THE WORLD OF THE ANCIENT SILK ROAD

Edited by XINRU LIU

WITH THE ASSISTANCE OF PIA BRANCACCIO

THE WORLD OF THE ANCIENT SILK ROAD

This volume explores human migration, communication, and cross-cultural exchange on the Silk Road, a complex network of trade routes spanning the Eurasian continent and beyond. It covers thousands of years of human history, from the 3rd millennium BCE to the early 2nd millennium CE.

Consolidating archaeological discoveries, historical analyses, and linguistic studies in one comprehensive volume, *The World of the Ancient Silk Road* brings to light diverse perspectives from scholars who have lived and worked across this vast region, many of which are published here in English for the first time. It contains extensive references of primary and secondary sources in their original languages and scripts. From Early Bronze Age cultures to the rise of regional Islamic empires, from the Mediterranean to the Yellow River basin, this multidisciplinary volume seeks to offer new insights and expand Silk Road studies to the Anglophone world.

The World of the Ancient Silk Road provides an essential reference work for students and scholars of world history, particularly those studying the regions, cultures, and peoples explored in this volume.

Xinru Liu received her PhD from the University of Pennsylvania in 1985. She is Professor Emeritus at the College of New Jersey. She has published extensively on topics related to the Silk Road, including *Ancient India and Ancient China*; *Silk and Religion*; *The Silk Road in World History*; and *The Silk Roads, a Brief History With Documents*. She has been teaching courses on the Silk Roads for more than thirty years.

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CONTRIBUTORS

Benjamin Abbott is currently a PhD candidate in ancient history at the University of Pennsylvania. His primary research focus is on the early Seleucid empire and its formation. More broadly, his research focus includes the history and archaeology of Achaemenid and Hellenistic Western and Central Asia, race and ethnicity in the ancient world, and interdisciplinary approaches to the study and teaching of antiquity.

Kazim Abdullaev received his MA in Renaissance studies from Gorky University (Nizhniy Novgorod), USSR, in 1975, and his PhD with distinction in classical archaeology from the Institute of Archaeology, Academy of Sciences of the USSR, Moscow, in 1986. His research interests include the archaeology and art of Central Asia of the Hellenistic and post-Hellenistic periods. He is Member-Correspondent of IsMEO and Senior Fellow at the Institute for the Study of Ancient World (New York University). Currently, he is Senior Fellow and Lecturer at Istanbul University, Department of Fine Arts.

Craig Benjamin is Professor Emeritus of History at Grand Valley State University in Michigan, where he has taught big history and ancient Eurasian history. Craig is a frequent guest presenter at conferences worldwide, and the author of several books and numerous chapters and articles. His recent books include *Big History: Between Nothing and Everything* (2014); Volume 4 of the *Cambridge History of the World* (2015); *Empires of Ancient Eurasia. The First Silk Roads Era 100 BCE–250 CE* (2018); *The Routledge Companion to Big History* (2019); and *Traditions and Encounters: A Global Perspective on the Past* (2020).

Wang Binghua graduated from the Department of History, with a major in archaeology, from Peking University, in 1960. He worked in the Institute of Archaeology of Xinjiang Uyghur Autonomous Region for forty years (1960–2000), acting as a researcher and chief archaeologist. He explored, excavated, and examined the sites of Lop-nor, Niya, Kongque He, valleys of Tianshan Mountain range, Turfan, Hami, and the Yili River valley. After retiring from the archaeological team in Xinjiang, he was invited to teach courses on the archaeology of Xinjiang at Renmin University, Beijing, till 2019.

Pia Brancaccio is Professor of Art History at Drexel University in Philadelphia, USA. She completed her PhD in South Asian Art and Archaeology at the Universita' degli Studi di Napoli l'Orientale, Italy, and is a longtime collaborator of the Italian Archaeological Mission in Pakistan. Her research focuses on early Buddhist art in South Asia, with a special focus on the ancient regions of Gandhara and the Western Deccan. Her publications include *The Buddhist Caves at Aurangabad: Transformations in Art and Religion* (2010); *Living Rock: Buddhist, Hindu and Jain Cave Temples in Western Deccan* (2013); and *Gandharan Buddhism: Archaeology, Art and Text*, co-edited with Kurt Behrendt (2006), in addition to numerous articles in festschriften, conference proceedings, and academic journals (*Ars Orientalis*; *Archives of Asian Art*; *East and West*; *South Asian Studies*; *Hualin International Journal of Buddhist Studies*).

Hamish Cameron is a lecturer in Classics at Victoria University of Wellington where he works on the history and geography of the Roman Near East, representations of imperialism in ancient Greek and Latin literature, and the reception of the ancient Mediterranean world in modern games. His book *Making Mesopotamia: Geography and Empire in a Romano-Iranian Borderland* (2019) examines how Roman geographical writers controlled their spatial descriptions to convey imperial perspectives.

Bruno Genito is Full Professor of Central Asian Art and Archaeology in the Asia, Africa, and Mediterranean Department at Università degli Studi di Napoli, L'Orientale (UNO), Italy. He has been Director of UNO's Italian Archaeological Mission in Azerbaijan in collaboration with the Italian Ministry of Foreign Affairs and the Institute of Archaeology of the Azerbaijan Academy of Sciences, Baku, since 2016. He has also been Director of UNO's Italian Archaeology Mission in Azerbaijan since 2016, in Uzbekistan since 2008, and in Iran between 2003 and 2014.

Berit Hildebrandt is an ancient historian and classical archaeologist whose research focuses on the topics of social, gender, cultural, and economic history, especially the production, trade, and uses of silk in antiquity. She has been teaching and researching at universities and museums in Germany, Denmark, Sweden, the United Kingdom, and the USA. She currently leads a project at Göttingen University, Germany, in collaboration with Professor Guy Bar-Oz, University of Haifa, and Dr. Orit Shamir, Israel Antiquities Authority, investigating silk, cotton, and other organic finds from the Late Byzantine/Early Islamic village of Nahal Omer in Israel. The project is funded by the Ministry of Science and Culture of Lower Saxony/Germany in the framework of the "Niedersächsisches Vorab"/Research Collaboration between Lower Saxony and Israel.

Minoru Inaba is a professor in the Department of Oriental Studies, Institute for Research in Humanities, Kyoto University. He specializes in the pre- and early Islamic history of Afghanistan and adjacent regions. Recent publications include "Central Asia in the Eighth Century: Wukong's Itineraries between China and India," in D.G. Tor and M. Inaba (eds.) *The History and Culture of Iran and Central Asia* (2022); "The Narratives on the Bāmiyān Buddhist Remains in the Islamic Period," in B. Auer and I. Strauch (eds.) *Encountering Buddhism and Islam in Premodern Central and South Asia* (2019); and "Between Zābulistān and Gūzgān: A Study on the Early Islamic History of Afghanistan," *Journal of Inner Asian Art and Archaeology*, 7 (2017).

Liu Jian is a senior research fellow at the Institute of World History, Chinese Academy of Social Science. Her research lies in the field of ancient Western Asian history, specifically Assyriology and Hittiology. She is the deputy secretary of the Center for Comparative Studies of Ancient Civilizations, Chinese Academy of History, and a member of the Chinese Society of Ancient and Medieval World History.

Li Jinxiu is a senior researcher at the Institute of Ancient History, Chinese Academy of Social Sciences. She is the chief editor of series of the *Eurasian Studies*, *Silk and Porcelain Road*, and *Translations of Eurasian Studies*. Her major publications include *Financial History of the Tang Dynasty*, *History of the Tang Institutions*, and *Studies of Documents from Dunhuang and Turfan*.

Ye Junshi is a lecturer of archaeology and museology at Ningbo University of Finance and Economics, and earned a PhD from Renmin University of China in 2018 for his research on ancient Silk Road history. The title of his PhD dissertation is *A Preliminary Study on the History of Jingjue Kingdom* and he has published several related papers in Chinese.

Shoshin Kuwayama is an archaeologist in the field of Gandharan Buddhism in Pakistan and Afghanistan, having taken part in excavations at Thareli and Mekhasanda in the Mardan District during the 1960s, and directed the five-season excavations in the 1970s at Tapa-ye Iskandar, a 7th-century Hindu town, Sarai Khwaja to the north of Kabul. He is currently Emeritus Professor at Kyoto University.

Xinru Liu received her PhD from the University of Pennsylvania in 1985. She has published extensively on topics related to the Silk Road, including *Ancient India and Ancient China*; *Silk and Religion*; *The Silk Road in World History*; and *The Silk Roads, a Brief History With Documents*. She has been teaching courses on the Silk Roads for more than thirty years.

Lin Meicun is a professor of archaeology at Peking University, Beijing. He is interested in Silk Road archaeology and ancient economic and cultural communications. His research covers a wide geographical area, from China to Eurasia, and a long historical period, from prehistory to the Medieval period.

Luca M. Olivieri is Associate Professor in Archaeology of Gandhara at the Ca' Foscari University of Venice, and Director of the Italian Archaeological Mission in Pakistan (ISMEO and Ca' Foscari). As an archaeologist he has been working in Pakistan since 1987. In 2016, he was awarded the title of Sitara-i-Imtiaz by the president of the Islamic Republic of Pakistan. He has authored more than 170 scientific works, including several monographs, and serves as editor and member of scientific and editorial boards of several academic journals.

Wang Peng is a PhD candidate at New Siberia State University, where he studied archaeology from 2012 to 2016. He is now an associate researcher of the Institute of Archaeology, Chinese Academy of Social Sciences. His main research field is Bronze Age Eurasia.

Renato Sala is a leading researcher at the Laboratory of Geoarcheology at the Al-Farabi Kazakh National University in Kazakhstan. He graduated in 1977 with a mathematical dissertation on General System Theory from the University of Turin (Italy). Since 1998 he has worked as Principal Investigator in various international scientific projects devoted to paleoclimatology, geoarchaeology, and cultural landscapes. He has written over fifty publications about these topics.

Armin Selbitschka is Professor (Chair) of Ancient Chinese History and Archaeology at Ludwig-Maximilians University (LMU), Munich. He is interested in the social functions of material culture along the Chinese Silk Roads and the concept of the Silk Roads itself. He is currently working on a monograph on early Chinese notions of the afterlife.

Liu Tao graduated from the Archaeological Department of Xibei University, China. He is a senior researcher at the Institute of Archaeology, Chinese Academy of Social Sciences. He participated in excavations and research at Zhouyuan, Shaaxi Province; the Wei Dynasty site at Luoyang, Henan Province; and the Tang and Song-era site at Yangzhou, Jiangsu Province. He joined Zhu Yanshi to lead the collaboration with Uzbek archaeologists for the excavations at Mingtepa, Uzbekistan.

Daniel C. Waugh is Professor Emeritus of History, International Studies, and Slavic and East European Languages and Literatures at the University of Washington (Seattle). For many years he taught an introductory survey of the Silk Roads, and has lectured widely on the subject for general audiences. He was the founding director of "Silk Road Seattle," a pioneering Internet-based educational resource. For more than a decade, he edited and wrote extensively for the general-interest annual *The Silk Road*. He has participated in summer institutes studying Buddhist art at the Mogao Caves in Dunhuang, excavated Xiongnu graves in Mongolia, and traveled extensively along the Silk Roads. His photographs are being added to major web-based archives, notably ArchNet (at MIT) and the HEIR project (Oxford).

Arielle Winnik is a postdoctoral fellow at the Yale University Art Gallery. She holds a Ph.D. from Bryn Mawr College, an M.A from the Institute of Fine Arts, NYU, and a B.A. from Barnard College, Columbia University. Her research focuses on textiles of the Byzantine and medieval Islamic Empires, and she has a particular interest in the meanings of these objects across transnational networks.

Song Xian is a senior researcher at the Institute of World History, Chinese Academy of Social Sciences. Specializing in Islamic studies, he has translated several important Arabic works into Chinese, including *Al-masaalik wal-mamalik* by ibn-Khurdadhbih, and published several monographs, including *Ancient Persian Medicine in China*.

Zhang Xiaogui completed an art degree with a major in history at Beijing Normal University in 2000, before obtaining a PhD from Sun Yat-sen University in 2006. From 2006, Xiaogui has taught in the Department of History at Jinan University, Guangzhou, becoming a professor in 2015. He has published books and articles on ancient Zoroastrian history and culture on the Silk Road.

Zhu Yanshi is the deputy director of the Institute of Archaeology, Chinese Academy of Social Sciences. He has conducted numerous excavations in China, including the Northern Wei City Ye. He led the joint project of the Institute of Archaeology, CASS, and the Institute of Archaeology of the Academy of Sciences of Uzbekistan to excavate the site of Mingtepa in Uzbekistan, 2012–2017.

Jia Yiken (Jarkyn Tursun) is an associate professor at the Institute of Ancient History, Chinese Academy of Social Sciences. Her research field is the history of nomadic people in the Mongolian plateau, circa 3 BCE to 10 CE, and the history of the Qïrqïz people.

Lin Ying is Professor of Ancient World History at Sun Yat-sen University. She studied Medieval European history, Byzantine history and archaeology, and history of Sino-west contacts in Jilin University, Northeast Normal University, University of Athens, and Sun Yat-sen University. She was a visiting scholar officially sponsored by Dumbarton Oaks Library of Byzantine Studies and Seeger Center for Hellenic Studies, Princeton University, in 2000–2001. She has completed a research program funded by the National Social Science Fund of China on China and the Roman Empire: Centered on the Trade Contact via India during 2008 to 2014. She currently leads a program on Gold Coin Imitations and Industries of Luxury in Early Byzantine Times funded by the National Social Science Fund of China (2016–2019). Her research interest is economic and cultural exchange between East and West in ancient and medieval times, especially the diffusion of Roman-Byzantine culture to China and Byzantine numismatics.

Ran Zhang is a research associate in the Department of Archaeology, Durham University. His research is now concerned with how ancient Chinese trade affected the maritime economy in the Indian Ocean and Europe from the 8th to the 19th centuries.

Map 0.0 Map depicting major sites and regions of the Silk Road, provided by Daniel C. Waugh.

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INTRODUCTION

Xinru Liu

The aim of *The World of the Ancient Silk Road* is to expand Silk Road studies from the field of Chinese studies to the stage of world history. The researches in the volume cover subjects such as communications, immigrations, transportations, and interactions among the various communities that resided and roamed around the Eurasian landscape from as east as agricultural China to as west as the Mediterranean. The focal historical period is from the mid-1st millennium BCE to early 2nd millennium CE, the time that a communication artery formed via Central Asia, linking the Eurasian landmass into a commercial and cultural network. The volume, however, should start with the Bronze Age, that is, the 3rd and 2nd millennia BCE, when human migrations associated with the development of Indo-European languages and with technological advances, including the domestication and harnessing of horses and camels as well as bronze metallurgy, enabled long-distance transportation that paved the future landscape of the Silk Road.

To define the Silk Road as an academic field, this project intends to merge archaeological researches, studies of languages and scripts, and art historical analyses of all the participating regions into a historical narrative of human migration and communication, the means of transportations, and the dramas of various polities and religious movements involved in the premodern material transactions and cultural exchanges. Studies of material cultures and transactions across communities in distance and the propagation and demise of religions and ideologies have been the major interests of scholars involved in the researches of the Silk Road. However, most scholars have been focusing on a particular region or a couple of regions, a particular culture or a couple of related cultures, or, following their expertise in one discipline. Pooling the expertise of scholars of various fields and regions into a structured volume will provide insights into several poorly understood but nonetheless prevailed historical phenomena. One notable phenomenon is that many communities and peoples either surviving or having diminished from historical records in the great Silk Road scene spoke their distinguished languages. This volume could provide clues for understanding how the peoples of different languages communicated with each other, either for cooperation or for conflicts, and how one language dominated a region and pushed out other languages. The language landscape changed dramatically during the heydays of the Silk Road. The changes could have involved military conquest, but also migration and cultural assimilation, especially the spread of religious institutions. This collection of studies of the Silk Road gave us a unique opportunity to display the

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processes of certain major historical transitions and thus made it possible for authors of world history to incorporate stories from the Silk Road into a wider historical narrative.

This project inevitably will encounter controversies in several academic fields. One example is the origin of the Indo-European languages, that is, the reconstructed Proto-Indo-European language (PIE), which has been a question in debate for more than half a century. As the early Indo-European speakers, actually all early human communities, did not leave written records of their languages, reconstruction of the hypothesized PIE from modern speaking languages and from written records composed long after the supposed age of PIE incurs serious uncertainty. Whether the PIE speakers were herders, farmers, or hunter-gatherers has been under scrutiny by archaeologists, anthropologists, as well as life scientists. Scholars have been looking for which groups were responsible for the spread of Indo-European languages westward, the groups that have been assumed to be associated with horse domestication and the horse chariot, the fastest means of transportation before the coming of steam engine. *The World of the Ancient Silk Road* has to face the challenge of this fundamentally important question in human history, hopefully to add new information and insight and, possibly, more questions to the premise of the whole hypothesis.

Looking to solve the debated issues and to discover sites buried under sands and later built-ups, archaeologists are employing new technology, including drone photo surveys and isotopes. New sites, especially those in the high time of the Silk Road, have been rapidly discovered around Afghanistan and Central Asia. Archaeological research in Iraq starts to recover; discoveries in Turkey, the South Russia steppe, and the Caucasus region continue feeding into the repertoire of cultural remains of ancient communications. Using DNA and strontium isotope enhances studies of human migrations and transferring technology such as horse domestication, breeding, and harnessing. The new technology provides new tools for archaeologists and historians. But meanwhile the inconsistencies between the data of new approaches and those of traditional methodology create new challenges as well as tensions among academics of various disciplines. This volume includes the advancements of the research and challenges in the progress, for the purpose of encouraging a new generation of scholars to explore further into the forgotten human past through interdisciplinary approaches.

To set the stage displaying historical processes in the world of the Silk Road, it is mandatory to examine the developments of infrastructure of communication and transportation across a vast geographic area between the Mediterranean and the Yellow River basin covered by mountains, river valleys, deserts dotted by oases, forests, and marshlands. Communities of different cultures and languages resided, roamed, and interacted with people who spoke languages belonging to different linguistic families. Domestication of horses and the development of wheeled vehicles in the Bronze Age pushed road building to enable high speed transportation. Sometime earlier, the domestication of camels, dromedary, and Bactrian enabled transportation on terrains without roads, typically sand deserts where road building was impossible. By the late age of the Silk Road, toward the end of the 1st millennium CE, ships on the Arabian Sea and South China Sea took over the bulk of long-distance transportation.

With the means of transportation, the movement of people and goods still needed the support of communities along the routes to proceed to their destinations. Settlements in oases and mountain valleys provided food and fodder for the travelers and also benefited from the transactions that took place in their localities and from payment of the boarding not only with goods from faraway lands but also information and knowledge of technology and culture. Therefore, settled niches often shaped the viable routes for caravans. However, climate changes and overexploitations of resources frequently moved human settlements and thus reshaped the routes of travel. In the last 4000 or 5000 years, the geographic landscape of Central Asia has not change

largely, but pockets of ecological zones could be developed or abandoned. In the Kongquehe valley around Lop-nor, a Bronze Age culture that flourished from ca. 2000–1500 BCE deserted the once lush lands nurtured by glacial water after the people cut down all the trees and thus deprived vegetation protecting the soil. More than a thousand years later, new settlements claimed the region with new technology and established powerful kingdoms and became trading depots for the Silk Road trade. In the Swat valley on the Indus, agriculture of double crops, rice and wheat, sustained a route to India, in a treacherous terrain for travel. The residents weathered changes of polities, climate, and religious incursions and never needed to abandon their homeland.

The most formidable barriers of communications, though, were the different languages spoken by different communities. The landscape of languages has been changing constantly due to migrations and cultural mingling, but the changes could hardly be attributed to physical types or genetic features of the speakers. Four to five thousand years ago, various types of European-looking people and Eastern Asian appearances had entered inner Asia. Without any literary recording, Indo-European linguistic studies tried to associate language changes with physical types of mummies, that is, buried corpses dried in sands, and/or material cultures revealed by archaeology to pin down migration of certain Central Asian groups as speakers of certain Indo-European branches. However, this approach ignores the fact that those ancient communities could have spoken languages other than Indo-Europeans, and the search for the language affiliation with material cultures is far from scientific. In the last decade, studies of the Transeurasian languages gained momentum. An article published in *Nature*, "Triangulation Supports Agricultural Spread of the Transeurasian languages", asserts the Proto-Altai could have been ancestry of Turkic, Mongolic, and Tungusic languages spread to Central Asia around 6811 BP; Mongolo-Tunguisic reached Mongolia ca. 4491 BP. Archaeological data demonstrate that the earliest people speaking Transeurasian language cultivated millet and raised dogs and pigs. Only after the language groups encountered western Asian, Sino-Tibetan, and pastoral communities the vocabulary increased with the addition of words such as *rice*, *wheat*, *cattle*, and so on.[1] The new research provides a new approach to look into the ways ancient people explored nature and learned from each other. We nevertheless still have to recognize that we do not have the means to be certain of the languages of the peoples who lived outside the spheres of those civilizations that left us with written records during the 2nd millennium BCE.

By the 1st millennium BCE, Greeks and Chinese started to provide some information about the people who lived in the space separating the ancient literary lands. The Persian empire rose on the Iranian Plateau in the 6th century BCE and brought their own language, the Old Persian, which is a branch of Indo-European, and Elamite, a language not linked to any known language families, into writing with cuneiform script. The Persian kings employed scribes from all over their empire, especially those from the east coast of the Mediterranean, to take record for the administration. Educated people skillful at Aramaic treaded the royal highway to the east to work for the empire and to trade. Aramaic thus assume the role of official language de facto of the Persian Empire. Toward the later 1st millennium BCE, the Silk Road trade was initiated by the migration of the Yuezhi/Kushans to Bactria and established the Kushan empire across Central Asia and South Asia, and the Han empire of China expanded its influence to Central Asia. Then, oases around the Tarim Basin started to use their languages, Iranian and Indic branches of Indo-European languages, parallel with Chinese, as administrative script. On the western part of inner Asia, Greek language and script as administrative language extended to caravan cities and trading depots, appeared alongside with Semitic languages in Aramaic script. This language landscape held on for several centuries till Turkish migrations and conquests from the Mongolia

Plateau started from the 6th century CE. The Turkish language family has since gradually but steadily replaced Indo-European languages of all levels of the most part of inner Asia, except for a few communities such as Tajik. Islamic conquest starting from the 7th century brought in Arabic and spread Persian languages in Arabic script as religious and administrative languages, but never supplanted Turkish languages as local languages of Central Asia.

Commercial transactions and imperial administrations both involved not only language but also writing. Communities on the Silk Road developed their written forms at different times, either created their own system, or borrowed from other languages. A writing system thus enhanced the spread of a certain language to make it the Lingua Franca of trade in the Silk Road communication networks. The Achaemenid Persian Empire used their own language – the Old Persian, or Arya, along with major languages spoken by peoples subjugated, that is, Elamite in the east part of the empire and Akkadian in the west part – to exclaim their legitimacy. As the Achaemenids did not have script to record their language before they ruled the vast empire, they borrowed the cuneiform of Babylonian language to write down the Arya. But neither the language nor the written form was an efficient tool of communication, not even just for bureaucratic bookkeeping. Eventually, the Aramaic language and its phonetic script became the most common tool of communication, for both the administration and trade. The spread of the Aramaic in the empire meant that the rulers, at least the first couple of generations, were illiterate, and therefore had to employ the people from the land where early Aramaic was spoken. Be they Jews or Babylonians, the literate workers arrived at many parts of the empire to perform the bureaucratic work and act as agents of the government. They scribed Aramaic for the imperial administration and traveled to far corners of the empire to trade, all facilitated by the imperial roads. The Persian satrapies Gandara and Hindush (in modern Afghanistan and upper Indus Valley) brought Aramaic to the northwest of the South Asian subcontinent. After the retreat of the Persian power from Central Asia, Sogdian city-states in the catchment of the Syr and Amu rivers adopted Aramaic script to write their own language. Aramaic, along with Greek, lent a hand to Indians to set their ancient languages, Sanskrit and various Prakrit, into phonetic written forms, Kharoshthi and Brahmi.

During the first half of the 1st millennium CE around the Tarim Basin, the hub of the Silk Road trade, the language landscape, according to inscriptions excavated from oasis sites, appeared as this: Kroraina kingdom, Khotan kingdom, and Kucha kingdom, the major three powers around the Tarim Basin, used different Indo-European languages. As the territories of the three major kingdoms were shifting frequently, even oases in the same regime could be using different languages. The Khotanese used Kharoshthi script, but it was somehow different from that of the Niya, which was under the Kroraina kingdom. The language in Khotan was similar to the Iranian, and some scholars dub it "Khotanese Saka". The language of Niya was Indic, similar to Gandharian. Kucha at that time wrote in Brahmi of Kuchean language, another Indo-European language.

In order to trade or battle with other regimes around the Tarim, the kings and traders had to employ interpreters who could understand and read the documents of others. Buddhist missionaries were avid translators active in all the oases as they tried to convert local people who spoke their own languages. Several Buddhist documents written in two or three languages bear the evidence of the language skills brought by Buddhist education. In this context, Kucha was a significant center linking Buddhist activities from Bactria, Gandhara, to Central Asia and China. The most famous Buddhist translator, Kumarajiva, traveled around Kucha to study, and learned Sanskrit and Vedic literature in Kashmir. His mastering of Sanskrit enabled him to be the most efficient translator of Mahayana Buddhist texts into Chinese. Kucha hosted both Mahayana and Theravada Buddhist monasteries and learned teachers thus attracted young

members of royal families of the kingdoms of Tarim Basin to study there. It was said princesses of kingdoms east to the Pamir Plateau had to study and graduate from there before pursuing their secular lives.[2] That Buddhist monks were active in oases suggests the system of Buddhist education spread religious and secular knowledge to oases around the Tarim. The fact that there were stupas but not monasteries in oasis towns such as Niya could not negate the presence of Buddhist institutions. In early Buddhism, monks and nuns did not have permanent residence, but they had to gather around a stupa fortnightly to be disciplined and taught. In Central Asia, the monks in oases could have been taking adobe in their own homes, as the livable area of an oasis was limited. The special arrangement of residences for monks in oases created another kind of Buddhist institution. Buddhists also taught their faith using artworks, as a way to get around the language barriers. The artworks on stupas illustrated stories and doctrines efficiently. Buddhist institutions made an impact on politics and the economy, especially in terms of facilitating communications with those outside oases. The rapid constructions of Buddhist monuments and the abundant artworks associated with Buddhist institutions around the Tarim region during the period demanded supports from both traders passing through and residents living in oases. In short, the Buddhist religious institution was one of the important movers on the Silk Road, as Buddhists were the ones who overcame language barriers to get their culture across to other cultural domains.

While Buddhist theology was the prominent driving force in the world of the Silk Road, Christianity, Islam, and other religions also participated in transactions of ideas and materials. Christian missionaries, both Nestorian, the sect deviated from the Byzantine orthodox, and Melkite who were loyal to the Byzantine court, traveled to Tang China via the Central Asia Silk Road. The Nestorian church, which won official patronage from the Tang government in the eighth century recorded their names in old Syriac, which evolved from Aramaic. Nestorianism lingered around East Asia till Mongol times, but did not make Syriac the universal language for the religion. Manichaeanism entrenched among the nomadic regimes in Central Asia, notably the Uyghur empire in the ninth century, and later entered the Mongol empire. Unlike nomadic empires before them, the Uyghurs built cities and created writing, thanks to their Manichaean mentors. They learned Aramaeo-Syriac script to record their Turkic language and created a rich literature.[3] This script was adopted by the Mongol empire as one of writing system, then inherited by the Manchus later on.

Religious propagation involved expansive area of Afro-Eurasia into the world of the Silk Road. Christian religious institutions and later Islamic infrastructure in Egypt brought textile industries, both wool-linen and silk, made in the Nile valley into the networks of textile markets and supply chains to Anatolia to the east and West Europe to the east. Islamic traders ventured further east especially on sea to the coasts of China and the Pacific islands.

The world of the Silk Road was a constantly changing landscape. The natural environment – climate, the terrain, the flora and fauna – varied with time, caused by their own dynamics and by human intrusions. Human explorations of the landscape shaped not only populations but also their way of production and reproduction, their ethical identity, and cultural traits including religion and language.

Part I: Landscape of the Silk Road: From the Bronze Age to the Beginning of Historical Records

Human activities and settlement of Eurasia during the Bronze Age created the environment that the Silk Road could function. Peoples from the east and west, north and south, entered the landscape of deserts, oases, snow-capped mountain ranges, pastoral lands of low grass,

and those of high grass. Diversity of the terrain was matched with rich flora and fauna; both nature and human exploration of the land constantly changed the landscape. From the late 3rd millennium to the mid-2nd millennium BCE, many human communities looked for ecological niches suitable for pastoral uses and cultivation around the Tianshan Mountains, Tarim Basin, and the Altai Mountains. Communities settled in a place probably did not look over the horizon of their territory of livelihood until they were forced to move on by climate change and the exhaustion of local resources. In the same time frame, the ancestor of domesticated horse appeared in the lower Volga-Done region and replaced other domestic horses all over Eurasia by about 2000 BCE, about the same time of the invention of the spoke-wheeled horse chariot discovered at Sintashta Complex at Urals.[4] The pastoral communities on the steppe started to use domesticated horses pulling four-wheel wagons and as well as two-spoked wheeled chariots for rapid travel and transportation on the steppe. Camels were domesticated ca. 3000 BCE in the region bordering Iran and Turkmania, which facilitated transportation through the desert. During the 1st millennium BCE, the routes of long-distance transportation on the Silk Road ran through two terrains. The route passing through deserts linked cities and oases into a transportation network; the Eurasian steppe between mountains and deserts formed the Steppe Silk Road. Along the east-west routes, communities from the northern cold countries joined the trade networks. To the north of the steppe, tribes from snow-capped mountains and forests offered commodities such as sable furs, feeding into the Silk Road world. To the south, the highlands of Tibet and Pamir were both hindrance and channel of communication. By the 1st millennium CE, Buddhist missionary and pilgrimage connected South Asia to the hubs of Central Asian trade networks. At the eastern terminal were the Chinese empires, connecting with Japan, Southeast Asian islands and lands as the outliers. The western end of the network was the Mediterranean countries, spanned out to Mesopotamia, Egypt, and the Arabian Peninsula. The focuses of the studies of the Silk Road, however, were the center of the Eurasia, where the deserts, steppe, and mountainous forests witnessed human migrations that moved populations and cultures across the entire Eurasia.

The archaeological study of the Bronze Age culture of Kongquehe valley, near Lake Lop-nor on the eastern part of the Tarim Basin, displays the drama of early human explorations of Central Asia, which was a land not plainly fertile but full of opportunities. Wang Binhua, based on his forty years of archaeological work in Xinjiang and excavations he carried out in Kongquehe valley, illustrated how a community settled in the ecological niche between water streams and sand dunes. Replacing the local cultures before their coming, the new comers then cultivated wheat and millet, herded sheep and cattle, wove fine woolen textiles, made sturdy leather shoes and felt hats, and lavished their funeral monuments with local wooden materials. They, however, never used pots to cook, and owned no horses. Ephedra, a local plant in the Lop-nor region, was attached to the buried in every grave of the Kongquehe valley. The people believed ephedra and could have used the effect of stimulation to overcome the hardship of life. For about 500 years of settlement in Kongquehe valley, the people used up the natural resources and cut down all the trees; thus the wind erosion of the land carried away the soils that deprived vegetation, and cut ditches into the lands, forming the *yardang* terrain. Without the soil for planting and pasture for livestock, the people migrated out of the Kongquehe valley around mid-2nd millennium BCE. A branch of the migrants settled on the Keriya River, a locale almost in the middle of the Tarim Basin, about 300 years later.

The archaeological works at the Lop-nor region in the last decades reveal a full-bloomed Bronze Age community that engaged in farming, herding, and hunting; developed beautiful wooden and straw-woven artifacts and utensils; and made beautiful woolen textiles and leather boots. Yet, they never produced pottery. The absence of pottery could be due to the

fact that there was a lack of clay adequate for making pottery, and due to the isolation of the Kongquehe valley from other communities. The exceptional phenomenon, nevertheless, challenges a standard practice of archaeologists, that is, using pottery as the indication and measurement of material culture of prehistorical settlements. People who migrated to a new area had to adapt to the new environment to make a living, by learning from the locals, often the people who submitted to their conquerors. Material cultures therefore had to change. Meanwhile, some persistent rituals, such as sacrifices of cattle and veneration of snakes, could be indicators that once upon a time the Kongquehe people were familiar with the rituals of people of the *Avesta* and the *Vedas*.

DNA studies of the Kongquehe valley show a common pattern of migration and occupation in human history. The Y chromosome was persistent in the Xiaohe Cemetery samples, which means men came from the same ancestry, but their maternal lineages varied. Which language the second and later generations from the mixed parentage adopted was a question. Judging from the stories of historical periods, either the father's language or the mother's language could have prevailed. Thus, one cannot decide which language the Kongquehe people spoke by examining their pottery, horse, or other material cultural assemblage. The European looking corpses simply could not tell what languages they spoke. Labeling the European-looking people living in Kongquehe valley 4000 years ago as Tocharian speakers does not have any evidence. The appearance of the so-called Tocharian language in oases at the northwest rim of the Tarim Basin was a later historical event, no earlier than the 5th century CE. How modern scholars found out the languages of characteristics of the western branch of the Indo-European in a landscape of eastern branches of the Indo-European, and how they tried to link the languages to European physical type, had been a complicated process of intellectual development involving many disciplines of science and humanities. The search for an Aryan race and more specifically German style of Aryans with spread of Indo-European languages was – and still is – a pursuit of intellectuals and politicians. In the area of eastern Central Asia, this pursuit failed. It failed because the researchers, as well as scholars in general, simply have not found any evidence of the languages spoken there.

The Indo-European language family was not the only language that once prevailed on the landscape of the world of the Silk Road. Aramaic, along with its phonetic script, spread to the Iranian Plateau and Afghanistan and the upper Indus (see Chapter 3 in this volume by Liu Jian). Even though the Persians tried to promote their native speech, Aramaic was the language de facto for the administration and trade. Edicts from the king, directives to the satraps, and passports for travelers, official or private, most were written in Aramaic, on papyrus, leather, or wood slips. Aramaic, along with Phoenician, were two earliest known phonetic scripts. The fact that Phoenician evolved into Greek and Latin made the fame for Phoenician as the origin of alphabets. Meanwhile, Aramaic figured into the development of writing systems in the landscape of the Silk Road.

The history of powerful steppe regimes often traced their ancestry back to the forest to the north. The Qirqiz were one of the peoples in the mountains and forests that moved down to the steppe to join the competition for hegemony, or for the control of the Silk Road trade traffic. They were hunters and miners who exploited forest products. They rode on "wooden horses", that is, sleighs and sleds, traversing snow-capped mountains and forest at high speed "like flying" (see Chapter 4 in this volume by Jia Yiken). The Qirqiz people were clad in fur and leather from their land, but they also desired silks from China to decorate their outfits. They traded their furs for silk via steppe nomads. But once they realized the disadvantage of the secondhand silk trade, they vied with the steppe powers to gain access to the silks. The Qirqiz managed to build an empire on the steppe during the 9th and 10th centuries. Like all

the empires on the steppe, their regime faded when a fresh new power, the Kitan, came to the scene. Though dispersed to many parts of the central Eurasia world, the Qirqiz people everywhere maintained a distinguished population.

Domestication of both horses and camels paved the way for long-distance transportation of people and goods for trade, war, and diplomacy in the world of the Silk Road. The invention and spread of horse chariots around Afro-Eurasia during the mid-2nd millennium BCE brought a new weapon and a new technology to Greece, Egypt, India, Mesopotamia, and Asia Minor, and a few centuries later to China. Horse vehicles were the high-speed transportation in the ancient world and they informed residents of the sedentary lands about cultures outside their knowledge. Horse chariot was a widely studied topic involved with studies of warfare. Bruno Genito (Chapter 5 in this volume) surveyed the archaeological works on developments of horse chariots and four-wheel horse wagons of Eurasia. His survey covers not only the coming of horse vehicles to the established civilizations but also their development on the steppe. The author, however, did not have the chance to look at the recent study on the ancestry of the modern horse, as mentioned earlier. Therefore, he was not certain about the process of horse domestication.

When and how horse chariots arrived in China has been a debated issue for decades, as China had wheeled vehicles long before using the horse chariot as a weapon on the battlefield and as a ruler's moving throne. Wang Peng, in Chapter 6, "Horse Wagon With Bronze Wheel Felloe From Zhouyuan", provides clear evidence of transferring the technology of horse pulling vehicles from the steppe to China. Though the Zhouyuan technology was not the earliest horse chariot found in China, the author proves that it was a legacy from the Shang time, when horse chariots reached Shang China around 1200 BCE, suddenly and quickly dominating the royal and military transportation.

Wheeled vehicles ran on roads. Improvements of vehicles into efficient transportation tools mean authorities had to build roads or at least search for viable routes to expand their territory and trade connections. The complicated terrain of the vast area stretching from the Iranian Plateau to agricultural China hindered fast horse-drafted vehicles. Camels were the animals that did not need roads. Camels thus became the vehicles crossing deserts to connect oases into networks of transportation with or without roads. Renato Sala (in Chapter 7 of this volume) studies the domestication of camels, dromedary, and Bactrian, and the role of camels on human settlements on oases. The domestication of camels was later than that of some animals such as sheep and cattle, but not horses. The author could not predict this new development in the study of horse domestication. That the hard services of the camel to human societies never elevated it to the divine status could not be simply attributed to their later domestication. But meanwhile, the author points out that the cult of camels somehow became the vehicle to carry the dead to the other world. This service is no less divine than that of the horse-chariot carrying gods such as Apollo or Indra. Therefore numerous artworks representing camels were buried in graves, allowing us to appreciate their brilliance during their good times.

Though there is no further evidence of how the Kongquehe Bronze Age people made their next step of migration and how they merged with other communities on the eastern part of Central Asia, their faith in ephedra, or other stimulating plants such as cannabis when ephedra was no longer available, easily seems to have persisted among their descendants and spread to other communities. Kazim Abdullaev (in Chapter 8) examines amulet-seals from Gonur of BMAC complex, arguing that carvings on the amulets represent poppy, ephedra, and cannabis. These artifacts from sites were dated around the same time of the Kongquehe Bronze Age culture, that is, the early 2nd millennium BCE. The amulets symbolize that the plants served the same function for the Kongquehe people, who were clutching small bags of ephedra when

entering the other world. In other words, an amulet or a small bag of the plant protected the person by enhancing their abilities around working and, perhaps, sexual performance, as fertility was essential for the very survival of a community. The personal protection provided by carrying or consuming the various drug plants permeated the communities that remained on the steppe and deserts and lingered around the mainstream culture of agricultural societies.

Zoroastrian and Vedic priests started to use intoxicants to reach the divine beings, probably in the time they were still in Central Asia. When the communities following Zoroastrianism entered Iran and Vedic tribes entered South Asia, they carried the rituals of drinking *hoama* and *soma* into agricultural societies. Learned scholars tried for years to find out the exact content of *hoama* and *soma*, but there still is not a consensus.[5] While ephedra was almost certainly one candidate, cannabis could be important, too.[6] The only conclusion one can reach is that the ingredients could have changed with time and availability. The religious rituals developed new forms of using the intoxicants and made them elements of cosmological significance. Meanwhile the peoples remaining in Central Asia continued to exploit the effects of the plants to help them with daily life. The discovery of cannabis smoking by burning in braziers in the Pamirs during the middle of the 1st millennium BCE is more evidence that using drugs was one of the means that people in the hard terrains used to survive.[7] The stimulating plants, including ephedra, lingered around the large region from Sogdiana, Bactria, to Gandhara. To the west, cannabis, ephedra, and opium could have been the ingredients of *haoma*.[8] The *soma* used in Vedic rituals could have changed. By the time of the Kushans and later, ephedra could be the popular one as depicted on potteries in the Hindu Kush region.[9] *Soma* and *haoma* brought by religions into sedentary society perpetuated among the priests and spread to the general population. People in South Asia learned to use them as remedies, but drug addiction became a problem that early Buddhism had to deal with.

Part II: Pastoral Nomads and Agricultural Societies

The horse chariot became a major vehicle of warfare after entering agricultural states in Greece, Egypt, South Asia, and China. Meanwhile horse riding revolutionized herding and sped up movements on the steppe. Nomadic groups therefore came into conflict with each other and conflict incurred into settled societies more frequently, invariably sparking more warfare. Those conflicts initiated the diplomatic exchanges between regimes on the steppe and the land of sown, which brought faraway lands into the field of vision of all of the parties in the world of the Silk Road. Chapter 9 on horse archery warfare and the rise and fall of nomadic empires on the Eurasian steppe by Craig Benjamin studies the dynamics of the steppe politics. Nomadic peoples who had mastered horse riding on the Central Asian steppe were able to build empire confederations by waves. Various groups fought for hegemony on the steppe, and for controlling the trade that went through central Eurasia. State formation and collapse on the steppe followed different paths than that of the sedentary societies. Benjamin divides the process into three eras. The nomadic empires of the first Silk Road era (ca. 3rd century BCE to 3rd century CE) were about the conflicts between the Xiongnu and the Yuezhi/Kushan. Turkish states and empires emerged, split, and merged, and westward expansion (6th to 13th centuries) was the main drama on the steppe during the second Silk Road era. It was the Mongols who built the utmost empire during the 13th century to help facilitate the communication that brought the knowledge and information to the modern world.

The warfare on the steppe overflowed into the agricultural empires and states around them. Nomads, winners or losers, often invaded or migrated into the sedentary societies, thus making themselves the rulers of the conquered peoples and adapting into the local

culture. The westward migration of the Yuezhi state from the edge of agricultural China to Bactria, and the rise of the Kushan empire, present the case of transition from nomadic to sedentary. Scholars have been focusing on the records about the five Xihou/yabgus under the Yuezhi to find out how the Kushan state took shape. However, Shoshin Kuwayama, in Chapter 10, points out that the transition from the Yuezhi of the steppe to Kushan the empire across Central Asia to South Asia was not a straightforward evolution, but rather a complicated process involving many powers on the steppe and in agricultural Bactria. In discussed in Chapter 10, "The Kushans, viz. the Dà Yuèzhī: a Century-Long Fallacy", through analyzing Chinese literature Kuwayama studies the Kangju, Wusun, and other nomadic regimes on the steppe. He concludes that the Dà Yuèzhī who migrated to the Amu River was not exactly the Kushan, but the overlord of several local sedentary states, including the Kushan. Kuwayama dispels the murky assumptions around the transition of the nomadic Yuezhi to the Kushan empire. Meanwhile, one may notice that even though the Kushans were not necessarily the Yuezhi nomads per se, the Yuezhi likely imposed a chief and his retinue to the local community, as the Kushans certainly upheld much nomadic fashion and style from the Yuezhi. Artworks of the Kushan period show that the rulers of the Kushan empire had been keeping their attire of the steppe, namely, trousers, boots, and short robes with side slits, through their time of ruling, despite the tropical temperature of South Asia. Their nomadic cultural tradition, therefore, is undeniable.

