowed some of the Japanese traders to make fortunes, was carried out side by side with missionary activities of Catholic religious orders. In the 1630s, Tokugawa Iemitsu unleashed a brutal anti-Christian persecution and expelled all the Portuguese from Japan. Folding screens like this one were probably produced by Japanese artists of the Kanō School to decorate the homes of merchants and officers, and they were made in pairs to separate different domestic spaces. In fact, this is the left-side screen from a pair produced around the end of the sixteenth century and currently preserved at the Museu Nacional de Arte Antiga, in Lisbon.

Figure 23.9b Detail from the right side of the screen showing the landing party. This visual account of the historic encounter between Europeans and Japanese contains splendid, colourful details. The screen shows the presence of a multiethnic crew steering boats, unloading goods, and aloft in the rigging.

Source: Public domain

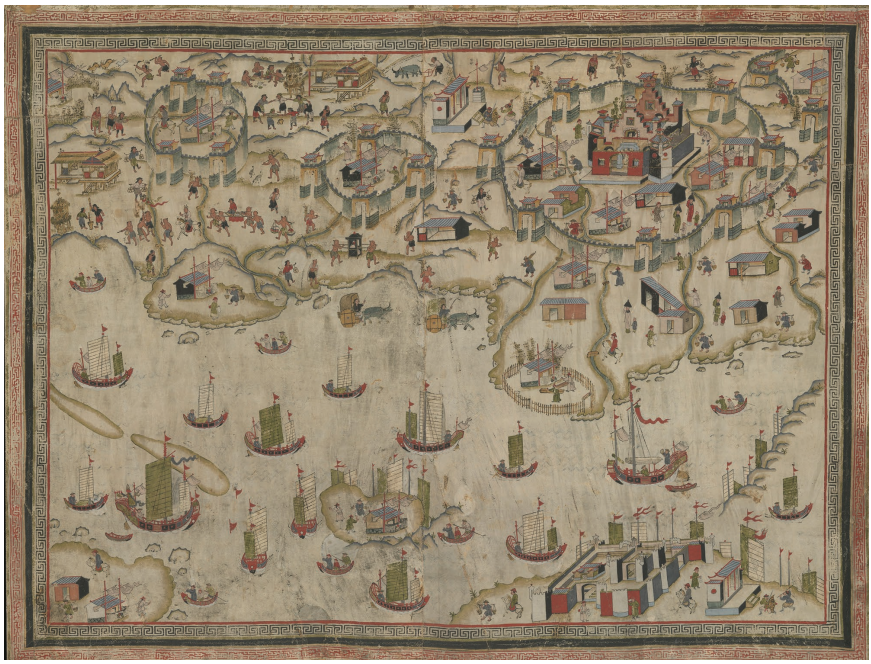

Figure 23.10a This pictorial map of Tainan, a port town in Taiwan is an example of material culture along the maritime silk roads. Produced by Chinese artists in the nineteenth century, it recalls the lively urban environment of the Tainan port. Here, the Dutch had built a fortress in 1624, as part of their expansion in the East during the seventeenth century.

On the map, amusing scenes of everyday life are juxtaposed with economic activities, such as agriculture and fishing, as well as with representations of indigenous people hunting and men engaged in military training. Overall, the map, which survives in several versions, suggests how as late as the nineteenth century, images of the East that were formed in the Dutch Golden Age were still used by Chinese painters selling their works abroad.

Figure 23.10b Detail that shows farming around one of the forts. Both Chinese and indigenous people are represented; at the top right corner, a farmer is busy ploughing his fields using an ox; and at the top left, an indigenous house on stilts.

Source: Public domain.

Figure 23.11 Ancient Southeast Asian sailing vessels are depicted on the bas-reliefs of the ninth-century Borobudur Temple in Central Java, the largest Buddhist temple in the world. The image above is of a distinctive Javanese double outrigger ship that was still in use in East Java for coastal trade up to the mid-twentieth century. The outriggers are shorter than the hull; the masts are bipod or tripod rigged with canted square sails and a bowsprit sail and steered with quarter rudders (oar-shaped rudders either side of the stern).

Malay-Javanese ships of this kind probably carried Indian Ocean and Southeast Asia cargoes to China between the fifth and ninth centuries. They are believed to have travelled from Srivijaya in the ninth century as far Madagascar. The outrigger design was even adopted by the late Song and Yuan navy for fast attack ships, but little documentation has survived about them (and no images). In the second-half of the first millennium, these vessels were very large and able to carry hundreds of passengers and cargo. Javanese rice ships were reputed to be over 1000 tons, dwarfing the early European ships in Southeast Asia, and war vessels of 500 tons or more, but they were too slow to manoeuvre against European vessels, not to mention outgunned (some Javanese vessels carried small Chinese cannons by the fifteenth century).

Source: Photo by Michael J. Lowe (CC BY-SA 2.5 License).

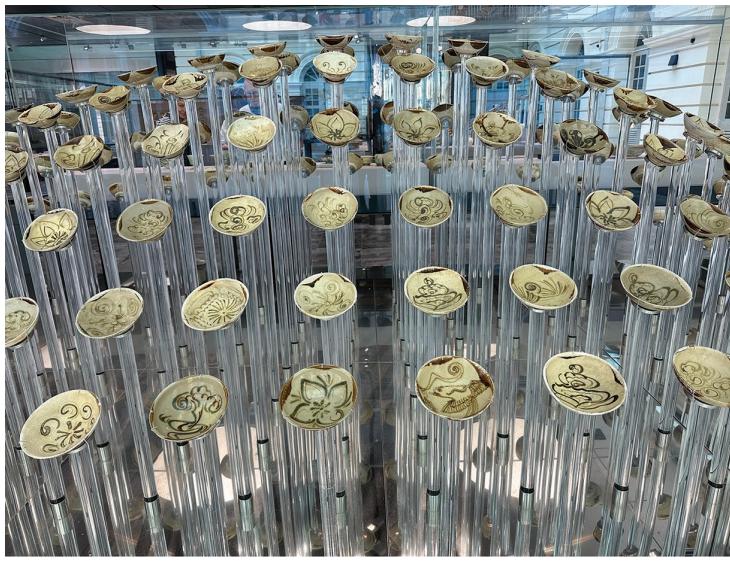

Figure 23.12a The nineth-century Belitung Shipwreck found in 1998 off Sumatra had more than 60,000 pieces of ceramics, the largest discovery ever of Tang period porcelain, including thousands of bowls from Changsha kilns. Displaying the vastness of the cargo is difficult for curators. At the Asian Civilisations Museum (ACM) in Singapore they are arranged to resemble Indian Ocean waves.

Source: Picture Stephen L. Morgan.

Figure 23.12b Shipping porcelain without breakage was a challenge for merchants. On the Belitung ship, the Changsha bowls were packed inside huge Guangdong-made storage jars as recreated above at ACM.

Source: Picture Stephen L. Morgan.

Figure 23.13a Spices motivated Romans, Arabs, and fourteenth-century Europeans to seek supplies from South and Southeast Asia. The black pepper (*Piper nigrum*) plant (left) is native to the Malabar Coast in southwest India but was grown in Java by the eleventh century. It made the fortunes of many a merchant from Venice, Arabia, India, and Insular Southeast Asia.

Source: Public Domain.

Figure 23.13b The nail-like cloves (*Syzygium aromaticum*) are the fragrant dried flower buds of a tree that once only grew on the Maluku islands in Eastern Indonesia. Along with nutmeg and mace from the Banda Islands south of Maluku, Europeans engaged in conquest, piracy, and slavery to control the supply during the sixteenth and seventeenth centuries.

Source: Public Domain.