Between the nomads and the settled, countries engaged in both herding and farming were dynamic players on the Silk Road. The excavations carried out by Zhu Yanshi et al., starting from 2012 on the Mingtepa site, Ferghana, Uzbekistan, reveal a grand city plan, which could well be the headquarters of horse breeding and a training ground of the Dayuan/Dawan kingdom. The ancient city, occupying about 272 hectares in area, was defended by two layers of city walls of strong fortification. Dayuan/Dawan was a kingdom west to the Pamir Plateau, a land of grape wine, wheat, rice, and heavenly horses fed on alfalfa. The fame of its heavenly horses attracted the attention of the Han emperor Wudi, who needed the high-speed horses for his campaigns resisting the intrusions of the Xiongnu. The emperor also desired the beautiful Dayuan/Dawan horses to glorify his court. Emperor Wudi sent General Li Guangli to press the king of Dayuan/Dawan for the precious horses in 104 BCE. According to the information from envoys and travelers of the Silk Road, the horse city was called Ershi, thus General Li Guangli was designated as General Ershi. It took two expeditions from the Han empire to force the Dayuan/Dawan kingdom to submit the heavenly horses to the Han. General Ershi sacked the outer city wall after a long siege, but never entered the inner city. The rare scale of horizontal excavation and dating data are matched well with the literary records of this historical event. Therefore, the Mingtepa site was very possible the city General Ershi attacked. The success of bringing heavenly horses to the Han also introduced alfalfa to horse husbandry as well as to agriculture in China, because the heavenly horses must be fed on alfalfa. Meanwhile, there were many other cities in Dayuan/Dawan according to Chinese historical records, and a large quantity of grape wine was exported from there. Hopefully there will be more excavations to reveal ancient cities of the Silk Road in Ferghana Valley.

The Qirqiz/Kyrgyz people were one of the antagonists on the steppe Silk Road. Like many of the powers on the steppe before and after them, they started as a people in the mountainous forests but joined the scramble for dominating the profitable silk-horse trade with the Tang Dynasty. The Qirqiz was a minor player at the battleground among the Turks, the Uyghurs, the Tibetans, until it defeated the powerful Uyghur empire. After a brief period of hegemony on the steppe in the later 9th century to the early 10th century, the Qirqiz eventually had to retreat back to the forests and other corners of Central Asia to make way for the newcomers from the

northern forests, the Kitans and finally the Mongols. Among the Qirqiz, some converted to Islam, but many communities scattered in Central Asia maintained their ethnic identity, though they had been heavily scathed in the conflicts between empires on the steppe (see Chapter 12 in this volume by Jia Yiken).

The conflicts and interactions between nomads on the steppe and agricultural empires stimulated development of weaponry and armor on all sides, and provided opportunities for each to learn from others. Kazim Abdullaev, in Chapter 13, "Ancient Knights on the Great Silk Road", analyzes how armor on the steppe evolved from shell and leather to steel. The technology and styles of armor were learned fast between adversaries on the battlefield and transmitted to the camps as well. High-speed horse riding warriors armed with fierce shooting arrows and steel swords empowered steppe states in their fighting with each other and with sedentary neighbors.

Part III: Silk Trade and Caravan Cities

Caravan cities from Dunhuang, the oasis just inside the Jade Gate, at the eastern end of Central Asian Silk Road, to Palmyra, the trading depot of the Roman empire, were relaying stations of the Silk Road trade. Most caravan cities were located in deserts, thus subjecting their fate to desertification caused by climate changes. Meanwhile, they built up their hinterlands to provide food and necessities from surrounding areas. Oases developed irrigation facilities, such as wells to lift underground water and cisterns to save rain water. They conducted water by constructing canals above and under the ground. Imperial expansion of the Han Dynasties brought cultivation technologies to the oases, first inside the Great Wall all the way to Dunhuang, then reaching outside the garrison of the Great Wall to oases on the rim of the Tarim Basin. The rise and fall of major regimes in agricultural China and their imperial ambitions altered the strength of their presence in the oases over time. Fighting for the hegemony among the oases caused change of alliances and even elimination of oasis settlements. Meanwhile, the oasis settlements built up their communities to form networks of commerce, religious movements, educational institutions, and marital alliances. Similarly, caravan cities such as Palmyra, a marble city in the Syrian dessert, also had built their agricultural bases even when they relied on the markets of the Roman empire and Persian empire to flourish.

Kingdoms and empires rose and collapsed around the Tarim Basin caused by climate changes and political balances with nomadic regimes around them and sedentary empires to the east, west, and south. Oases on the rim of the Tarim Basin gained and lost hegemony and changed allegiances. Ye Junshi's Chapter 14, "Rise and Demise of Jingjue Kingdom, a Case of Tarim Oasis Politics", illustrates the drama of one of the oasis states on the eastern Silk Road. Jingjue kingdom was a small political entity on the Niya site of the southern rim of the Taklimakan Desert. Though official historical record was brief, decades of archaeological works provide a rich source, including documents in Kharoshthi and the entire layout of the settlements. The archaeological information reveals that Jingjue was a kingdom of stratified society, and Buddhist monks played the role of literati serving the community and communicating with the outside world. The Niya settlement continued to flourish after the Jingjue submitted to the Shanshan kingdom. After two hundred years under the suzerainty of the Shanshan kingdom, residents abandoned the oasis and the Jingjue kingdom diminished from the scene. Though the exact events that prompted the demise of Jingjue could not be pinned down, it certainly was closely linked with the dynamics of the political and economic changes of Central Asia as well as the fortunes of empires farther away.

Around the Tarim Basin, the Gaochang kingdom, based in Turfan, numerous archaeological explorations and geographical surveys have revealed many of the spectacular artifacts involved in the Silk Road trade. In Chapter 15, "Astana, Jiaohe, and Other Turfan Cemeteries: The Movement of People, Ideas, and Objects in Gaochang Kingdom (442–640)", Armin Selbitschka instead uses movement as an analytical tool to explain the meaning of the artifacts to the people of the time. Using literary records, he maps the coming, going, and settling of the population in the region. He notices that most tombs were burials of husband and wife, along with tombs of one male plus several females. In cases where a spouse is absent, a wooden or straw figurine substitutes for the spouse. For whatever the reason, the body of the spouse was missing at the time of burial; the family structure of the Turfan region is clearly in display. The roughly made figurines in the burials could be substitutes of servants or slaves who once waited on the master in life. This analysis helps us to appreciate the purpose of burying both the well-dressed and roughly made figurines that the people of Gaochang carried into their tombs, beyond their esthetic value.

That diseases spread with trade and communication is in historical records but rarely mentioned when talking about the Silk Road. Song Xian, in Chapter 16, "Turfan, the Frontier Tansmitting Smallpox to Tang China", studies the coming of smallpox to China during the high time of the Silk Road. The Chinese literature records the mystic fatal disease coming from the "sky" to the Turfan region in the year 653 CE. An archaeological excavation of the tomb of Zhao Songbai, the newly assigned "Chief Secretariat, Military Staff, Calvary Marshal Guard, to Turfan" by the Tang court died suddenly soon after he arrived in the same year of 653. Song Xian analyzed the Persian silk textiles and Sassanid silver coins in the tomb of Zhao and his two wives in the contexts of the collapse of the Persian Sassanid empire and the plight of Sassanid royals caused by the conquest of the Arabs. He hypothesizes that the Persian refugees transmitted smallpox when they fled to Turfan, a frontier region of the Tang empire called Xizhou at the time. As Turfan was the center of regional administration, frequent travels between Turfan and Chang'an and other cities of China's interior spread the disease. The people in Turfan soon responded with herbal medicine to mediate the impact of the deadly disease. Remedies of treating smallpox soon developed in the Chinese pharmacopoeia.

Near the west end of the Silk Road networks, the best-known caravan city in Syria is Palmyra and that in Jordan deserts is Petra. Hamish Cameron, in Chapter 17, "Caravan Cities in the Roman Near East", argues that caravan cities such as Petra and Palmyra built their own trade networks around their localities. The networks of Palmyra were overlapped with that of the Persians. Recent archaeological works in the Syrian landscape reveal agricultural hinterlands of caravan cities such as Palmyra. The discoveries were important to understand that the caravan cities were not just islands in the desert but needed agricultural hinterlands to survive as sizeable urban settlements. Meanwhile, their role in facilitating long-distance trade was the very reason for their existence. Their fortunes rose and fell with that of the Mediterranean, especially the Roman empire.

Treking through many valleys in the mountains of the northwest corner of South Asia, Shoshin Kuwayama visited many of the ruins dated to the last couple centuries BCE and the early centuries CE. In Chapter 18, "The Chitral *Yaβγu* 雙靡翕侯, and a Route Southward in the 1st Century BCE", combining the meticulous study of Chinese literature of the time, he draws a trade route linking the Silk Road to the Mediterranean by locating the five *Xihou*, or *Yabgu*, under the Da Yuezhi. More than locating the ancient trade routes, Kuwayama clarifies the title of Xihou, which remained obscure to scholars for a long time. The nomadic conquerors, including the Yuezhi granted the title *Yabgu*, or *Xihou* in Chinese, to the chiefs of sedentary communities or other nomadic groups under their suzerainty or hegemony. The title of *Yabgu*

remained in steppe politics for centuries, transcending language changes. Kuwayama interprets the nature of *Yabgu* polity in the context of the relationship between conquering overlords from the steppe and communities that were conquered but maintained certain autonomy. This interpretation makes the complex of the Yuezhe–Kushan politics much more comprehensible.

In Chapter 19, "Kābul and the Regional Centers of Eastern Afghanistan in Their Historical Perspective", Minoru Inaba summarize literary, archaeological, and numismatic researches on the prosperity and decline of the three urban centers in eastern Afghanistan. The waxing and waning fortune of each of the three cities depended on change of the political and economic situation in the regions to the northeast, northwest, and south of the Hindukush Mountains, which affected the trade routes and depots passing through the region. The agriculture of the mountain valley down from the Hindukush, after all, could sustain one major city to act as the center of political regime, cultural activities, and commerce. From the Kushan times, Buddhist monuments dominated the landscape for centuries, especially around the Kabul region, even in periods under Hindu and Muslim rulers. Coins inscribed with three scripts, Pahlavi, Bactrian, and Brahmi, meant the readers of the currency before the Islamic conquest came from Iran, India, as well as local residents.

The trade routes from Central Asia to South Asia crossed high mountains with the Pamir Plateau as the most formidable mountainous terrain cut by deep river valleys. In Chapter 20, "Roads of Swat: New Perspectives", Luca M. Olivieri points out the population in Swat Valley, the road to India, was quite stable since 800 BCE, with little admixture of steppe influx. This ecological niche produced a variety of crops, including wheat, barley, lentils, and rice. The local agriculture therefore yielded high quality food to nurture local residents and support the traffic of traders coming and going between India and Central Asia. The rice production was so unusual in the northeast of South Asia, that Olivieri call the route through Swat Valley "Rice Road".

In Chapter 21, "The Silk Road and the 'Cotton Road': Buddhist Art and Practice Between Central Asia and the Western Deccan", Pia Branccacio examines how cotton, the exporting product from Western Deccan, gained market in both the west to the Mediterranean and east Central Asia and China. This research explains the formation of the Indian branch of the Silk Road, marked by the Buddhist cave temples lining up along the mountainous routes during the 1st to the 7th centuries. Her research on the artworks in those caves illustrates commercial and financial endeavor of Buddhist institutions. The cotton products and Buddhist cave art made India a major contributor to trade and religious exchanges to the world of the Silk Road.

Arielle Winnik examines textiles associated with the Egyptian site of Akhmim (also known as Panopolis) and demonstrates that elite Egyptian textiles, both the 3rd- to 6th-century linen-wool *purpurwirkereien* and the 7th- to 10th-century Akhmim silks, were involved with networks of global commerce. The textile industry and commercial networks persisted in the time period before and after the Arab conquest of the region in the mid-seventh century. Prior to the Islamic conquest, the art designs of textiles of Panopolis/Akhmim engaged mostly with repertoires in and around the Mediterranean basin. Following the Arab-Islamic conquest, art designs engaged with motifs of Red Sea trade routes, which expanded to be integrated into the Silk Road. Far from being solely of local production and style, Egyptian textiles of the long late antiquity were deeply engaged with systems of international trade.

The trade between Sassanid Persia and China prospered during the 5th to the 8th centuries, via both land routes in Central Asia and sea lanes of the Persian Gulf, though the land routes were the main arteries of communications. After the mid-8th century, overland trade on the Silk Road started to wither. Meanwhile, the Islamic empire, the Abbasids, took over the ancient Arab trade networks on the Arabian Sea and the Indian Ocean, and expanded the

networks to China. The maritime trade accommodated the need for shipments of heavy and fragile ceramic products and bulky tea, both the top exports of China from this period. Meanwhile, explorations of southeastern Asian lands and islands brought more botanical and animal products in the form of spices, drugs, and fragrances into the markets of the Indian Ocean and Pacific Ocean. Changes of political regimes in the Islamic world brought the Mediterranean market to the networks through the Red Sea. The political regimes in the region around the Red Sea and Persian Gulf shifted the use of different ports. The study of ceramic deposits of the ports outlines and verifies the impacts on trade by those political changes.

Part IV: Empires and Religions

The empires surrounding the inner-Eurasia steppe, mountains, and deserts were major markets and suppliers of commodities of the Silk Road trade. Mostly agriculture-based economies had long depended on draft animals, especially horses, for military equipment, transportation, and symbols of ruling extravagance. In return, the rulers of empires using textiles, wine, and other products of agrarian societies as diplomatic tools traded with the horse-riding nomads and oasis states. Events of significance around the Afro-Eurasia periodically shook the balance between the regimes of interior Eurasia and agricultural empires to create a new political landscape.

Chapter 24, "Elephants, Greeks, and Gold: The Silk Road in the Age of the Hellenistic Empires", by Benjamin Abbott, brings out the significance of the expedition of Alexander of Macedonia and the following Hellenistic age for paving the way for the coming of the Silk Road trade to the Mediterranean and South Asia. Even before Alexander's expedition to Central Asia, Greeks arrived there as mercenary, artisans, or merchants. Information about the wealth in Central Asia inspired Alexander to visualize the long march. After fully revenging the Persian invasion to the Greeks, Alexander marched to Central Asia and India for the wealth of the lands. The many Alexandrias, cities set up by his way of conquest, testify that he meant to bring the lands under the Macedonian empire. He even chose a Central Asia princess, Roxana, as his first wife to seal the loyalty of the Central Asian warlords. After Alexander, the battles and treaties between Seleucid and Mauryan empires brought peace between the two rising regimes, which was the foundation of conducing exchanges between the Mediterranean and South Asia. The elephants that entered the scene as rides of war were more than gifts of friendship from Indians and trophies of triumph for the Greeks. It made the wealth of South Asia and Central Asia accessible to the lands under the Roman empire.

The Arabs crushed the Sassanid Persian empire thus making the Byzantine and Tang empires the most sequential political entities of Eurasia in the 7th century. Byzantine won the admiration of the Tang court as the Western Lord of Treasures. In Chapter 25, Lin Ying examines Chinese literary records about transactions between the Tang court and Fulin, the name for the Byzantines, and many artifacts labeled as Byzantine, especially gold coins excavated from tombs along the Silk Road. She concludes that Turkish horse-riding regimes were intermedia of material transactions between the Byzantine empire and regimes of north China before the Tang Dynasty established a unified empire. After the Eastern Turk empire submitted to Tang Suzerainty (630) then the Western Turk surrendered to the Tang (659), Central Asians, especially the Sogdians, were the messengers of information about the world to the west and copiers of Byzantine artifacts, which they brought to the court and market of Tang China. The so-called Byzantine envoys were invariably traders and religious missionaries migrated from Syria, the former Byzantine territory but now under the Arabic Caliphate. The Byzantines were not aware of the existence of the Tang empire, and the

Chinese scholar-officials of the Tang court did not have direct knowledge of the Western Lord of Treasures either.

Sogdian traders had traveled to China since the 3rd century. Numbers of them stayed in cities along the trade routes and major urban centers in the Central Plain and eventually settled there. In his study of Sogdian immigrants in China (Chapter 26), Zhang Xiaogui concludes that from the early days to the late Tang times, Sogdians were faithful followers of the Zoroastrian religion. They demonstrated their religious ritual in the form of magic performance, though hardly propagated their faith through the performances. After the Arabs conquered their homeland of Sogdiana, many Sogdians migrated to the China interior. Their religious institutions survived to the Song times, but lost the validity of Zoroastrian doctrines. Zoroastrian deities joined local cults and thus were absorbed into Chinese folk religions.

Buddhists were the most numerous travelers on the Silk Road, and the cave murals and silk painting and prints were the focus of art historical research. Buddhist propagation from the lower and middle Ganges plain to northwest of the Indian subcontinent and eventually China had to overcome many language barriers. From the earliest days of Buddhism, missionaries encountered communities, from forest and marshland, who did not share the mainstream culture and the languages of the time. Buddhist sangha when spread to those areas expressed the teachings of the Buddha through stories and illustrated the stories with sculptures on railings around stupas, such as the Sanchi and Bharhut stupas. As Buddhist stupas were landmarks for Buddhist monks and nuns to gather for their fortnightly study and discipline, artworks became the fixture of Buddhist monasteries following their expansions to Gandhara, Central Asia, China, and further. Buddhist artworks, along with literature that had been translated into various languages, evolved in new homes. When adapting new culture they inevitably lost some of the original meanings.

On the east terminal of the Silk Road, Chinese empires initiated the silk-horse trade as the strategic tool to engage the nomadic neighbors on the steppe. The Han empire started the silk-horse trade to get the supply for its cavalry and to embellish royal carriages, and meanwhile to strike treaties for allies on the steppe. The Tang empire furthered the silk-horse trade by setting up border fairs at frontier garrisons. The government paid higher prices than market value of the horses to the allies, in fixed amount allotments of silks from the treasuries to each recipient. Those groups who proved themselves as a strong ally, such as the Uyghurs, received a large share of the border fair silk-horse trade and thus made a large profit by reselling the silks to other tribes on the steppe and entrusting the Sogdian traders to sell them further west. Li Jinxiu (Chapter 28) noticed that the Xiagasi/Kyrgyz was left out of the lucrative trade though they had good horses and sable furs from the northern forests. When the Xiagasi eventual defeated the Uyghur, becoming the hegemon on the steppe, the Tang empire was in its last days. Though the Tang still needed the excellent horses from the Xiagasi, the border fair quota system was no longer necessary. The silk-horse trade between the Xiagasi and the Tang switched to market transactions. This change triggered the end of the imperial monopoly of the trade of horse and silk, both prestigious goods of the Silk Road trade.

In Chapter 29, "Roman Silk Trade and Markets", Berit Hildebrandt extends the vision of the Silk Road studies to real people in the Roman empire who engaged in silk trade and consumption. Scholars so far limited their reference of the silk market on the west end of the Silk Road as works in the *Natural History* of Pliny the Elder and the *Periplus Maris Erythraei*. From the few simple mentions of the silks from the east, the Roman involvement with the Silk Road looks like a mirage, or a concept at the best. Hildebrandt offers much more. In the analysis of market information on silk supply, demand, and price, personal

stories of artisans and traders from inscriptions and plural texts make the narrative of silk trade alive. We learn that high quality silks were sold in a shopping street connecting the *Forum Romanum* to other market places; a former slave became so rich by silk trade that he donated a temple to Venus the goddess in Gabii, a city near Rome. Through the stories, the networks of the traders and operational structures are displayed. The networks extended to caravan cities in the east frontier of the empire, such as Palmyra, and involved various ethnic communities, including the Jews.

The assumption that Roman women exhausted the treasury by searching after luxury oriental goods, including translucent silk textiles to show the beauty of their bodies, baffled researchers who more than often found heavy tapestry and brocade samples from archaeological sites such as Palmyra. However, in Chapter 30, "Christian Discourses About Silks in Antiquity", Berit Hildbrandt tells a more nuanced story. In the Roman empire, not only women of high status liked silk, but also men. Roman aristocrats used expensive silk to mark their status and meanwhile criticize the extravagance of wearing silks to distinguish themselves from the others. The Christian church inherited this contradiction. Early Christians did criticize luxuries such as wearing silk cloths to claim moral superiority. The focus of scrutiny of Christian writers was on the nuns who lived as ascetics, but they made compromises for Christians who lived a domestic life. Meanwhile, in churches, the high priests donned in dazzling regalia, altars were covered with donated silk tapestry and embroidery. As the altar was the container of relics of saints, the donor, often a rich woman, made the connection to the saint and the Church through the donation. The decoration of silk banners meant to make the church as splendid as the heaven for the faithful who were mostly destitute.

Islamic empires spread silk production and trade through the *tiraz* system, according to Arielle Winnik (Chapter 31). The *tiraz* system derived from the Persian and Byzantine imperial traditions of granting robes of honor to secure the loyalty of subordinates for their talents and efficacy. That Prophet Muhammad (570–632) took off his own mantle to reward a poet was a memorable event recorded in *Hadith*. When Caliph Abd al-Malik ibn Marwan (r. 685–705) made Arabic the official language of the Islamic regime, text messages in Arabic calligraphy replaced images of rulers on coinage and honor robes, then the policy extends to textiles. The embroidered and tapestried messages on the edges of precious textiles, silk, that is, *tiraz*, conveyed legitimacy of the caliphates, from the Rushidun (Rightly guided, 632–661) to the Umayyad Caliphate (661–750), Abbasid Caliphate (750–c.1258), Fatimid Caliphate (909–1171), and many Islamic states fragmented from the major Islamic regimes. The *tiraz* became such a fashionable status symbol that regimes and religious institutions all over Eurasia purchased the textiles with *tiraz* for rituals, unaware of the religious and political messages embodied in the text and calligraphy. As *tiraz* became markers of textiles of various parts of the Islamic world, it actually was the trader mark of textiles that helped to shape the international market of textiles.

In his survey of artworks on the Silk Road, Chapter 32, "Virtual Silk Roads: Objects, Exhibitions, and Learners", Daniel C. Waugh analyzes outstanding cultural objects related to the study of the Silk Road. Most helpful is that he provides the links to websites, museums, and libraries where researchers can find access to the objects virtually. This is a tremendous blessing during a period many of us have to work from home. However, when I check on the most important database, International Dunhuang Project (idp.bl.uk), I found several links are blocked for access from readers like me, from the United States. It seems the study of the Silk Road is as politicized as ever, but meanwhile scholars and people of curiosity also persisted in searching the story of the past.

Notes

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PART I

Landscape of the Silk Road

From the Bronze Age to the Beginning of Historical Records

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1

KONGQUEHE BRONZE AGE CULTURE

A Page of Early Eurasian History

Wang Binghua and Translated by Xinru Liu

In the last century, especially during the three decades starting from 1970, archaeologists discovered and excavated Bronze Age cultural remains in the Kongquehe valley of the Lop-nor region. These remains reveal a new chapter in early Eurasian history. They show that a group of European-looking people migrated eastward, probably from the Caucasus region, into the Kongquehe valley. They settled there to cultivate, gather, and hunt; they organized into a society; they worshipped the sky and the sun; and they believed in an afterlife. They held faith in ephedra, cattle, snakes, and the enigmatic number seven. Study of the Kongquehe culture helps us to understand early civilizations in Xinjiang, as well as the connections between early populations in China, South Asia, southwest Asia, and Caucasus mountainous regions. The information from the archaeological works, none of it available in literary records, is invaluable for research on early Eurasian civilizations.

About a dozen Bronze Age cemeteries of Kongquehe spread along the valley from Xianshuiquan to where the river flowed to Lake Lop-nor (Map 1.1). The water source of the Kongquehe valley is Bosten Lake, a fresh water lake of 800 km^2 surface area, on the highland northeast of the Tarim Basin. The Kaidu River flowing from the southern slope of the Tianshan Mountains feeds the Bosten Lake with glacial water, which natured Lop-nor and the oasis ecology of the Kongquehe.

During the first half of the 20th century, several archaeologists, including Aurel Stein, Sven Hedin, Chen Zongqi, and Huang Wenbi, exploring the eastern part of Central Asia visited the Kongquehe valley and discovered some of the graves. Those scholars reported their discoveries, but the Kongquehe Bronze Age sites were not their main interests. Systematic explorations and excavations started with Xinjiang archaeologists from the 1970s.

Works of Xinjiang Archaeologists

In December 1979, together with the TV documentary team of the Silk Road, a team of Xinjiang archaeologists headed by Wang Binghua entered the Lop-nor Desert. In this expedition, the team discovered and excavated Gumugou Cemetery, on the north bank of the Kongquehe River. They found two types of graves in Gumugou Cemetery. Six distinguished tombs dominated the cemetery. Around each of the major tombs, seven circles of wooden poles surrounded the center; from the outmost circle, lines of the seven wooden poles radiated out like sun rays (Figure 1.1). In the center of each of the six tombs there was a rectangular burial pit in

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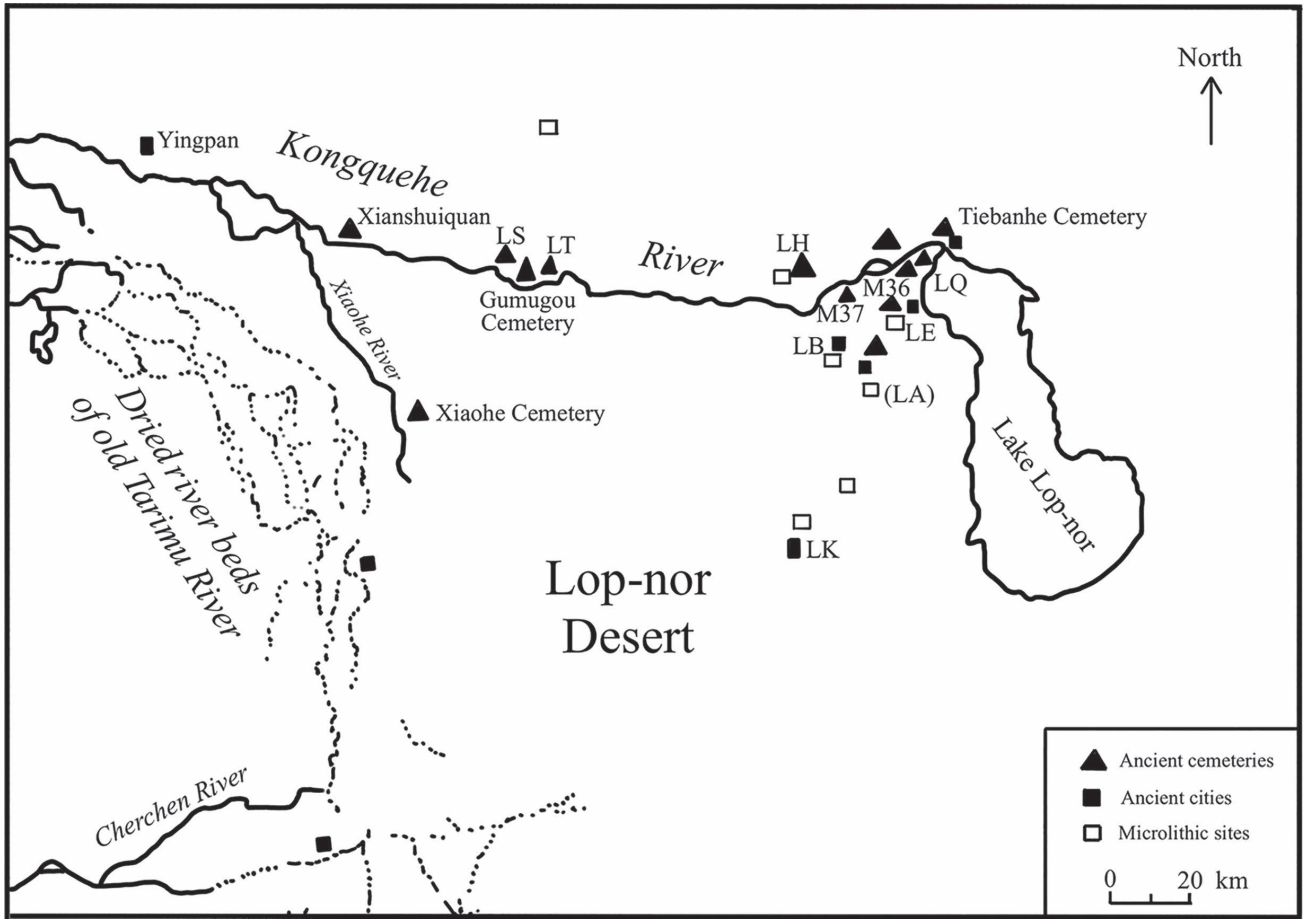


Map 1.1 Archaeological sites of Kongquehe valley.

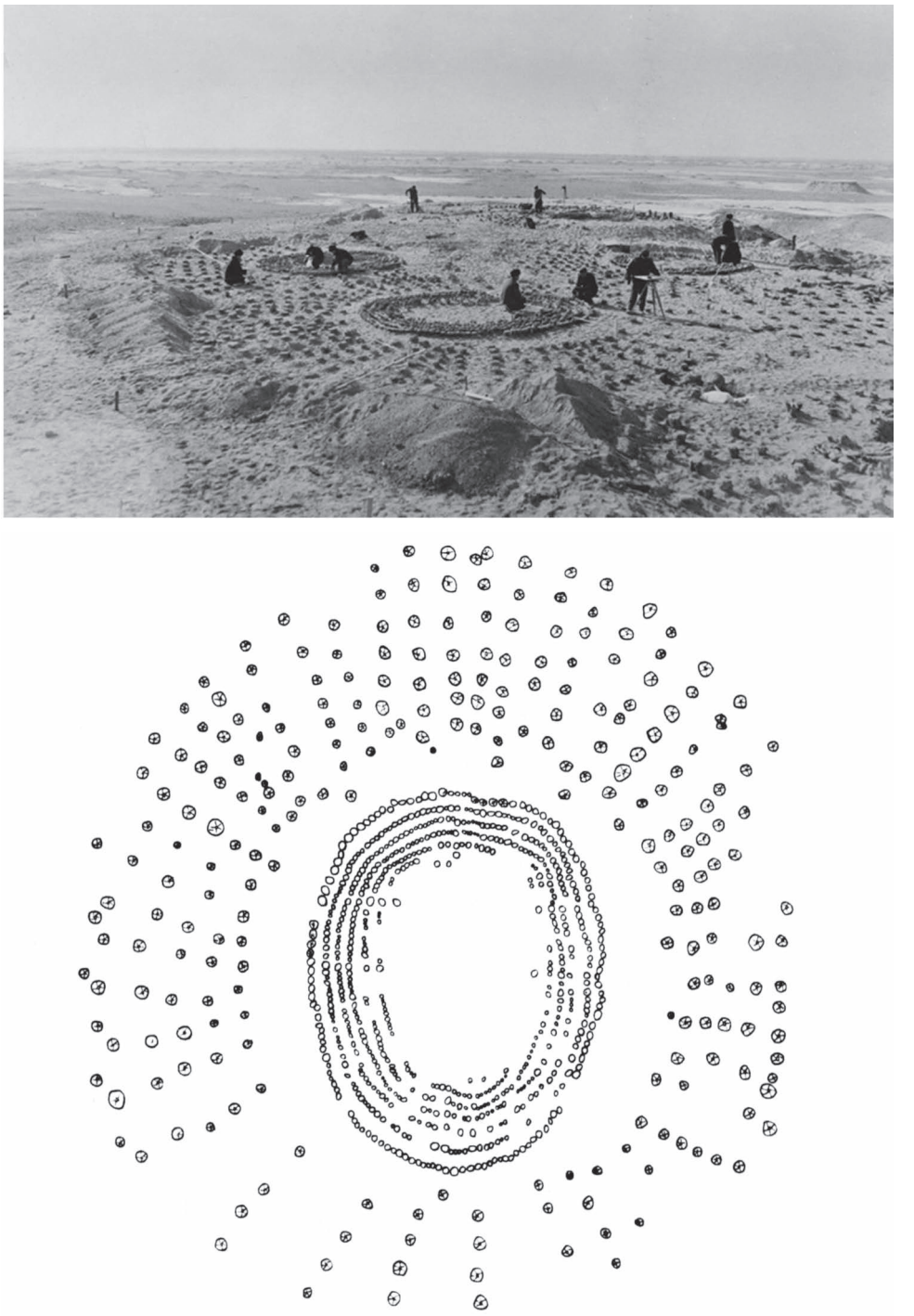


Figure 1.1 Wooden pillars line up on the surface of the tomb in the shape of a shining sun.

Figure 1.2 Wheat from 79LQ2M4:3, Gumugou Cemetery.

the sands that contained a male body, either adult or elder. The skeletons were well preserved, but the wooden coffins were almost all deteriorated. Most burial goods were no long visible, except for a few wooden artifacts and copper rings. The sands covering the tombs show signs of burning.

The team also excavated thirty-six rectangular pit burials that did not have radial wooden poles. Above the common graves, a small wooden pole marked the end of each burial. The bottomless wooden coffins were covered with wooden lids. Every burial contained a single person. Several bodies in the graves were preserved, as they naturally dried up like mummies. Every buried person wore a pointed felt hat and was wrapped in a woolen blanket. Small bags containing ephedra sticks and straw baskets with wheat grains were wrapped in the blankets (Figures 1.2, 1.3). Burial goods in this type of grave included wooden figures (Figure 1.4), a marble figure in the shape of violin (Figure 1.5), horns of cattle and sheep, wood sticks with marks carved at equal distances (as rulers of tally or measurement?), straw bunches, bracelets made of bone beads, and so on. A few of the burials were surrounded by a fence reaching the surface of the ground. The big tombs and regular burials were adjacent and interspersed, probably buried in the same period.[1]

In 1980, the archaeological team headed by Mu Shunying explored the Tiebanhe area covered by a *yardang* landform, a terrain with a group of small hills of equal height. This geological feature was shaped by sharp winds cutting through the plateau into a landscape with separated but not far between mounds, thus creating a desertlike environment. The team discovered and excavated two isolated graves on top of two *yardangs*. From one of the graves was extracted a well-preserved female body. She wore shoulder-length hair, and her nose was

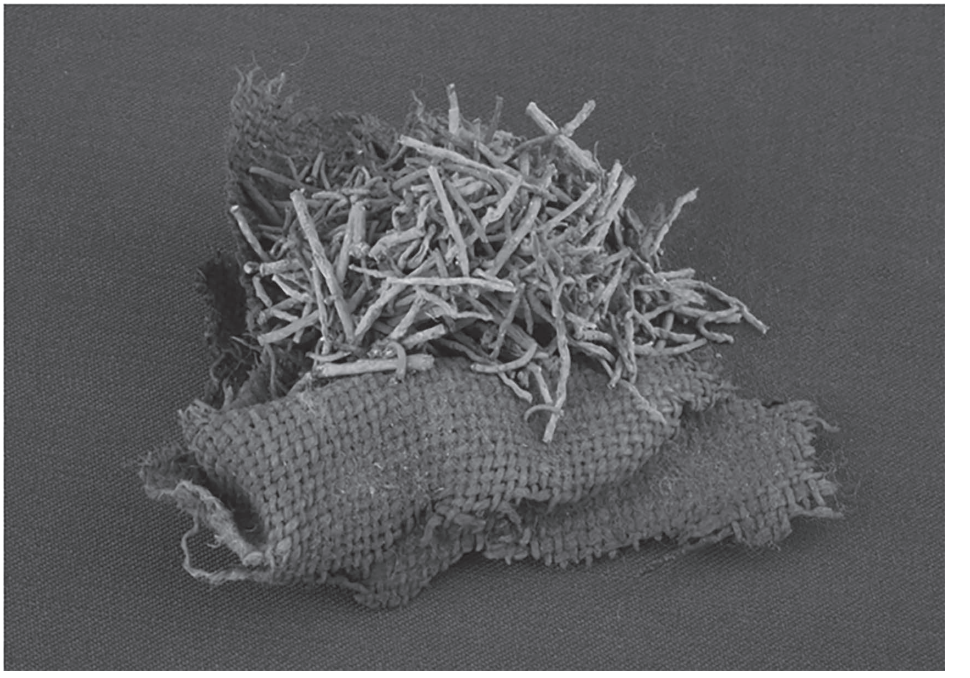
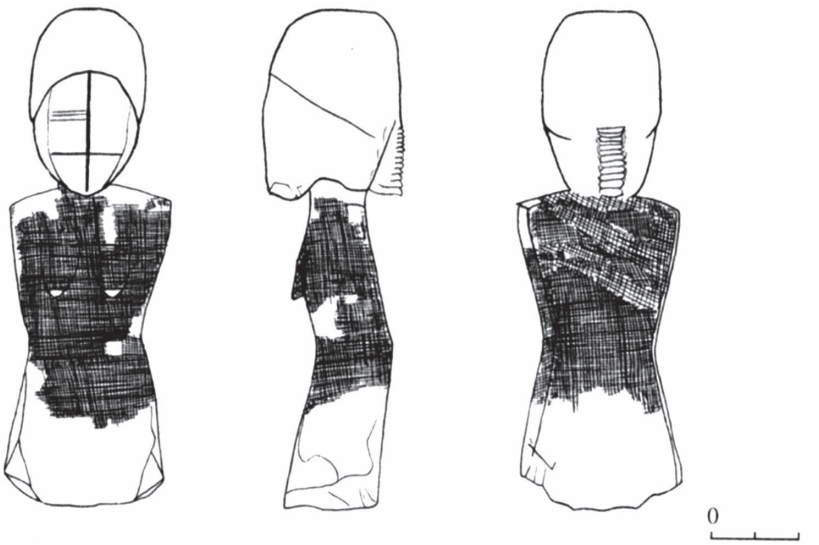


Figure 1.3 Ephedra twigs wrapped up with a small bag buried with an infant. 79LQ2M4:1, Gumugou Cemetery.

high and her face narrow. Dissection of the body showed that all the organs were in the right position without specific pathology, but the lungs were filled with carbon and silicon dust. Lice filled her hair and genital area. This is the very female body that Japanese media advertised as the "Beauty of Loulan". About 1 km away on the top of another *yardang* was located a grave that was badly eroded by winds. No human body was found but there were vessels made of straws of different plants, and materials and tools for weaving the vessels, including cattail bundles, grass stem bundles, straw ropes, and a wooden knife. It seems an expert of making straw vessels was once buried there.

From December 6 to 20, 2000, supported by friends of Gudatang Film Advertising Company, Wang Binghua, leading a group of thirteen experts of geography, sand desert study, preservation of cultural relics, and wildlife studies, reached Lop-nor Desert from the southern foothills of the Kuruk mountains after an arduous trip, and finally rediscovered the Xiaohe Cemetery, after it disappeared from human vision sixty-six years ago. This discovery, though not accompanied by an excavation, invoked great interests from the general public.

From 2002 to 2005, Yidilis and Li Wenying of the Xinjiang Archaeological Institute organized the Archaeological Team of Xiaohe, carrying out a comprehensive excavation of the cemetery. The team excavated 167 graves. In addition to the 190 previously exposed graves on the upper level of the sand dune, the cemetery had at least 357 graves. The graves were formed in five layers, revealing the time sequence of burials. The graves thus formed a gigantic sand hill over 7 m in height. Wooden poles over four 4 m high, painted in red, stood in front of some graves. Wooden human figures, over 2 m tall on a base of 1 m, probably four in number, once



79LQ2M12　线图4

图版三十七①　木雕人像

图版三十七②　木雕人像局部

Figure 1.4a, b　Wooden figurine from Gumugou Cemetary, 79LQ2M12.