Figure 23.14a This silk screen portrays Japanese and Portuguese sailors on a "red seal" (朱印船, *shuinsen*) ship in the seventeenth century. Red seal ships were merchant vessels that had obtained a vermilion patent (seal) from the Tokugawa Shogunate to trade in Southeast Asia.

The Ming Dynasty had banned Japanese vessels from Chinese ports as a measure to control the Japanese wokou pirates, although many so-called pirates were Chinese merchants evading the Ming maritime ban. These ships traded with Chinese in Vietnam and other Southeast Asian ports, and like European vessels, carried a mixed crew, including Chinese and Southeast Asians who could pilot the vessels.

Figure 23.14b Japanese and Portuguese are relaxing with a tobacco pipe and tea while watching a dance performance.

Figure 23.14c Japanese and Portuguese are engaged in a game of Go (Chinese *weiqi*), a strategy game like chess.

Source: Public domain. Philadelphia Museum of Art.

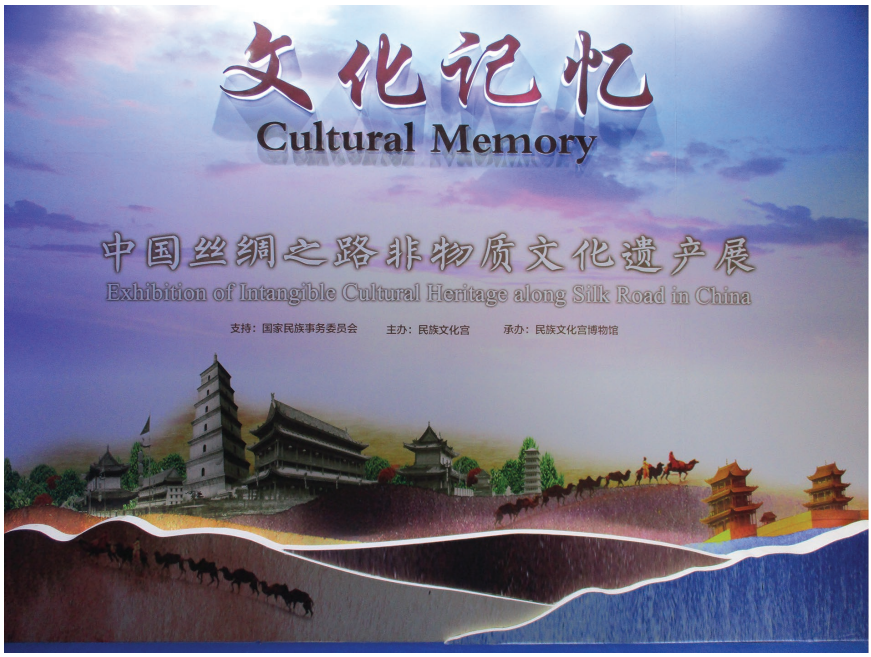

Figure 23.15a A poster for the "Exhibition of Intangible Cultural Heritage along [the] Silk Road in China" held at the National Minorities Cultural Museum in Beijing in 2019. This depicts stylised images of famous pagodas and monasteries, fortifications from Gansu, and camel trains to assert a distinctive Chinese origin to the silk roads.

Source: Photograph Melissa Shani Brown.

Figure 23.15b A screenshot of the British Museum's promotion of an exhibition on the silk roads in 2024–25.

Many travel firms as well as exhibitions related to the silk roads employ romantic visual tropes. A camel caravan led by a merchant over sand dunes is common. The images implicitly neglect the maritime routes that carried far more goods and people than the Eurasian land routes. This neglect of the maritime route has filtered through to scholarship and the popular imagination.

Source: Photograph Stephen L. Morgan.