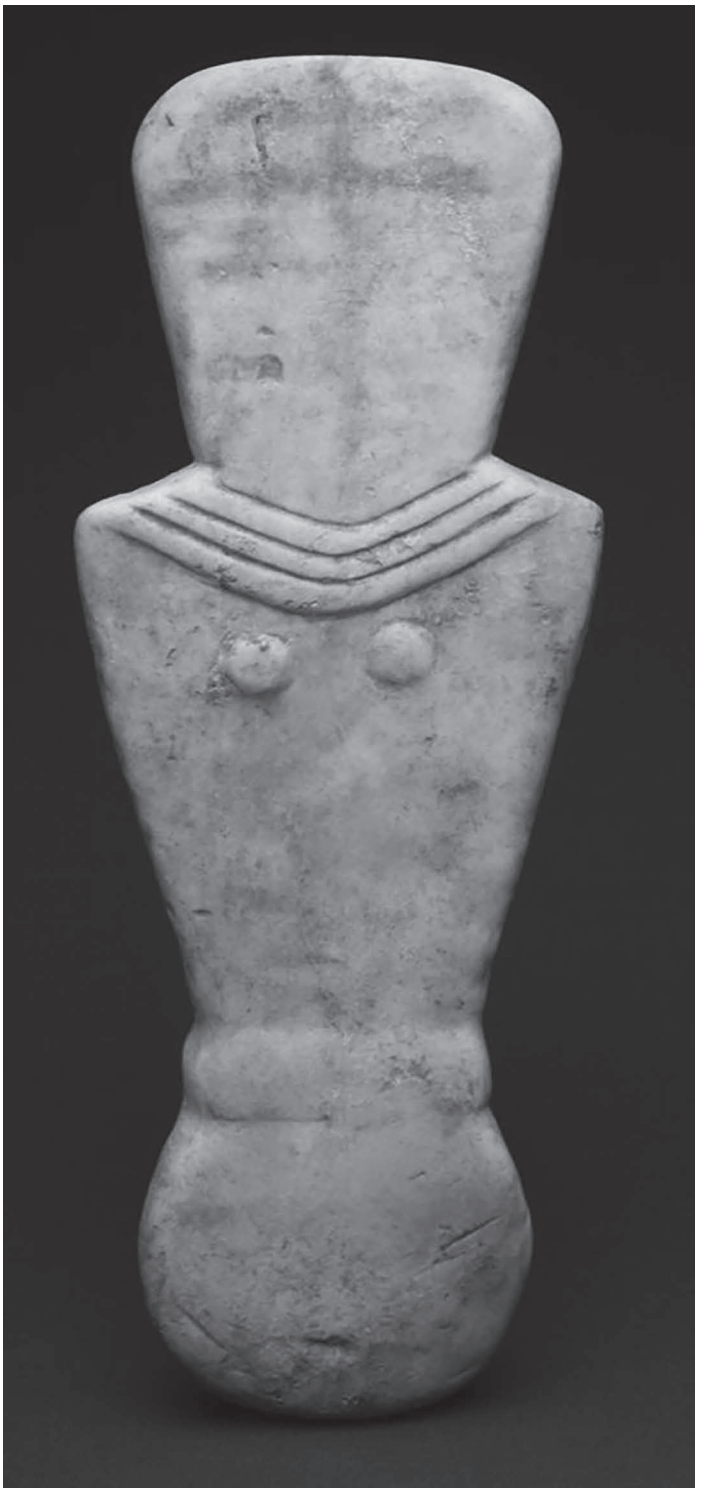


Figure 1.5 Marble statue from Gumugou Cemetery, 79LQ2M18:2.

stood on the skirt of the hill (Figure 1.6). In the northeast corner of the cemetery once stood a grand tomb in the shape of a wooden house. The tomb had been robbed and disturbed, and the fragments of skeleton indicate that the buried body was that of a woman. Several precious items escaped robbery: a copper mirror with golden ring, a copper bell, and a mace of white stone. The majestic atmosphere of Xiaohe indicates that it was the clan cemetery, and the chief of the clan was a woman.[2]

The graves in Xiaohe are rectangular pits in sand. Bottomless coffins were covered with bovine hide. A single body in each grave was laid on its back heading toward the east. Some of the heads and faces were painted with red lines. The graves in the three upper layers were better preserved than the lower layers, and many were mummified corpses. All the bodies wore pointed felt hats, were wrapped with woolen blankets and loin clothes, and had leather boots on their feet. Small bags containing twigs of ephedra were attached to the woolen blankets. Buried goods included straw woven baskets filled with wheat grains and broomcorn millets, and ear tips of cattle and sheep. Necklaces and bracelets were made of bones and stones. Male burials often had wooden mask with extraordinary high noses (Figure 1.7), and a few contained wooden sticks with sharp points, snake-shaped wooden pieces, a stone inserted between two pieces of wood to form a shape of a horse cannon bone with hoof (Figure 1.8), and arrows attached with feathers. Seven snakes were found under the belly of a mummified male. Many female bodies were attached with a wooden phallus under the genital area. The phalluses were hollow inside, some of them contained a snake head. There were two big coffins, one of a male, another a female. Each contained a large bovine skull, painted with black and red stripes.

A wooden sculpture was erected at the head of each coffin. The sculptures for women were in the shape of a phallus (Figure 1.9); those next to the men coffins were in the shape of a paddle (Figure 1.10), symbolizing a vagina. At the bottom of every wooden sculpture there were seven grooves painted with red color (Figure 1.11). The red paint was bright when the tombs were discovered. The tops of the sculptures were inlayed with small bronze plates. A thick and tall wood pole, over 4 m in height and painted in red, once stood in front of several big graves. Hooks for hanging sacrificial goods such as bull heads were carved near the tops of the poles. Goods that were used daily, such as reeds, camel thorn, ephedra twigs, licorice bundles, sheep leg bones, cow dung, symbolic bows and arrows, for a funeral were piled on the feet of the wooden poles.

The wooden coffins in the lower levels, that is, the fourth and fifth layers of the cemetery, contained mostly females with a few exceptions. Some coffins were covered with clay. Six to

Figure 1.6a, b, c Xiaohe Cemetery and one of the four wooden human figures that once guarded it.

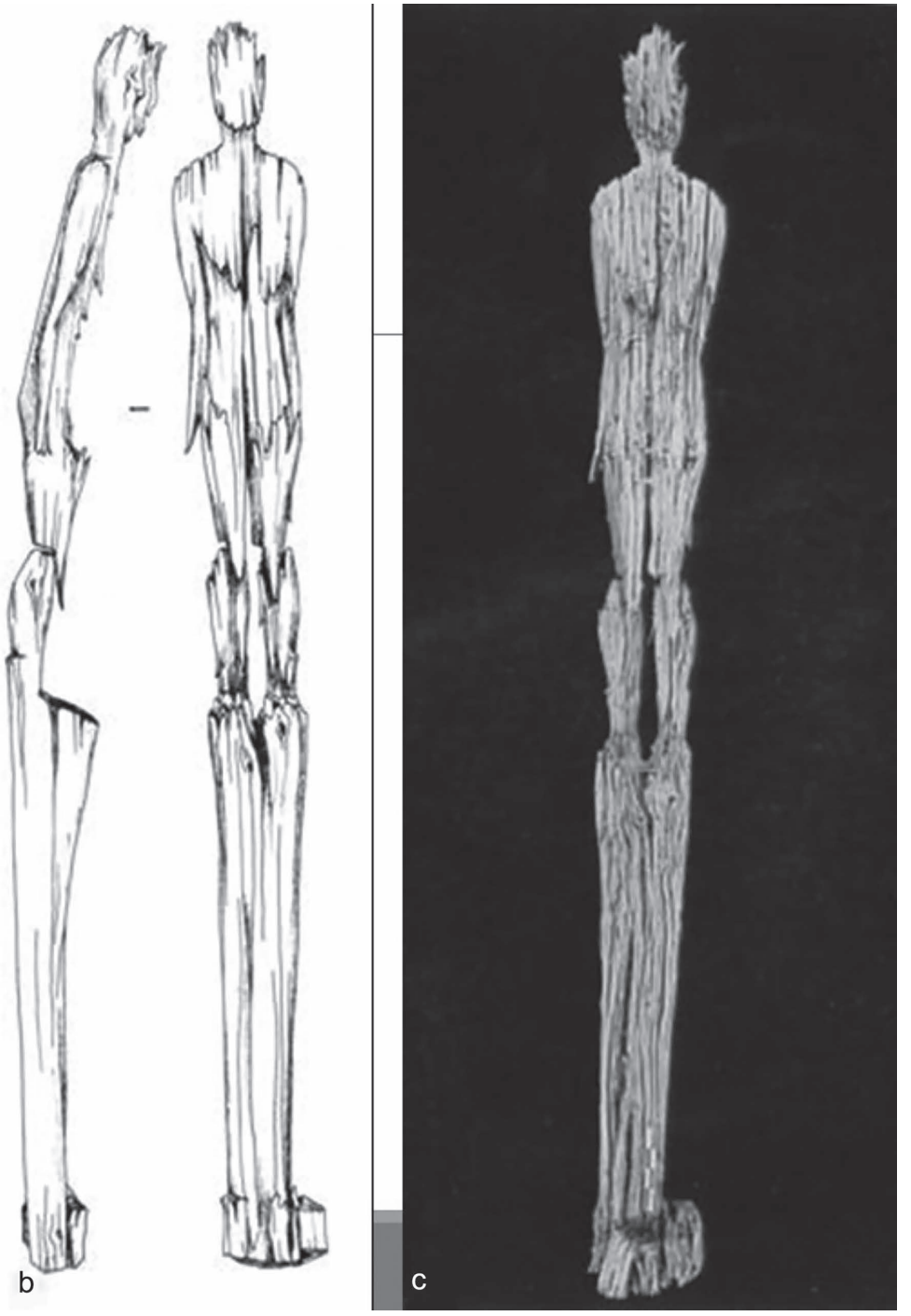


Figure 1.6a, b, c (Continued)

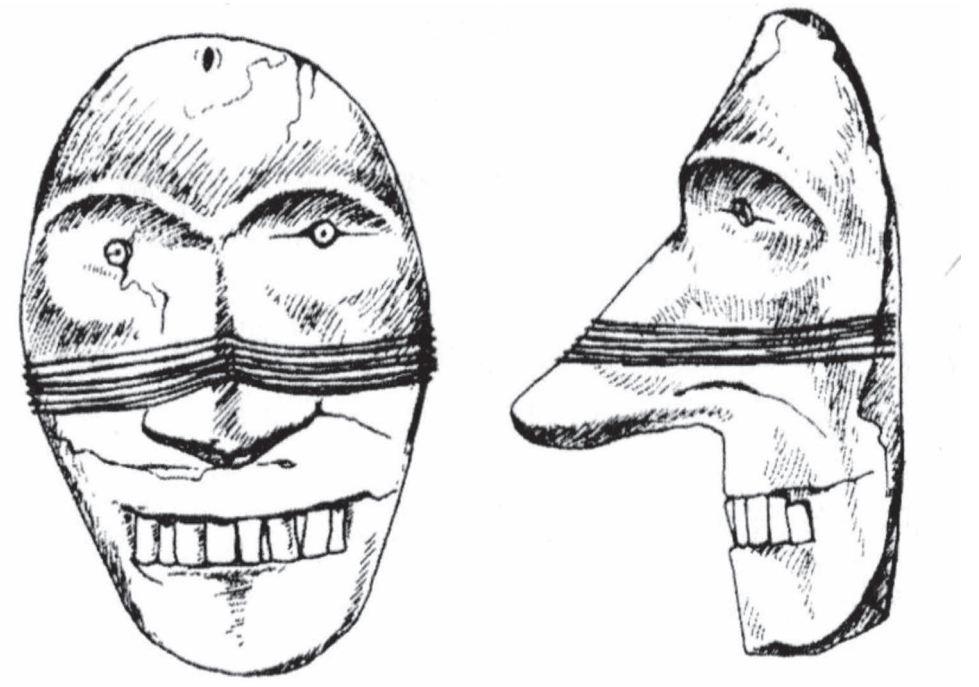


Figure 1.7 Wooden face mask in M13 of Xiaohe Cemetery.

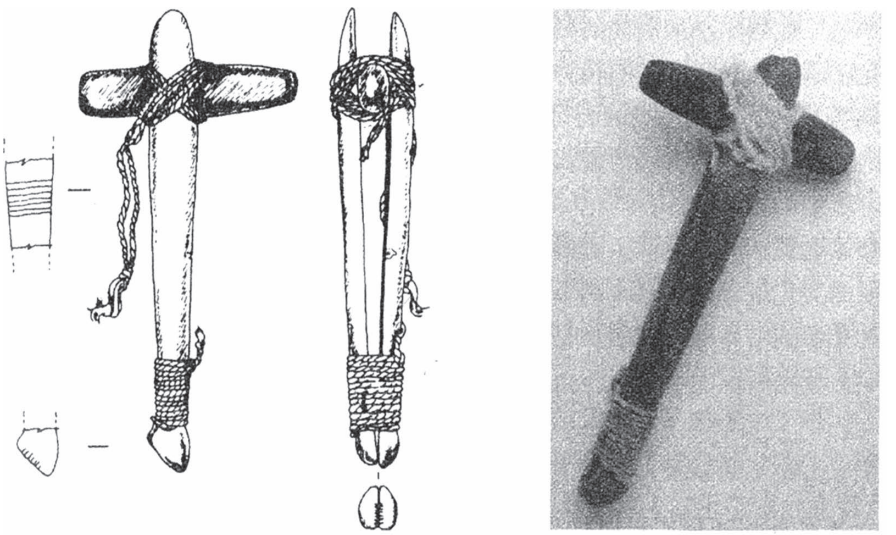


图14　小河第24号墓葬马蹄形木器上有七道刻线

Figure 1.8 A device of a stone inserted between two pieces of wood to form a shape of a horse cannon with hoof, M24 of Xiaohe Cemetery.

Figure 1.9 Grave of a woman, marked by a wooden phallus, Xiaohe Cemetery.

Figure 1.10 Graves of men marked by wooden paddle shape sculpture, representing female vagina, Xiaohe Cemetery.

eight or even ten wooden poles were erected around each coffin. The poles were rhomboidal in section, and were painted red; a bovine head could have been hanging on the tops of the poles. Sixteen samples for dating were taken from all the layers of Xiaohe Cemetery. AMS ^{14}C tests give the absolute date of the cemetery to ca. 1500 BCE.[3]

The third survey of archaeological remains in Xinjiang started after 2009. In the valley of Kongquehe across Yuli County and Ruoqiang County, twenty sites similar to Gumugou, Tiebanhe, and Xiaohe cemeteries were located. They are Xianshuiquan in Yuli County, 09LE50 Cemetery and No. 4 Cemetery at Tiebanhe, No. 6 at LE Tableland, LE4 Cemetery, and more. All of these cemeteries had been looted, but they all yielded similar artifacts. The archaeological survey demonstrates that such ancient graves widely existed in the catchment of the Kongquehe valley.[4]

The Keriya River Northern Cemetery (KRNC) was a site similar to the Xiaohe Cemetery. It was located in the sand desert around the end of Keriya River, and not far from the Tarim River. KRNC is 320 km from Yutian County, about 70 km north to the Keriya River Ancient Round City site. The sand dune of the cemetery was 48 m in north-south direction, and 34 m in east-west direction, covering an area of 1600 m^2. Many wooden poles appeared on the top of several layers of graves. Unfortunately, the cemetery was badly looted between the end of 2007 and early 2008, but the scattered remains could still be easily identified with the Kongquehe Bronze Age culture (Figure 1.12). Samples of wheat, Ephedra twigs, beans, woolen yarns and blankets, and straw woven basket fragments collected from the site were sent to the central laboratory of Queens University, Northern Ireland, for AMS ^{14}C dating

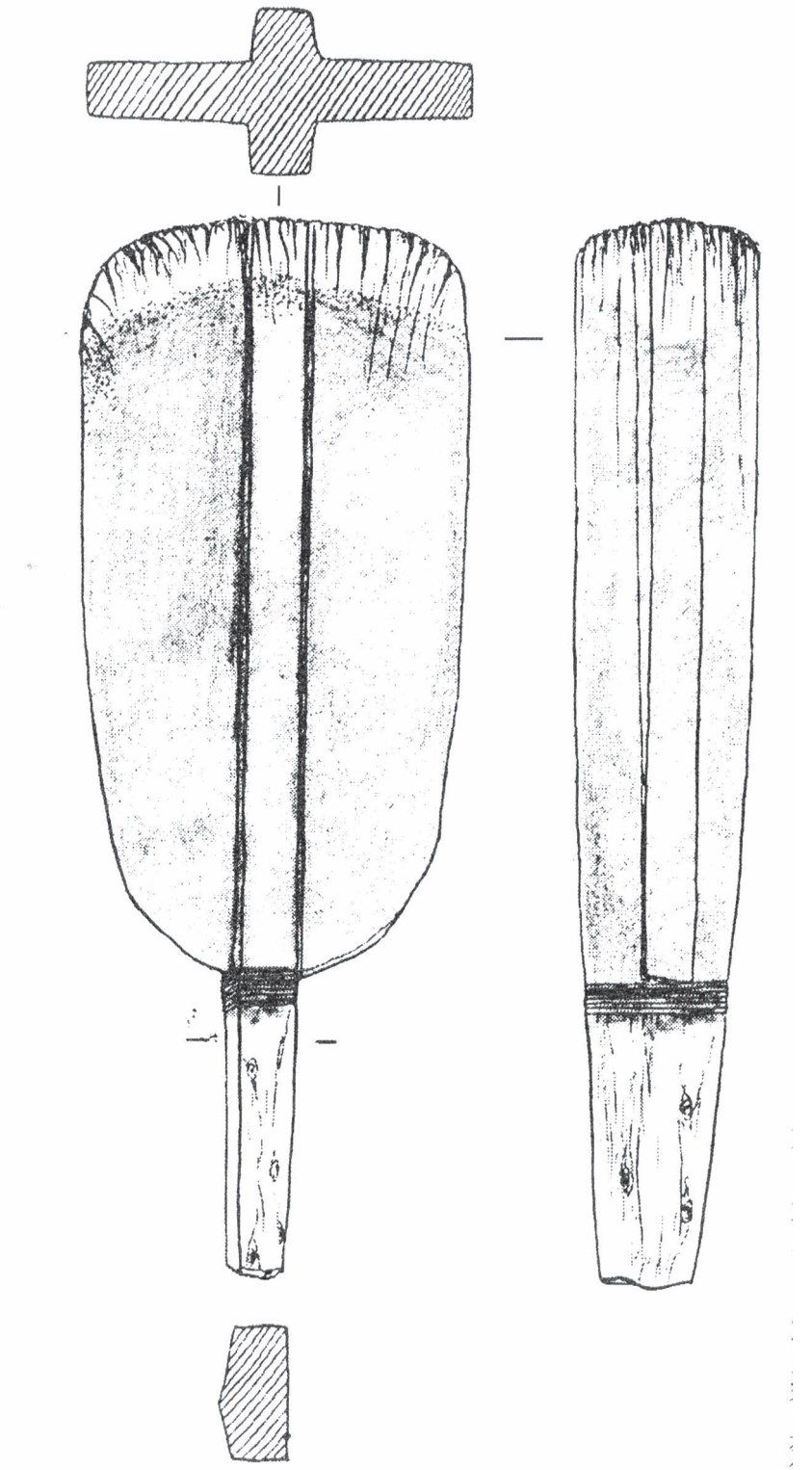


Figure 1.11 Seven lines carved on the paddle shape sculpture, M24, Xiaohe Cemetery.

Figure 1.12 Relics from Keriya River Northern Cemetery.

and they indicated a date of ca. 3300 before present.[5] This date suggests that those buried in the KRNC were migrants from the Kongquehe valley about 200 years after when they left. This is a significant fact for our further exploration into the history and culture of residents of Kongquehe catchment and the northern foothills of the Kunlun Mountains.

Analyses of Archaeological Remains of Bronze Age Kongquehe Culture

It took a while for us to identify the nature of Kongquehe cemeteries. Excavations at Gumugou in 1979 revealed female bodies in the image of white people; the well-preserved and digital reconstructed female body was a typical white person. Media made a big fanfare of those discoveries and attracted academic concerns in the early 1980s.

The comprehensive and systematic excavations of Gumugou Cemetery provided samples taken from undisturbed graves. Several analyses and examinations of the wood pieces from coffins, furs, and woolen textiles in various laboratories reached the conclusion that the burials could be dated to 4000 years before present.[6] However, all the meticulous work at the site has not exposed any bronze tools, but only a few copper rings, therefore making it problematic to attribute this culture to the Bronze Age. Meanwhile, the artifacts such as poles made of hard and tense textured *huyang*, or diversiform-leaved poplar (populus euphratica), carefully sculpted wooden female figurines, wooden basins and bowls in burials demonstrate the impacts of sharp and smooth cuts and peels. Traces of the carving shows a single hack reached 4 cm into the wooden material. Using modern tools to test on a piece of wood of *huyang*

verifies that only sharp and hard metal tools could have had the effect. Even though there is no direct evidence of bronze tools, the impact of metal tools on the artifacts is obvious and cannot be ignored. Therefore archaeologists reached the consensus that Gumugou was a Bronze Age culture.

The excavations at Xiaohe Cemetery in 2002–2005 provided sixteen samples from several layers for AMS ^{14}C dating. The latest burials at Xiaohe Cemetery could be dated around 1650–1450 BCE.[7] The earlier burials, that is, the lower layers, could be dated earlier. Therefore the approximate dates of the Kongquehe Bronze Age culture should be 4000 years before present.

The people buried in Kongquehe culture show obvious European features. During the early 20th century, archaeologists discovered many dried bodies datable to the Bronze Age. Since the 1980s, Xinjiang archaeologists have revealed even more dried corpses from the sites of Gumugou, Tiebanhe, especially Xiaohe through comprehensive excavations. Most of them had yellow-brown hair, a small number had black hair, and an exceptional few had red hair. Skin color was pale; faces were narrow, and noses were high. Their beards were often yellow in color. In short, they looked like Europeans. Physical anthropologist Han Kangxin analyzed samples of human skeletons from Gumugou site to reach the conclusion that physical types of males tended to be European more than those of females. Skulls of males generally were long and narrow, thus their faces were low and wide, showing a prominent brow ridge and high nose bridge. The men of Gumugou were similar to early European population, and to the Nordic-type among modern Europeans.[8]

DNA studies of the ancient corpses conducted in recent years corroborated the physical anthropological analyses. DNA examinations of samples from the Bronze Age Xiaohe Cemetery revealed that maternal heredity was diversified. Both eastern pedigrees and western pedigrees were there and evolved into complicated eastern Eurasian pedigrees. There was only one eastern Eurasian pedigree C4 in the earliest group; by later layers of the site the maternal lineages include C5, D, G, Z. However, examining paternal heredity through Y chromosome reveals only western Eurasian pedigree R1. In other words, when data from the mitochondria of the Xiaohe population show changes from early to later periods, the data of paternal inheritance are consistently excluding eastern Eurasian pedigrees.[9] A simple explanation of the data is that the men of the indigenous population disappeared totally when migrants that looked like Europeans entered the region. Meanwhile only women remained to create new, mixed pedigrees. This social and cultural historical phenomenon needs to be further explored.

Social and Economic Life of Bronze Age Kongquehe

People of Bronze Age Kongquehe relied heavily on their livestock and also engaged in farming. Hunting and fishing supplemented their diet. Handicrafts were essential for the society. The major livestock were cattle and sheep. Physical examinations show that cattle were similar to European types, distinguished from Asian cattle, zebu, yak, and water buffalo.[10] The residents of Xiaohe kept a large number of cattle, as shown in their daily consumption of cow's milk, cheese, meat, leather boots, and in their burials. As many as four cow hides were used to cover one coffin, suggesting that they raised many cows and ox. Sheep also were important resources for their life. The widespread use of woolen blankets, woolen felts, felt hats, woolen ropes, mutton for food, and so on, shows how much people relied on sheep for living. They certainly had selected an excellent sheep breed to produce fine wool yarn and good meat.

Kongquehe people at that time planted wheat, broomcorn millet, and other crops. The hexaploid wheat raised there was of high quality (Figure 1.2). Broomcorn millet was a drought-enduring plant adequate for planting in the Kongquehe water catchment. Analyses of excavated

soil and grains prove that the food grains were planted. But how the grains were grinded and cooked remains a big question, as no cultivated lands, irrigation canals, grinders, or even cooking ware have been discovered. How a settled society could function without pottery requires some explanation. In 1992, the author had the opportunity to work in Dariyaboyi oasis, along the lower Keriya River. Residents there lived in a vast region on both sides of the Keriya River, where one or two households were in clusters separated from each other by several kilometers or even a longer distance. They constructed small cottages using branches of *hongliu* (tamarix chinensis) and *huyang*, and each household herded its own sheep and cattle on a large area of a sandy river bank. The livestock fed on leaves of *hongliu* and *huyang* as well as reeds. The residents seemed isolated, but whenever there were alarming incidents, they managed to correspond and collaborate quickly. In the short sojourn at Dariyaboyi oasis, the author witnessed a unique way in which the locals were cooking food. The mistress of the household poured a paste of wheat flour on a hot burning big pebble in the center of a fire pit, and soon produced a nice piece of pancake. This could be a tradition tracing back to antiquity in the Takla Makan area where adequate clay for pottery is not available.

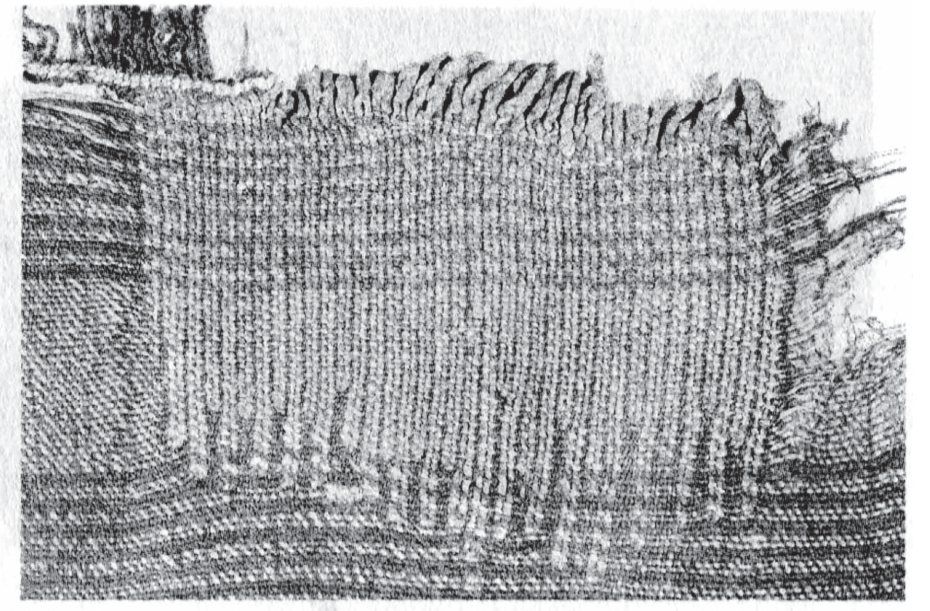
Samples of bones and horns corroborate the existence of the big horn deer (megaloceros), least weasels (mustela nivalis), and eagles. Eagles should have been used for assisting hunting; big horn deer and least weasels were important resources of meat and pelts. Weasel pelt was a popular decoration on the point of hats. Fish bones have been found in Tiebanhe Cemetery, and fragments of fishnet were found in the filling soil of Gumugou Cemetery. It seems fishery was part of the economy, but not on a large scale.

Handicrafts were essential for the livelihood of the Kongquehe people. They produced woolen textiles, felt, tanned leather and fur, straw woven vessels, metals, jade carving, wooden sculpture, and so on. Everyone wore woolen blankets. The blankets were plain woven, about 2 m in width, and more than 2 m in length. The size of each pieces suggets that they were woven by a loom, though no loom has been discovered. The blankets were smooth and soft, and each varied in texture and color (Figure 1.13). It seems the fleece and cashmere had been sorted into various yarns for making different blankets for individuals according their sex and status. Some of the blankets were woven with red and brown stripes, showing wool dyeing. Another kind of clothing was a loin cloth, worn by both men and women (Figure 1.14). As a whole, the woolen textile apparel of a Kongquehe individual was composed of a loin cloth and a cape for both male and female, though the quality, weave, design, and color varied, probably according to status.[11]

Making felt from wool was another essential craft for the people living in felt tents and simply structured cottages. Felt was made by spreading several layers of wool and fluff on top of each other, then rolling and pressing numerous times to work the fiber into a tightly matted, evenly thick piece. Felt excavated from graves was used to make pointed hats (Figure 1.15) and lining for shoes. In the Xiaohe Cemetery, another style of hat appeared in addition to the plain pointed hat. This new type of hat was taller but less pointed (Figure 1.16). The large pieces of felt, however, should have been used as construction materials for tents and huts.

People of Kongquehe tanned cattle hides to make their short boots. Boots from the earlier-dated Gumugou Cemetery used rough and hard leather, as tanning and decreasing processes were not well developed at that time (Figure 1.17). By the time people were buried in Xiaohe Cemetery, the leather boots were well tanned and soft. The quality improvements made leather for materials of other goods, such as women's bags and leather wraps on tops of wooden poles.

The most characteristic crafts of the Bronze Age Kongquehe culture were handwoven straw baskets and other vessels. The most popular vessels were small baskets containing wheat, broomcorn millet, and dry cheese, so those baskets were probably eating vessels (Figure 1.18).



a

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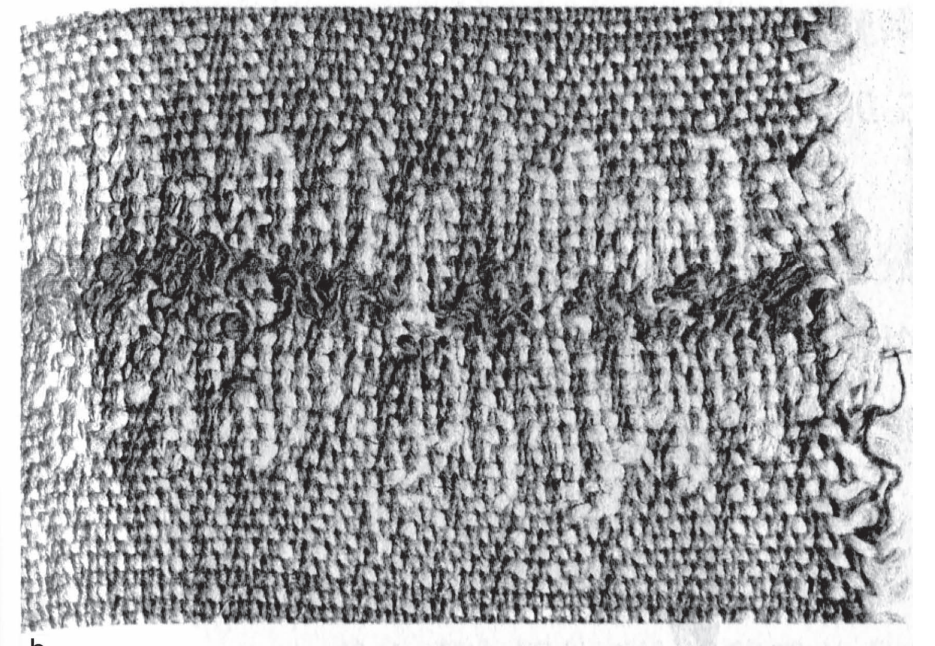


b

图版8　79LQ2M2:2B

Figure 1.13a, b　Gumugou woolen blanket, 79LQ2M2:2B.

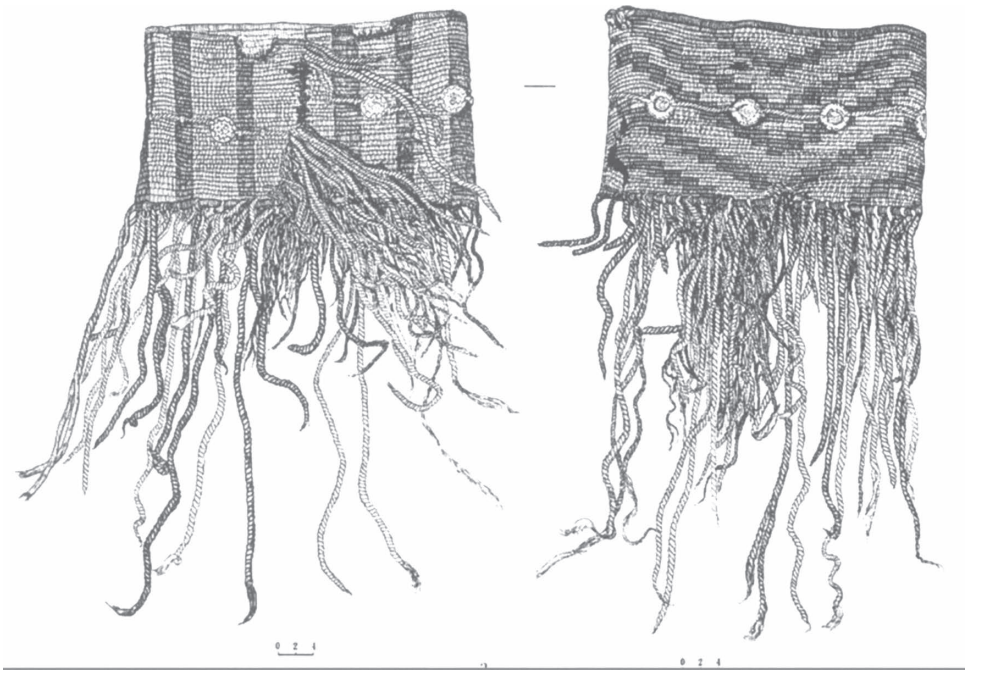


Figure 1.14 Loin cloth decorated with seven copper disks, M13 of Xiaohe Cemetery.

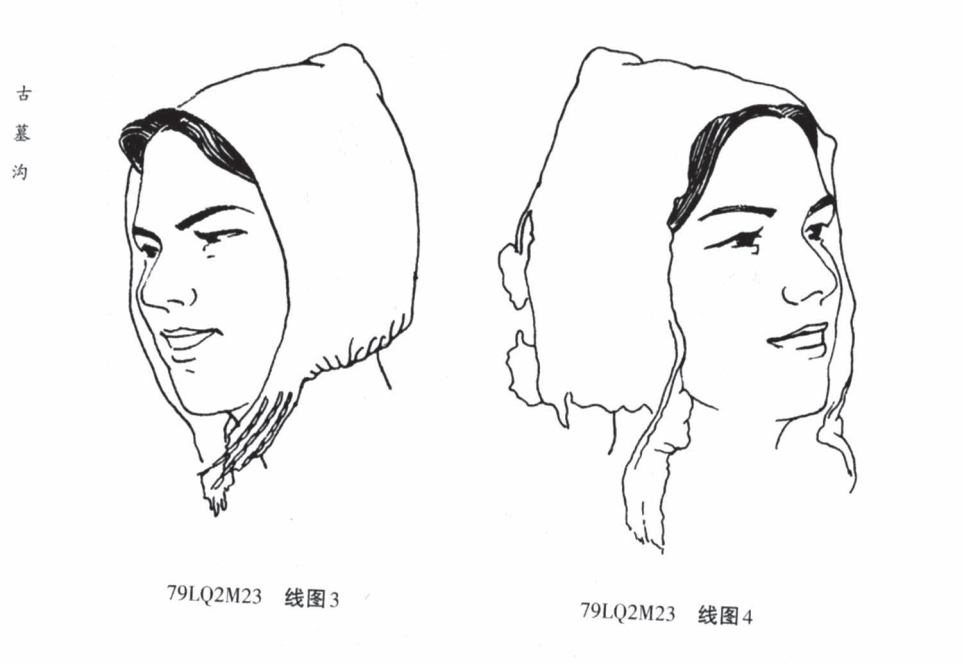


Figure 1.15 Pointed hat on the head of woman buried in 79LQ2M23, Gumugou Cemetery.

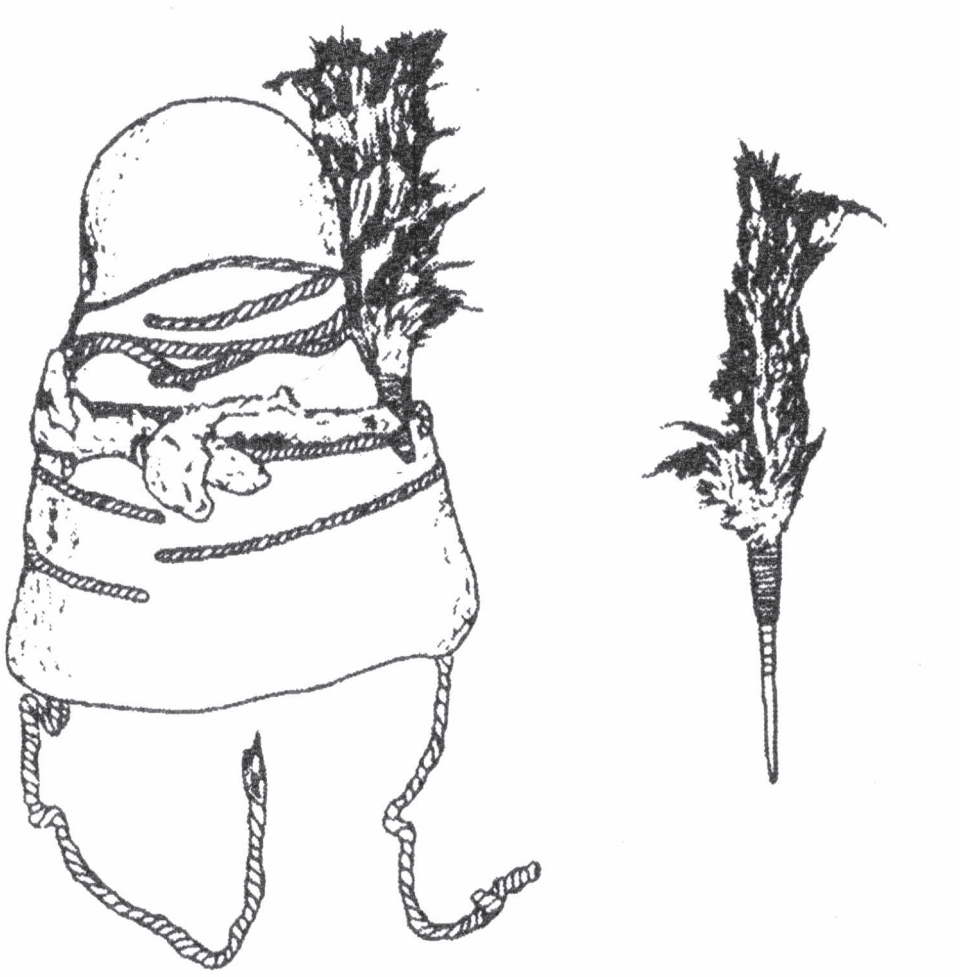
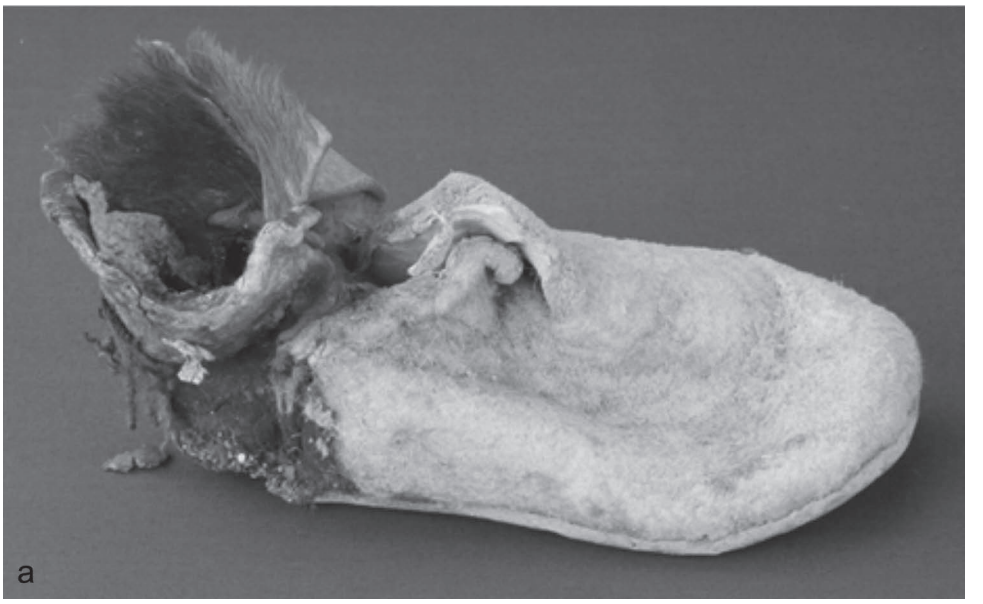


Figure 1.16 Tall felt hat decorated with seven rounds of red thread and plumes, M13 of Xiaohe Cemetery.

Pans were popular utensils also made of straw from local cattail grass, bark of *hongliu*, *jiejie-cao*, a grass of stem with joint knots (equisctum), peels of hemp and flax. In the no. 2 grave of Tiebanhe Cemetery, bundles of various straws were buried with the dead. It seems those weaving materials were used by the person in life, and buried as funeral goods. Though the straw weaving craft could be done by everyone in the community, exquisite works of some samples could have needed expertise. The baskets varied in size, in shape, and in decorative patterns of the weave. Geometric patterns included curves, parallel arch links, and triangles. Loosely woven vessels could contain dry pieces, and tightly woven with fine straw vessels could have contained fresh cheese. Non-specialist could hardly have accomplished this high level of craftsmanship.

Straw-woven pans, similar in size to dust pans of our time, were widely used to cover the head, belly, and legs in Kongquehe graves. Obviously, they were not used as dust pans but more likely associated with funeral rites (Figure 1.19).



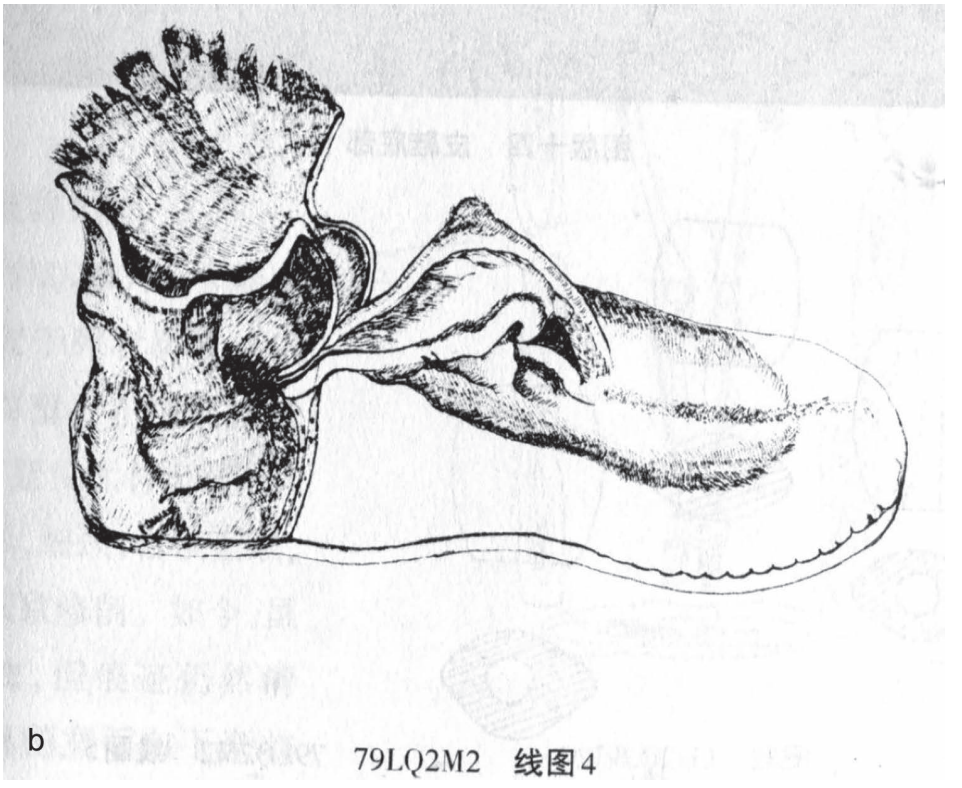


Figure 1.17a, b Boot of leather sole and felt upper. 79LQ2M2:4 Gumugou Cemetery.

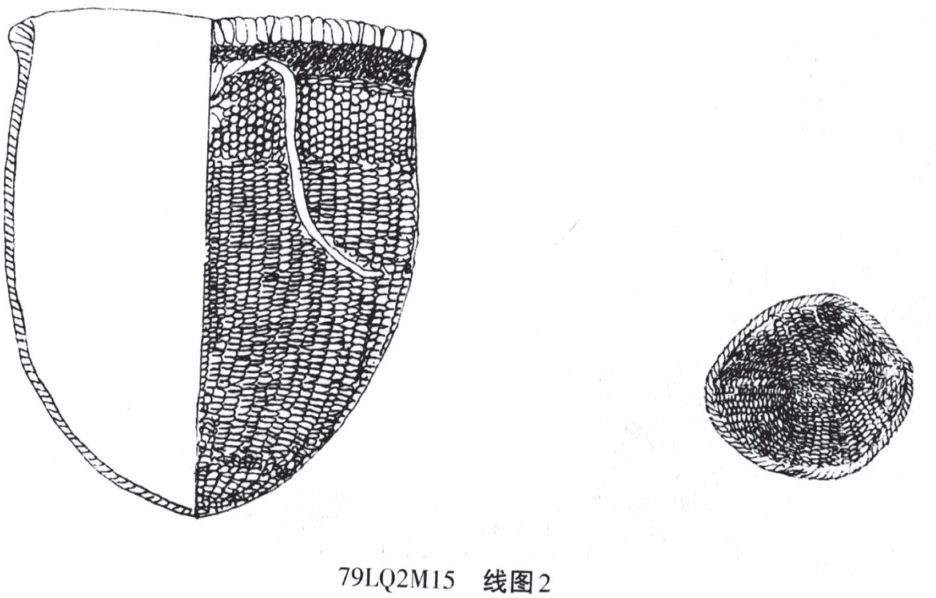


Figure 1.18 Straw basket from Gumugou Cemetary 79LQ2M15, 13.5 cm in height.

The Spiritual World of the Bronze Age Kongquehe Culture

The burial arrangements reveal the cosmology of the people of the Bronze Age Kongquehe. Survey of all the excavated burials show a clear pattern: all the coffins were closed on top with cowhide. The shrunk hide sealed the coffin so tightly that even sand could hardly penetrate into the coffin. Meanwhile, all coffins were bottomless. Wooden poles painted red, some over 4 m high, stood in front of the coffins for hanging sacrificial goods such as bovine skulls. This arrangement shows that people of that time believed that their souls would enter the earth, and the poles were bridges that would enable them to communicate with heavenly beings.

People of Kongquehe held such a great faith in ephedra that everyone carried ephedra to the next world. In all the burials, a small bag of ephedra was attached the body; straw baskets containing arrows and ephedra twigs were in graves; ephedra twigs covered the entire bodies of important figures. The abundant ephedra native in the Lop-nor region provided the supplies for the ritual use. The stimulation and hallucination effects of ephedra were well-known and appreciated by the people.

Seven was a mystic number that coded everything and everywhere in Bronze Age Kongquehe cemeteries. The most outstanding example consists of the seven circles of wooden poles surrounding the major tombs of single males, and lines of seven poles radiating out like the shining sun (Figure 1.1). Felt hats were decorated with seven circles of red thread; seven lines were carved on the bottom portion of wooden poles representing female genitals and male organs; seven red ribbons decorated woolen blanket body wraps; seven copper plates were attached on loin clothes on women's bodies (Figure 1.14); seven jade beads were in women's necklaces; there were seven teeth on wooden combs (Figure 1.20); the bottoms of straw baskets were woven with seven warps and seven

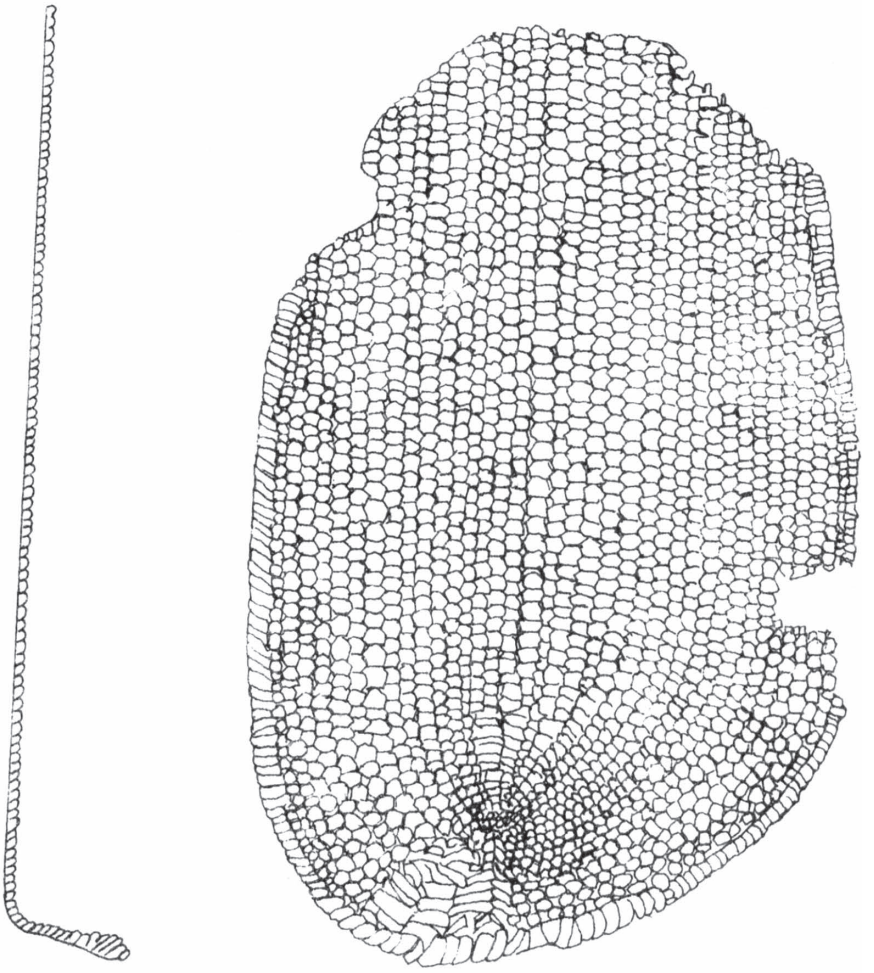


Figure 1.19 Straw-woven pan, 79LQ2M26, Gumugou Cemetery.

wefts; seven woolen threads circled wooden figure heads around nose level (Figure 1.6); long bracelets of bone beads and stone beads wrapped wrists for seven rounds; in the distinguished wooden house tomb of Xiaohe Cemetery, seven layers of bovine skulls were sacrificed; seven snakes were buried with a man, and so on. The list of seven is an endless one. Seven was a sacred code that permeated every aspect of the material and spiritual lives of the people.

They also developed a snake cult. Wooden sculptures of snakes were buried in male graves; a snake head was put in the hollow of a wooden phallus hanging below the belly of a woman's body. As mentioned earlier, seven snakes, including sheds, were buried with a man.

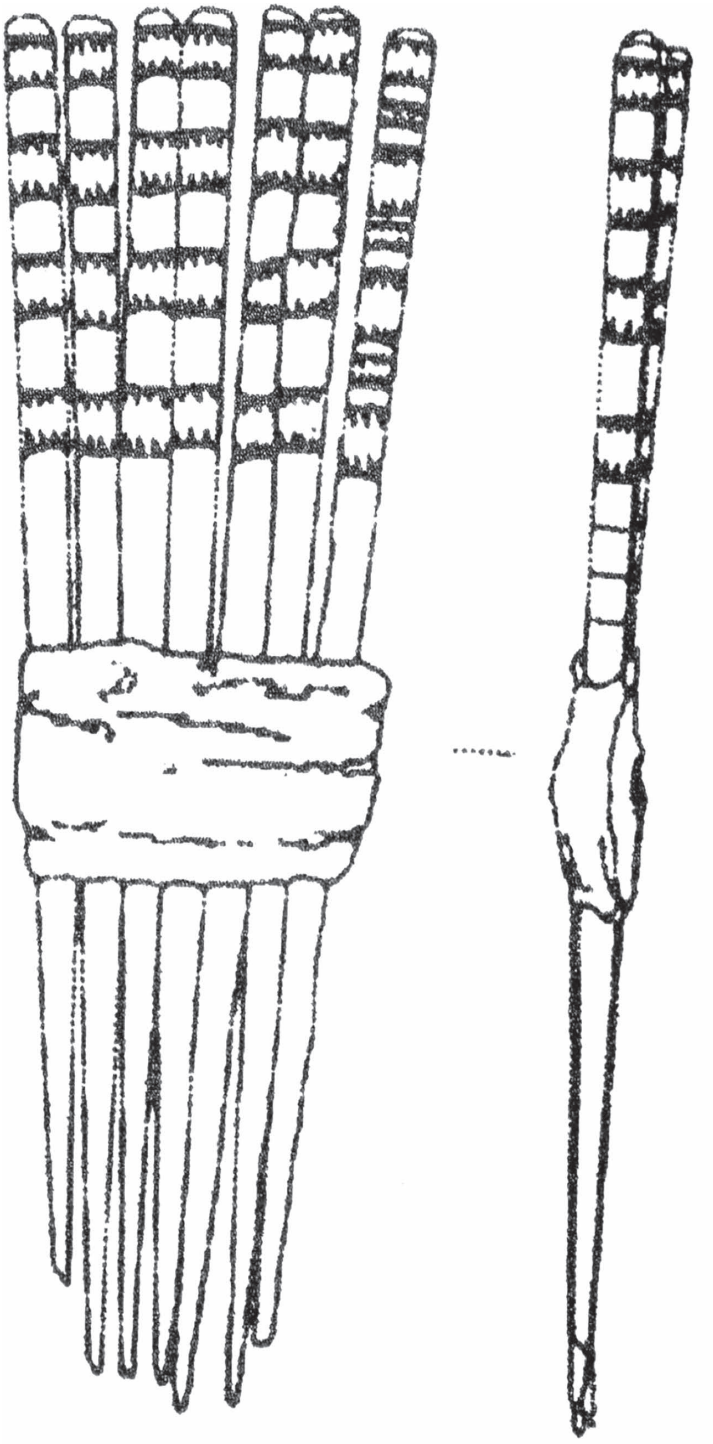


Figure 1.20 Comb of seven teeth. M13 of Xiaohe Cemetery.

Figure 1.21 Bovine skull and horns on the chest of a body, Xiaohe Cemetery.

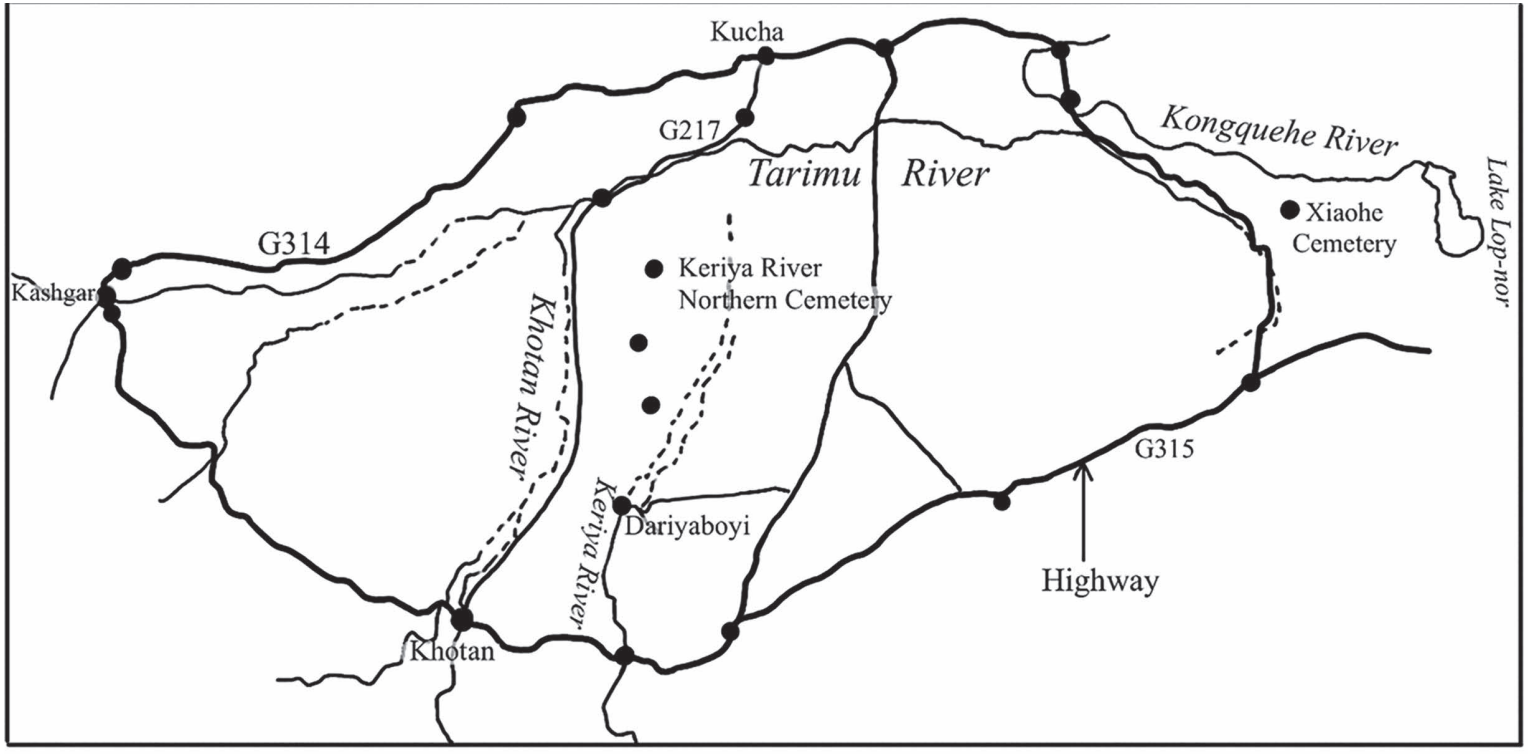
Cattle were sacred animals. Bovine skulls were hung on top of wooden poles and cow dung was heaped at the foot of the poles. Bovine skulls with horns and painted with red and black lines were set on the chests of major figures (Figure 1.21). The large number of bovine skulls in seven layers sacrificed in the big tomb of Xiaohe is another example of the cult of cattle.

Red color was sacred. Red color was painted on poles above graves, decorated on woolen blanket wraps, on felt hats, on leather shoes, and more.

Exiting Kongquehe Valley

Five humdred years after they settled in the Kongquehe valley, around 3500 years before the present time, the people migrated out of the area in search of new homelands. They moved westward along the Kongquehe entering the catchment of the Tarim River. Moving upstream along the Tarim River, one branch of migrants turned left into the lower Keriya River and settled there around 3300 years ago. The Keriya River Northern Cemetery discovered in 2008 is the evidence of this migration.

What forced the people out of the Kongquehe valley needs further research. A long spell of drought lasting from ca. 3400 to 2200 years ago in this part of Central Asia once dried up the Lop-nor. This regional climate change could have deteriorated the ecological environment of the Kongquehe. But the long-term and large regional environment could not account for the very circumstance that forced the Kongquehe people out of their established homeland. Archaeological works could provide an insight into the ecological changes affecting the



Map 1.2 Sketch map of the site of Keiya River Northern Cemetery.

narrow region where the Bronze Age people lived. Almost all the discovered graves and cemeteries dated to that period, whether single ones or a few or a few dozen, remain on the tops of *yardangs*. The current ground level around the *yardangs* is about 10 m lower. Obviously, the tops of the *yardangs* were remains of the ground level where the Bronze Age communities lived and moved around. Wind erosion cut away the lands around the ancient graves because the soil was deprived of the protection of vegetation. The Bronze Age people cut down trees to make lavish tomb markers and coffins, and eventually used up the resources of the valley. Nowadays, one sees almost no trace of *hongliu* and *huyang* trees when walking around the cemeteries of Gumugou, Xioahe, Xianshuiquan, and those around LE city sites. The way the Bronze Age people exploited resources was simply unsustainable for the environment. People suffered as the environment deteriorated. The famous "Beauty of Loulan" actually died of silicosis in her forties. However, the communities settled in new areas with water and trees, such as the Keriya River Northern Cemetery, and continued to exploit abudant natural resources. This pattern of migration and settlement, not limited to the communities that created the Kongquehe Bronze Age culture, could be charactersitic of the human landscape of the eastern part of Central Asia.

The Legacy of Bronze Age Kongquehe Culture

Excavations and researches of Kongquehe reveal a unique Bronze Age culture. This was a group of settled people who did not make pottery but made fine woolen textiles, leather and felt shoes, straw baskets, wooden and jade sculptures, and many other artifacts. Though no bronze tools have been discovered, the workmanship of the artifacts suggests that bronze tools were used. Many of the dried bodies and skeletons look European, though they differ in nuances such as hair color. DNA analyses show persistence of male inheritance but female diversity involving East Asian admixture at Xiaohe Cemetery. Yet the dominant tomb at Xiaohe Cemetery buried an eminent woman with abundant funeral goods and a large number of skulls from sacrificed bovine, indicating that she was a matriarch of the tribe. Meanwhile, the six major tombs at Gumugou that included buried adult male bodies suggest the existance of a patriarchal social structure. The people in Kongquehe valley cultivated wheat, herded cattle, and hunted deer. However horses, either wild or domesticated, were absent. The absence of pottery and horses distinguished the Kongquehe from contemporary Bronze Age cultures in the Eurasian landscape, such as Yamnaya and Afanasievo cultures where the people were equipped with pottery and horses. In short, this was a group of people that entered Kongquehe valley around 4000 years ago and replaced the indigenous culture. They interbred with local people, mostly women. They exploited the limited natural resources and settled in this ecological niche in a special way to lead a farming and herding life. Five hundred years later, after having exhausted the natural resources of the Kongquehe valley, by cutting down all the slow-growing woods and drying up the streams, they moved on to another area and eventually mixed into the diverse population of east Eurasia.

Where did these people come from and where did they go are intriguing questions that have encouraged many debates and speculations. Their European-like physical types prompted scholars to point to the early horse-herding people on the steppe as their origin. However, the clear differences in material culture made that hypothesis improbable. In fact, the European physical semblance does not tell much about the origin of this specific group, as there were already quite a few types of "Europa" population that entered Xinjiang around 4000 years ago.[12] The people who settled in Kongquehe 4000 years ago had to adapt to the specific environment, including the lack of adequate clay to make pottery, so the efforts to trace ceramic

use among these people have been revealed as futile. Meanwhile, several kinds of artifacts of unexplainable usage provide clues that they could be one of the waves of migration on Afro-Eurasian continent around 2000 BCE. An artifact hard to explain in the local context is a female marble statue (27.5 cm high) discovered in Gumugou Cemetery (Figure 1.5). The local unavailability of the material shows that this artifact was not indigenous, but could have been made before the people settled in the region and kept as a memento. Without evidence that the Kongquehe communities engaged in long-distance trade, the only assumption one can make at this stage is that the migrants carried this precious artifact as a memory of their past shared with other European-looking peoples involved in the migrations when they parted ways and strayed into Kongquehe valley. Should this group of people have left the Central Eurasian steppe to venture eastward, they must have done so before the domestication of the horse took place. As for the direction where the Kongquehe people came from, there is a clue in an exhibition cabinet in the history museum at Moscow (Figure 1.22). The items look exactly like those from the graves of the Kongquehe valley. They are roughly dated to 3000–2000 BCE, and they were found in a bog in the Caucasus Mountains in the 1930s. No further information is available. Even though one cannot use this as the evidence of the itinerary of the Kongquehe people, the striking similarity of the material culture is sufficient to give a hint of the routes of one of the numerous groups of migrants of the 3rd millennium BCE on Eurasia.

The unique assemblage of the Bronze Age Kongquehe culture suggests that the peoples of the Eurasian steppe could have changed ways of living when climate changed or the ecology of an area was negatively affected by their own activities. With their cattle and sheep, they could have roamed around to seek better pastures; keeping precious wheat and millet seeds meant they always hoped that they could find another land to plant the crops. Ephedra twigs, in woolen bags or spread over the bodies, were as sacred if not more sacred than the wheat seeds found in the straw baskets in every grave. The ephedra plant was ubiquitous in the Lop-nor area. Kongquehe people certainly appreciated its stimulating and hallucinating effects. The fact that ephedra as a drug was available to everyone, not just for priests or shamans as in the Avestan and Vedic cultures, means that people used it to aid them in fighting daily hardship. Wherever the Kongquehe people came from, they continued their search for a good life, but probably remained in the eastern part of Central Asia. In their settling and roaming, they facilitated the transfer of material and spiritual cultures across eastern Eurasia. The wheat grains buried with the dead in Kongquehe were the same type of wheat transferred to agricultural lands in China, but they are dated earlier than all samples discovered at agricultural sites in China.[13] Therefore, the Kongquehe cultivators could be one of the carriers of wheat from West Asia to China.

Kongquehe people could be the earliest user of ephedra, as the plant was widely available in the Lop-nor area. However, as they left the Lop-nor area, the fact that they were no longer able to get the same supply could have been a problem. The communities who lived in other areas, nomadic or sedentary, could have established a more hierarchical social structure where only the elite, priests first, could enjoy the stimulating product, given the limited supply. The people there, including former Kongquehe residents, might also have to search for substitutes to keep up their spirit and performing rituals of communication with gods. Roughly contemporary to the exodus from Kongquehe valley in mid-2nd millennium BCE, priests in Vedic literature drank soma and those in the Avestan literature took haoma in their rituals in order to reach the gods. Many erudite scholars have discussed what exactly the species of plants for soma and haoma were. Given that both Vedic and Avestan cultures traced their roots to Central Asia, the discussion invariably involved the flora and people there. Among the candidates in the debates – cannabis, a mushroom (fly agaric), poppies, and ephedra – ephedra seems to be one valid candidate or ingredient.[14] The ephedra used in Kongquehe so far predated all the literary and

Figure 1.22 Wooden sculptures in an exhibition cabinet in a Moscow museum.

archaeological records. Thus one may assume that the Bronze Age Kongquehe people started the habit of consuming ephedra as a stimulating agent, and the habit spread to other communities when they migrated out of the Lop-nor region. The habit of taking stimulants could have caused the people to try other stimulating plants when ephedra was short in supply. Chapter 8, "Cannabis and Other Plants With Peculiar Properties on the Silk Road" by Kazim Abdullaev, analyzes amulet seals discovered from Fortress of Gonur 1 of BMCA complex, and asserts that images of poppy, cannabis, and ephedra were carved on the amulets. These amulets show the divine nature of the plants to their carriers, same as the Kongquehe people did when carrying the real ephedra bags on their way to another world. The BMCA people, though, have more choices of plants, and probably less supply of ephedra.

This group of warriors – wearing leather and felt boots, woolen woven capes, pointed hats or high hats, stimulating their spirits with ephedra, shot wild animals and probably enemies with arrows – could be one of the predecessors of a loosely defined people roaming the Eurasian steppe who appeared in historical records about a thousand years later, namely the Sai in Chinese, or Saka in Iranian and Indian, and Scythians in Greek records. The Scythians were horse riders who traversed the steppe speedily and spread throughout a large area north to the agricultural lands of Eurasia. The Kongquehe people, obviously, had no horses. Material cultures of the Sai/Saka/Scythians were much more sophisticated than those of the Kongquehe. Nevertheless, some of the unique Kongquehe cultural traits seem to persist into the nomads roaming on their horses a thousand years later. The Persians named two groups of Sakas: the Saka Tigrakhauda (the Saka of the pointed hats), who lived around marshland areas, and the Saka Haumawarga (the *haoma*-consuming Saka), who lived in the plains and deserts.[15] The pointed hat is a stereotype of Sakas as seen on sculptures of Sakas on monuments in Iran and India. The *haoma* consumed by the Sakas, however, was more likely a kind of cannabis.

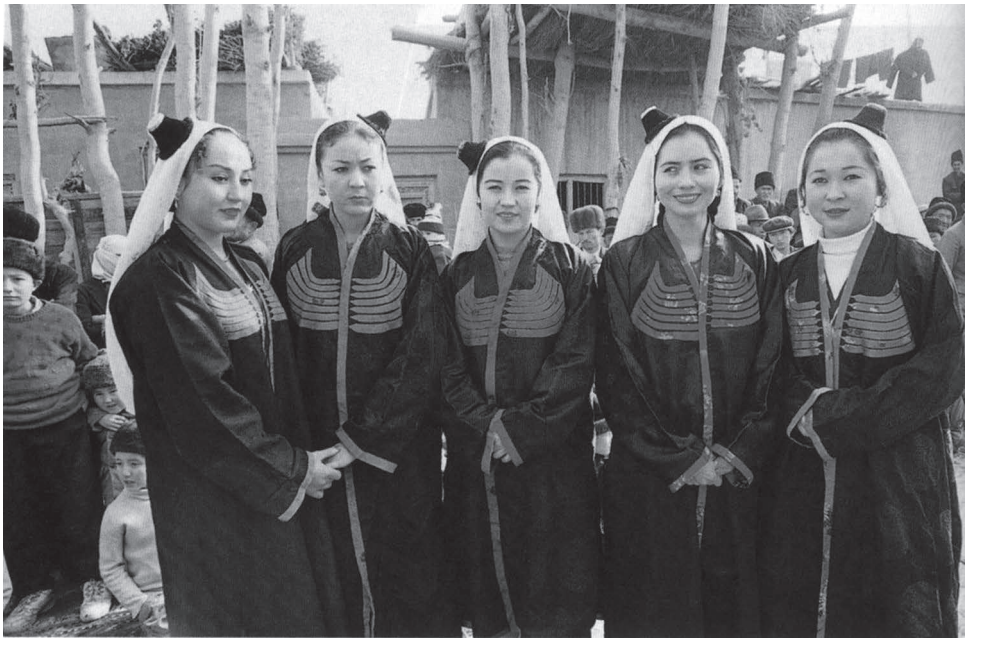


Figure 1.23 Women wearing festive robes decorated with seven ribbons on each side of the chest.

In Pazyryk Cemetery in Altai Mountains, Kazakhstan, dated to the mid-1st millennium BCE, archeologists found in Kurgan 2 a bronze brazier containing burned stones. Hemp seeds on the burning stones created intoxicating fumes for inhaling at the funeral. This setup of ritual is exactly as described by Herodotus in his *History* (iv. 73), who also mentioned that the Sakas were shouting with joy after inhaling the fume.[16] The Sakas inhaled but did not drink *haoma*, as Zoroastrians did. Meanwhile, how the Kongquehe people consumed their ephedra is not known. Cannabis is not ephedra, but both could have the ingredients of the *soma*/*haoma* used by priests to get stimulated and intoxicated. Descendants of the Kongquehe people, who survived the deteriorated environment, merged their blood and cultural traits into the vast landscape of Central Asia. Those people, such as the Sakas, stayed in peripheral communities and probably continued to indulge in the use of stimulating plants to cope with their harsh lives as herders, hunters, and occasionally farmers. The oases near the Keriya River later in historical periods yield documents written in a language termed as Khotanese Saka language, which was a peripheral language of Indo-Iranian. Some Saka nomads evolved into Muslim communities in Xinjiang carrying special traits of the ancient cultures, including those shown as early as the Kongquehe valley. In forty years working as an archaeologist in Xinjiang, the author observed many cultural features recalling the people buried in the Kongquehe graves. For instance, the men of the Keriya region wear a kind of conic high hat, though the top the cone is flat instead of a sharp point. On women's festival robes there are seven ribbons on the chest (Figure 1.23).[17] These personal observations by a seasoned archaeologist could serve as a reminder that there are many more stories buried in the sands of Takla Makan and among cultures of modern communities living in the region.

Notes

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2

TOCHARIAN CONTROVERSY

A Mobile Language Landscape of Central Asia

Xinru Liu

Genetic studies of ancient human migration have gained momentum in the last couple of decades. Research on this front has revised and continues to revise the map of human evolution and migration. Though archaeologists, scientists of genomics, and historians differ in their explanations of the data, all have started to realize that evolution of human race and their dispersal across the earth was not a lineal process jumping from one stage or station to another following a single direction. In the development of modern *Homo sapiens*, the genes of Neanderthals, Denisovan, and probably many other early hominids were clearly admixed. New research tools have also started to revise the map of human migrations and language diffusion, especially the Indo-European languages, across Eurasia, including the eastern part, that is, the lands of the Silk Road. Before genetic studies were applied to coordinate routes of human migration and language transfer, archaeologists and linguists tried to use material culture, including natural environments and material remains of settlements, to mark the boundaries of different languages. The shifts of boundaries of material cultures, therefore, became proxies for the advance or retreat of speakers of certain languages. Data from genetic studies has disrupted the theoretical correlation between material cultures and languages. Groups migrating from one region to a remote region could have brought their own genes but adopted the indigenous material cultures. Challenged by the discrepancies between material culture and genetic data, scholars look to align genetic data with language diffusion and fusion. The alignment of language with genetics, however, is as controversial as, if not more so, than linking material cultures with languages. The arduous path of studying the "Tocharian" language and identifying ancient speakers of the language is one example of trying to map the language landscapes of the world of the Silk Road with the variable tools of traditional scholarship and modern technology.

In the study of linguistic landscapes of Eurasia, focusing on Indo-European languages alone creates a blind spot, as it is ignoring other archaic contemporary language families. Not until recently have studies of Transeurasian languages provided details of another important language family, including Japanese, Korean, Tungusic, Mongolic, and Turkic, which could have been in Central Asia before the arrival of Indo-European languages.[1] The reconstruction of the homeland of Indo-European languages, or the Proto-Indo-European language, has correlated linguistic and zoological/botanical evidence to identify the stages of migrations of languages and the people who spoke them. The best example of this correlation is through

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tracing the use of the horse, investigating its domestication and the invention of horse-drawn vehicles, especially the horse chariot having two spoked wheels, to identify the possible speakers of early Indo-European languages. It is known that the vocabulary of horse culture was present in all known early Indo-European languages as early as the 2nd millennium BCE. The Proto-Indo-European reconstructed by linguists should go back at least a thousand years earlier, when we have no record of any of the Indo-European languages per se. However, it is argued, material cultures that exploited the domesticated horse and horse-drawn vehicles should be evident in the remains of the earliest Indo-European language speakers. Looking for early speakers of Indo-European languages thus has been linked to the search for the earliest horse tamers and chariot makers. All the articulated researches brought to light many new discoveries, offering insight into the early history of the landscape of the Silk Road, but they ignored the peoples who spoke other languages, making for a very incomplete picture. Many of the ancient languages have not been as well studied, and some of them simply do not give us any avenue to find out what they were. Even well into the historical time, the language of the Xiongnu who built a powerful empire on the eastern part of the steppe during the centuries before and after the Common Era is illusive to us, except for a few titles of their officials recorded in Chinese historical texts. Similarly, the language of the Yuezhi, one of the major candidates as the founder of the Kushan Empire, is unknown. For a long time, scholars, including myself, assumed that Yuezhi was a people who spoke Tocharian, a unique language that bore the marks of the western branch of the Indo-European family in the region of Indo-Iranian, the eastern descendent of Proto-Indo-European. However, research on inscriptions during the Kushan times from Tokharistan, in present day Afghanistan, reveal no evidence of the named Tocharian language. The hypothesis that the Yuezhi spoke Tocharian has thus lost any validity.

The Tocharian language became a focus of controversy in the field of Indo-European language studies because, even though this language family is the best-studied linguistic system, it has been laden with an association to the concept of the Aryan race. The Aryan race theory was a product of now-failed race science, which served as the theoretical pillar of Nazism. Early studies of Indo-European languages in the 19th century categorized the linguistic family into two major sub-families, the Centum and Satem. Centum, including German, Italic, Celtic, and so on, spread to the west, while Satem included Indo-Iranian, Baltic, and Slavic languages spoken by the communities that lived in regions east to that of the Centum speakers. This categorization, though technically linguistic, somehow alleviated the frustration felt by European Indo-European scholars from West Europe. Linking the dark-skinned Brahmans in India with the fair-skinned Europeans who were rulers of colonial India with the exact same ancestry language was not palatable. The Third Reich was not shy to exploit this academic development to advance the white supremacy Aryan racial claim. Tocharian, a language documented from mainly Buddhist and Manichaean documents excavated from Kucha, Yanqi, Turfan, and other oases communities along the Silk Road of north basin of Tarim, is identified as a Centum, albeit an archaic form of Centum dated to at least 4000 years ago, but it was used in eastern Central Asia no earlier than the 5th century CE. Which means it could be a language that branched out early from the Proto-Indo-European, remaining in the eastern region where most Indo-European spoke Satem. Therefore, it is hypothesized that there should have been some white Europeans who either remained or wandered into the Taklimakan as ancestors of the local people. The scholarship of Tocharian that began in the early 20th century was necessarily infested by an ideological bias. Even during the late 20th century and first two decades of the 21st century, the ghost of Aryan race still haunts research on Tocharian language and the related stories of human migrations.

In his landmark book *The Horse, the Wheel, and Language*, 2007, David Anthony proposed that "most persistent, robust material-culture frontiers were ethnolinguistic".[2] He also cautions that ethnolinguistic frontiers were not necessarily biological, as intermarriage or interbreeding of different clans happened all the time. Anthony maps geographical distribution of archaeologically revealed horse domestication and chariot craftsmanship to index the spread of Indo-European languages on Eurasia. He named the Yamnaya horizon (3300–2500 BCE) the material expression of the late Proto-Indo-European languages. The Yamnaya people used wagons for transporting bulky stuff and they rode on horses for speed. Independent from the ethnolinguistic Yamnaya culture, which branched to the west and east to develop into Centum and Satem, a group of early Indo-Europeans migrated from a culture of Volga-Ural to the east across the Kazakh steppes to west Altai around 3700–3500 BCE. The Afanasievo culture should then be the beginning of a new branch from the Proto-Indo-European, the Tocharian.[3] The material cultural assembly, including bones of sheep, goat, cattle, and horse, convinced Anthony that those Afanasievo people spoke an Indo-European language.[4] But naming it Tocharian, the language described as used in the northern rim of the Tarim, needs to match the relevant material cultures in the archaeological sites in Tarim, which Anthony did not know firsthand. Therefore, he tentatively suggests that Tocharian was the language of the "Late Bronze Age Europoid 'mummies'" found there.[5] By associating those European-looking mummies with Tocharian, a language more akin to Centum (the west branch of Indo-European), Anthony somehow deviates from the standard of excluding biological factors set by himself.

With the development of genetic studies on human migration, the biological components of the human remains can confront the question of using material culture as a proxy for ethnolinguistic frontiers. Using human remains from Yamnaya, the laboratory of population geneticist David Reich reached the conclusion that herders from the steppe, that is, the Yamnaya Horizon, moved westwards replacing the gene pool of central and western Europe around 4500–5000 years ago. These herders are known archaeologically as the Corded Ware culture. This scenario is so similar to that of Gustaf Kossinna, the German archaeologist who provided the fodder to Nazi white Aryan supremacism, that it alarmed even the participating researchers. In a paper titled "Kossinna's Smile", archaeologist Volker Heyd offered a valid critique. Heyd does not challenge the genetic data, but points out "Corded Ware and Yamnaya burials are more different than they are similar". Therefore, using genetic data to draw maps of migration misses complexity of the past.[6] A recent study on horse domestication published in *Nature* further questions the association of genetic data with material culture. "The role of the horses in this expansion remained unclear, as oxen could have pulled Yamnaya heavy, sold-wheeled wagons".[7] According to this study, domestication of the horse that was the ancestor of the horse in human history happened much later, around 2000 BCE, than the migration of Yamnaya into Europe ca. 3000 BCE. As the words "horse" and "horse chariot" were key words defining Indo-European languages, the association between genes, material culture, and language looks even weaker. This debate brings biology back into the study of human migration. Genetic research exposes the deficiency of using material cultures as proxies for language evolution and spread, but at the same time it does not offer a clearer picture.

The debate around the association of biology and language also targets to the study of the ancestry of South Asia, the original source of Indo-European language studies. Peter de Barros Damgaard et al., published in *Science* (29 June 2018, 360) under the title "The First Horse Herders and the Impact of Early Bronze Age Steppe Expansions into Asia", argues that

Yamnaya and Afanasievo expansion did not contribute to the population of South Asia. Rather, it was a second wave of

> Late Bronze Age (2300 to 1200 BCE) through established contacts between pastoral steppe nomads and Indus Valley bringing the specific ancestry of the Europe Neolithic as well as CHG (Caucasian hunter gatherer) specific ancestry, and with them Indo Iranian languages, into northern South Asia.[8]

Differing from this approach, Vagheesh Narasimhan et al. studied genetic components localized around the northwest frontier of South Asia and they asserts that Yamnaya culture contributed to both the gene pool and language of South Asia. It cites the discrepancy between Corded Ware culture and the genetic pool of Yamnaya in Europe as an example of discrepancy between material culture and language. Similarly, that the absence of Central Asian material culture on the frontiers of South Asia could not exclude the possibility of Indo-European speakers entered into South Asia. This research, however, did not use direct genetic samples from South Asia, but rather extrapolated its conclusion from samples taken from northwestern surrounding areas.[9] That the Indo-European language entered South Asia is a historical fact. But how did the speakers adapt to the new homeland and settle there if they did not carry a distinctive material culture with them? This research notes a male sex bias of the population influx to South Asia, which suggests that the likely scenario for admixture took place during male-dominated migration/invasions. However, when linking language with genes, the authors invoke Brahman endogamy to explain Sanskrit language hereditary in the upper caste. The Brahmans, however, did not practice clan endogamy. They restricted their marriage within the caste, but the Brahman *varna* expanded all over South Asia through marriage alliances with priest lineages of formally non-Indo-European communities. In arranging marriage, kin within seven generations on the paternal side and five generations from the maternal side are forbidden to intermarry. Therefore, Brahman *varna* was never a pure blood clan, but a vast marriage network that served to induct priests of various communities into the religious and social elite. This research on Indo-European languages entering South Asia simply returns to the Max Müller version of Aryan race theory. That is to say, Indo-European languages are the most sophisticated languages and thus spoken by the most intelligent people – the Aryans.

The two research projects discuss what the impact of Yamnaya culture on South Asia was, but neither mentions which branch of the Indo-European language was involved. However, whether the Yamnaya culture was ancestor language of South Asia, the branch that entered South Asia could not have been Centum, or Tocharian, as Indo-Iranian or Indo-Aryan was standard Satem. Also, neither project addresses the material culture per se. Here the leads offered by genetic studies to trace language spread only further muddle the outline first made through material culture as the index for the evolution of Indo-European languages.

The landscape of the eastward extension of Indo-European language shows the similar problem of correlating archaeological data with DNA. The assumption that the Tocharian language descended from the Afanasievo culture gained acceptance on the basis of the appearance of some "European-looking" desiccated corpses, called "mummies", found at sites in Tarim oases, which invoked a fantasy of white Aryans living in faraway eastern lands. The research on the family of Indo-European languages identified as Tocharian addressed a language from religious texts found in oases on the northern rim of the Taklimakan desert, from Kucha to Turfan. Research and debates around the language or two languages were long and tedious. Valerie Hansen, in her 2012 *The Silk Road*, succinctly summarizes the process of naming

the language Tocharian. In 1908, two German scholars – Emil Sieg and Wilhelm Siegling – deciphered an unknown language using a bilingual text of the unknown language paired with Sanskrit. The grammar of the newly discovered language is more Centum than Satem. At that time, Sieg and Siegling could not find a name for the newly discovered language. They found a note from a Buddhist text in the Uighur language discovered in the same region saying the text was a translation from "Twghry", which in turn was translated from an Indian language. They thus decided the language should be Tocharian, named after the region called Tokhara or Tokharistan in Afghanistan. Tocharian is a misnomer for the discovered language, Hansen concludes, as there is no trace that this language was ever used in Tokharistan.[10]

In any case, the name of Tocharian has stuck in the literature. Research on documents of the language have been prolific and have greatly enhanced our understanding of the cultural exchanges along the Silk Road. Meanwhile the misnomer also misled research in two directions of Indo-European language studies. One caused a misunderstanding of the possible language spoken by the Yuezhi people, who migrated from the border of agricultural China to Tokharistan. The other was to impose Tocharian as the language of the now voiceless "European-looking" mummies of Tarim basin as "Tocharian". With more documents discovered and researched, linguists divided the Brahmi script documents of Tarim into two dialects, Tocharian A and B. Tocharian B was the better established and more prevalent language in northern Tarim, used as both religious language and for official documents. Tocharian B now is called Kuchean, after more documents of the language have more recently been discovered, some of them citing the writing as Kuchean, meaning from the oasis Kucha in north Taklimakan. Tocharian A was less established and used mostly in Buddhist and Manichaean documents in an area east to Kucha, now called Agnean for Yanqi, named after the oasis Agni or Yanqi.

Though Tocharian is a misnomer for Kuchean and Agnean languages, north Tarim was associated with the name *Twghry*, in Uighur Buddhist and more in Manichaean texts. A population of Uighurs migrated from the Mongolian steppe to the Tarim region to establish a state called Uighur Kaghanate in the second half of the 9th century, with Gaochang city in Turfan basin as the capital. Under the Uighur rule, Manichaean and Christian deities joined the pantheon of Buddhist, Daoist, Zoroastrian, and local gods.[11] Looking through Uighur manuscripts from the Gaochang region, Rong Xinjiang noticed that the word *twghry* appears mostly in Uighur texts dated to the 10th to 11th centuries. Manichaean texts refer to the land as "Four *Twghry*", which could be called the Four Tokharistans. Rong thus proposed that the Manichaeans formerly established in Tokharistan in Afghanistan where there was the base for its propagation to the east. Under the patronage of the Uighur Kaghanate, Manichaeanism flourished in Tarim and thus moved their center in the east to the Turfan region and proselytizing north Tarim, including Turfan, Yanqi, and Kucha.[12] That religious missions carried their earlier geographical name to their new base is a plausible scenario. In this scenario, the *Twghry* did mean Tochara, but not the Tokharistan in Afghanistan, but the new Tokhara land established for Manichaean missionaries. Here the cultural elements muddle the neat outline of language movements, but meanwhile the exploration of the historically documented complex of cultural interactions made the appearance of the place name *Twghry* in an unexpected region less puzzling.