24 Conclusion

Questioning and recovering the Silk Roads

Matteo Salonia, Stephen L. Morgan, and Julian Henderson

The silk roads are not an entirely fictional idea. Long-distance networks along which peoples, goods, knowledge, and faiths moved across Eurasia have existed for millennia. Silk was not always the main commodity traded along these routes, but the concept of silk roads – though imperfect – remains very useful for at least two reasons. First, it helps both academics and the public to study, describe, and question the unique history of intense and prolonged interactions between Asia and Europe. Research projects, heritage initiatives, and classroom discussions of these interactions, which came in waves of different lengths, underpinned by a variety of motives and opening paths that included not only land routes but also maritime 'roads', surely benefit from an umbrella term.

Secondly, the silk roads offer a framework that facilitates multidisciplinary and interdisciplinary cooperation, bringing together scholars from many fields and subjects. This volume shows rarely tapped potential to assemble historians, archaeologists, scientists, economists, geographers, political scientists, and art historians with the aim of bridging different academic debates, methodologies, and communities. Our volume demonstrates the vitality of silk roads studies and invites readers to move beyond their comfort zones to draw connections, reevaluate chronologies, and reflect on the long history of Afro-Eurasian encounters, their legacies, and the competing 'national' narratives.

At the same time, we believe that the silk roads must be reimagined. The recent politicisation of the term by the Chinese Communist Party (CCP), which has constructed a historical myth to soften and romanticise its economic and geopolitical ambitions in Central Asia, South Asia, and as far as Africa, is a serious problem for the development and dissemination of research projects. Scholars worldwide have become suspicious of an idea that President Xi Jinping has appropriated, as for instance in parts of his 2023 speech, marking the 10-year anniversary of the Belt and Road Initiative (BRI) that links back directly to the silk roads.[1] In fact, Xi's political redeployment of the past reminds us of both the longer history of Sino-centrism, rooted in the Han statecraft idea of 'tianxia' (天下) or 'all under heaven' (Mankoff 2022; French 2017), and the imperialist mindset behind the first definition of 'the Silk Road' by Baron Ferdinand von Richthofen.

How to reimagine the silk roads then? Partly, the answer comes from a broader approach that pays attention to the fundamental contribution of the steppes, as well

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as to the agency of polities, communities, and individual actors other than those in China, or for that matter the major settled empires of the ancient silk roads. In this volume, Pin Lyu has compellingly argued that the Sogdians weaved together a mercantile network and a sophisticated economic geography that facilitated the flow not only of goods, but also of languages and cultures across Central Asia. Similarly, the 'maritime silk roads' were forged by Malay-Javanese, Arabs, Persians, and Gujarati sailors and merchants in the first millennium, and later by the Chinese and Portuguese. At times Chinese merchants were forced to abandon sea-going commerce because of state bans, of varying duration, during every dynasty from the Song onwards. At these key junctures, groups of sailors and merchants between West and East Asia, sustained and expanded trade, including clandestine Chinese groups that were labelled pirates. An additional strategy to reimagine the silk roads consists of alternative chronologies, which are not state-centred. We suggest that new routes opening up long-distance relations were not always underpinned by the will of courtly officers or by the military expansion of an empire. To the contrary, Eurasian pathfinders included zealous missionaries who spread Buddhism, Christianity, Islam, and other faiths without necessarily aligning to diplomatic or political goals. Taking into account the spiritual motives and the religious landscapes of monks and priests moving across Eurasia helps us to call into question the monopoly that some empires still hold on the periodisation and the 'turning points' of world history.

The argument running through this volume is that different waves of exploration, transfer, and exchange intensified the integration of Europe and Asia through both land and maritime routes (see Figure 1.1). Some of the most important waves include the fourth-century Buddhist 'conquest' of China, to use Erik Zürcher's term (Zürcher 2007); the dramatic increase in maritime trade led by Muslim merchants from the late eighth century to South, Southeast, and East Asia and to Africa (Chaffee 2018); and the arrival of Europeans on the Indian Ocean and the Pacific Ocean since the end of the fifteenth century, which made possible the flow of goods and capital across longer distances and expanded geographic and navigational knowledge (Salonia 2022). These and other changes that we identify as key in our volume present a novel account of the past that Asia and Europe share. For instance, we reject the chronology of the Silk Road given by Xinru Liu (2010), because it privileges the initiatives of the Roman empire in the Mediterranean and of the Han and Tang dynasties in China, and because it sets what we consider the maritime silk roads in opposition to 'the' land Silk Road. Consequently, Liu's narrative begins with Han expansion and ends with the disintegration of the Mongol order. Her definition and periodisation are too narrow, and neglect pre-Han China exchanges, the agency of geographic areas far removed from Roman and Chinese courts (with the exception of the Kushan empire), and the impact of late-medieval and early-modern European explorations.