Tokhara, or Tokharistan, has been and still is the place name of northern Afghanistan, located on the southeastern bank of the Amu Darya. This was probably the region where Indo-Iranian and Indo-Aryan, both Satem Indo-European languages, bifurcated. The Indo-Iranian speakers entered into the Iranian Plateau, and the Indo-Aryan speakers entered South Asia. Linguists named the Vedic language and Sanskrit as Indo-Aryan because the senior lineages in Vedic tribes called themselves *arya*, the "elite". However, the "elite" in the Iranian language also called themselves *airiia*, a cognate of *arya*. The two sibling languages shared

much vocabulary, but many similar words could have the opposite meaning, because the two populations were divided on the cosmology. In Iranian language, *Ahura* means god, Daeva was the enemy of Ahura. In Sanskrit, Asura was the enemy of Deva, the name for gods. In Zoroastrian religion, the cosmos was divided by the good Ahuras and evil Daevas. In Vedic cosmos Ahuras were defeated by Devas, but not necessary the arch-enemy of the Devas until the story was further elaborated in Hinduism. In early India, Buddhist and Brahmanical texts often refer to all ethnic groups from Iranian region as Asura.[13] In the broad linguistic communities of both, the Aryan elite disdained junior lineages and call them *daha* in Iranian, and *dasa* in Indian. When Zhang Qian, the envoy of the Han Empire, followed the Yuezhi tribe crossed the Amu Darya and entered the region called Bactria by the Greeks and Persians in the late 2nd century BCE, he called it Daxia, very likely a variation of Daha. At that time, the Daha was likely a people who lived on the fringes of Indo-Iranian language domain. Tokhara could be derived from the word Daha, referring to a people within the Indo-Iranian linguistic sphere but living a life outside the cultural mainstream, people such as nomadic herders. The Greek geographer Strabo described Scythians as a loosely defined ethnic name for several horse-riding nomadic groups on the steppe, roaming to the east of the Caspian Sea. The group on the bank of Caspian Sea was called *Däae*; one of the groups of nomads who took over Bactria from the Greeks were Tochari.[14] Both *Däae* and *Tochari* were nomads that roamed, skirting sedentary societies. Both names could be variations of *Daha*. The label Tochari, however, stuck to the region we call Tokharistan. *Tuhuoluo* and its variations appeared in Chinese historical texts. In the *New History of the Tang Dynasty*, the author stated clearly the Tuhuoluo state on the other side of the Amu River was the land called Daxia in ancient times.[15] The transition of the regional name from Daha/Daxia to Tochari/Tokhara was a complicated process that probably involved several nomadic and sedentary populations. Inscriptions from the time when the Greek regimes relinquished their control of the region to newcomers from the steppe shows that the Lingua Franca there was Bactrian, a branch of Persian. The regional name Tokhara, then, had nothing to do with the Kuchean and Agnean languages used in north Tarim.

Even if the name Tocharian is taken away from the Kuchean and Agnean, those were still the languages of archaic Indo-European leaning toward Centum used in the period from the 5th to the 10th centuries CE around Tarim. To associate a material culture and physical features of human remains with an Indo-European language especially of the Centum branch prompted a flurry of attempts to identify suitable candidate cultures in Bronze Age Central Asia. When the beauty of "princess of Xiaohe", an amazingly well-preserved body of a young white woman, invoked fantasies in general onlookers, scholars quickly linked the European faces to the "Tocharian languages" discovered in oases along the northern edge of the Taklimakan. Though the date of the Tocharian, actually Kuchean or Agnean documents, could not be earlier than the 5th century CE, while the mummies were buried around 4000 years ago, European-looking people speaking a European language was simply a logical and natural association. The major argument to correct this long-lasting difference between the two sets of information is that Tocharian separated from the Pro-Indo-European language, namely from the Afanasievo culture, as early as the time of the mummies who lived in the Lop-nor region. After the people who buried the mummies vanished from the Kongquehe Valley, it is assumed, their language stayed in the region of Tarim basin and eventually appeared again in the documents of the 5th century CE.

Imposing a language documented 2000 years later on the mummies whose language we cannot know is no more than a speculation. In order to verify the association between the language and the mummies, archaeologists looked for similarities in material cultures of

Afanasievo and Kongque River. There are, indeed, numerous "European-looking" mummies preserved under the sands of Taklimakan Desert. Archaeologist Shui Tao summarizes the data on human physical types and material cultures in the Chinese part of Central Asia, namely Xinjiang, concluding that that there were four major physical types of peoples living in the Xinjiang region around 4000 years ago. They were: a population that came from the northwest part of Altai Mountains inside Xinjiang, looking like proto-Europa; a population coming from the Kazakh steppe of Central Asia, physically similar to the Europa of Mesopotamia; a population coming from the Pamir Plateau, similar to Europa of the east Mediterranean; and a Mongolian type population coming from the regions east to Xinjiang. By 3000 years ago, there was even more variety among the physical types in Xinjiang and their material cultures showing strong mixtures of many cultural sources. He reached the conclusion that none of the many cultures carrying a variety of European physical types could be identified as Tocharian speakers. Therefore, efforts of identify the population who spoke an archaic language, namely Tocharian, is scientifically impossible and therefore meaningless.[16]

The variety of material cultures associated with "European-looking" communities is not surprising to scholars familiar with the landscapes and cultures of Central Asia. Archaeologist and art historian the late Boris Marshak once informed me that in his encounters with numbers of ethnic groups in Central Asia, communities living at the same altitude and similar climate and ecological environments often share similar material culture. They wear similar outfits and live within similar kinds of dwellings and raise the same kinds of animals and crops, while at the same time speak different languages and have their own recollections of the past. The people of one language group could spread to regions separated from each other by long distances, but continue to speak the same language for generations. This observation of Marshak is anthropological, thus one should not simply extrapolate it to prehistory times. Nevertheless, Kirgiz people, discussed in this volume, are an example of this cultural resilience within changing environments. Kirgiz tribes migrated around and were separated from other co-patriates while spreading all over Central Asia and meanwhile maintaining their language and many elements of their core culture. If this observation on patterns documented in modern Central Asia can be applied to the archaic culture, it would suggest that ancient people did not dogmatically carry their material culture into new environmental settings, but did maintain their cultural core, including their language. The association of a language with a material culture is again put into question.

To question the association of Tocharian with mummies from Bronze Age sites of Kongquehe Valley, Wang Binghua in his report described a unique culture that was distinguished from that of the Afanasievo because of its special natural environment. The human remains from graves of Afanasievo share similar physical types with those of Kongquehe Valley, that is, they were "European looking". The similarity, however, stops there. The burial customs differ to the extent that it is obvious that the communities had different cosmologies. In Afanasievo one or two graves were marked by stone wall enclosures. The orientations of bodies were not uniform, but most of them had the head in the southwest. Pottery was abundant in Afanasievo culture. Handmade pots have ovoid egg shapes with pointed or flat bottoms. Artifacts were made of copper or stone. Graves in Kongquehe Valley, in contrast, have no stone enclosure. Meanwhile at the remarkable cemetery of Gumugou each of the six major tombs was marked by seven circles of wooden sticks in the center and lines of sticks radiating from the center. Each body was covered by a bottomless wooden coffin, and the interred were positioned on their backs with their heads in the east. In Kongquehe Valley, the graves had no pottery at all. Every buried body was attached with a straw-woven basket, containing ephedra and wheat grains. Artifacts were made of wood, cattle or sheep horns, and bones, and there was no trace of horse, domesticated or wild. Aesthetic

values of the two cultures were also very different to judge from the artifacts. In short, linking the two quite different Bronze Age cultures to one archaic language is totally without basis.[17] The assumption that Afanasievo culture separated from Yamnaya culture to create a different dialect is based on the similarities and differences between the two material culture assemblages. The Kongquehe Valley material culture was so different from that of the Afanasievo culture that the flimsy thread of Tocharian language linking the two archaeological cultures separated by long and rugged terrain is impossible to sustain.

The Kongquehe River flows from the Tianshan Mountains eastward to Lake Lop-nor. The terrain of the delta is not as rugged as the mountainous terrain upstream. Water streams cross and cut, forming lakes and marshes of reeds. Woods of *Huyang* (populous diversifolia), a poplar native to this region, grow thick and dense along the river banks. Patches of reeds and *luobuma* (apocynum venetum) cover the lowlands and marshlands. This flora created fertile soil for limited farming, and provided an environment for wild animals that could sustain some hunting and fishing. Though the climate and ecology did not change much in the last 20,000 years in the delta, the ecology of the region has been fragile. *Huyang* is a slow-growing species taking decades of nurture to be useful for humans. Just a short distance from the banks of the streams on the desert of Lop-nor, where major sites of the Bronze Age cultures are located, only fallen trees and dried up lakes and reed patches remain nowadays. About 4000 years ago, a group of people who knew how to herd animals and plant wheat and millet moved into the region and replaced the population using microlithic tools for hunting and gathering. From the cemeteries of the region, at Tiebanhe, Gumugou, and Xiaohe, archaeologists found the people then looked like "Europeans", wearing pointed felt hats and woven woolen capes and shoes made of cattle hide. Though the human bodies have been well preserved in the arid climate, the crushing desert winds and sands wiped out traces of their residences and farming activities. Archaeologists so far have found neither pottery nor bronze vessels in the graves. Naming it Bronze Age culture is because the hard wooden utensils could not been carved without bronze tools. One may assume that the bronze tools were too useful to be buried with the dead. But without pottery how could the people prepare their food? Wang Binghua observes that even nowadays residents of the Tarim Basin cook their meals without pots. Women pour flour paste on a hot burn large pebble to make pancakes; burying meat meals in hot burn sands till it is cooked.[18] There is, however, no residential remains to suggest how the farmers who lived in the Kongquehe Valley some 4000 years ago cooked their foods. This current custom at least suggests that given the limited resources of the environment, there could be a potteryless agricultural way of living. Around 3400–3300 years ago, this population, probably due to the depleted natural sources in Kongquehe Valley, moved to the west, and founded new settlements in the valley of the Tarim River. The Keriya Beifang cemetery, though robbed badly before any archaeological work could take place, yielded artifacts similar to but more refined than those from the Kongquehe Valley.[19]

According to Wang Binghua, the excavator of sites in the Kongquehe Valley, the material culture of people of the Kongque River Valley suggests they migrated from the Caucasian mountains and stayed around the valley for about 500 years. Judging from their outfits, especially the pointed felt hats and straw baskets filled with ephedra, Wang suggests they were likely one of the predecessors of the Scythians, namely several loosely defined horse-riding nomadic groups that roamed the Eurasian steppe and appeared in Greek historical records in the 6th century BCE. Wang concedes the 1000-year time difference between the Kongquehe Valley Bronze culture and that of the Scythians is too great to connect them. However, he argues that the harsh climate and terrain of the inner Eurasian mountains and steppes could justify the persistent style and materials of clothing for fending off the winds. The shamanic

practices of inhaling hallucinogenic substances such as ephedra could easily have been a specific cultural tradition of Central Asia that could have been inherited across generations.[20] After all, the material culture of the Kongquehe Valley is so different from that of the Afanasievo to allow for a clear cultural connection. Kongquehe Bronze Age culture could be the remains of an isolated and vanished community. The only clues from their material culture hints that their language could have been more closely associated with Indo-Iranian, including the languages of Scythians, a Satem, rather than with the so-called Tocharian languages.

And last but not least, one should not forget that there should have been languages other than Indo-European spoken by peoples alongside the possible Indo-European-speaking communities. There has been neither the interest nor the means to find such lost languages of, for instance, the hunters and gathers who lived in the Kongquehe Valley before the coming of the agricultural community. The recent published triangulation study of the 98 Transeurasian languages traced Proto-Altaic, the unity of Turkic, Mongolic, and Tungusic to 6811 BP, and Mongolo-Tuntusic to 5458 BP. The linguistic data correlate with archaeological data of 172 archaeological features for 255 Neolithic and Bronze Age sites nicely.[21] Both groups distributed to the eastern part of Central Asia and thus could have been the languages spoken by communities residing in Tarim Basin before and during the Bronze Age culture of Kongquehe. From prehistoric times to times recorded by writing, numerous peoples of different physical types entered Central Asia and explored and exploited the diverse natural resources there. The communities vanished from our sight for different reasons. Some could have been crushed by the wrath of natural or manmade disasters, such as snow storms, mountain slides, drought, flood, or the depletion of trees and animals due to overexploitation by humans, and conflicts between communities fighting for resources and dominance. Some communities changed their religion and accepted the languages of the new ideologies. Turkic languages replaced Indo-European languages and the Islamic religion wiped out Manichaean, Buddhist, and Christian institutions; these are facts known through historical records. Some groups perished entirely, but most of them dispersed or collectively joined others. Genetic studies reveal that in certain communities male genes persisted, while in others the bias is toward female genes. This information could be useful to analyze the social structures of the communities, but hardly can be useful to identify the dominant language of a community. Presume that a group conquered another, the men of the conquerors mated with the women of the conquered as well as with women of their own group, a scenario witnessed frequently in historical times. In some cases, the conqueror's language and culture dominated the new social entity; in other situations, the winners adopted the language and culture of the people they ruled; or sometimes there was a hybrid of both – thus resulted a new language. All the different scenarios, which we know happened in historical times, could certainly have happened in the remote past during which we have totally no written records as witness.

In the debates about the Tocharian language – Centum or Satem Indo-European, spoken in Afanasievo culture in Russian steppe, or ancient Tokharistan in modern Afghanistan, or a language used in north Tarim from the 5th century, or by the mummies in Kongquehe Valley – are exhausted, and should finally be put to rest. Meaningful questions are awaiting us, such as how peoples who entered the region from different directions explored and exploited the environment to make a living and how they encountered each other, peacefully or violently, and how these factors shaped their views of the universe in which they lived. Or, how their encounters with the natural environment enabled them to create distinctive cultures and also forced them to migrate. Using archaeological research supplemented by the new tools of genetic studies we can enhance our understanding of how the communities of Bronze Age Central Asia prepared for the emergence of the major artery of communication and transportation of Afro-Eurasia, the Silk Road.

Notes

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3 David W. Anthony, *The Horse, the Wheel, and Language*, p. 305.
4 David W. Anthony, *The Horse, the Wheel, and Language*, p. 310.
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3

ARAMAIC IN THE 1ST MILLENNIUM BCE

Its Reception and Diffusion

Liu Jian

The Persian Achaemenid empire, the first to cover a vast area across Afro-Eurasia, left a significant legacy. Its imperial ideological, economic, military and political institutions set a model for later empires worldwide, and have been studied from many perspectives. Modern studies tend to focus on questions such as how the Persian Empire was able to administer a multiethnic and multilinguistic country, and how the empire was able to coordinate the relationship between different peoples and cultures. As Robin Lane Fox stated, in such a large territory, communication must have been a big problem leading to widespread regional autonomy, limited cultural and economic interactions, and unavoidable uprisings.[1] However, as many other scholars insisted, texts and archaeological evidences showed that the Persian communication system was well-developed and catered to the needs of the military and labor forces all over the empire. In order to meet the requirements of an imperial administration, a common language was necessary. At the time of Darius I more than seventy ethnic groups were ruled by Achaemenid kings, which implied that a number of languages coexisted. Achaemenid court regulated Akkadian, Elamite, and newly invented Old Persian as official languages, while still allowing native languages, such as demotic Egyptian in Egypt, to be used in local administrations. Aramaic was the main language used in the administration of the empire as well as commercial affairs and daily life. During and after the Achaemenid period the Aramaic alphabet was used also by many different communities to write their own languages, such as Bactrian, Sogdian, and so on. The Aramaic language and script had been in use throughout Western Asia as early as the 11th century BCE when it emerged in the Levant, and its influences continued and spread eastward to central Asia and South Asia. It was employed in the administration and daily life throughout a vast territory and created a channel of communication between different regions, peoples and cultures.

This chapter aims to study the process of emergence, reception and diffusion of Aramaic language and script, and to reveal the exact function played by the language in the administration and cultural interaction across ancient regimes and communities in Eurasia.

The Emergence and Early Diffusion of Aramaic in Ancient Western Asia

Aramaic is one of the ancient West Semitic languages, which include Ugaritic, Hebrew, Phoenician, and so on, that emerged as a local language in west Syria before the 11th century BCE. Having developed into a written language,[2] the Imperial Aramaic, the second developmental

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stage of the language, began in Egypt, specifically in the ancient southern region of Elephantine. Old Aramaic and Imperial Aramaic were subtly differing in rhythm, syntax, and spelling.

Aramaic in Neo-Assyrian Period

During the Assyrian Empire (934–612 BCE), Aramaic spread to West Asia. Due to the Assyrian policy of deporting conquered people, the defeated Aramaeans were deported to every corner of the expanding empire, thus leading to the diffusion of the Aramaic language throughout the empire. Aramaic can be found in texts from different areas. Starting from the reign of Tiglath-pileser III (744–727 BCE), several Assyrian kings led to the dispersal of Aramaic texts.[3] For example, in Dur-Katlimmu, located in south of Khabur, a set of Akkadian legal and purchase texts were discovered. Some Aramaic notes were found among the documents. Aramaic texts were also found in the center and capital of the empire. A lion standard inscribed with Aramaic script revealed in Kalhu was dated to one of the reigns of Tiglath-Pileser III, Shalmaneser V (726–722 BCE), Sargon II (721–705 BCE) or Sennaherib (704–681 BCE).[4]

These texts were different from official texts, private letters, seal inscriptions, standards and inscriptions carved on various materials.[5] We did not find *bona fide* royal inscriptions belonging to this period yet, but a wine list found in Nimrud should probably be considered as an officially document, and standards and seals with Aramaic script were employed in administrative affairs. We should also mention that the ivory sheet with Aramaic script found at Nimrud was dated earlier so that it should be considered a foreign import and not an example of Aramaic used by Assyrians.[6]

Theses texts were used by different peoples, most of which were Aramaens. With the process of Assyrian expansion, Arameans became one the largest communities in the empire. As *Prosopography of the Neo-Assyrian Empire* stated, in 8th–7th century BCE, more and more names of Aramaens and West Semites appeared in Assyrian cuneiform texts.[7] Aramaens also appeared in all strata of Assyrian society. During the reign of Sennaherib, Aramean soldiers had been the biggest foreign group in the Assyrian army. Beaulieu thus considered that Sennaherib consciously elevated the position of god of the western people called Amurru in order to get support from Aramaeans to consolidate his rule.[8] Aramaen scribes also worked in Assyrian court, as one can see from the wall reliefs. In the scene representing scribes, Aramean scribes holding parchment and pen stood side by side with Akkadian scribes, who held tablet and reed pen.[9] On the Assyrian wine list found in Nimrud, the Aramaen scribe was recorded as *ṭupšarru armû* (scribe of Aramean).[10] Aramaens scribes were recorded in many other texts, and among them there were also female scribes.[11] an Akkadian text with Aramaic notes found in Dur-Katlimmu, suggests that Akkadian cuneiform was still functioning as an official language when the scribe who wrote this document, most probably an Aramaen, noted the text with his native language. We also have evidence that a skillful diviner in the Assyrian court was probably an Aramaen, since he owned an Aramaen name Usallim.[12]

It is also possible that not all scribes who bore Aramaen names or wrote in Aramaic were Aramaens. It was recorded that Sargon II had denounced his scribes who paid more attention to Aramaic instead of Akkadian,[13] which suggest that the scribe responsible for the text just discussed could have been an Aramaen who knew Akkadian, or an Akkadian who knew Aramaic. Aramaic was also used by many other communities. *Kings* 2 18:26 of the *Old Testament* tells how Jerusalem had sent delegates to the Assyrian court, and they wished to use Aramaic as the language for negotiation when they met the Assyrian officer Rabshakeh, but that was denied. The story shows how at the time Jewish people had accepted Aramaic as a diplomatic language and in daily life. Due to the deportation

policy, Jewish deportees spoke Akkadian and Aramaic, and the second and third generations mostly bore Assyrian and Arameans.[14] Possibly, Phoenicians were also Aramaic speakers, as noted by A.R. Millard: "They are not themselves Aramaic, but as yet there is no final agreement on their identity".[15]

We can conclude that during the Assyrian Empire, Aramaens had spread all over the empire, and Aramaic came to be largely used in court affairs, administratio, and commercial activities, and became influent on other communities throughout the region. However, the language had not yet been accepted by all in the court as Akkadian cuneiform appeared from the outside to be still dominant.

Aramaic in Neo-Babylonian Period

Aramaic became popular in the Neo-Babylonian period. Babylonia, the traditional destination of migrants, was also a key region for the Assyrian policy of deportation. From 626 BCE, when the kingdom was formed, till its downfall in 539 BCE, Babylonia formed a complex society of various ethnic and linguistic components. Though Aramaic texts dating to this period have not been found yet, Aramaic was definitely one of the main languages of the Babylonian court and administration, judging from the frequent mentions of *sēpriru* (those who wrote on parchment) in cuneiform texts and images.

It is commonly agreed that the Neo-Babylonian rulers came from an ethnic group called Chaldean (*Kaldu*). *Kaldu* tribes occupied the region between the city of Babylon and the north coast of Persian Gulf as recorded in several Assyrian texts. Berossos (2nd century BCE), a Greek priest in Babylon city, did not differentiate between Babylonians and Chaldeans.[16] Classical writers seemed to follow Berossos' opinion. As Beaulieu pointed out, Chaldean would be used by Aramaens who lived in Babylonia, judging from names of some Chaldean tribes, for example, Bīt Yakin, Bīt Dakuri, and so on. Further evidence comes from Biblical studies where some paragraphs found in the *Dead Sea Scrolls* were written in Aramaic. Daniel mentioned that, among those documents, there was a passage about a Chaldean who reported to the king in Aramaic.[17]

However, the Neo-Assyrians probably considered the Chaldeans as an independent ethnic group.[18] Chaldean lived along the Euphrates, where the traditional center of Sumerian and Akkadian culture, that is, Babylonian culture, was located. The Aramean scribes who appeared in the Neo-Babylonian texts mostly bore Babylonian names, showing that Arameans were most probably homogenized by Babylonian culture. They followed the Babylonian religion, habits and language, had access to the Babylonian bureaucracy and some were even trained as specialized scribes where the skill of writing in Aramaic would be the sole indicator of them being Aramean.[19]

Aramaic had developed into an influential language during the Neo-Babylonian period. Akkadian cuneiform in the Late Babylonian stage had incorporated many other linguistic elements, including Aramaic and Assyrian.[20] On the other hand, Aramaic was also greatly advanced. Aramaic writing system was formalized when the classical literature *Ahiqar* also took shape during this period. Meanwhile, there were still Aramean tribes living along east Tigris, who were also speakers of Aramaic, but leading a semi-nomadic life, in contrast to Chaldeans in Babylonia.

The Neo-Babylonian kingdom was a significant period for the development of Aramaic. Babylonian thoughts and ideology began to be expressed in Aramaic. The popularity of Aramaic threatened the traditional prominent position of Akkadian. Aramaic itself became legitimized and formalized as an academic and sacred language.

C. Aramaic in Achaemenid Persian Period

The Persian Achaemenid empire covered a vast territory extending from the South Asian subcontinent in the east to the Anatolian plateau in the west, and the Nile River to the south. Many languages were used in such a vast territory, as *Esther* (3.12, Old Testament) described: "every province in its own script and to every people in its own language". Texts discovered in Persepolis also revealed that many languages and scripts, such as Elamite, Akkadian, Aramaic, Greek, Phrygia, and so on, were used in the Persian court. Meanwhile, some other languages, such as Indic, Scythian, and Egyptian, were also employed. Multilinguism was significant in the empire, especially in the early period.

Multilinguistic policy was first carried out by Cyrus the Great as a mean to legitimize his reign. Since the core territory of the Achaemenid Empire was the original area of Elamites, Cyrus emphasized building a close relationship with them. Hence, Elamite was claimed as the official language. Meanwhile, cuneiform Akkadian was acknowledged as another official language due to the traditional significance of Babylonian culture. During the reign of Darius I, when imperial ideology was established, cuneiform was applied to write the so-called Old Persian, which was the native language of the ruling lineage from the steppe.[21] The Old Persian in cuneiform thus was one of three languages engraved on the famous Behistun inscription. Cuneiform was the most privileged script used to write the three official languages of the empire, that is, Elamite, Akkadian, and Old Persian.

Though the cuneiform system was used to write Old Persian, a trend toward alphabetization was apparent. Old Persian cuneiform consisted of only thirty-six syllables, and was in sharp contrast with the traditional cuneiform system of 300–1000 syllables. As Leo Oppenheim stated:

> The system presents a complex hybrid containing logographic, syllabic, and alphabetic elements and seems to owe its origin to the desire of the Persian kings to have a "national" system of writing beside the systems used for Babylonian and Elamite. We may well say that the Persian system owed its existence to considerations of prestige rather than to the needs of a bureaucracy.[22]

During the Achaemenid period, the use of Aramaic progressed greatly, as shown by the formation of the Aramaic linguistic and writing systems, the use of Aramaic as a sacred and academic language, and the variety of Aramaic writing materials and text patterns. Two kinds of Aramaic scripts were formed during this period,[23] that is, the line carved and monumental. The monumental script originated in the Neo-Babylonian period (ca. 6th century BCE) and was consolidated in the Achaemenid period (ca. 5th–4th century BCE) when the line carved Aramaic writing was formatted. Moreover, two dialects, the western and eastern dialects, were also formulated.

In contrast to the Neo-Assyrian and Neo-Babylonian times, Aramaic had been used among Achaemenid intellectuals. The Mesopotamian hermeneutic tradition accepted Aramaic as a tool.[24] This phenomenon was also apparent in the linguistic policy of the empire: the category of sacred languages was expanded from former Akkadian (possibly Sumerian as well) to other languages, including Aramaic. However, the use of Aramaic as a sacred language was sharply different from that of Akkadian and Sumerian, as Aramaic did not cease to be an active administrative and common language, when the other two sacred languages had ceased to be. Meanwhile, Aramaic was written on a great variety of materials, new text patterns appeared, and was commonly used in administrative affairs. Most importantly, Aramaic kept developing and spreading in different areas of the empire.

The wide diffusion of Aramaic was evident. Aramaic was written on many different materials such as papyrus, parchment, clay, stone, metal, and so on, and engraved on artifacts such as vessels, stela, monuments, walls and many others. Aramaic texts or scripts were discovered in each corner of the empire, in the satrapies of Arachosia, Bactria, Hindus (India), and Gandara located in today's Afghanistan and Indus River valley, in the hub cities of Herat, Kandahar, Balkh, and so on. Bilingual texts such as the Lydia-Aramean texts found at Sardis, capital of Lydian satrapy in Northwestern Anatolia,[25] were another indication of the ample diffusion of the language.

The types of documents written in Aramaic during the Achaemenid period included royal inscription, administrative texts, literature, letters and juridical texts. The only royal inscription was found in Elephantine, Egypt; it consisted of an Aramaic version of the Behistun Inscription, dated to the end of the 5th century BCE. The text was written on twenty-four papyrus and divided into nine columns on obverse and two on reverse. This coincided with the recording in the paragraph 70 of Old Persian Version of Behistun, in which Darius ordered to translate Behistun into Aramaic to be sent to the armies stationed all over the empire.[26] An Aramaic version was probably one of the first to be written down.[27]

Administrative texts were discovered in many places of the empire. In Persepolis the Fortification Archives consisted of thousands of tablets written in Elamite, Akkadian, Old Persian, Aramaic, Greek and Phrygian, dated to 509–494 BCE. Half of them were dated to 500–499 BCE, including more than 800 Aramaic texts dealing with movement and transmission of peoples in the empire, among which were soldiers, officials, merchants, forced labors (*kurtas*).[28] The other important Aramaic corpus in Persepolis was called the Persepolis Treasury Archives, in which some Aramaic labels were found on elaborate flint artifacts.[29] Moreover, some Aramaic seal inscriptions were found in these two corpuses,[30] which indicate the significant function of this language in the Persian administration. Besides, in the site of Arad in modern Palestine, 85 Aramaic texts written on ostraca and dated to the middle of 4th century BCE reveal that a military station was set here to safeguard the supplies and roads.[31] Hundreds of ostraca dated to the end of 4th century BCE, mostly addressing the road safety in the Idumaea satrapy, have appeared on the antiquities market in recent years.[32] Moreover, in many Elamite texts, Aramaic notes and signs proved the common use of Aramaic in administration and, most probably, that Elamite scribes grasped Aramaic.[33]

In addition to the core territory of the empire, Persian Egypt was the region where many more Aramaic texts were discovered showing a greater variety of genres. They were found in Elephantine, Abydos, Hermopolis, Memphis, Saqqara, ranging from 500 BCE to Ptolemy Period.[34]

Three literary texts were found at Elephantine, including the so-called story of Hor (5th century BCE) on papyrus, and the story of Ahiqar and the Sheikh Fadl Cemetery cave text.[35] Ahiqar was one of the most widespread folk stories in many traditions of the ancient world, even in *The Arabian Nights*. It is the longest Aramaic text discovered up to now, and was found by German scholars in the early 20th century in Elephantine.[36] The text was written on eleven parchments and was divided into fourteen columns, revealing an Assyrian literature tradition dating to approximately the 5th century BCE, which was considered as the prototype of the story and was widespread among the Jewish who brought it to Egypt in later times. The story consisted of two parts representing the Eastern and Western branches of the language respectively – one dealt with the fugitive Ahiqar, who was one of the main advisors of Assyrian king Sennaherib of Assyrian royal court; the other was a collection of proverbs of Canaanites and Levantines tradition.

Some juridical texts in Aramaic found at Elephantine were mainly involved with the internal affairs of Jewish communities, such as commodity transaction, lease,

> purchase, rights, marriage, oath etc. A small number of juridical texts were discovered at Saqqara, whose format was considered to be derived from Asian traditions and composed of Phoenician, Canaanite, Hebrew and Akkadian elements adopted by Achaemenid Aramaic jurists.[37]

Aramaic letters were found in several places in Egypt, among which, the earliest was a letter from Palestine to Saqqara, dated to the end of 7th century BCE,[38] meanwhile eight letters from Hermopolis, the largest in number, were dated to the end of the 6th or early 5th century BCE.

An Analysis on the Route of Reception and Diffusion

The vast diffusion of Aramaic in the Achaemenid Empire played a key role in the imperial policy in political, administrative, and ethnic affairs. First, the Achaemenid court inherited the migration policy enacted by the Assyrian Empire. The conquered peoples were forcefully migrated all over the country. For example, some migrants from the Indian satrapy (^{lú}*Indūmaja* or ^{lú}*Indumāja*) were deported to Babylonia, as recorded in a 5th-century BCE text found in Nippur. Also in Nippur, family archives of a merchant Murašû kept a few records of Indians (Figure 3.1). Among the Indians, a person acted as a witness was named Nidinti-Enlil (means "Gift of god Enlil"), which was a typical Babylonian name. Meanwhile names of his father and grandfather, Bagaina and Zimakka respectively, were typical Indo-Iranian. This generational changes led to a hypothesis that Nidinti-Enlil should be an Indian born in Babylonia, hence was given a local name by his father.[39] The deportation policy accumulated peoples from different areas, different ethnicities, variant religions in a city, a town, even a village. These migrants accepted imperial ideology faithfully, where encounter and acculturation must have had taken place in the process.

Second, the imperial labor system was an efficient channel for the diffusion of Aramaic. Massive infrastructure constructions were undertaken in the Achaemenid period, for which labors were recruited from all over the country. As recorded in PFA, craftsmen and laborers from Egypt, Cappadocia, Lydia, "Skudra" (an area in Northwestern Anatolia), Sogdiana, and Bactria worked together doing construction at Tamukkan, a place near the Gulf.[40] In a text on papyrus found at Elephantine, dating to the reign of Xerxes (17, Feb. 483 BCE), about a Nile boatman who was in charge of transporting grains for the frontier force,[41] officials and witnesses came from diverse ethnicities such as Egyptian, Jewish, Aramean, Iranian, and so on.

Third, Aramaic was vastly used in bureaucracy, and generally mastered by bureaucrats. As already mentioned, administrative archives recorded officials from diverse ethnic groups, such as Babylonian, Ionian, Egyptian, Jewish, Iranian and so on. In an Elamite text from PFA (1810) (Darius I, 498 BCE), a Babylonian scribe used Aramaic as his working language; an Ionian messenger and an Iranian recorder were also recorded and they most probably used Aramaic, too.[42] In order to maintain a communication system, the Achaemenid court was in charge of training skillful Aramaic translators and interpreters and set them off all over the empire.[43] Scribes in Achaemenid court might mostly be Babylonians, as mention earlier in PFA 1810, and they obviously were used to write in Aramaic more than other languages and scripts.

Fourth, the sophisticated transportation and communication system provided the most convenient way to the widespread of Aramaic. Darius I attached great importance to the construction of an efficient transportation and communication system. He had the canal between the Nile and Red Sea dug, so that the waterway between West Asia and North Africa was connected. In addition, as stated by Herodotus, the king had sent Scylax, a Carian navigator, to the Indus River for investigating the possibility of building waterway transportation systems

Figure 3.1 Clay tablet from the archives of the Murašû family mentioning Indians in the Nippur area. CDLI (Cuneiform Digital Library Initiative) P261616.

within the empire (IV. 44). The most significant achievement of Darius I in transportation was the so-called Royal Road, from Sardis in Anatolia to Susa in the southwestern Iranian Plateau and the post station system along the road. Through this vast system, the delivery and execution of government decree became faster and smoother, the movement of populations and the commercial activities were enhanced as well. Aramaic definitely spread all over the empire. As recorded by Classical writers, a letter sent between any two places within the empire could reach its destination in 12 days.[44] PFA included many travel certificates signed by the Achaemenid king, in which travels from India to Susa (PFA 1318) and from Persepolis to Egypt (PFA 1554) were attested. Even women could take long-distance travel, as mentioned in PFA 1550, whereas the king signed a certificate for a woman who would travel from Susa to Kandahar.[45] Aramaic was the script used to write these certificates.

The fifth, the inclusive cultural policy accelerated the spread of Aramaic. In order to consolidate the regime, Achaemenid kings implemented the imperial ideology and culture all over the empire. Imperial material culture, art and artifacts, as well as religious concepts were accepted by the people in all conquered regions. The so-called Achaemenid bowl, a type of wine vessel, was found in such a vast territorial scope, including the Iranian Plateau, Anatolia, Syria, Egypt, Cyprus, Mesopotamia and Russian Steppe. The "Achaemenid bowl" found at Sardis revealed its process of localization. This type of vessel was first brought there after the conquest of Lydia, then the local people began to copy it in local clay and thus this kind of vessel was made in increasingly large numbers.[46] The cultural synthesis and diversity of Persian culture is fully embodied by the Persepolis Apadana, by the image of Ahura Mazda in the palace built during the reign of Darius I. Moreover, in the imperial administration, the multicultural characteristics became apparent when the government unified the systems of weights and measures, calendar and of currency. As a bronze lion weight stated: "exact, according to the 'STRY' (meaning unclear) of silver".[47] Meanwhile, the conversion and exchange ratio between different systems were officially published. In the official documentation, Akkadian cuneiform was confirmed to be the official language and writing. The format, the royal title and archive genre and style all followed the Akkadian writing system, and meanwhile Persian traditional royal titles were brought in.

In virtue of the imperial policies in military, political, administrative and cultural affairs, Aramaic widely spread all over the empire and infiltrated deeply into society, even after the collapse of the empire.

Diffusion of Aramaic in Post-Achaemenid Period

After the collapse of Persian Achaemenid Empire, Aramaic kept its role as a common language, but diversified into several sub-branches, such as Palmyrean, Hatrean, and so on.[48] Diodorus Siculus, a Greek writer, recorded that Alexander the Great had camped in a Babylonian village, which was settled by Boetians who were deported during the reign of Xerxes (XVII, 109.3–5). They were bilingual, speaking Greek and a local language spoken by indigenous people that A. Kuhrt concluded it was Aramaic.

In ancient West Asia, the Jewish language was influenced mostly by Aramaic. As early as the Assyrian Empire, Aramaic had been accepted by the Jews as recorded in *Kings* 2 (18.26), when the delegate sent by Jerusalem to the Assyrian court requested using Aramaic as a negotiating language. Later, in the Neo-Babylonian period, Aramaic had become the official Jewish language even if it was not yet used by common people (*Kings* 2 18.26). During the Babylonian Exile (586–538 BCE), Aramaic permeated into Jewish society. Thus, when the Jews were permitted to go back home, they did not know Hebrew, as *Nehemiah* 13.24 said, and

those half-blooded could only speak a local dialect, that is, Aramaic, instead of their mother tongue. In Jerusalem, Hebrew was replaced by Aramaic script, too.[49] *Nehemiah* (13:24) proved that Hebrew was only an oral language then.[50] The fact that Jews used Aramaic was further confirmed by texts found in Elephantine. Aramaic continued to be used as official language, as Ezra had reported to the Persian king in Aramaic (*Ezra* 4.8–6.18, 7.12–26). Judaic classics were also documented in Aramaic. Torah, edited from the end of Monarchy till Babylonian Exile, formed in the middle of 5th century BCE,[51] was partly preserved in *Dead Sea Scrolls*, in which *Daniel* 2–7, *Enoch*, *Levitus* could be traced to Aramaic versions, dated to the Second Temple period; the later version of *Tobit* also suggests the existence of an Aramaic copy.[52]

More Aramaic texts dated from 250 BCE to 68 CE were collected in the *Dead Sea Scrolls*, Kumran.[53] Aramaic was used to write the Hebrew Bible (except *the book of Esther*), Apocrypha, Pseudepigrapha, and so on, and some folk stories. Moreover, some archives discovered in nearby sites were also recognized, for example, juridical texts from Wadi Murabbaat and other findings nearby. Though some chapters of the Hebrew Bible indicated that Hebrew began to revive and more texts were expressed in Hebrew, eventually Hebrew was replaced by Aramaic again when Judea was conquered in 135 CE.

Aramaic was formalized during the Achaemenid period and spread widely, so that some local languages began to write in Aramaic script. Meanwhile, a lot of local stories were written down in Aramaic. Aramaic and Aramaic script spread across vast areas toward Western Asia, Central Asia, Southern Asia, and Northern Africa. Especially in Southern Asia, during the reign of Mauryan Empire, Aramaic was applied as one of the official languages, as least at the western part of the country, as seen in Asoka Edicts, where bilingual and trilingual edicts were executed. Aramaic script was accepted even by more peoples when considering it inspired the creation of Kharoshthi and Brahmi scripts in South Asia and Central Asia. When Panini of Gandhara wrote the *Sanskrit Grammar*, he most probably chose Brahmi to explain the rules of classical Sanskrit. From then on, Sanskrit classics were written down and preserved. Gandhara, where Panini was from, has long been a pivot from Western Asia to South Asia, thus Aramaic and Aramaic script were spread along to a wider region. From the Chinese Tang Dynasty and on, Old Syrian texts written in Aramaic script were found in several sites in China.

To conclude, Aramaic first appeared in ca. 11th century BCE, it became the court language in Assyrian Empire, and then functioned as administrative language in Achaemenid Persia. Aramaic played more important roles in the administration and social life in most parts of ancient Asia and North Africa, from Lydia to the west, to Afghanistan to the east, Caucasus to the north and Arabian peninsula to the south, covering approximately 6,100,000 km^2, even though Arameans never founded a powerful state. Aramaic script spread wider, expressed more languages, through which commercial activities and cultural interaction were greatly enhanced and the legacies of ancient civilization of Eurasia were preserved.

Notes

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4

QÏRQÏZ, A PEOPLE IN THE FOREST AND ON THE STEPPE

Jia Yiken

The Qïrqïz (Kyrygz) is one of the earliest nomadic peoples who roamed on the Eurasian steppe. The name of the Qïrqïz appears in Chinese sources in the 2nd century BCE as Gekun 鬲昆;[1] Jiankun 堅昆 in the 1st century BCE;[2] Hegu 紇骨 in the 5th century CE;[3] Qigu 契骨, Jiegu 結骨 and Juwu居勿during the 6th to 8th centuries; Hegesi 紇扢斯, Xiajiasi 黠(轄)戛斯 and Heliqis 纥裹迄斯[4] during the 8th to 13th centuries; Jilijisi 吉利吉思 and Qierqisi 乞兒吉思etc. in the Mongolian periods; and Burut 布魯特 in the periods of the Zhungar Kaghanate and Qing dynasty. Records on the Qïrqïz people in Chinese sources provide basic information and clues to learn about their conditions and movements, as well as their role in the steppe in early history. Written sources in Persian, Greek, Arabic, Tibetan, Mongolian, Manchurian and so on, as well as Old Turkic inscriptions and physical remains supplement our knowledge of the history of the Qïrqïz people.

It is generally believed that the Gekun in *Shiji* and Jiankun in *Hanshu* were names of the earliest ancestors of the Qïrqïz.[5] Most recently Yu Taishan, based on his study on nomads and the Silk Road Eurasian steppe in antiquity, surmises that Juanhan in *Mutianzizhuan* (Biography of Mu, the Son of Heaven) compiled during the later period of the Warring States (475 BCE–221 BCE) might be homologous with Gekun and Jiankun, or even the forefather of the latter.[6] Mu, the Son of Heaven, the protagonist of *Mutianzizhuan*, that is, the king of Zhou dynasty (r. 1054 BCE–949 BCE) was a historical person. Projecting the scenarios of Mu traveling westward outside his territory, this book mainly reveals the lines of communication between east and west that had come into existence no later than the 7th century BCE. These lines of communication evolved into what is known as the Steppe Silk Road tranversing Eurasia.

According to *Mutianzizhuan*, the king Mu met the Juanhan people during his westward trip along the northern foot of Altai Mountain where there were "grasslands and fields in a temperate climate, where people cultivated millet and wheat and herded horses, sheep, cows with dogs, and where gems and jade were produced". The Juanhan people gave the king Mu "A hundred of fine horses, three hundred of cows, seventy fine dogs, two hundred of dromedary camels, three hundred of wild horses, two thousands of cows and sheep and three hundred carts of millet and wheat"[7] as gifts. It seems that the Juanhan people engaged in both pastoral and agricultural productions.

Many nomadic cultural sites dated to the 8th century BCE to the 2nd century CE have been found in the range of the Altai Mountains which run from northwest to southeast, and also in

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regions to the east and west of the Altai Mountains, the area famous for the Pazyryk culture dated from 6th century BCE to 3rd century BCE. Furthermore, the earlier nomadic culture sites dated to 9th BCE or even earlier were found in the Sayan mountain regions such as barrows of Arzhan-1, Arzhan-2, Arzhan-0.[8] It can be said that the Sayan-Altai Mountain regions are one of the earliest centers of nomadic culture in the Central Eurasian Steppe, which is generally considered to be related to the Scythians. The Scythians, the first historically recognized pastoral nomadic nation made up of many different tribes thrived across a vast region that stretched from the borders of northern China and Mongolia through southern Siberia and northern Kazakhstan, all the way to the northern reaches of the Black Sea between the 9th (or even earlier) and 2nd centuries BCE. The Scythians developed efficient ways of riding horses, which increased their ability to move bigger herds to new grazing grounds over longer distances. Though dispersed over a vast area, their culture had developed similar types of horse harness, weaponry, and a distinctive type of art known as Animal Style. The Juanhan people were supposed to be in the valley of the Bukhtarma River in the west of Friendship Peak of Altai Mountains not later than the 7th century BCE.[9] It seems that the Juanhan lived in the domain of the Scythian empire, thus their culture might have shared some common features with the Scythian culture.[10] These speculations on the relationship between the Juanhan people and the Scythians are quite alluring, but need further research in the future.