A seventeenth-century panel of embroidered silk is a good example of the interactions that can be captured by a broader, more flexible definition of silk roads (Figure 24.1). This beautiful textile, influenced by Spanish and Portuguese models and produced in China for the export market (to Europe and Japan), represents well

Figure 24.1 A Seventeenth-century Chinese panel of embroidered silk.
Source: MET, public domain.

Eurasian material culture and the reach of global silk trade routes three centuries after the downfall of the Yuan dynasty. Previous chronologies and notions of metropoles and peripheries are further disintegrated if one also follows other avenues of research indicated by our previous chapters. For instance, the early trajectory of Christianity in Central and East Asia, from Persia through Sogdian territories, and then into Xinjiang and Gansu, suggests the relevance of areas along the silk roads in the global history of Christianity during the millennium before the Jesuit missions. Patterns in

the movement of animals, crops, and material cultures since prehistoric times (Hsu et al. 2016; Zhou et al. 2020; Librado et al. 2024) are equally significant to problematise the idea of silk roads. In other words, from our volume, a new image of the silk roads emerges, which encourages scholars working on different periods to recognise the complexity of Eurasian networks and the polycentric origins of changes in their structures, nodes, and flows. This reimagined concept of silk roads moves radically away from the picturesque yet troubling notion of a land route dependent only on the political, imperial projects of sedentary civilisations.

As suggested by the previous chapters, the CCP's politicisation of the term Silk Road to embellish the narrative surrounding the BRI is recent, but cultures, religions, and commodities have been exchanged in Eurasia for several millennia. We reject the Chinese government's historically inaccurate rhetoric. However, we believe that even though people in the past did not use the name silk roads for their routes and networks, it is crucial to acknowledge that they often imagined and mapped the series of urban environments and human societies from Karakorum to Constantinople and from Hormuz to Nagasaki as a continuous constellation of wealthy markets, important temples, and splendid courts. There were also many smaller tributary routes that connected to primary ones. Interdisciplinary silk roads studies, therefore, is also a field that recovers a history of perceptions and opens up opportunities for the results of archaeological excavations, heritage studies, and museums.

A museum display that demonstrates the impressive scale of trade on the silk roads is that in Guangdong Maritime Silk Road Museum on Hailing Island. The museum displays the hull of a 21.9-m long Southern Song Dynasty boat with 15 compartments discovered in 1987 in the South China Sea near Hailing Island. This is the best-preserved ancient Chinese ship yet found in China. It sunk shortly after leaving Guangzhou. The ship's hull and cargo were exceptionally well preserved in layers of mud.

Known as the Nanhai No.1, the wreck was excavated by enclosing the hull in a metal box, which was raised and moved to the site of the museum, which was then built around it. Museum visitors can watch the wreck being excavated and appreciate the scale of both the boat and its cargo, and the techniques of excavation. The bulk of the cargo is ceramics (Wei 2018) and iron objects (such as vessels and nails), the balance being bronze, including contraband rings (Chen et al. 2024), tin, stone, and lacquer. As many as 100,000 pieces of ceramic ware might be found once the hull is fully excavated. These ceramics were manufactured in the Jingdezhen (Wu et al. 2020), Longquan (Wood and Rastelli 2014), Dehua (Zhou et al. 2019), Cizao, Minqingyi, and Jian kilns, many of the most prominent kiln sites of the Southern Song. They were probably being exported to Southeast Asia when the vessel sank. The principal range of shapes are bowls, plates, jars, bottles, vases, boxes, cups, and small dishes. Ink markings on the ceramics have survived including one associated with Dehua ware, which shows they belong to particular merchants. The unique museum display not only shows the scale of production and organisation of Chinese porcelain exports in the Southern Song, but also how archaeological excavations can be presented in ways that allow us to be in 'contact' with some individuals from the past.