Recent studies suggests that the Qïrqïz tribes distributed in a vast area from the Mönsu[11] Basin, Yenesai[12] (Yenisei) River and the Altai to the eastern and western spurs of the Tian Shan from the 3rd century BCE to the 5th century CE.[13] In "Biography of the Xirong" of the *Weilüe* written by Yuhuan, a historian in the Three Kingdoms period (220–280), the Qïrqïz (Jiankun) people were described as having many martens and fine horses; they moved around following their herds; there were 30,000 people serving in fighting troops in their state.[14] Their relationship with Xiongnu, Toba Xianbei, Dingling, and other surrounding people should be taken into account when exploring their ethnic culture in this period.

The Qïrqïz had been under suzerainties of the Turks (in second half of the 6th century and in the early 8th century), the Xue Yantuo (Sir Tarduš from 30s to 40s of the 7th century) and the Uighurs (from second half of the 8th century). In 840, the Qïrqïz overthrew the Uighur Khaghnate and reached their heyday. Usually, the Qïrqïz Kaghanate from the middle of 9th century to the beginning of the 10th century was named the Great Qïrqïz Kaghanate.[15]

Territory of the Great Qïrqïz Kaghanate

During its most powerful time the territory of the Great Qïrqïz Kaghanate could have extended as far as the Quriqan[16] in the east,[17] China in the southeast,[18] the Tibetans in the south, the Qarluks in southwest,[19] Semirechye and the central Tianshan Mountains in the west and today's Novosibirsk, Tomsk and Kemerovo regions in the northwest.[20] The Tang imperial bestowing to the Qïrqïz Kaghan in 845 confirmed the domination of the Qïrqïz of "the north (i.e. the Mongolian plateau)" after the Uighur Kaghanate collapse,[21] although the bestowing ceremony was deferred to be carried out two years late. As for how long the Qïrqïz controlled the Mongolian plateau, an observation is that the departure of the Qïrqïz from Mongolia was connected with the rise of Khitan power in the eastern steppe, when the Khitan's ruler Yelü-Abaoji entered the Orkhon region with his troops in 924.[22] Another estimation is that the Qïrqïz withdrew from the Mongolian plateau no later than the early 10th century due to the expanding of the Toquz Tatar instead of the Khitan, based on the Herbis Baary Inscription and the inscription of the Ujbat IX in Yenesai.[23] Yet another point of view is that Qïrqïz did not expand into the Orkhon region in the mid-9th century beyond a few raids, that they never established themselves as

a power on the Mongolian steppe. Their control over the Mongolian plateau both weak and exceedingly brief, lasting at most only a few years, and their attack on Anxi (Kučar) and Beiting (Besh balik) most likely is another chimera.[24] Lack of information on the Mongolian Steppe after the decline and collapse of the Tang dynasty and in the chaotic periods of the Five Dynasties and Ten Kingdoms (907–979) in the Central Plains leaves more room for speculation on the situation of the Qïrqïz from the mid-9th century to the 10th century.

The paleoclimatic evidence shows that widespread drought extending from western Tibet to northern China began in 783 and continued nearly unabated through 850. The climate of central Mongolia and much of arid Central Asia abruptly shifted to a drought, ranging from moderate to severe, that engulfed the region for nearly six decades.[25] The economic devastation caused by prolonged droughts and catastrophic frosts may have made the Orkhon Valley unsuitable for the Qïrqïz to move their political and economic center from Mönsu to the Orkhon Valley. But the Mongolian steppe was important to them. Horse-for-silk trade with China also was one of crucial commercial interests of the Qïrqïz. Thus, renewing relationship with Tang dynasty was the pursuit of the Qïrqïz after they destroyed the Uighur Kaghanate. For the Tang dynasty, on the other hand, keeping an alliance with their strong neighbors by granting imperial title or engaging in intermarriages was the traditional way to deal with foreign states. Usually, the Tang court cautiously bestowed the title to one who was the most powerful on the steppe instead of one who simply was a raider on the steppe. The imperial edict of Wuzong on "Granting the title of Kaghan to the Qïrqïz" stated:

> So, (I) write down their deep sincere with nice words, add a nice title to them, grant them imperial edict, (so that) leave it over their posterity, then they own the north. We host this grand ceremony to let the aliens from away to know (this) clearly.[26]

Obviously, this imperial document of the Tang dynasty certified the Qïrqïz power on "the north", that is, the Mongolian Plateau. Their overlordship on the Mongolian Plateau lasted at least to 866 according to Chinese records and a jade bar of imperial edict of the Tang dynasty found in Abaqan revealed. Furthermore, research shows that the Qïrqïz had taken up the Anxi and Beiting,[27] reached Jeti-Suu (Semiryechye)[28] and the western Tianshan Mountain regions in the early 40s of the 9th century.[29] The territory of the Great Qïrqïz Kaghanate shrank after the Tianshan Mountain regions and most of the Mongolian Steppe were out of their control. So far, we have no direct evidence to give details on this process. What more clearly is that expansion of the Qïrqïz created waves of ethnic migrations across the Eurasia Steppe, and some of the Qïrqïz groups invaded and settled in other regions, absorbing the population of the neighboring ethnic groups.[30]

The Qïrqïz People and Their Society in the Early Middle Ages

Chinese sources such as the history of the Qïrqïz in *Tong Dian*（801）通典,[31] in *Tang Hui Yao*（961）唐會要,[32] in *Tai Ping Huan Yu Ji*（987）太平寰宇記,[33] *Ce Fu Yuan Gui*（1013）冊府元龜[34] and in *Xin Tang Shu* (1060) 新唐書,[35] along with other written (particularly Persian-Islamic) documents and archaeological records give some details on the Qïrqïz people and their society in the period of the 7th century to the 10th century.[36]

According to Chinese sources, the Qïrqïz people were hundreds of thousands, 80,000 among them were available for fighting. They were originally powerful in the north of the Tanman Mountains with a part of them distributed in the north of the Altai Mountain and the eastern Tianshan Mountain regions. The exact identity of these Tanman Mountains is still a

matter of debate. Someone thought that it is the south of the Tannu-Ola Mountain,[37] while another considered it as Sayan Mountain.[38] They neighbored with the Boma in the north,[39] the Az and Čik people in the south,[40] and the Tuva, Belig, and Atsch in the east were subordinated to the Qïrqïz.[41] They also shared the Yenisei River valley with the Jü and Dahan[42] or Damo[43] and other tribes.

The Qïrqïz Kaghanate had various officials under the kaghan, such as Totoq or Tutuk (governor of province, leader of high rank), Säŋgün, Čigši[44] (governor, military commander of high rank), Čäŋši (governor), which likely borrowed from the Chinese title Changshi, and Buyruq[45] the Chief minister, Tarqan, Iltäbär (Elteber)，Irkin，Beg, Čor, and so on. Among of them, three persons were in the rank of Tutuq, seven persons were in the rank of Buyruq, and ten persons in the rank of Čigši. All of them served in the army. They had battle flags and used knives and swords, bows and arrows to attach and used wooden armor to protect their stomachs, legs, thighs and shoulders in a war. Whenever there was warfare, all subject tribes of them would take part in it and they paid duty to Qïrqïz only with sable and other pelts. Their laws were very strict. One who refused to engage in battle or did not do his best as an envoy or have improper comments on state would be beheaded just as they punished those who stole.

The land where the Qïrqïz distributed in the north of the Tanman Mountains was wet and slushy in summer and snowy in winter. The weather mostly was cold year around. They engaged in both agriculture and animal husbandry along with hunting and fishing.

They dwelt in houses with bark roofs in the winter while they employed yurts in grazing seasons. Their cereal crops were mainly millet, barley, wheat and highland barley. They sowed in the third month, and harvested in the ninth month. Millet was used for both meal and fermented spirits; they grinded barley into flour in big millstones. They did not cultivate fruits or green vegetables, as their climate was not adequate. Meat and fermented mare's milk, along with grain were important parts of their diet. Only their leader A-Re enjoyed pastry.

Both domesticated and wild animals were an important part of the Qïrqïz economy. Their livestock were horses, camels, cattle, and sheep, among which cattle were most numerous. The rich one owned two or three thousand cattle. There were wild horses, Mongolian gazelles, male wild sheep with small tail, deer and "big black tail" called *Yemo* which looked like river dear. Usually, livestock were also symbol of wealth in addition to being consumed for foods. Sheep and horses were used for their bride price, the rich one often offered hundreds or thousands of sheep and horses. Their most used fish were called *Mie* which was seven or eight *chi* (equal to 2.2 m ~2.5m at present) and *Mohen* which was boneless and its mouth was under chin; birds mentioned in their life were wild goose, duck, dark magpie, eagle, and falcon; flora were pine, birch, elm, osier, and cattail. Among of them birches were especially plentiful there; an arrow shot could hardly reach the top of a big tall pine tree.

Gold, iron, and tin were produced in their land. The iron ore called *jiasha* (qaša[46]) was in good quality and used for making plough, spade, hoe, harnesses, stirrup, and weaponry such as knives and swords, arrows, battle-axe, helmet, armor, and so on. Archaeological finds confirmed their activities in metallurgy.[47] Various industrial works specially mining and processing of iron and other metals were an indispensable part of their lives. The Qïrqïz also made ceramic vase which was popular in the 6th to 8th centuries. It was a kind of deep belly bottle crafted with pottery wheel which was known as "Qïrqïz vase".[48]

Trade was vital part of their life. They sold fur, musk, knife-handles made of ivory, iron, weapons, and other metal objects and handcrafts as well as their livestock and animal products, similar to those of other nomads did. Horse-for-silk trade also played an important role in their economy.[49]

The Qïrqïz in Chinese source was described as "large stature, red hair, white face, and green eyes". People with dark hair and dark eyes were regard as inauspicious, because they were very few in number. One incident suggests that the military conflicts among the tribes on the steppe and with the regimes of China could be a venue of admixture of the different ethnic populations. In 99 BCE, Li Ling (134–74 BCE), a general of the Western Han, led his troop of 5000 soldiers joined one of the Han campaign fighting the Xiongnu.[50] Surrounded by 80,000 cavalries of *Chanyu* (the chief of the Xiongnu) and suffered high casualty, Li Ling surrendered to the Xiongnu. *Chanyu* saw Li Ling as a military talent and thus married his daughter to him and made him as *You*xiaowang, that is, a prince, and a governor over the northwest of the Xiongnu territory which might be near to the Qïrqïz (Jiankun) or even populated by the Jiankun people at that time. Li Ling's experience in the Xiongnu Empire could be the event triggered a legend that those who had black hair and black pupils among of the Qïrqïz people were descendants of Li Ling.[51]

People were strong and vigorous, upright and outspoken. Proportion of women is higher than that of men there. Both sexes wore earrings. A man who was robust had tattoos on his hand and woman who married had tattoos from the ear down to the neck. They were good at hunting, and they climbed up and descended mountains and cliffs on "wooden horse" (sleigh) so fast that it looked that they were flying.

They valued mink and used it for clothes. A-Re, the leader of the Qirqiz, wore a hat made of mink in winter and wore a hat with the top and the bottom rolled up decorated with gold in summer while his men wore white felt hats. They liked wearing a small knife and whetstones at their waists. The poor wore leather without hat. Women's clothes were made of wool and handwoven cloth, the richer also wore silk. They honor red color.

The Qïrqïz considered the water and grass as paramount gods demanding their sacrifice. they worshiped fire, and the steppe cult of the sky-god Tengri was known among them; they believed a protective female deity Umay associated with fertility and family;[52] they also had animal totems such as cow, deer, tiger, snow leopard, wolf, and so on, and employed the divinatory power of shamans (*qam*); there was no set time for them to sacrifice. As to whether Manichaeism were practiced in Qïrqïz people, we still need more proof to examine it.[53] Death among the Qïrqïz was accompanied by special rituals; mourners circled the corpse thrice while weeping, bodies were cremated, and then the bones collected and buried a year later. The mourners wept in moderation. The Qïrqïz also erected stone funerary inscriptions in the rune form script same as the Turks.

They performed on various musical instruments such as drum, flute, a reed pipe wind instrument pipe and a percussion instrument with the form of plates for entertainment. They also performed games with camels and lions (?), and performed on walking and running horses, and did tricks with ropes.

The Qïrqïz marked time with the twelve-animal cycle of years taking three months as a season. They employed the Old Turkic written language and spoken language which are a little bit different from that of the Turks and the Uighurs.[54] But what exactly the language of the Qïrqïz spoke in earlier times is a controversial issue.[55]

According to Persian-Arabic sources, the Qïrqïz mainly engaged in animal husbandry, wandering along rivers and grass, living in tent and felt huts, only the kaghan had a residence in a village or a town. Their wealth consisted of sheep, cows, horses, and their merchandise such as musk, furs, *khadang-wood, khalanj-wood* and knife-handles made of khutu. They were also Hunter and game-killer.[56] Their lands were abounded in sable-martens, squirrels, musk, and beasts. The Qïrqïz had several festivals every year. Their flag was green. Their diet was mainly rice, millet, beef, mutton, and other kinds of animal meat except for camels. They

usually let the light of oil lamp run out instead of blown it out. They had luminous stones used for light sometimes. They were thoughtful and judgmental, and had written characters. They prayed in the temple, facing to the south and in rhythmic words. They worshiped the Saturn and Venus while Mars was considered a bad omen.[57] They venerated fire and burn the dead,[58] "asserting that fire purified and cleansed them, that was their ancient use, but when they became neighbors with Muslims, they began burying their dead".[59] Some of the Qïrqïz worshipped animals such as oxen, falcon, falcons and magpie, while some of them worshipped winds and the tall and beautiful trees.[60] Shamans still played a role among Qïrqïz life. The shaman was

> summoned on a fixed day every year; about him there gather singers and players and so forth, who begin drinking and feasting. When the company is well away, this man faints and falls as if in a fit; he is asked about all the events that are going to happen in coming year, and he gives information whether (crops) will be plentiful or scarce, whether there will be rain or drought, and so forth; and they believe that what he says is true.[61]

According to Rashiduddin Fazlullah's *Jami'u't-Tawarikh*, the Qïrqïz state in the Yenesai consisted of two adjacent regions, that is, "the Qïrqïz (region) and the Kim-kim ji'ut (region)"[62] in the second half of the 13th century or early 14th century. *Yuan Shi* (History of the Yuan Dynasty) stated that the territory of the Qïrqïz run 1400 *li* long and 700 *li* wide with Kem River flows through it. Their customs and ways were different from others. Their language was the same with that of the Uighur. They live in yurts, raised their livestock along rivers and grass, and knew farming. They hunted with their "wooden horse" (sleigh) when it snowed. Horses and white and black gyrfalcon were their special local products.[63] The Kim-kim ji'ut was on flat and vast fertile land that was suitable for agriculture. Farming was in summer and harvesting in autumn.[64] Iron produced there was good in quality.[65] Chinggis Khan's artillery under Jatalahun stationed in Kim-kim ji'ut in 1218.[66] It became one of military stronghold in the northwest of Chinggis Khan and Qubilai Khan,[67] where were several artisan bureaus including making and repairing weapons[68] and weaving kinds of silk[69] and others.

In short, the Qïrqïz is a very ancient people. They mainly lived in the north of the Sayan-Altai Mountains with a branch of them in the Tian-shan Mountain Regions, where the Steppe Silk Road that traverses Eurasia pass by. This Steppe Silk Road was running from Mongolian plateau to the northern reaches of the Black Sea by way of the South Siberia and the north and south foot of the Altai Mountains.[70] Nomads who rose in Mongolian plateau such as the Xiongnu, Xianbei, Rouran, Turks, Sir Tarduš, Uighurs, Mongols, and so on, gained control over Central Asia and further west, therefore brought the trade on the Steppe Silk Road under their power.

The Qïrqïz were situated on the Steppe Silk Road and in the rear of the nomadic states in Mongolia. They mainly engaged in animal husbandry supplanted by farming, hunting, fishing, and producing fine horses and minks. Archaeological finds revealed the Altai regions and the Mönsu region in the South Siberia had metallurgical tradition for long time.[71] Mönsu once had been a center of making many kinds of weapon.[72] Their location on Steppe Silk Road and their resource including their productions of animals and metallurgy might be reasons that led the Xiongnu, the Turks, the Sir Tarduš, the Uighurs and the Mongols to conquer the Qïrqïz when their powers expended to Central Asia. Thereby the Qïrqïz in Chinese historians' descriptions were more than often referred in conquest activities of these powerful nomads of different periods.

The Qïrqïz had been involved in the Silk Road trade by selling their local products and their livestock. Usually, the horses-for-silk trade with China was monopolized by the suzerain nomads of the eastern Eurasian Steppe. It seems that the Qïrqïz began their horses-for-silk trade with China after they built up relationship with the Tang dynasty in 647~648 when emperor of the Tang was the overlord of the eastern Eurasian Steppe. From then they kept in touch with the Tang at least to the second half of the 9th century except the period they were blocked by the Uighurs from 758 to 840. They also tapped their markets in commercial cities Beš balik and Kučar in the eastern Central Asia, dealing silk business with Arabs and trading with Tibetans, Qarluqa, and so on. Their trade with China declined in 12th century and ceased from 13th century for 400 years.[73]

The Qïrqïz state was composed of several tribes including native tribes and subject tribes. It seems that their state was in the form of kaghanate, a more united and powerful polity under a ruler kaghan in the first half of the 8th century and from the mid-9th century to the end of the 10th century. They were in a relatively fragmented tribal society in the periods of the first Turk Kaghanate, the Sir Tarduš Kaghanate, the Uighurs Kaghanate. Since the early 13th century, they were incorporated into the administrative system of the Yuan dynasty, the Zhungar Kaghanate, the Qing dynasty, and Tsarist Russia. There are about forty tribes of the Qïrqïz in Central Asia in the first half of the 20th century, among of them at least nine are very old tribes.[74]

Life style of the Qïrqïz did not change much until the first half of the 20th century. Usually, they migrated seasonally with their livestock each year, lived in yurt in most of time, and their diet were mainly based on meat and milk. They venerated fire and asserted that fire purified and cleansed them till today. Most of them converted to Islam in the second half of 17th century to 18th century,[75] but Shamans also played an important role in their daily life till modern times.[76] Musical performance and kinds of games, including competitive games of horse and other animals, were played in the festivals. Various forms of art were an important part of their lives. They kept their own language till today. Their folk oral epic *Manas*, which was shaped from the 13th to the 15th centuries and passed on from generation to generation, was one of the most important in their spiritual heritage. Their traditional clothes, both man's and woman's, have handed down to the present day, particularly the white felt hat with the top and the bottom rolled up has become a symbol of the Qïrqïz nowadays. It can be said that the Qïrqïz people have gone through hardships many times in their historical process; their core culture has survived, which allows them to still exist as a distinguished ethnicity today.

Notes

1 Sima Qian, *Shi Ji* (ch. 110) (Beijing: Zhonghua Shuju, 2014), p. 349.
2 Ban Gu, *Han Shu* (ch. 70) (Beijing: Zhonghua Shuju, 1962), p. 3008.
3 The name Hegu 紇骨 appears in descriptions on early history of the Toba Xianbei before the North Wei dynasty established in Wei Shou, *Wei Shu* 魏書（ch. 113) (Beijing: Zhonghua Shuju, 2018), p. 3266. The records on early movements of the Toba Xianbei in *Wei Shu* came from *Annals of Dai*代記which was translated from *Song of Dai* an oral epic of the Toba Xianbei from generation to generation and edited by Deng Yuan 邓渊, a historian of the North Wei dynasty in 402–405 (See Tian Yuqing 2001). This indicated that Hegu as a name of tribe had been in *Song of Dai* and it might originate from the Toba Xianbei language. Some alien tribes including a branch of the Hegu joined the confederation of Toba Xianbei in second half of the 2nd century (see, Jarkyn Tursun 2014, p. 51). It seems that contact between the Hegu and the Toba Xianbei could date back to the second half of the 2nd century.
4 Liu qi, *Gui Qian Zhi*, *collection of historical notes of yuan and Ming dynasties* (Beijing: Zhonghua Shuju, 1983), p. 167.（金）劉祁撰：《歸潛志》（元明史料筆記叢刊）(中華書局, 1983), 年, 第

167頁。Jia jingyan, “Annotation on Hu Qiao *Xian Liao Ji* ”, *Collected Papers on History Studies,* No. 4 (1983), p. 15. 賈敬顏, “胡嶠《陷遼記》疏證稿”, 《史學集刊》, 年第 4 期 (1983)，第 15 頁。

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6 Yu Taishan, “A note on the geographical location of Jiankun,” in *International Journal of Eurasian Studies*, Vol. 9, edited by Yu Taishan & Li jinxiu (Beijing: the Commercial Press, 2019), p. 4.

7 *Collection of Proofreadings and Notes on Biography of Mu*, *the Son of Heaven*, annotated by Guo Pu, proofread by Wang Yiliang, Chen Jianmin (Beijing: Zhonghua Shuju, 2019), p. 130.

8 Gino Caspari, Timur Sadykov，JegorBlochin，and IrkaHajdas, “Tunnug 1 (Arzhan 0) an early Scythian kurgan in Tuva Republic, Russia，” *Archaeological Research in Asia*，Vol. 15 (September 2018), pp. 82–87.

9 Yu Taishan, “A note on the geographical location of Jiankun,” pp. 1–5.

10 Tabaldyev Kubatbek, “Problems in the study of the archeology and history of the medieval Kyrgyz,” in *International Journal of Eurasian Studies*, Vol. 9, edited by Yu taishan and Li jinxiu (Beijing: the Commercial Press, 2019), p. 11.

11 Mönsu is the correct version of Minusa or Minusink. Mönsu comes from Möngü Su “Glacier water”. Minusa or Minusink is a spelling of Mönsu adapted to Russian phonetics.

12 Yenesai means “mother river” in Qïrqïz language.

13 Chen Qinglong, “Textual research on Jiankun, Xiajiasi and Bulut,” p. 1；Yu Taishan, “A note on the geographical location of Jiankun,” p. 2; Tabaldyev Kubatbek, “Problems in the study of the archeology and history of the medieval Kyrgyz,” pp. 6–10.

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15 Tynchtykbek Choroev (Chorotegin), “The Kyrgyz ethnicity and its early statehood (1st millennium BCE – 10th century CE),” *International Journal of Eurasian Studies,* Vol. 9, (2019), p. 495.

16 It seems that the Quriqans distributed around the Baikal Lake. Some thought the Quriqans were in the north of the Baikal Lake (see E. H. Schafer, *The Golden Peaches of Samarkand* (Berkeley, 1963), pp. 69–70); Peter B. Golden, *An introduction to the History of the Turkic Peoples: Ethnogenesis and State-Formation in Medieval and Early Modern Eurasia and the Middle East* (Wiesbaden: Otto Harrassowitz, 1992), pp. 143–144); another one said they distributed in lower Selenga River regions and the east and west of the Baikal Lake (see Tan Qixiang, *Historical Atlas of China,* Vol. 5 (Beijing: China Map Publishing House, 1982), pp. 36–37; Bao Wensheng, “Study on the places of the Tiele tribes of Monglia in the Tang period,” *Inner Mongolia Social Sciences*， Chinese version, No. 1 (2013), p. 53).

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18 *Hudud al-Alam: The regions of the world,* translated and explained by V. Minorsky, second edition, edited by C. E. Bosworth (London: Messrs. LUZAC & Company, LTD., 1970, reprinted 1982), pp. 94, 282.

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5

INVENTION AND SPREAD OF HORSE CHARIOTS AROUND AFRO-EURASIA

Bruno Genito

Introduction

To talk about the invention and spread of horse chariots in Eurasia and Egypt, may appear incongruous when discussing the world of the Silk Roads. However, those means of transportation, including wheeled wagons, contributed to accelerating the movement of people, goods, and ideas across Eurasia and North Africa. This happened, of course, long before the development of the so-called Silk Road and the interest that such historiographic and cultural category ignited in the 19th-century scholarship. Extensive studies have dealt with the importance and role played by the Eurasian commercial routes and related religious-ideological itineraries[1]. A more suitable aim, in this context, however, is to single out the technical, historical, and cultural relationships between the general historical and geo-cultural concept of the Silk Road and the technical evolution of means of transportation thanks to the help of the animal "horse" (Singer ed., 1956). The invention and spread of the horse chariot are significant historical phenomena which occurred in areas spanning from the Mediterranean Sea to China, and they played a key role in most regions of the so-called Silk Roads situated in the Eurasian steppes, between the Black Sea and western China (Grousset, 1970).

When tackling issues related to means of transportation and animals used in antiquity, one should begin with a preliminary distinction: one thing is the invention of the wheel, another one is that of the wagon and the choice of a specific animal to drive it. These three aspects cannot be completely separated, and from the technical and functional points of view they probably happened in three distinct chronological moments. To this end, it is helpful to examine the archaeological documentation related to wheeled vehicles, their miniature models, and depictions on reliefs as well as literary references, including pictograms. The genesis and development of animal-drawn wheeled vehicles and chariots have historically been linked to the origins of pastoral economy, breeding and domestication, where the animal "horse" played a key role. It is, nonetheless, difficult to say whether pastoral economies have led to the spread of innovative transportation systems, even if the horse played a crucial function in them[2].

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Horse Domestication

It is evident that an inquiry into the long and complex process of horse domestication is central to our research agenda. The horse is among the few animals that was able to make history (Sereni 1981) without neglecting the fact that other animals, like the dog, reindeer, camel, also played decisive roles. The horse domestication is a long-debated question with various competing theories explaining its occurrence. The main point is whether the domestication of the horse occurred once in a single event, or independently in different regions. DNA evidence now at our disposal supports the reconstruction of a mixed model in which the domestication of the stallion most likely occurred only once, while wild mares in various regions were included in local domesticated herds (Vilà *et alii* 2011, 291).

Another theory proposes that the modern horse is descended from the Botai culture (in present-day Kazakhstan) where horses were milked and possibly ridden more than 5000 years ago. Study of DNA gave evidence that modern horses do share something with Botai horses, but they are not descendants from them. Przewalski and Botai horses were both descendants of another type of domesticated horse (Gaunitz *et alii* 2018).

Wheels and Chariots: A Historical Outline

Chariot burials are the most direct source of evidence for the use of horses as working animals. Indirect evidence suggests that horses were ridden long before they were used to drive vehicles, approximately around 3500 BCE (Chamberlin 2006). At first, it seems likely that simple wooden sledges, slides, two-wheeled carts and contraptions were created for transporting agricultural produce. Four-wheeled wagons represent the final evolution point of animal pulling vehicles. They featured a rectangular vehicle body fitted with solid disc-wheels or tripartite wheels were made from three planks to the axle. These heavy wagons were most often drawn by two animals, usually oxen, while horses were generally harnessed to its later variant, the two-wheeled light chariot. Draught animals varied from region to region, and their depictions show that a wide array of creatures were associated with these vehicles, ranging from birds to camels. Vehicles were initially the privilege of a few, for they expressed prestige and high social status and often were associated with sacred meanings. As mystical symbols, wheels and wagons were the links between terrestrial existence and the celestial world, and their owners were the selected few who could boast direct connections with the mystical sphere. Mythologies and religions speak of carriages ridden by gods, of vehicles flown to the heavens by birds and Sun chariots, while legends and folk tales of many peoples mention funerary wagons on which the deceased made the journey to the otherworld (Bondár 2018).

The archaeological evidence for early vehicles was first analysed and discussed by Childe (1951; 1954). His chronological hypotheses were based on early Egyptian dynasties and Mesopotamian royal lists, to which European archaeologists anchored their findings. On the basis of remains uncovered across an immense area and their relative dating, Childe thought that the earliest evidence for the use of wheeled vehicles came from Mesopotamia, implying that wheeled conveyances had been invented in this region and then spread to other parts of the world. The proposed chronological sequence for this process is more or less the following: the earliest finds from Mesopotamia were dated to 3000 + BCE; the ones from the Indus Valley to the central Asian Steppes evidence to 2500 ± BCE; from Syria and the upper Euphrates region

to 2200 ± 100 BCE; from the Orontes region 2000 ± 100 BCE; from Crete and Central Anatolia to 1900 ± 100 BCE; from mainland Greece to 1550 ± 30 BCE; from Armenia and southern Russia to 1400 ± 200 BCE; from northern Italy to 1100 ± 200 BCE; from Central and Northern Europe to 1000 ± 200 BCE, and from Britain to 500 ± 100 BCE (1951, 193).

After new discoveries from Hungary (Soproni 1954; 1956) and various contributions on the matter by Bóna (1960, 110) for Hungary, Anati (1960) for the European Bronze Age, and Piggot (1970; 1968; 1974; 1975; 1978; 1979; 1983) for Far East and China, the studies by Littauer (1976; 1977; 1983) and Littauer and Crouwel (1974; 1977a; 1977b; 1979a; 1979b; 1985; 1986; 1989; 1990, 160–162; 2002) concentrated mostly on vehicles from the ancient Near East. Nagel (1966; 1986; 1992) and Moorey (1986) also focused on the same region. The wheeled means of transportation in the steppe region were principally reviewed and discussed in detail by Häusler (1978; 1981; 1984; 1985; 1986; 1992). Following the surge of interest in the 1960s and 1970s, studies on the first wheeled vehicles received a fresh impetus from findings analyzed and interpreted on the basis of methods and approaches derived form the then new disciplines of archaeo-zoology and natural sciences, which contributed to the development of new relative and absolute chronologies.

Sherratt (1981; 1983; 1997; 2004) thought that in terms of scale, the changes taking place in the earlier 4th millennium BCE were on par with Childe's Neolithic Revolution. This period saw new inventions and innovations such as the wheel, wheeled vehicles, plough, and the spread of new domestic species such as the horse, donkey and woolly sheep. Sherratt elaborated on his original SPR (Secondary Products Revolution) model in several studies and envisioned these communities as participants of an almost gigantic industrial society (Rolle 1991; Anthony 1990; 1995; 2007; 2008; Anthony and Vinogradov 1995; Raulwing 2000). New methodological advances were also developed in the archaeology of the steppes (Genito ed., 1994), while fresh finds were covered by Kuz'miná (2007), Philip Kohl (2007) and by Sagona (2013) who finally reviewed the assemblages from the steppe regions beyond the Caucasus.

In the wake of the growing number of archaeological finds, the discoveries made by archaeo-zoologists, the wide-ranging impact of Sherratt's model and the revolutionary changes in dating methods, a series of international conferences were held. They were intended to survey the state of research in light of the new finds and chronological framework developed, especially in the context of ancient Europe (Rad und Wagen 2002; WegZeiten 2004; Rad und Wagen 2004; Pétrequin et alii eds., 2006). In 2001, wooden remains of a genuine wagon were discussed at conference mainly focusing on finds from Germany (Rad und Wagen 2002) organized at Hammenhofen.

According to most scholars the main reason behind such a staggered development of wheeled vehicles and the relative knowledge we have is due to diverse economic modalities practiced over different areas. Horticulture on one hand, and agriculture on the other, would have developed very different technologies and adaptation systems to the environment over time; the latter would have felt before others the need for more comfortable transportation, thus leading to the discovery of the wheel. Wheeled vehicles made their first appearance around the 4th millennium BCE in a geographical area between the Rhine and the Tigris rivers. The first wheels are either full disk-type or spoke-type; the full disk type is in turn distinguishable as a single or tripartite element, and three or more axes. Both types carry an integral or inserted hub. Vehicles with two or four-wheel discs are compressed structures where the weight is carried directly by the wheels. Therefore, this type of vehicle has little elasticity, is very slow and suitable for the transport of heavy loads, and is generally drawn by cattle. On the other hand, spoke wheel vehicles with at least four spokes constitute tension structures in which the weight is more elastically discharged on light wheels which generally have a hub,

a locker, and a wheel rim. These vehicles were drawn by agile and fast horses and were suitable mostly for military purposes, parades and ceremonies. Further developments of the four-wheeled wagon and the two-wheeled chariot feature a frame, a bed or body, a curtain or a big top and an axle that carries the wheels.

The spread of wheeled vehicles as documented in miniature models, depictions and literary references, including pictograms, is so ample, both in geographical and historical-chronological terms that is best discussed in different paragraphs keeping in mind that the technical and functional aspects of the vehicles cannot be anchored solely to interpretative parameters related to ethnicity and cultural geography. The areas taken into consideration are selected on the basis of their relevance within the general theme of the Silk Roads: *Ancient Near East, Iran and surroundings areas, Steppes, Southern Russia, Central Asia, India and China*. They are discussed more or less in chronological and geographical orders, from the earliest to the most recent traditions and from West to East. Evidence from proto-historic and historical Europe, Britain and Ireland, ancient Etruria, Greece, and Rome will not be examined here because of the long and different historical, cultural, and methodological premises that their discussion would require.

Archaeological, Epigraphic, and Iconographic Evidence

Ancient Near East

Some scholars argue that the chariot was most likely the product of ancient Near East in the early 2nd millennium BCE. However, one of the most ancient iconographic testimonies of a wheeled vehicle can be found in a pictogram found in Uruk (layer IV) dating to 3200-3100 BCE. A similar contemporary representation on stone shows a person (or a god) on a "sled" pulled by cattle. Remains of a sled were found in the tomb of Queen Pu-Abi in Ur[3]. This vehicle was a chariot adorned with lionesses' heads in silver, probably drawn by cattle, which seems to date to the Proto-dynastic III period (middle of the 3rd millennium BCE). Similar is the small model with four wheels found in Tepe Gawra and dated around 3000 BCE (Speiser 1935, tav. XXXV A). Small models with tripartite disk wheels have been found also in Kish (Schmökel 1955, tav. 17) and are datable to the proto-dynastic period (first half of the 3rd millennium BCE)[4]; other models of carts uncovered at Tell Agrab (Schmökel cit., tav. 17)[5] belong to the Mesilim period (Schmökel cit., tav. 13)[6].

The so-called Standard of Ur, the double panel found in the royal tombs of Ur in southern Mesopotamia (Schmökel, cit., tav. 39; Frankfort 1954, tav. 33 A) dates back to the period of the first dynasty of Ur or 2500-2350 BCE. This object shows[7] five war wagons with four wheels each pulled by four *equidae* and mounted by a fighter and a charioteer (Figure 5.1) in a fashion that was later immortalized by the Homeric poems. Solid wheels are made up of two semicircular elements joined likely by two metallic bars; the hubs have a rather wide head; the chariot seems to be built from structural elements with rods with a high bank on the front and low sides. It is not clear if the structure bars, variously arranged and crossed, constitute the side rails and the forehead alone, or if they hold wooden or other material bulkheads.

In the late 3rd millennium BCE during the Akkadian period and the Ur dynasty III, representations of four and two-wheeled vehicles continue in Syria and Anatolia on cylinder seals; the battle cart, the astride and the platform. At the beginning of the 2nd millennium BCE (2000-1600) in the Near East, Anatolia and within archaeological contexts of the Assyrians we find comparable examples of battle chariots, astride and platform. This is the last phase of the wheeled vehicle evolution when it appears to turn gradually into a chariot or quadriga

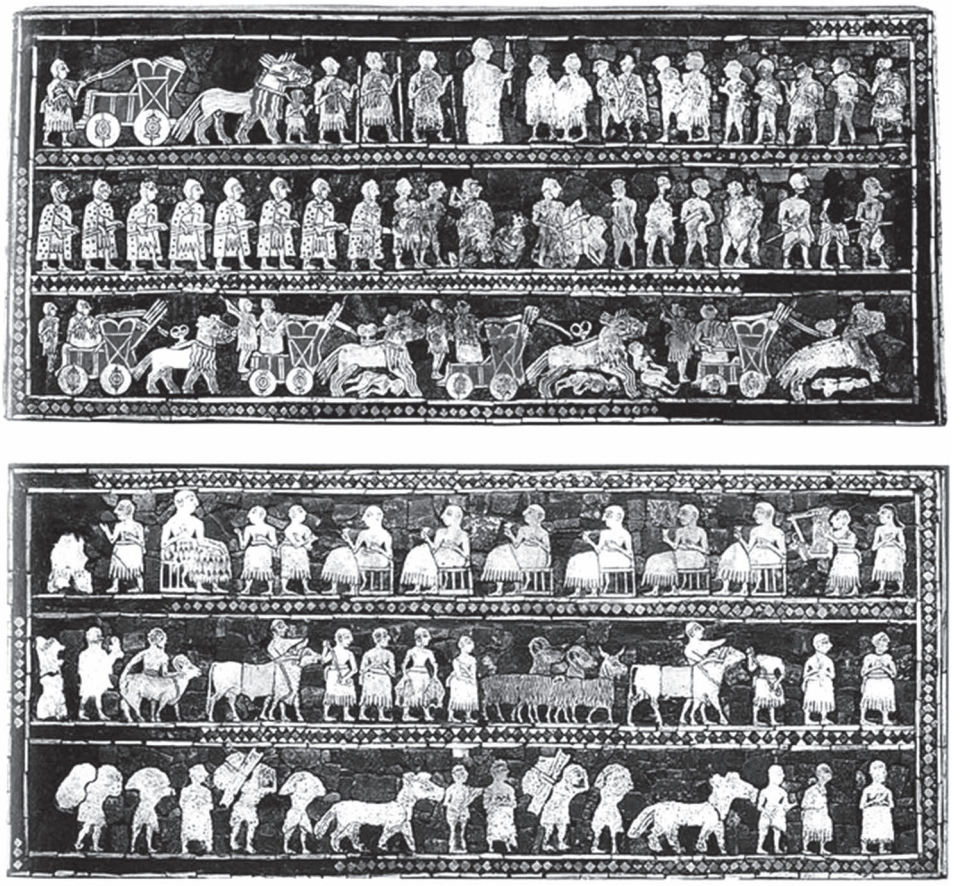


Figure 5.1 Two panels of the Standard of Ur, shell, limestone, lapis lazuli, bitumen, inlaid, 2600 BCE, Royal Cemetery. Acc. no.: 121201, British Museum © The Trustees of the British Museum.

pulled by a horse. Carriage burials are examples of funerary ideology associated with elite groups. The chariot, predominantly military in nature, becomes a kind of status-symbol that assumes the symbolic aspect of a ceremonial vehicle.

In the early Iron age (1000-600 BCE) the Assyrians often present the theme of the chariot as seen in the reliefs of Ashurbanipal (668-626 BCE) and Sennacherib (705-681 BCE), while composite wheeled carts with studs are visible in Nineveh (Figure 5.2). The invention of iron rims with nailed studs certainly dates back to the Assyrians. The use of armatures in tripartite disc wheels with metal rims can be traced back to models dating to the 3rd millennium BCE while in[8] southwestern Iran this practice is datable to the 2nd millennium BCE) (Figure 5.3).

In Syria, at Mari, in L room were found wooden and bitumen imprints of wheels dating to ca. 2900-2800 BCE (Butterlin and Margueron 2006, 319, 321, fig. 3, fig. 6.). In Jebel Aruda was uncovered a clay wheel of late Uruk period (Bakker et alii 1999, 778, fig. 4) (3335-2916 BCE).

In Anatolia, Iraq or Syria were discovered wagon models of uncertain provenance dating to the first half of the 3rd millennium (Rad und Wagen 2004, abb. 30, 16). In Iraq were found two unprovenanced clay tablets with pictograms datable to the mid-4th millennium BCE at

Figure 5.2 Ashurbanipal hunting lions relief from the northern Palace of Ashurbanipal, Nineveh (modern Kuyunjik), Iraq, ca. 645-640 BCE. © The Trustees of the British Museum.

Uruk-Eanna (Bakker et alii 1999, 778, 780, tab 1.1-4) and a stone relief datable to the mid-4th millennium (Rad und Wagen 2004, abb. 12), while from Kish comes a wagon model datable to the first half of the 3rd millennium (Rad und Wagen 2004, abb. 27).

The Hittites were renowned charioteers. They developed a new chariot design with lighter wheels having four spokes rather than eight. The vehicle held three rather than two warriors because one wheel was placed in the middle of the chariot and not at the back as in Egyptian chariots. Hittite prosperity largely depended on the control of trade routes and natural resources, specifically metals. As the Hittites gained dominance over Mesopotamia, tensions flared among the neighboring Assyrians, Hurrians, and Egyptians. Under Suppiluliuma I, the Hittites conquered Kadesh and, eventually, the whole of Syria. The Battle of Kadesh in 1274 BCE is likely to have been the largest chariot battle ever fought. In Luxor the Egyptian reliefs of the battle of Kadesh show how Hittites chariots[9] were pulled by two or more horses.

The chariot and horse in Egypt contributed to the military success of the Pharaos. The chariots were richly decorated and were equipped with quivers full of arrows, the main weapons used in war. The Egyptians invented the yoke saddle for their chariot horses in ca. 1500 BCE. Artistic remains from Egypt preserve numerous representations of chariots with rich ornamentation, however the best-preserved actual chariots were found in Tutankhamun tomb; they were deposited in the antechamber, behind the corridor, in front of the annex zone, the treasure, and the burial chamber (Sandor 2004a; 2004b).

Iran and Surroundings

In Iran and the surrounding regions the history of the chariot and wheels is strictly related to a linguistic question (Malandra 1991). Examples of wheeled vehicles are documented in Transcaucasia in the Trialeti culture (Edens 1995; Džaparidže 1960; Džorzkasvili, Gogadze 1974; Pogrebova 2003) and in the Pit, Catacomb and Ocher Graves cultures in Caucasus between ca. 3000 and 2000 BCE. Models of terracotta wheels were numerous, but it is not yet sure if they represented true wheel models, or simple spindle-whorls. Starting from the early Bronze Age, we have examples of buried chariots with disk wheels in this region and on

Figure 5.3 Iron and wood wheel reconstructed from Susa. Photo by the author, courtesy of National Museum of Iran.

the southern shores of Sevan Lake Sevan (Lchashen) (Mnacakanian 1957, 146–153; 1960, 139–152; 1961, 66–72), where traces of tripartite disk wheeled carts date from between 1400 and 1300 BCE.