Another museum exhibit that encapsulates interactions and trade, but over a far wider area of the silk roads is the 'Center of the world: China and the Silk Road' exhibit in the Freer Gallery of Art, in Washington, D.C. The exhibit focuses especially on metalwork that represents complex connections over thousands of miles of the terrestrial silk roads between the capital of the prosperous Tang Dynasty in Chang'an and central, southern, and western Asia. Many of the items were produced or influenced by artisans from the Persian-speaking Sogdians who originated in today's Uzbekistan and Tajikistan. Described as 'cultural bees' (see Chapter 10), they were among the most successful of the travellers on the silk roads who settled and acculturated to their new environment in Chang'an.

The exhibit shows artistic designs that influenced decorative styles associated with the migration of Sogdians to China. A sixth-century marble Sogdian funerary couch, which was found in Henan, has musicians, dancers, and Buddhist divinities carved into it. Traces of pigment suggest it was once highly coloured. A hammered silver-lobed bowl decorated with foliage and a lion at its centre from the late sixth and early seventh centuries probably derives from Uzbekistan. Lobed silver bowls are found in earlier Sasanian contexts, with evidence of a fusion of Sasanian and central Asian designs (Lerner 2019), but this is more typically a Sogdian design. A lidded silver box from Shaanxi province, probably Xian, dates to the early to mid-Tang (late seventh to early eighth centuries). Depicting a melon with grape vines, the box is evidence of the spread of viticulture, which originated in the Mediterranean and the Middle East (Dong et al. 2023). Behind these exhibits are the people who travelled along the silk roads of Eurasia to China. While art works are static objects in museum displays, they let us catch a glimpse of the movement of humans and their interaction with others in foreign lands, which create an enduring fusion of ideas, lifestyles, religions, and designs that is at the heart of the silk roads.

Museum exhibits are neither value free nor free of controversy. Those that show the material cultures of the silk roads are no exception. The Belitung shipwreck, a ninth-century western Indian Ocean-style vessel that was discovered in Indonesian waters in 1998, is a recent high-profile example (Pearson 2023). On board there were more than 60,000 pieces of Chinese ceramics, the largest single discovery of Tang period stoneware and porcelain, along with gold and other objects. The most numerous of the main cargo were bowls from Changsha kilns, some fine Yue white-and-green-splashed ware, and the earliest examples ever found of blue-and-white dishes. The Asian Civilisations Museum (ACM) in Singapore is now home to the almost complete assemblage of the artefacts recovered from the wreck (Chong and Murphy 2017). But the recovery, ownership, and display of the artefacts illustrate vividly the fraught ethics and politics of archaeology, museums, and the 'heritage industry'. The wreck raised questions such as: whose artefacts? whose stories? And we need to reflect on the thorny politics of the appropriation of the past to serve the present and envisage a particular future that a government might want to promote.

Salvage of the Belitung shipwreck (also known as the Tang shipwreck) was undertaken by a commercial salvage company under licence from the Indonesian Government (Flecker 2000, 2008, 2017). Sale of the recovered objects to the Singapore Government contravened the principles of the 2001 UNESCO Convention

on the Protection of Underwater Heritage and prompted a lot of international criticism from Western archaeologists and museums. The Smithsonian Institution in 2011 was forced to cancel the exhibition, *Shipwrecked: Tang Treasures and Monsoon Winds*. Only in 2017 was the American public able to view an exhibition at The Asian Society, despite protests. Space does not permit a fuller discussion of the political and other complexities of the recovery of the wreck (see Flecker 2000, 2017; Pearson 2023). But we need to recall that at the time Indonesia was very unstable following the fall of President Suharto after the Asian Financial Crisis (1997–8), and even though the salvage was less than ideal, most of the cargo has been kept together for research and public display at ACM, instead of it being looted – as had already begun in 1998 – and dispersed through sale on private art markets.