In Armenia and Georgia during the late Bronze Age the use of the disc wheel and the continuous wheel are documented up to 1300-1200 BCE. Examples include a belt plaque from the necropolis of Lalvar and Akthala with representations of wheels and carts; three carts with four-spoke wheels with elongated D-shaped body in Astkhi Blur, and a quadriga and four horses in Khaketia. Less studied are the finds from the Urartian area (Ozgen 1984), even though they come from a crucial region situated between the plateau and the southern Russian

Figure 5.4 Darius I's seal, mold, and drawings. © The Trustees of the British Museum.

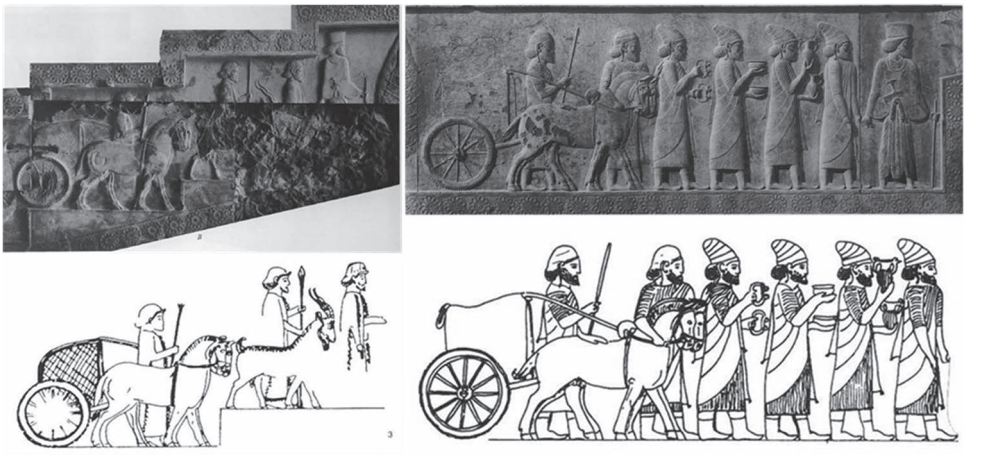


Figure 5.5 Representations of Libyan and Syrian delegations from the apadana in Persepolis, after photos by Schmidt (1953) and drawings by Tourovetz (2001).

plains. A belt from Stepanavan is decorated with a chariot and a cart with six-spoke wheels both pulled by a horse. At Gokhebi, in Khaketia (eastern Georgia) a long, slightly curved D-shaped rudder and a yoke were found. A stone slab of a funerary cist found in Berekey (Dagestan) bears the engraved representation of a chariot with four-spoke wheels.

The Persians may have been the first to yoke four horses to their chariots rather than two, and they also used scythed chariots. Cyrus the younger would have employed these chariots in large numbers. Herodotus mentions that the Libya and Indus satrapies supplied cavalry and chariots to the army of Xerxes the Great. However, by this time the cavalry was far more effective and agile than war chariots, and the defeat of Darius III at the Battle of Gaugamela (331 BCE), where the army of Alexander simply opened their lines and let the chariots pass and attacked them from behind, marked the end of an era of chariot warfare. Among the most important archaeological finds documenting the use of chariots in ancient Iran are Darius's I seal (Figure 5.4) and the stone reliefs from Persepolis apadana (Figure 5.5) (Sancisi-Weerdenburg 1980). Extremely important are also the findings from the Oxus treasure (Dalton 1905; Curtis and Tallis eds. 2005) which include a gold model of a chariot with three horses, one charioteer and another figure (Figure 5.6).

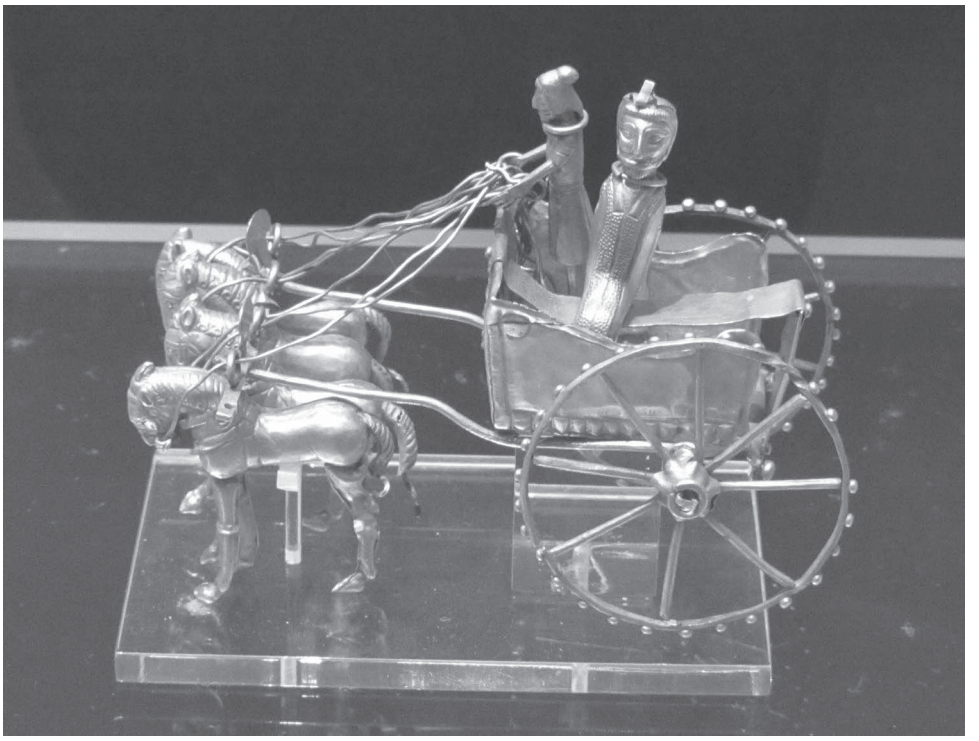
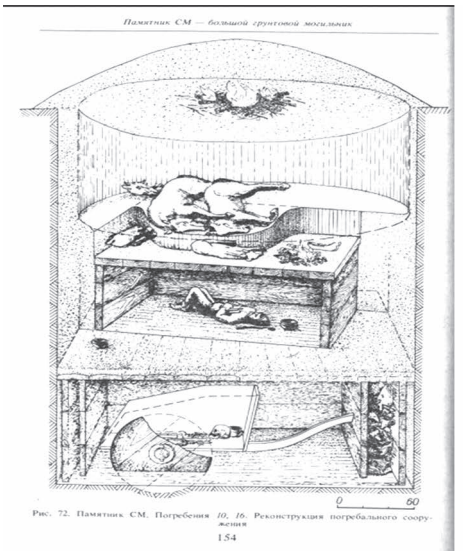


Figure 5.6 Oxus chariot model, after Curtis and Tallis (eds. 2005).

Southern Russia, Steppes, and Central Asia

Numerous finds of wheels come from Russia and in general, Eurasia (Sorokin 1990). The wooden wheels uncovered at Starokorsunskaja (Mound 2, Grave 18) and the ones from Koldyri (Mound 14, Grave 7; Mischka 2011, table 3.20) dated to ca. 3370 BCE, both belong to the Maikop culture (Maran 2004, 436). In the steppes of southern Russia stand out the finds from Tri Brata (Sinicyn 1948) and numerous rock reliefs with representations of carts with spoked wheels. The most exceptional archaeological finds come from Arkaim (Sintašta culture) (Chelyabinsk), in the area of the southern Urals, from a context belonging to the Timber-Grave and Andronovo culture (1600-1500 BCE) where horses and carts are present in numerous tombs (Figure 5.7) (Kuz'mina 2007, 222; Anthony 2007, 371–374, 375, 382; Gening 1977, 53–73; Gening and Asicmina 1975, 144–147; Gening, Zdanovič, and Gening 1992)[10].

In Ukraine, the burial with wooden wagon at Novokorsunskaja (Kurgan 2, Grave 18) and the one at Novoaleksandrovskij I (Kurgan 6, Grave 16) both belong to the Maikop Culture (Trifonov 2004, 168, Abb. 2; Burmeister 2011, Abb. 19.1). More wooden wheels have been found at the Kurgan Sugokleja (Grave 20) also from the Maikop culture, dated to ca. 2845 BCE. Clay wheels have been found at Psekujchabl' (Maikop culture) (Trifonov 2004, 168; Burmeister 2011, 226), at Konstantinovska (Maikop culture) (Trifonov 2004, 168, Abb. 3) (3500-3200 BCE), at Cischo (4th millennium, Maikop culture) (Trifonov 2004, 168; Burmeister 2011, 223). Wagon models have been found at Vladimirovka (Tripolje B2-C1) (> 3500 BCE), at Rakovec (Tripolje B2-C1) (Matuschik 2006, fig. 2.3; Bondár 2012, fig. 3.3) (3500 BCE), at



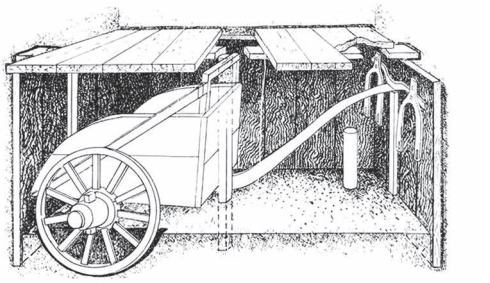


Рис. 108. Памятник СМ. Погребение 28. Реконструкция боевой колесницы в погребальной камере

Figure 5.7 Examples of chariot and graves from Arkaim (Sintašta culture) after Gening, Zdanovič, and Gening (1992).

Vladimirovka, Tripolje B2-C1 (Maran 2004, 436; Mischka 2011, table 3.36), at Karolina Tripolje B2-C1 (Matuschik 2006, fig. 2.1; Bondár 2012, fig. 3.1) 3500 BCE.

At Altyn Tepe in Turkmenistan were found wagon models and a clay wheel from the late 4th millennium to the early 3rd millennium BCE (Kirtcho 2009, fig. 3, 2.9, 2.10, 2.17, 2.18, 2,21, 4, fig. 1.6; Bondár 2012, 2, 3), as well as clay and terracotta wheels datable to the first quarter of the 1st millennum BCE (Kirtcho 2009, Fig. 2.1–8, 11–16, 19–20, 22–23). Also at Kara-Depe were uncovered clay and terracotta wheels that can be dated to the first quarter of the 3rd millennium (Kirtcho 2009, fig. 2.24, 27–29).

A large ceremonial chariot in birch is the most striking discovery from the Pazyryk Barrow no 5 in Siberia. It consists of three frames joined by means of small carved poles and leather straps, which form a platform with a canopy over it. Each of the four large wheels has thirty-four spokes wrapped up in birch-bark and glued to make the construction firm. The axes are devoid of a rotary device, which meant that the chariot could only be used on flat ground, however it could have been easily disassembled and transported by packhorses. This chariot that is generally dated to the 5th century BCE and attributed to the Scythian culture, is truly unique for its excellent state of preservation (Figure 5.8).

India

Chariots are often mentioned in the Rigveda (ancient Indian collection of Vedic Sanskrit hymns) thus attesting to their diffusion of these vehicles in India during the 2nd millennium BCE. Some of the Vedic gods ride on chariots: Ushas (the dawn), and Agni in his role of messenger between gods and men (Sparreboom 1985). A few petroglyphs in India depict chariots: there is a biga and the head of the driver, a quadriga, with six-spoked wheels and a driver standing up. It has been suggested that these representations most probably date to the early centuries BCE but still record stories of Neolithic hunting tribes, and thus would be testimony of foreign technologies.

Figure 5.8 Chariot from Pazyrik, © Hermitage Museum.

Sculptures made during 6th century to 8th century CE show scenes of combats involving chariot warriors, archers, swordsmen, elephants. Chariots are shown with seven-spoked wheels, a flagstaff and a rectangular box with a single archer riding it. Charioteers, virtually sitting on the horses, can also be seen. The very realistic chariots carved into the Sanchi stupas are dated to roughly the 1st century. Very late, though admirably executed, is the representation of a chariot taken in procession around the Airavatesvara temple in Tamil Nadu during festivals, dating back to 12th century CE.

China

The ancient Chinese used the chariot as an attack vehicle since 1200 BCE. More uncertain is the tradition which attributes its invention to the legendary Xia dynasty. The earliest archaeological evidence of chariots in China comes from a tomb discovered in 1933 at Hougang in Anyang, Henan province, dating to the rule of King Wu Ding of the late Shang Dynasty. Oracle bone inscriptions suggest that the western enemies of the Shang used limited numbers of chariots in battle, and the Shang themselves used them only as mobile command vehicles and for royal hunts. Contemporary oracle bone inscriptions depict a chariot-like two wheeled-vehicle with a single pole for the attachment of horses (Shaughnessy 1988).

During this period, members of the royal family were buried with a complete household and servants, including a chariot, horses, and a charioteer. A Shang chariot was often drawn by two horses, and four-horse variants are occasionally found in burials. Gernet (1996) claims

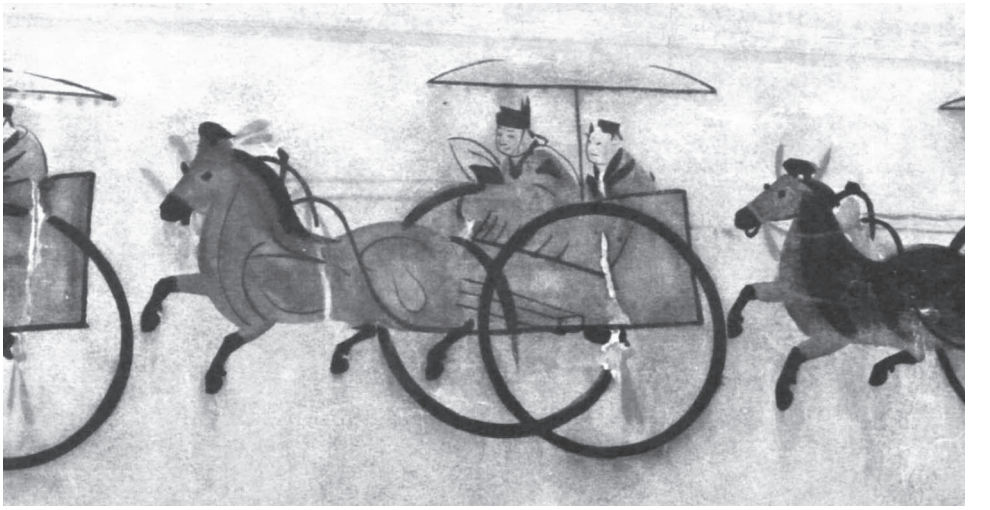


Figure 5.9 Powerful landlord in chariot (Eastern Han, 25-220 CE, Anping County, Hebei), © John Hill, via Wikimedia Commons.

that the Zhou dynasty, which defeated the Shang, made more frequent use of the chariot and "invented a new kind of harness with four horses abreast". From the 8th to 5th centuries BCE, the Chinese use of chariots reached its peak. Chariots also allowed military commanders to stand up on a mobile platform in order to control troops while providing archers and soldiers armed with dagger-axes increased mobility. They acquired great relevance during the Spring and Autumn time, but were largely superseded by cavalry during the Han Dynasty.

Chariots reached their apogee (Excavation 2002) and remained powerful weapons until the end of the Warring States Period (471-221 BCE) with the increased use of the crossbow, infantry, adoption of standard cavalry units and adaptation of the nomadic cavalry (mounted archery). The chariots continued to serve as command posts for officers during the Qin and Han Dynasties while armored chariots were also used by the Han Dynasty against the Xiongnu, specifically at the Battle of Mobei in 119 CE. General Wei Qing's army, setting off from Dingxiang (Whiting 2002, 154–155), encountered the Xiongnu Chanyu's cavalry of 80,000 strong. Wei Qing ordered his troops to arrange heavy-armored chariots in a ring formation, creating mobile fortresses.

With changes in the nature of warfare, as well as the increasing availability of larger breeds of horses, during the Qin and Han Dynasties (221 BCE-220 CE) the chariot was replaced by cavalry and infantry, and the single-pole chariot became less important. At this time the double shaft chariot developed as a transport vehicle and it was light and easy to handle. During the Eastern Han (25–220 CE) and the Three Kingdoms Period (220-280 CE) the double shaft chariot was the predominant form of horse carriages. This change is recorded in innumerable Han Dynasty stone carvings and in many ceramic tomb models. Over time, as society evolved, the early chariot of the Pre-Qin period gradually disappeared (Figure 5.9).

Ancient Chinese chariots were typically two wheeled vehicles drawn by two or four horses with a single draught pole measuring around 3 m in length. At the front end of the pole there was a horizontal drawbar about 1 m long with wooden yokes attached, to which the horses would be harnessed. Wooden wheels with a diameter of between approximately 1.2–1.4 m

were mounted on a 3-m-long axle and secured at each end with a bronze hubcap. Wheels of the Shang period usually had eighteen spokes, but those of the Zhou period included anywhere from eighteen to twenty-six spokes. Chariot wheels of the Spring and Autumn period (771-476 BCE) had between twenty-five and twenty-eight spokes. The carriage body was around 1 m long and 0.8 m wide with wooden walls and an opening at the back to provide access for soldiers.

At the same time improvements were made to the design and construction of chariots. The angle of the curved draw pole had increased raising the end of the pole. This shape reduced the amount of effort required by the horse pulling the chariot and increased its speed. The width of the carriage body had also increased to around 1.5 m allowing soldiers greater freedom of movement. Key components such as the pole, hubcap and yoke were reinforced with decorated copper castings, increasing the chariot's stability and durability. These chariots were variously referred to as "gold chariots", "attack chariots", or "weapons chariots". The Chinese war chariot, like the other war chariots of Eurasia, derived its characteristic ability to perform at high speed by combining a light design with the propulsion system using horses, the fastest draft animals available (Beckwith 2009).

Notes

1 I would like to thank Xinru Liu and Pia Brancaccio for their kind invitation to contribute to this book. It is worth citing here the four volumes on *Silk Roads, Paths, Images and Material Culture* conceived as proceedings of a series of conferences on this subject by Italian and international scholars held at the Università di Napoli "L'Orientale" between 2012 and 2015 (Genito, Caterina, a cura di, 2017, I–IV), as well as and the recent contributions by Williams (2013a; 2013b). To sum up, one can say that the Eurasian steppes with their different cultures from the late Bronze Age up to the early Middle Ages (from the pre-Scythian, Sauromatian, Sarmatian, Scythian, mostly of Iranian origin, to the Palaeo-turkish, Huns, Avars and Magyars), have been privileged areas for movement of people and goods from east to west and vice versa.

2 Generally speaking two of the most significant innovations of mankind were the invention of the wheel and wheeled vehicles in the 4th millennium BCE, which led to other major innovations during the Late Copper Age. The development of wheeled vehicles, the problems of their dating and original place of invention are still open to debate notwithstanding the fruitful collaboration between archaeologists and scholars of various disciplines. It would almost appear that the invention of the wheel and wheeled conveyances occurred in different areas. Even though it is impossible to date the creation of the very first vehicle, it seems quite certain that wheeled vehicles appeared more or less simultaneously in several regions during the 4th millennium BCE.

3 Pu-Abi was a ruler in the Sumerian city of Ur. Her life is placed between 2600 and 2500 BCE, and she is listed among the rulers of the first dynasty of Ur. It is not clear if she was a sovereign or a priestess: inside the Royal Cemetery of Ur, a cylindrical seal was found in which Pu abi is called "Nin", a term that can be translated both as "Queen" than as "Priestess". It is, therefore, possible that she held both roles, as often happened in the most ancient societies, where religious and political power were united in one person.

4 Kish is an ancient Sumerian city located 12 km east of Babylon, near modern Tel el-ehêmir, and about 80 km south of Baghdad, in the governorate of Babil (Iraq). It was founded in the 5th to 4th millennium BCE after the formation of the first Sumerian city of Eridu, which, according to tradition, was considered a divine creation situated at the very origins of the formation of the world. Some models of chariots found in Kish belong to the proto-dynastic period (first half of the 3rd millennium): they reproduce carts with two and four wheels, with the front wall higher than the side ones

5 Roughly contemporary is a copper model from Tell Agrab, representing a two-wheeled chariot with driver who holds four equidae by the bridle

6 It presented the detail of the gear wheels, which also appear in the carving of a cylindrical seal from the Mesilim period (2600 BCE).

7 In Mesopotamia, models and depictions of vehicles with four and two wheels became more and more frequent as evidenced by the so-called Standard of Ur, a significant though still unidentified object. This is a wooden box believed to be a military standard showing a narrative sequence. The standard of Ur is highly decorated with precious lapis lazuli, shell, and red limestone, and depicts men carrying goods or leading animals towards important seated figures who are taking part in a feast accompanied by servants and musicians. The other side of the standard depicts men in chariots trampling over prostrate bodies and soldiers leading prisoners towards another important figure. It is not known how the box was used or what it may have contained (Zettler *et alii*, 1988; Hamblin 2006, 49)

8 In the Elamic world the main references to wagons and wheels are those of the wagons and guardians of É.DÙ.A in the Tepti-Ahar stele and in the tablet HT 2 da Haft Tappeh, in Accadian H.T. 2 (Herrero 1976, no. 8, 106), in stele no 1 of Haft Tappeh (Reiner 1973). Information on wagons can be found in Elamic textual documentation (Hinz and Koch 1987), in administrative texts relating to metals from Tall-e Malian (1000 BCE ca.; Stolper 1984), in administrative texts from the acropolis of Susa (600 BCE ca., discussed dating) (MDP9 = Scheil 1907) and obviously in physical remains of chariots (Amiet 1966, 318, fig. 238; Harper et alii 1992).

9 The armies that clashed in Qadeš in many respects resembled each other and the most important feature they shared was the use of war chariots. This was introduced by peoples who invaded the Mesopotamian territories at the beginning of the 2nd millennium BCE, such as Akkadians and Hyksos. However, the tanks used by the two sides had decisive differences: the Hittite tank, in fact, was more robust than the Egyptian. It could have carries three soldiers, the charioteer – that is, the driver – and two fighters who were an archer and a shield holder who had the task to protect both the driver and the archer from enemy arrows and spears. From a strictly strategic point of view, the chariot was used as a first line enemy breakthrough weapon. The Egyptian chariot was lighter and could carry only two soldiers. The shield holder was also used by Egyptians to protect the archer equipped with arrows and a composed bow of Hittite design. The Hittite chariot allowed for more ductile tactical uses than the Egyptian one as it enabled a warrior to descend onto the battlefield, while the charioteer and archer continued to perform their role as fighters. The weapon used by Egyptian on war chariots was almost exclusively the bow; the Hittite on the other hand were also equipped with a rod used both for hand-to-hand combat and as a throwing weapon. The extreme variety of contingents of the Hittite army had an impact also on the equipment as many Hittite allies could have adopted two-man heavy tanks (typical of some areas of Mesopotamia and northern Anatolia, whose memory is present in the Iliad) both of the Egyptian type, or even lighter.

10 Arkaim is an archaeological site in Čeljabin'sk Oblast', Russia with remains of a fortified settlement dating to the Bronze Age, ca. 2800-1600 BCE. The site belongs to the Sintašta culture and is a "fortified metallurgical industrial center" situated in the steppe just east of the Ural Mountains. The site is named after the nearby Sintašhta River, a tributary to the Tobol'. The settlement consisted of rectangular houses arranged in a circle of 140 m in diameter and surrounded by a timber-reinforced earthen wall with gate towers and a deep ditch on its exterior. The fortifications at Sintašta and similar settlements such as Arkaim were of unprecedented scale for the steppe region. There is evidence of copper and bronze metallurgy taking place in every house excavated at Sintašta, again an unprecedented intensity of metallurgical production for the area. The Abaševo culture played an important role in the early phases of Sintašta. Five cemeteries have been found that can be associated with the site, the largest of which (known as Sintashta mogila or SM) counted forty graves. Some tombs were chariot burials with the oldest known chariots in the world. The earliest true chariots known date back to around 2000 BCE. They were found in burials of the Sintashta-Petrovka culture in modern Russia in a cluster along the upper Tobol' river, southeast of Magnitogorsk. They contained spoke-wheeled chariots drawn by teams of two horses. This culture is at least partially derived from the earlier Yamna culture, where some wagon-burials are found, and is interpreted by some scholars as having distinctive Indo-Iranian features. Others included horse sacrifices – up to eight in a single grave – various stone, copper and bronze weapons, and silver and gold ornaments. The cemetery is overlain by a very large kurgan of a slightly later date. It has been noted that the kind of funerary sacrifices evident at Sintašta have strong similarities with funerary rituals described in the Rigveda, an ancient Indian religious text often associated with the Proto-Indo-Iranians. Radiocarbon dates from the settlement and cemeteries span over a millennium, suggesting an earlier occupation belonging to the Poltavka culture. The majority of the dates, however, are around 2100-1800 BCE, which points to the main period of occupation of the site consistent with other settlements and cemeteries of the Sintašta culture.

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6

HORSE WAGON WITH BRONZE WHEEL FELLOE FROM ZHOUYUAN – IMPLICATION TO THE EXCHANGES BETWEEN THE EAST AND WEST[1]

Wang Peng and Translated by Xinru Liu

In 2014, an archaeological team excavating Zhouyuan site, joined by the Archaeological Research Institute of Shaanxi Province, the Academy of Archaeology and Museology of Peking University, and the Institute of Archaeology of the Chinese Academy of Social Sciences, discovered an exotic horse wagon equipped with bronze felloes, in a location south to the Group A (1976) Hejiacun.[2] Wooden wheel rims with bronze parts appeared at several Western Zhou sites, such as the Xincun Weiguo Cemetery,[3] Zhangjiapo Cemetery,[4] Shangcunling Guoguo Cemetery,[5] Hejiacun West cell storage,[6] and so on. Nevertheless, the bronze parts on wooden wheels from those sites did not wrap the wheels entirely, but only partially fortifying the rims. Therefore, the discovery of the wooden wheel wrapped by bronze felloes was lauded as the "most extravagant vehicle of the Western Zhou period". Though extravagant, the bronze felloes at Zhouyuan could not be considered the most advanced of its time. Because bronze felloes almost exactly in design existed more than a thousand years ago in West Asia and Central Asia.[7] This chapter illustrates that the root of the bronze felloes on horse carriages was in West Asia and Central Asia (Figure 6.1). It appeared in East Asia due to cultural exchanges between the east and west.

The most important archaeological achievement from Bactria-Margiana Archaeological Complex in Central Asia during the last decade is the discovery of the royal cemetery near to Gonur Tepe in southeast part of Turkmenistan.[8] When the archaeological team led by V.I. Sarianidi test excavating a big pound south to the urban site, they discovered a small cemetery. The team excavated several extravagant tombs and catalogued the items which made them consider that they were tombs of kings.[9] After years of continued archaeological researches, more than ten tombs and a few dozens of sacrificial pits have been excavated. From the tombs M3200, M3225, M3240, M3900, four-wheel wagons have been excavated, and all the wheels are fortified by bronze felloes.[10] Tomb M3200 was structured in the style of the living residence of the dead. On the bottom of the 6.5 × 6.5 m tomb pit, 2.5 m beneath the earth surface, a line of four grave rooms were constructed with clay bricks. Six layers of the clay brick wall, 1 m high, remain. North to the grave rooms was a rectangle courtyard. This tomb had been robbed years ago, but still yielded many precious cultural remains. The most important

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图一　周原遗址出土马车的青铜轮牙

Figure 6.1 Bronze felloes equipped four-wheel wagons discovered in Central Asia. Archaeology Team of Zhouyuan, "Exploration and Excavation of Zhouyuan site, Baoji City, Shaanxi Province", *Kaogu*, 2016, no. 7.（Note 2: 周原考古队：《陕西宝鸡市周原遗址 2014～2015年的勘探与发掘》，《考古》2016年第7期。）.

one was the four-wheel wagon located at the northeast corner of the courtyard. Four wheels survived entirely, and the wooden seat could be seen structurally. Two of the wheels lean to the northern wall of the courtyard, still in erect position. Another pair of wheels were lying to the south, and the seat was in the middle of the four wheels. The excavators thus inferred that this was the remain of a whole wagon burial. The front-wheels were at the west, and the hind-wheels were at the east. A whole skeleton of a dog lies in front of the wagon, heading to the west. Left to the wagon there were three human skeletons, and one camel skeleton. The skeleton of a young horse, disturbed badly by robbers, laid behind the wagon, heading west over the right-hind wheel. The excavators considered that that was the very horse pulling the wagon. The wagon seat was composed of four wooden plates, measured 90 × 20 cm each, aligned to form a rectangular board, and were secured with two 5-cm width wooden sticks. The four wheels were approximately same in size, made of solid wood of 70 cm in diameter, and each was fortified by six pieces of bronze felloes. The felloes closely linked to form a circle. Each piece of the felloes was an arc with a groove running inside. It was 0.5 cm thick, outside surface was 3 cm. On both ends and the middle of the felloes there were three pairs of "ears", 3.5 × 3.5 cm in size with semicircle heads. Holes were drilled on each pair of the ears for bronze pin nails (8 cm × 1 cm, with 1.8 cm diameter cap) to penetrate the felloes to fix them to the rim of the wooden wheel.

Information from M3225, M3240 has not been fully published, but conditions of the wheels are available. In M3225, the four wheels of a wagon were well preserved. The diameter of the wheel was 90 cm, composed of three wooden boards, and two 5-cm wide wooden strips laid perpendicularly on the boards to fix the three boards into one disk. The rim of the wheel was 5 cm thick, and the center part was 10 cm thick. The wheel nave, 22 cm in diameter, was cut from a whole wooden block, and a 7-cm hole for axil was drilled in the center. Same as the wheels in M3200, those in M3225 were also equipped with six bronze felloes similar in style, only the latter had large size, 9 × 6 cm, to fit the larger wheels. The wheels in M3240 were not well preserved. Analysis of the residues suggests the three pieces of wooden board were linked by tenons and grooves. Tenons from both sides of the central board fitting into grooves on the sides of the two side boards. Then two wooden strips cross the three boards further fix them into a whole disk. The felloes look similar in shape and size with those of M3225.

M3900 was a well-preserved circle sacrificial pit, about 6 m in diameter and 2.5 m in depth. Among the numerous remains, there were four skeletons of men, age ranging from one aged around twenty-five to thirty-five, two aged around thirty-five to forty-five, and one aged around ten to fourteen years old. There were skeletons of seven dogs, two donkeys, and two camels. Bronze vessels include a cauldron, a tower shape vessel, a lamp, and a spade. Buried in the pit also include two stone mazes, a stone arrowhead, two pots in addition to a whole four-wheel wagon. The four-wheel wagon was in the center of the pit, with the front wheels at the north section, and rear wheels at the south; the left rear wheel was still erect when excavated. The driver's seat of 84 × 40cm, composed of five wooden boards, was in the middle of the wagon, though the structure of the wagon body and how it connected to the seat could not be reconstructed. Traces of two wooden rods of 3 cm diameter, one was 132 cm and another 100 cm in length are considered as shafts of the wagon by the excavator. The wheels are 100 cm in diameter made of three wooden pieces and wrapped by six or seven (rear left wheel) bronze felloes. The rim of the wheels was 5 cm thick, and 10 cm thick in the center. The wooden naves were 20 cm in depth, stick out of each side of the surfaces of the wheel 5 cm. The diameter of the nave was 20 cm, and the hole of the axil was 7 cm. The bronze felloes were 37–40 cm in length, 5 cm in length, with three pairs of bronze ears, where one rivet was found in situ.

So far there are no C14 data to provide the absolute dates of M3200, M3225, M3240, and M3900. However, in the same cemetery C14 data are available for M3210, which is 2150–1500 BCE, and for M3245, which is 2200–1940 BCE. Researchers estimate that the reading of the dates of M3210 could have been slated to later dates as the site was disturbed. Thus, the dates of M3245 was closer to the factual dates. The dates are compatible with the time periods when the Palace Area and the Big Cemetery[11] were in use.[12] Therefore, the Royal Cemetery should be dated to the end of the 3rd millennium to the start of the 2nd millennium BCE. The four-wheel wagons from M3200, M3225, M3240, M3900 should be dated to the same period.

The discovery of bronze felloes on four-wheel wagons at Gonur Tepe verifies that the practical wheeled transportation tools were available in Central Asian civilizations.[13] Furthermore, the wholesome material remains of the wheels enforced by bronze felloes illustrated the function of similar bronze parts discovered in Ashur, Susa and those appeared in Bactria. They are new evidence of the close contacts between Bronze Age West Asia and Central Asia.[14]

In 1955, German scholars published the discovery of three bronze felloes from the site of Ashur city. The three damaged felloes were from the cellar of a temple, and dated to the end of the 3rd millennium and the beginning of the 2nd millennium BCE based on their relative stratum in the site. French scholars in 1985 published eighteen bronze felloes discovered earlier from Susa of Elam, and six of them from Apadana area, found on floor above skeleton of horse. In a temple of Donjon, twelve similar bronze felloes were discovered, which were dated between the end of the 3rd millennium and beginning of the 2nd millennium BCE, too. Similar bronze felloes also appeared in the antique fairs in Afghanistan, said from Bactria, and those of Iran. It is obvious all the bronze felloes share the same structure with those from Gonur Tepe. The stunning similarity prompted J.H. Grouwel to declare that the bronze felloes from West Asia and Central Asia came from the same origin, that was West Asia. The bronze felloes from West Asia spread to Turkmenistan and Afghanistan via Iran.[15]

Considering the complex structure and craftsmanship of those bronze felloes, we share the reasoning with Grouwel to reach the conclusion that the bronze felloes from West Asia and those from Central Asia were genetically connected.[16] However, both the bronze felloes from West Asia and Central Asia were far away from Zhouyuan geographically and dated much earlier than those from Zhouyuan. Therefore, there must have been a media between the West

Asia/Central Asia bronze felloes and those found in Zhouyuan. This media, obviously, was the Eurasian steppe to the north. An analysis of the horse chariots and related archaeological remains from the steppe could illustrate the connection.

The Appearance of Two-Wheel Horse Chariots on Eurasian Steppe and Their Eastward Moving

Two-wheel horse chariots reveal the connection between Central Asia and steppe. Since the excavations at Sintashta Cemetery in late 1970s,[17] archaeologists have discovered at least seventeen horse chariots with spoked wheels from several cemeteries of Sintashta culture.[18] The most recent C14 dating points to the period of 2030–1750 BCE.[19] This group should be earliest dated horse chariots of the entire Eurasia. From Sintashta culture, Indo-European speakers migrated to the east and south with horse chariots and spread the technology to Eurasian steppe. In the sites of Petrovska culture and Alakul culture, successors of Sintashta culture,[20] remains or traces of horse chariots have been identified.[21]

For years, scholars had been divided on the origin of horse chariots, one party assigned West Asia, another favored the steppe. Since the publication of Sintashta excavation in 1992, most archaeologists accepted that the steppe was the origin of horse chariots. The most major evidence is that, even though horse chariots of solid wheels first appeared in West Asia, the light, spoke-wheeled horse chariots on the steppe preceded those in West Asia.[22] Nevertheless, one cannot deny that the Sintashta horse chariots were so advanced that they must have had developed from more primitive models. Therefore, even some of those argue for steppe origin of horse chariots concede that the ancient West Asian civilizations played the key role to the development of horse chariots. I.V. Chechushkov, for example, considers that the creation of the light horse chariot was a gradual, complicated process, thus all the debates of its precise origin are unnecessary. Pointing out the vehicles of two solid wheels that discovered in Tyaqunova M27[23] at the north coast of the Black Sea and Ipatov Kurgan, Tomb 32,[24] of north Caucasus and other shaft tomb cultures, he convincedly argues that during the transition from the 3rd to the 2nd millennium BCE, some population in West Asia and those of the steppe had direct contacts. By crossing the Caucasus mountains or circling around the Caspian Sea through Central Asia, the people on the steppe adopted two-wheeled vehicles from West Asia. They then replaced donkeys and other draft animals with horses, the long domesticated draft animals they had possessed. To speed up the vehicles, they improved the wheels, and invented horse bits and cheek-plates to control fiery horses.[25]

That West Asia and Central Asia were closely connected is well known.[26] Numerous archaeological findings have proved the connections between Central Asians and steppe populations prior to the southward shift of Andronov cultural complex and establishing settlements there. Pottery from steppe culture to the north appeared in the sites of Bactria-Margiana Archaeological Complex; Central Asian style of decorations also appeared on potteries from the steppe to the north, including Sintashta culture, Potapovka culture, and Petrovka culture.[27] Furthermore, the horse chariot burial from Gonur Tepe and that of the contemporary were startling similar. B.A. Novozhenov summarizes the similarity as an "assembly of chariot", including sacrificial human, dog, horse, as well as the chariot, tool, and weapon.[28] Here what we need to add is the link between the bronze felloes from Gonur Tepe and the steppe cultures.

Archaeologists excavated three Bronze Age tumulus graves in the Satan Cemetery, central Kazakhstan, and they found a relatively well preserved two-wheel light horse chariot in M1.[29] The M1 grave chamber lays northwest-southeast direction, measuring 390 × 250 cm. Two pits of wheels, measuring 70 × 15 × 25 cm, separated 150 cm from each other, were

found in the northwest part of the chamber. This grave had been robbed and burned in early times, thus some carbonized fragments of wheel rim and nave remained in the wheel pits. Luckily a small piece of red colored leather "tire" was found attached to a fragment of the rim, along with four bone nails, varied from 8 cm to 17 cm in length, which were used to fix the "tire" to the rim. Judging from the remains and the structure of the grave, this grave was in Pedrovka culture. The only available C14 data from the site indicates the date of ca. 2150–1300 BCE.[30]

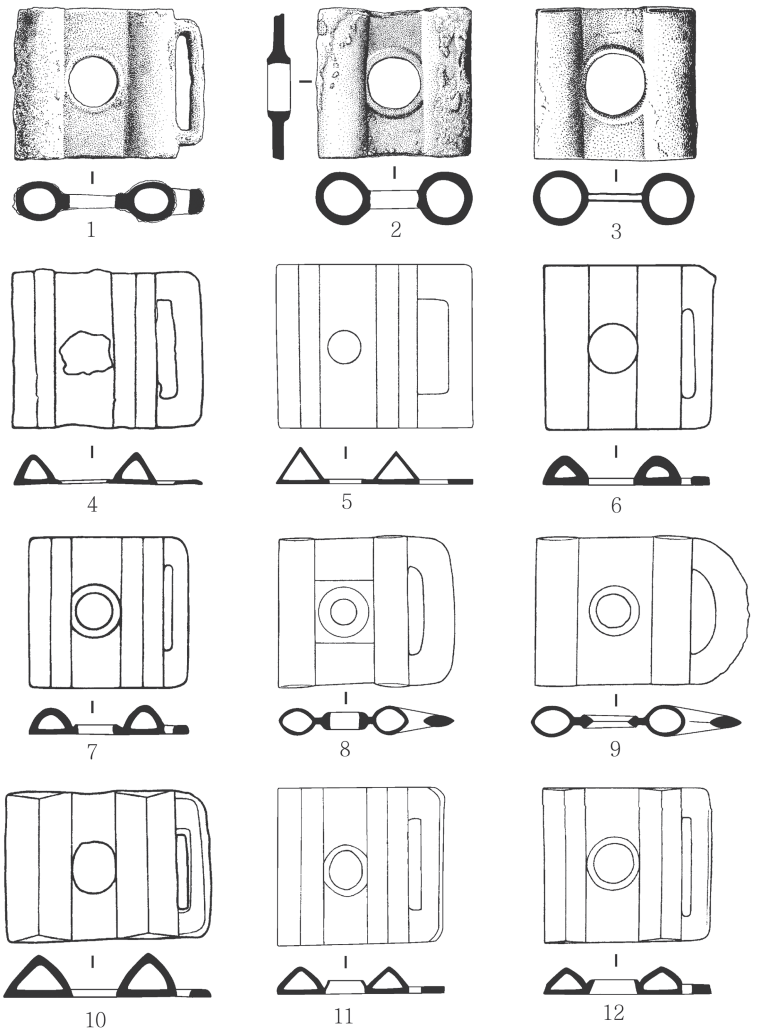
The "tire" on the chariot from Satan Cemetery and the felloes on vehicles from Gonur Tepe shared the same function, that was to protect the wooden wheel rim and reduce friction between the wheel and the ground. The technological principles of both were almost totally the same, and the only differences were in the materials. The Satan chariots used leather and bones, which were abundant materials on the steppe, to substitute bronze, a material showing royal status in ancient civilizations. The technological inheritance obviously gained through cultural exchanges. Although this "tire" is the only sample from the Eurasian steppe archaeological findings, it should be pointed out that the reason the leather "tire" of Satan could survive is that the grave was burnt. Thus, one can easily imagine that this kind of "tire" could have existed in other burials, or even widely existed.[31] Viewing from the angle of steppe culture, the genetic links between the bronze felloes from Zhouyuan and those from Gonur Tepe could be appreciated easily.

Connections Between Steppe and East Asia: Horse Chariots Driving to the East

Horses and horse chariots appeared in the Central Plain of China all the sudden around the time of Period II of Yinxu, the primary Shang site. Most archaeologists were convinced that horse chariots did not originate from China per se, but from the west.[32] However, where exact the west has been controversial.[33] In recent years, bloom of archaeological discoveries on Eurasian steppe and north China including Xinjiang, combining with deepening researches, direct scholars to focus on the numerous cultural treats coming from Eurasian steppe bronze cultures, which clearly direct the origin of horse chariot in China to Eurasian steppe.[34] Nevertheless, the direct evidence supporting the steppe origin of chariots of China is not sufficient.[35] On this background, study the gears coming together with horse chariots to China and those found in sites in and out of China could be an effective way to solve the problem of the origin of horse chariots in China. Surveying current available archaeological data and researches,[36] we consider, in the scope of the old continents, cheek-plates of horse bridles should be the most adequate parts among horse chariot gears for comparison.