The Belitung wreck shows vividly the competition between countries and museums over the ownership and display of the artefacts. The heritage that is displayed in museums and often unseen by the public is "constructed by local, national, and international actors," which is "a process of cultural production" that interprets and frames the past for "present day needs and aspirations" (Pearson 2023, 3–4). Multiple national stories are invested in the Belitung wreck. Singapore has used the wreck to create a narrative about its national origin that tries to position the city as central to the history of maritime Southeast Asia; China laid claim to ownership based on the origin of most of the cargo; Qatar expressed an interest on the basis of being the probable origin of the Arab-style dhow; while the discovery in Indonesian waters gave Indonesia a natural claim. The wreck can be reimagined to support diverse narratives, to speak "to [the history of] Chinese manufacturing, to Arabian-style shipbuilding, to Southeast Asian maritime histories, and to global connections facilitated by oceans," while its journey "has also been reimagined in modern, and political, terms to support narratives about infrastructure, security, and the nation" (Pearson 2023, 128). The competing narratives are difficult challenges for museums to manage as public institutions with a responsibility to protect and ensure the provenance of material culture artefacts and to educate the public.

As Pearson notes, the Belitung ship in its time transversed many geographies and touched many communities, which continues today "through the afterlives of its objects, bringing in communities and nations who seek to claim a part of this story for themselves" (129). We can see at work these processes in how China has managed the narrative around two of its most significant ancient shipwrecks, the Nanhai No. 1 wreck discussed above and the Quanzhou wreck (Green 1983; Green et al. 1998), both from the Southern Song that sunk several centuries after the Belitung wreck. The well-preserved hulls of both wrecks revealed the advanced Chinese ship technology (water-tight compartments, iron fastenings, and an axial rudder) that had previously been best known from accounts by Marco Polo and Ibn Battuta. These were far superior to the Indian Ocean stitched-plank hulls or the Southeast Asian lashed-lug ones and allowed Chinese vessels to commercially rule Asian waters for several centuries. A story about the Nanhai No. 1 at the Maritime Silk Road Museum of Guangdong at Hailing Island in the English-language

nationalist *Global Times* (2023) positions the narrative of the Maritime Silk Road as China's creation:

> Through the continuous efforts of several generations of Chinese scholars, major research projects … have shown that Chinese history includes 1 million years of human evolution, 10,000 years of culture and more than 5,000 years of civilization. …
>
> The museum [at Hailing Island] has become the home of the ancient ship, now known as the Nanhai No.1, and continues to tell the story of the Maritime Silk Road that began 800 years ago. … [the recovered ship is] a perfect embodiment of China's Maritime Silk Road history.

The history of the silk roads is, however, a history of humanity writ large. Of people from Africa, Europe, and the heartland of Central Asia, of those of the Indian Ocean, Indonesian seas, and the South China Sea, of nomads, slaves, merchants, artisans, preachers and scholars, warriors, and rulers, all of whom in their various ways and at different times shaped the silk roads. There is no single historical narrative, but many. A selection of those can be found within the pages of this volume.

Note

1 "The BRI, drawing inspiration from the ancient Silk Road and focusing on enhancing connectivity, aims to enhance policy, infrastructure, trade, financial and people-to-people connectivity, inject new impetus into the global economy, create new opportunities for global development, and build a new platform for international economic cooperation. […] China is endeavoring to build itself into a stronger country and rejuvenate the Chinese nation on all fronts by pursuing Chinese modernization. The modernization we are pursuing is not for China alone, but for all developing countries through our joint efforts" (Xi 2023).

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