The current archaeological data show that the earliest horse chariots were found in Yinxu, so were horse cheek-plates. Almost all the cheek-plates from Yinxu were square in shape.[37] They were found in the tomb of Fuhao,[38] from Xiaotun in tombs M20, M40, M202,[39] Xiaomintun 59,[40] Xiaomintun 72;[41] in west area of Yinxu, M216, M217,[42] M1613,[43] Guojiaozhuang M51, M58, M146–148,[44] Meiyuanzhuang M1,[45] M40, M41,[46] Dasikong M76, M226, M231,[47] and more (Figure 6.2). All the findings were in the Period II to IV of Yinxu. After the Shang Dynasty, similar square shaped horse cheek-plates had been found in several other sites, all the way down to the middle of the Zhou Dynasty.[48]

Found together with cheek-plates were studded disks. When the cheek-plates excavated from Meiyuanzhuang M41, Dasikong M76, M226, Qianzhangda M40, M41[49] were excavated, their inner sides all attached with studded disks. The studs thrust into the horse mouth for



图一二　殷墟出土的方形马镳

1.小屯M20　2.小屯M202　3.小屯M40　4.72孝民屯　5.殷墟西区M1613　6.郭家庄M51　7.郭家庄M58　8.郭家庄M146　9.郭家庄M147　10.郭家庄M148　11.梅园庄M1　12.梅园庄M40

Figure 6.2 Cheek-plates from Yinxu. Translation: 1. Xiaotun M20; 2. Xiaotun M202; 3. Xiaotun M40; 4. 72Xiaomintun; 5. Yinxu Xiqu M1613; 6. Guojiazhuang M51; 7. Guojiazhang M58; 8. Guojiazhuang M146; 9. Guojiazhuang M147; 10. Guojiazhuang M148; 11. Meijiazhuang M1; Meijiazhuang M40.

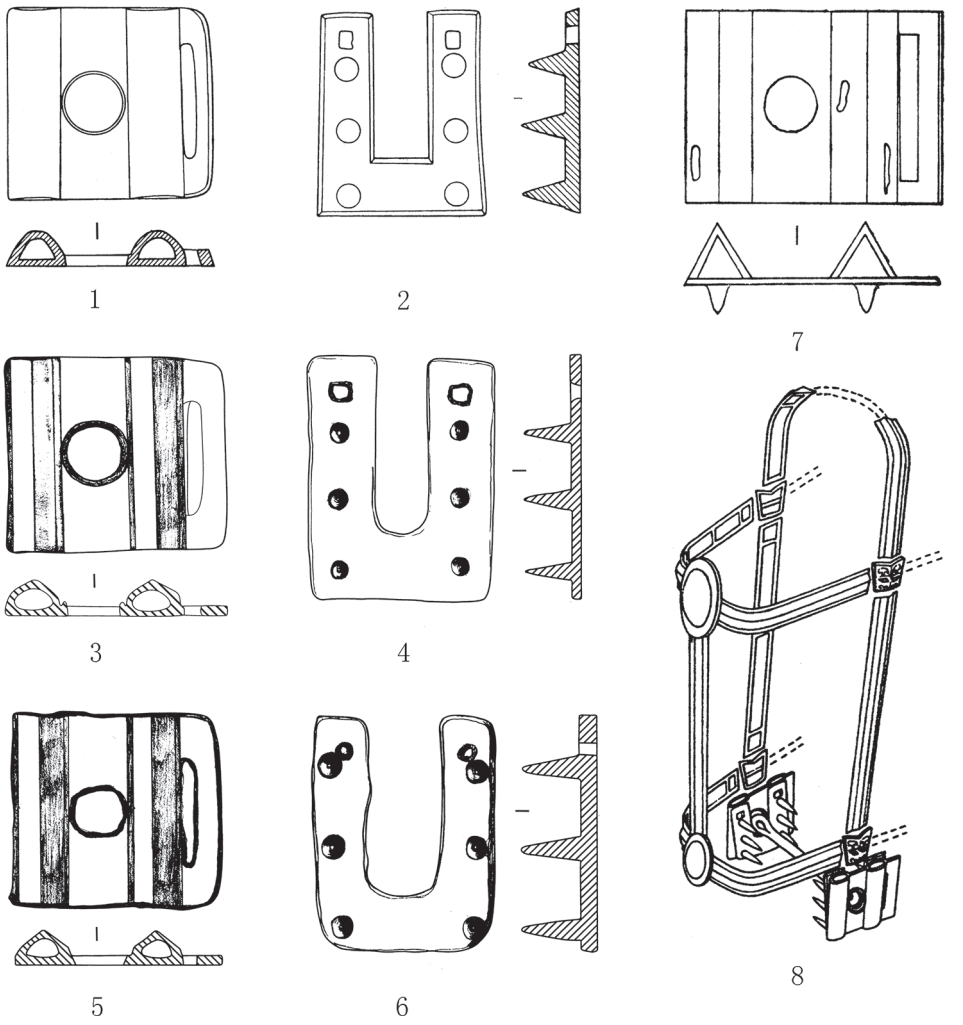


Figure 6.3 Square cheek-plates match with square studded disks. Translation: 1–2, Meiyuanzhuang M41; 3–4, Dasikong MM76; 5–6, Dasikong M226; 7, Guozhuang M6; 8, Qianzhangda M41.

controlling fiery horses. It should be pointed out that all the studded disks from Meiyuanzhuang, Dasikong, Qianzhangda share the same square contour with cheek-plates, meaning the studded disks were used together with the cheek-plates (Figure 6.3, 1–6).

In addition, from Guozhuang M6 four cheek-plates were combinations of cheek-plates and studded disks,[50] a further proof that the two were used together in the bridle (Figure 6.3, 7). So far more than twenty studded disks and studded cheek-plates have been published from Yinxu, including Meizhuangyuan, Dasikong, Guozhuang, and so on, dated to the periods II to IV of Yinxu. They were the earliest dated studded square disks for bridle, only found in Yinxu. Same as the square shaped cheek-plates, the studded square disks appeared in several sites after the Shang Dynasty, all the way to the middle of the Zhou Dynasty.[51]

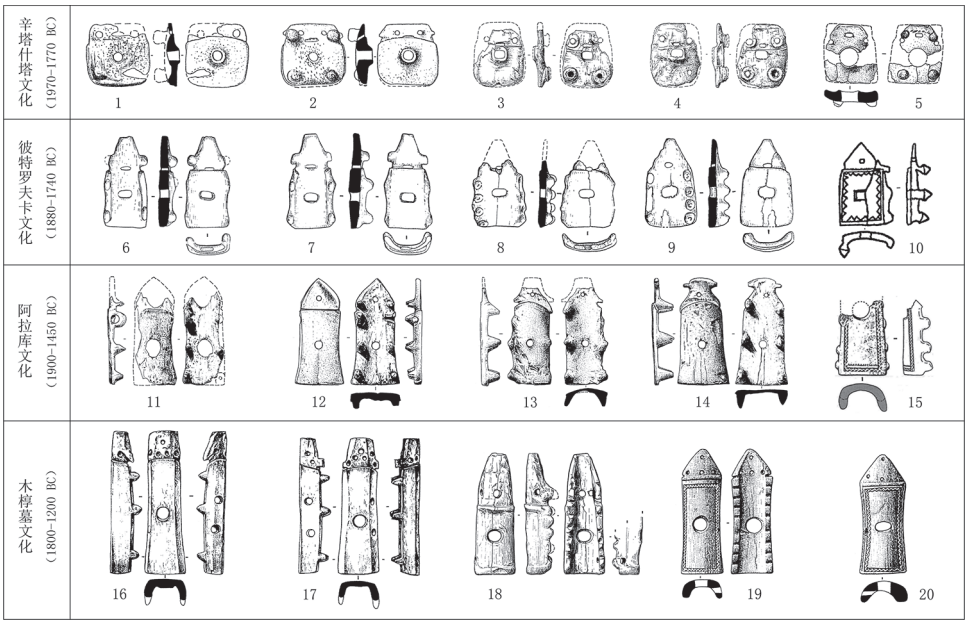


Figure 6.4 Square/rectangle studded cheek-plates. Translation: 1–2, Cemetery Kamen Ambal 5; 3–4, Sintashta Cemetery; 5, Arkaim site; 6–9, Cemetery Aksaiman; 10, Cemetery Satan; 11–14, Cemetery Obolkin Lug III; 15, Tasty-Butak site; 16–17, Cemetery New Klyuchi III; 18, Guselka II site; 19–20, Cemetery Kamarovka. 10 is quote from Novozenov V. A. 2012 (note 28); 15 is quote from Chechushkov I. V. 2013 (note 24); the rest are from Usachuk A. N. 2013. The ranges of dates are based on Chechushkov 2013.

Horse cheek-plates compatible to Yinxu came from Eurasian steppe. According to the statistics by Chechushkov in 2013, 260 and more horse cheek-plates had been found on Eurasian steppe. According to A.N. Usachuk the number of cheek-plates reached 390 and more.[52] Those from Sintashta were the earliest dated and the make was the most primitive. All the horse cheek-plates from Sintashta were horn made studded ones, in circle, semi-circle, and square shapes. After Sintashta, the three types of cheek-plates continued to be used in Petrovka culture, Alakul culture and Srubnaya culture, evolved in shape and structure. Studying the square shaped studded cheek-plates, one notices that since the Petrovka culture, animal long bones were used to make square cheek-plates to reduce the cost and to ease the making process. At the same time, the height of studded cheek-plates increased, and studs had been realigned. On Sintashta cheek-plates, four studs evenly distributed on the four corners (Figure 6.4, 1–5). The distribution evolved into multiple studs vertical aligned on the elongated plates. By the time of Alakul culture[53] and Srubnaya culture, cheek-plates became even narrower and longer (Figure 6.4, 11–20).

As a whole, most square cheek-plates including square studded disks and studded cheek-plates were compatible to the square-rectangular studded cheek-pieces from Petrovka culture, Alakul culture and Srubnaya culture. The similarity shows on the positions of holes on the center and upper part of the plates, and the arrange of studs. The long hole and the two lines of studs on Yinxu studded disks apparently were imitation of the studs on the two sides of the long bone made cheek-plates (see Figure 6.3; Figure 6.4, 6–20). In details, the contours of most square

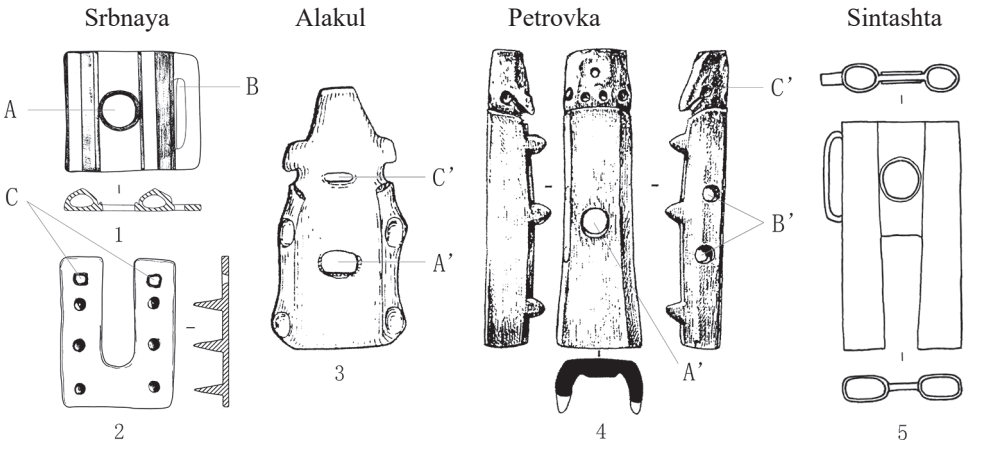


Figure 6.5 Comparisons of square-rectangular cheek-plates from Yinxu and that of the steppe. Translation: 1–2, Dasikong M76; 3, Cemetery Aksaiman; 4, Cemetery New Klyuchi III; 5, Xibeigang M1136–1137.3 and 4 are from Usachuk A. N. 2013 (note 52B); others are from Huang Chongming 2015 (note 36).

cheek-plates were compatible to those of Petrovka more than others. The only difference is that the nose ring attached to Yinxu cheek-plates are absent from Petrovka ones (Figure 6.3, 1, 3, 5; Figure 6.4, 6–12). Meanwhile, on one side of the rectangular studded cheek-plates from Alakul culture and Srubnaya culture appeared circular holes, apparently serve the same function of nose ring on one side of Yinxu square cheek-plates (Figure 6.5). One should pay attention to the elongated square or rectangular cheek-plate from Houjiazhang Xibeigang M1136–1137[54] (Figure 6.5, 5). This cheek-plate was quite different from most cheek-plates from Yinxu, but similar to those of Alakul culture and srubnaya with the slender long shape. If this type was not invented at Yinxu, then it should originate from the steppe. Therefore, we consider that the model of Yinxu square horse cheek-plates was the studded square cheek-plates of the Eurasian steppe. The eastward expansion of using Eurasian steppe square-rectangular cheek-plates should have taken place after Sintashta culture and Petrovka culture, probably during the Alakul culture and Srubnaya culture times.[55] We proceed to consider the origin of Yinxu square cheek-plates could have had come from west part of Eurasian steppe where Alakul and Srubnaya cultures distributed. Nevertheless, we still have no data from Federovo culture, also a variant of Andronov Cultural Complex, distributed to the east of Alakul culture in approximate same period but had more connect with East Asia. Therefore, we cannot exclude the possibility that Yinxu square horse cheek-plates came from Federovo culture.

As discussed earlier, Yinxu square horse cheek-plates came together with horse chariot, therefore Yinxu horse chariots, same as the cheek-plates, came from the Eurasian steppe. Furthermore, the timing of horse chariot reaching the east should also correlated with that of horse cheek-plates, that is, around the time frame of Alakul and Srubnaya cultures. After the Shang Dynasty, horse chariots used in the Western Zhou Dynasty basically followed the same structure.[56] Not only that, square horse cheek-plates and studded disks almost exact same as those from Yinxu have been found in sites of the Western Zhou.[57] In summary, the bronze felloes from Zhouyuan could well be an inheritance from the Yin Shang tradition, and thus indirectly related to the horse chariots excavated from Cemetery Satan of Petrovka culture.[58] One could expect similar discoveries from Yinxu.

Conclusion

Between the end of the 3rd millennium to the beginning of the 2nd millennium BCE, a four-wheel wooden wagon from Gonur Tepe in Central Asia was equipped with bronze wheel felloes that could be from West Asia. About the same period, two-wheeled vehicle from West Asia traveled to the steppe. With improvements, horse chariots with spoked wheels first appeared in Sintashta. In the process, West Asian technology of felloes/tires also reached the steppe. After Sintashta and Petrovoka preriods, around the time of Alakul and Srubnaya cultures, two-wheel light chariots moved to east. During the Period II of Yinxu culture, domesticated horses and horse chariots appeared in the Central Plain of China in large numbers. It is very possible that the technology of bronze felloes came along with the horse chariots of Yinxu. The bronze felloes from Zhouyuan was a legacy from the Shang time.

The current researches show that during Period II of Yinxu, not only domesticated horses[59] and chariots appeared all the sudden in quantity, but also closely related horse cheek-plates and a kind of arch shaped utensils,[60] so were a set of special decorative arts on pottery and bronze vessels.[61] Some motifs of the decorations could be traced to the Andronov Cultural Complex. However, they started to prevalent in "post-Andronov period" late bronze cultures around south Siberia and central and northern Kazakhstan. Their dates were corresponded approximately with Yinxu culture. Meanwhile, there was no trace of this cultural feature in the vast area between the steppe and the Central Plain in China. This vacancy could implicate that around the 13th century BCE there were large scale cultural exchanges, direct or indirect. If this was true, it should be a significant event in the history of China. Other than the important role of horse chariots in the historical development of China, it is not hard to imagine that horse chariots appeared in Yinxu was only one obvious mark of this event.

Notes

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5 Archaeological Institute of the Chinese Academy of Sciences, *Guoguo Cemetery at Shangcunling*, Science Publisher, 1959, p. 158. Beijing: 中国科学院考古研究所：《上村岭虢国墓地》，科学出版社，1959, p. 158.

6 Zhouyan Museum at Qishan County, the Academy of Archaeology and museology of the Peking University, "Shaanxi Zhouyuan yizhi hejiacun chemaqi jiaocang qingli jianbao," [Inventory of the cell storage of the horse wagon parts from the site of Zhouyuan, Shaanxi Province], *Periodical of Chinese National Museum*, no. 11, 2015, pp. 26–37. 岐山县周原博物馆、北京大学考古文博学院：《陕西周原遗址贺家村车马器窖藏清理简报》，《中国国家博物馆馆刊》2015, no. 11, pp. 26–37.

7 Here West Asia means the catchment of the Tigris and Euphrates, and Central Asia indicates the area between and around the Sir and Amu rivers, especially the Amu River area.

8 In Turkmenistan language Gonur Tepe means Grey Hill, from a low hill located on the right bank of the river Murgav near the site.

9 Дубова Н. А., Могильник и царский некрополь на берегах большого бассейна Северного Гонура, У истоков цивилизации, Сборник статей к 75-летию Виктора Ивановича Сарианиди, Москва: Старый сад, 2004. С. 254–281.

10 Information for M3200, M3225, M3240 see note 8; that of M3900 Сарианиди В. И., Дубова Н. А., Новые гробницы на территории царского некрополя Гонура, На пути открытия цивилизации, Сборник статей к 80-летию Виктора Ивановича Сарианиди, Санкт-Петербург: Алетейя, 2010, С. 144–171; Дубова Н. А., Погребения животных в стране Маргуш, Труды Маргианской археологической экспедиции, Том 4, Исследования Гонур Депе в 2008–2011 гг, Москва: Старый сад, 2012, С. 101–139; Нечвалода А. И., Дубова Н. А., Музеефицирование и муляжирование особо ценных предметов на Гонур Депе, Труды Маргианской археологической экспедиции, Том 5, Исследования Гонур Депе в 2011–2013 гг, Москва: Старый сад, 2014, С. 151–157.

11 More than 2800 burials and sacrificial pits have been excavated in the area 300 m to the west of the Palace site.

12 Five C14 data have been collected from the Big Cemetery, all in the cluster of 2200–1900 BCE; from the Palace site, seven reliable C14 dating data are available. Five of them were collected from the deposits when the palace was in use, dated to ca. 2137–1921 BCE. Other two samples came from deposits after the palace was abandoned, ca. 1995–1744 BCE. See Зайцева Г. И., Дубова Н. А. и др., Радиоуглеродная хронология памятника Гонур, Труды Маргианской археологической экспедиции, Том 2, Москва: Старый сад, 2008, С. 166–179.

13 Before this, only pottery cart and wheel models had been excavated. See Массон В. М., Алтын-депе, Ленинград: Наука, Ленинградское отделение, 1981, Табл. XIX (Plate 19）; Дубова Н. А., Могильник и царский некрополь на берегах большого бассейна Северного Гонура, У истоков цивилизации, Сборник статей к 75-летию Виктора Ивановича Сарианиди, Москва: Старый сад, 2004, С. 254–281.

14 Кожин П. М., Колесный экипаж впервые преодолевает п устыни, У истоков цивилизации, Сборник статей к 75-летию Виктора Ивановича Сарианиди, Москва: Старый сад, 2004, С. 282–289.

15 Crouwel J. H., "Metal Wheel Tyres from the Ancient Near East and Central Asia," *Iraq*, Volume 74, January, 2012, pp. 89–95. All preceding information of Bronze felloes is from this article, as well as Littauer M. A., and Crouwel J. H., *Metal Wheel Tyres from the Ancient Near East, Selected Writings on Chariots and Other Early Vehicles, Riding and Harness*, Leiden, Boston, Köln: Brill, 2002, pp. 261–271.

16 Apart from the obvious similarity between the bronze felloes from Zhouyuan and those from West Asia and Central Asia, the only differences are ears: there are more but smaller ears on the Zhouyuan felloes than on those West Asian and Central Asian ones.

17 Генинг В. Ф., Зданович Г. Б., Генинг В. В., Синташта: Археологические памятники арийских племен, Часть 1, Челябинск: Южно-Уральское книжное издательство, 1992, 448 с.

18 For statistics of horse chariots on the steppe see: Епимахов А. В., Чечушков И. В., Евразийские колесницы: конструктивные особенности и возможности функционирования, Археология Южного Урала, Степь (проблемы культурогенеза), Челябинск: Рифей, 2006, С. 168–182; Чечушков И. В., Колесничный комплекс эпохи поздней бронзы степной и лесостепной Евразии: от Днепра до Иртыша, Диссертация на соискание ученой степени кандидата исторических наук, Екатеринбург, 2013, 495 с.

19 Епимахов А. В., Относительная и абсолютная хронология синташтинских памятников в свете радиокарбонных датировок, Проблемы истории, филологии, культуры, XVII, Москва-Магнитогорск- Новосибирск, 2007, С. 402–421.

20 From the four cemeteries of Petrovka culture spread in the central and north parts of Kazakhstan, 6 horse chariots have been discovered, dated to ca. 1930–1690 BCE; from a cemetery of Alakulka culture, located in south Ural, one horse chariot was found, dated to ca. 1900–1250. See Чечушков И. В., Колесничный комплекс эпохи поздней бронзы степной и лесостепной Евразии: от Днепра до Иртыша, Диссертация на соискание ученой степени кандидата исторических наук, Екатеринбург, 2013, 495 с.3214–325; Епимахов А. В., Относительная и абсолютная хронология синташтинских памятников в свете радиокарбонных датировок, Проблемы истории, филологии, культуры, XVII, Москва-Магнитогорск-Новосибирск, 2007, С. 402–421 ; Епимахов А. В., Чечушков И. В., "Горизонт колесничных культур" Северной Евразии: поэтическая метафора и историческое содержание, Проблемы истории, филологии, культуры, XXI, Москва-Магнитогорск-Новосибирск, 2008, С. 480–500.

21 Due to the preservation conditions and the limit of excavation technology, archaeologists have never discovered a whole horse chariot, not even a whole wheel. As there were not metal parts on the chariots, identifying them has to thank to the prevail burial custom of that time. Two wheel-shaped pits

were dug to set the chariot on the bottom of the grave. Therefore, archaeologists often discovered the half wheels that preserved in the pits, or only the wheel pits, but not the chariot body parts.

22 David W. Anthony, *The Horse, the Wheel, and Language, How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World*, Princeton: Princeton University Press, 2007.

23 Dated between the end of the 3rd and the beginning of the 2nd millennium BCE. See bЧередниченко Н. Н., Пустовалов С. Ж., К вопросу о боевых колесницах и колесничих в обществе катакомбной культуры, Проблемы охра н ы и исследова н и я па м я т н и ков археологии в Донбассе: Тезисы докладов научно-практического семинара, Донецк, 1989, С. 104–106; Чередниченко Н. Н., Пустовалов С. Ж., Боевые колесницы и колесничие в обществе катакомбной культуры (по материалам раскопок в Нижнем Поднепровье), Советская археология, 1991, № 04, С. 206–216.

24 Кореневский С. Н., Белинский А. Б., Калмыков А. А., Большой Ипатовский курган на Ставрополье, Москва: Наука, 2007, С. 37–41.

25 Чечушков И. В., Колесничный комплекс эпохи поздней бронзы степной и лесостепной Евразии: от Днепра до Иртыша, Диссертация на соискание ученой степени кандидата исторических наук, Екатеринбург, 2013, С. 206–209.

26 Сарианиди В. И., Задолго до Заратуштры (Археологические доказательства протозороастризма в Бактрии и Маргиане), Москва: Старый сад, 2010, 202 с.

27 See note 21.

28 Новоженов В. А., Коммуникации и транспорт страны Маргуш в пространстве и во времени, Труды Маргианской археологической экспедиции, Том 6, Памяти Виктора Ивановича Сарианиди, Москва: Старый сад, 2016, С. 361–377.

29 Новоженов В. А., Колесный транспорт эпохи бронзы Урало-Казахстанских степей (Краткий обзор источников), Вопросы археологии Центрального и Северного Казахстана: сборник научных трудов, Караганда: Карагандинский государственный университет, 1989, С. 110–122; Новоженов В. А., Чудо коммуникации и древнейший колесный транспорт Евразии, Москва: Таус, 2012, С. 197–200.

30 Новоженов В. А., Наскальные изображения повозок Средней и Центральной Азии (к проблеме миграции населения степной Евразии в эпоху энеолита и бронзы), Алматы: Аргументы и факты – Казахстан, 1994, С. 158.

31 Another cause that the nails on Satan chariot survived the ages is that they were made of bones, instead of horns. In general, Eurasian steppe people used more horn than bone to make utensils, and nails for "tire" should not be exceptional.

32 a. Wang Wei 王巍：《中国马车渊源蠡测》，见《中国商文化国际学术讨论会论文集》，中国大百科全书出版社，1998, pp. 380–388.
b. Xiao Hanyi 夏含夷：《中国马车的起源及其历史意义》，见《古史异观》，上海古籍出版社，2005, pp. 99–130.

33 For historiography please see Wang Haicheng 王海城：《中国马车的起源》，见《欧亚学刊》第三辑，中华书局，2002, pp. 1–75.

34 Кузьмина Е. Е., Предыстория Великого шёлкового пути, Диалог культур Европа-Азия, Москва: КомКнига, 2010, С. 55–63.

35 Examples include that the shape of chariots in the Central Plain of China was similar to that of Eurasian steppe; the rock carvings of horse chariots in Kazakhstan, Mongolia, Xinjiang, and Inner Mongolia could indicate the routes that horse chariots traveled to China. Please refer Lin Yun 林沄：《对南山根M102出土刻纹骨板的一些看法》，《内蒙古东部区考古学文化研究文集》，海洋出版社，1991，pp. 53–57；乌恩：《论古代战车及其相关问题》，《内蒙古文物考古文集》，中国大百科全书出版社，1994, pp. 327–335.

36 a. Wu Xiaoyun 吴晓筠：《商至春秋时期中原地区青铜车马器形式研究》，见《古代文明》第一卷，文物出版社，2002, pp. 180–277.
b. Jing Zhongwei 井中伟：《鋗策、钉齿镳与镝衔 – 公元前二千纪至前三世纪中西方御马器比较研究》，《考古学报》2013, no. 3, pp. 297–324.

37 Huang Chongming divides horse cheek-plates from Yinxu into four categories. A type are square in shape; B and C are irregular squares and fewer in number; D type, only one sample, looks like a handle with a hole, something similar to a bottle opener, which could be created in Yinxu. Huang Chongming 黄铭崇：《从商代的"C形马衔"与"尖锥策饰"看商代的"骑兵"问题》，见《纪念殷墟发掘八十周年学术研讨会论文集》，历史语言研究所，2015年, pp. 141–187.

38 Institute of Archaeology, Chinese Academy of Social Sciences中国社会科学院考古研究所：《殷墟妇好墓》，文物出版社，1980，p. 470.

39 石璋如：《小屯第一本・遗址的发现与发掘丙编・殷墟墓葬之一・北组墓葬》，历史语言研究所，1970，plates 97， 98， 187， 188， 215， 216。
40 Archaeological Team of Anyang, Institute of Archaeology, Chinese Academy of Social Sciences中国科学院考古研究所安阳发掘队：《安阳殷墟孝民屯的两座车马坑》，《考古》1977, no. 1, pp. 71–74.
41 Archaeological Working Team at Anyang, Institute of Archaeology, Chinese Academy of Social Sciences中国科学院考古研究所安阳工作队：《安阳新发现的殷代车马坑》，《考古》1972, no. 4, pp. 25–29.
42 Archaeological Working Team at Anyang, Institute of Archaeology, Chinese Academy of Social Sciences中国社会科学院考古研究所安阳工作队：《**1**969～1977年殷墟西区墓葬发掘报告》，《考古学报》1979, no. 1, pp. 29–168.
43 Archaeological Working Team at Anyang, 中国社会科学院考古研究所安阳工作队：《殷墟西区发现一座车马坑》，《考古》1984, no. 6, pp. 27–31.
44 Institute of Archaeology, Chinese Academy of Social Sciences 中国社会科学院考古研究所：《安阳殷墟郭家庄商代墓葬》，中国大百科全书出版社，1998，p. 194.
45 Anyang City Working Team of Cultural Antiques 安阳市文物工作队：《安阳梅园庄殷代车马坑发掘简报》，《华夏考古》1997, no. 2, pp. 56–63.
46 Archaeological Working Team at Anyang,中国社会科学院考古研究所安阳工作队：《河南安阳市梅园庄东南的殷代车马坑》，《考古》1998, no. 10, pp. 50–67.
47 Institute of Archaeology, Chinese Academy of Social Sciences中国社会科学院考古研究所：《安阳大司空 – 2004年发掘报告》，文物出版社，2014, p. 502.
48 Same as note 35 b.
49 Institute of Archaeology, Chinese Academy of Social Sciences中国社会科学院考古研究所：《滕州前掌大墓地》，文物出版社，2005，p. 832.
50 Anyang City Working Team of Cultural Antiques安阳市文物工作队：《河南安阳郭庄村北发现一座殷墓》，《考古》1991, no. 10, pp. 40–47.
51 Same as note 35b.
52 A. Same as note 24.
B. Усачук А.Н., Древнейшие псалии (изготовление и использование), Донецк: ИА НАН Украины, 2013, С. 3–5.
53 The four square studded cheek-plates from Cemetery Obolkin Lug III（мог. Обилькин луг III）were considered belonging to Sintashta culture. See Денисов И. В., Могильники эпохи бронзы Обилькиного луга близ Соль-Илецка,
Археологические памятники Оренбуржья. Выпуск V, Оренбург: Издательство ОПТУ, 2001, С. 38–48. However, the grave structure and pottery assembly were quite different from those of Sintashta. We therefore adopt the opinion of 但墓葬形 И. В. Чечушков，assigning it to Alakul culture. (See note 24.)
54 Li Yongdi李永迪：《殷墟出土器物选粹》，历史语言研究所，2009年， 第129页。
55 Even though there were more archaic forms of square cheek-plates, such as Xiaotun M202, M40, etc. that the nose ring was absent from the side of the plate. This feature, however, is similar to that of Sintashta and Petrovka cultures.
56 Zhang Changshou & Zhang Xiaoguang 张长寿、张孝光：《殷周车制略说》，见《中国考古学研究 – 夏鼐先生考古五十年纪念论文集》，文物出版社，1986, pp. 139–162.
57 Same as note 35.
58 Surely one cannot exclude that the chariot of bronze felloes of Zhouyuan came from direct contact with the steppe. However, from Cemetery Satan excavated not only “tire” (M1), but also studded cheek-plates almost exact same as those in Yinxu. It is thus more likely the two reached Yixun together.
59 Yuan Jing袁靖：《中国动物考古学》，文物出版社，2015, pp. 99–103.
60 a. Wang Peng 王鹏：《商周弓形器用途再议 – 对“挂缰钩”说的一点补充》，见《中国北方及蒙古、贝加尔、西伯利亚地区古代文化》，科学出版社，2015, pp. 293–299.
b. Ван Пэн, Еще раз об использовании инь-чжоуских изделий в форме лука, Вестник новосибирского государственного университета, Серия: История, филология, Т. 14, вып. 4, 2015, С.24–36.
61 Ван Пэн, Взаимодействие культур бронзового и раннего железного века Южной Сибири, Синьцзяна и Северного Китая, Вестник новосибирского государственного университета, Серия: История, филология, Т. 17, вып. 4, 2018, С. 16–29.

7

NATURAL AND CULTURAL HISTORY OF THE CAMEL

Renato Sala

The Camelidae Family: Ancestral Origin, Evolution, and Geographical Diffusion

The *Camelidae* family consists of camel-like even-toed ruminant ungulates pertaining to the mammalian class, artiodactyla order, tylopoda sub-order. Today it is represented by three genera and seven species (three wild and four domestic) that diverged in the last five million years.

The earliest known Camelidae ancestor developed from an extinct genus of the size of a big rabbit and lived in North America forty to fifty million years ago (Eocene). During the Miocene (30 Ma), with the change of forest into open woodland, it grew in size acquiring the shape of a long neck antelope and evolved a new genus: *Poebrotherium*, the first representative of the Camelidae family. The last needed to adapt to the incoming cooling climate and evolved few genera: some built a cold-resistant massive body, others migrated south, which altogether determined the divergence of two lines of evolution.

The Camelidae that spread south to Central America around 11 million years ago and, around 4 millions years ago, crossed the Panama straight, conserved gazelle-like features and became in South America the direct ancestors of the *Lamini* tribe, today represented by two genera (Lama and Vicugna), each counting two species (one wild and one domestic).

Instead, the genera that remained in the colder North America developed bigger size, some with long giraffe-like neck and cushioned pads (*Aepicamelus*), others with two humps for fat storage (*Megatylopus,* enormous, stood 4.5 m at shoulders). During the late Miocene (around 8 Ma), at the first establishment of ice sheets in the N-Hemisphere, Megatylopus spread across the Bering land bridge in the savannas of the Old World and here generated a new two-humped genus, *Paracamelus*[1] (Figure 7.1).

Paracamelus, in order to avoid predators, adapted to all the arid (hot and cold) non-rocky plains of the Afro-Eurasian continents and here developed few species, becoming the direct ancestor of the *Camelini* tribe. One-humped proto-dromedaries and two-humped types diverged five million years ago[2] and from the lasts appeared proto-bactrians around one million years ago[3] (Figure 7.2).

By the start of the Holocene, the Camelini tribe was represented by three species: Camelus (bactrianus) ferus, two-humped, which had a long endurance and a little population still existing today; a kind of wild two-humped bactrian camel adapted to cold continental deserts; and a wild one-humped dromedary adapted to southern hot deserts. These last two wild species

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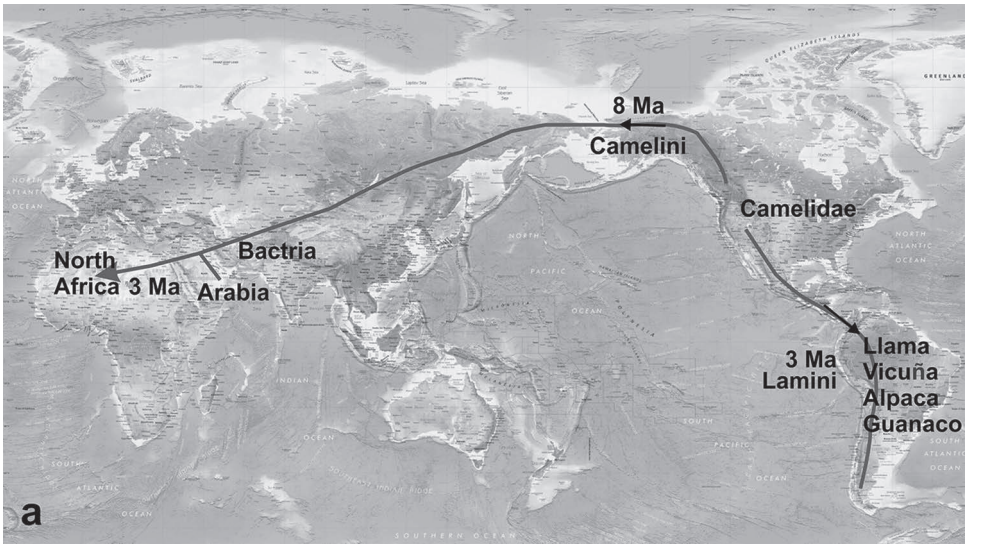

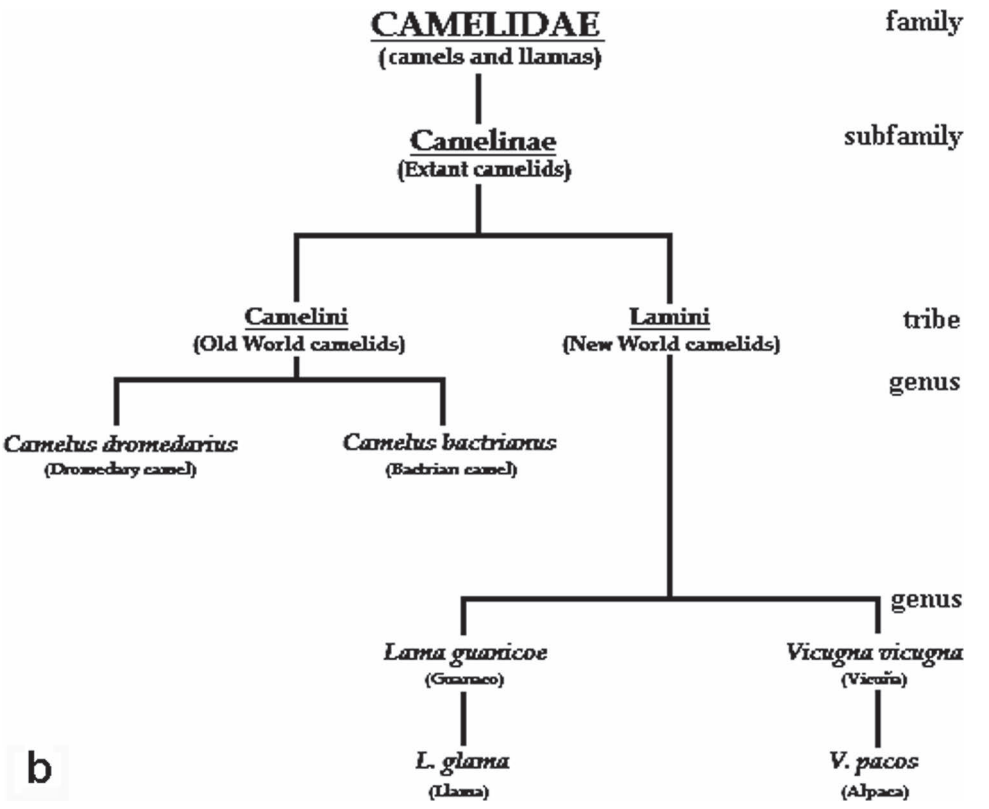

Figure 7.1 Geographical dispersal (a) and genetic tree (b) of the *Camelidae* family.

Figure 7.2 Cave painting representation of a two-humped camel from Kapova cave (Urals), radiocarbon dated at ca. 18 ka BP (photo V. Zhitenev 2018).

gave rise to the two domestic species we have today (Camelus bactrianus and Camelus dromedarius) and disappeared from wildness during the 1st millennium BCE (Peters and von den Driesch 1997: 652; Ji et al. 2009).

In North America all Camelidae were wiped out between 12,000 and 10,000 years ago along with most of the megafauna, in coincidence with the spread of humans from Asia (MacPhee 1999: 18, 20, 26). In South America the Lamini tribe persevered in the Andean region with two species that were eventually domesticated around 4500 BCE.

As a whole, today there are seven extant species of Camelidae: four in South America (wild guanaco, domestic llama, wild vicugna, domestic alpaca) constituting the *Lamini* tribe; and three in Afro-Eurasia (wild bactrian camel, domestic bactrian camel, domestic dromedary) constituting the *Camelini* tribe (Cui et al. 2007).

The Camelini Tribe: Extant Species and Qualities

The Three Extant Species of Camels

The popular name *camel* refers to the three extant species of Afro-Asian Camelini. Their characteristics are the following:

- Wild camel (*Camelus ferus*) is the only species of wild camel left. Its natural habitat was distributed between Mongolia and Central Kazakhstan at 1500–2000 m asl altitude; but today only around 1500 individuals are left in the continental deserts of Taklamakan,

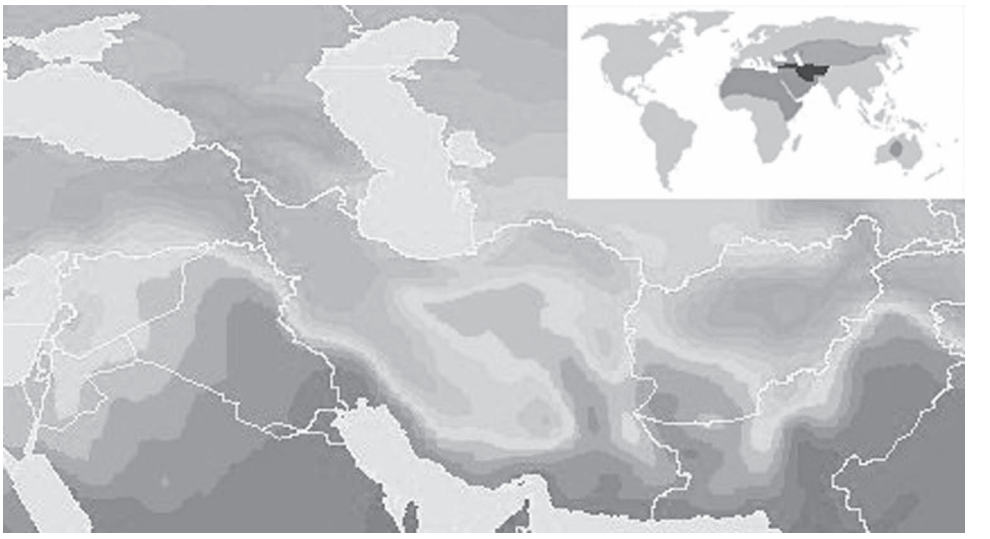

Figure 7.3 Small map: the middle-gray area marks the entire geographic extension of the camels' habitat; the black area marks the intersection between the natural habitats of both bactrian and dromedary camels. Large map: the merging of the natural habitats of the two species happens in the mountainous deserts of Middle East and South Asia, that is, around the whitish isothermal band with annual mean temperature of 21°C (elaborated by R. Sala).

Qinghai and Gobi.[4] It is characterized by two small compact pyramid-shaped hairy humps of lesser size than the ones of the domestic bactrian, from which differs by just 3 percent of the genetic code, so that it is considered by some authors a separated ancestor species and by others a parallel subspecies.

- Bactrian camel (*Camelus bactrianus*, Asian camel) has two rounded humps and is very large and robust (400–900 kg), heavy-coated and well adapted to cold-dry climate. Its favorite habitat is the same as Camelus ferus, that is, the mountainous regions of Mongolia, West China and Central KZ, but from here it diffused to the west in the Pre-Caspian region and to the southwest until Bactria, Kopet-dag, Khorasan and Anatolia. It can stand altitudes of 4000 m asl and temperature gradients down to -30°C, but not prolonged exposure to extreme heat. The species appeared around the turn of the 3rd millennium BCE at the Iranian-Turmenian borders as result of domestication of the now extinct wild bactrian, and rapidly diffused northeast, reducing and totally substituting the population of its original wild ancestor. Three main types are recognized: Mongol, Kazakh, and Kalmyk.
- Dromedary (*Camelus dromedarius*, Arabian dromedary or Indian dromedary) is one-humped, lighter (400–600 kg), slender (taller and shorter), faster (up to 60 km/h), more milky and less fleecy than the bactrian, and by far a better load carrier. It is well adapted to hot dry climate (it cannot stand temperatures below zero) and widespread in North Africa, Arabia, and the Middle East.[5] The species appeared in the Arabian peninsula around 3000 BCE out of domestication of the wild dromedary, and rapidly spread east and west, totally substituting in a couple of millennia its wild ancestor[6] (Figure 7.3).

Hybrid Camels

Hybrid camels result from the crossbreeding of the dromedary and the bactrian. They are fertile, mainly when crossed back with a purebred, but after the third crossbreeding generation they start loosing hybrid vigor and economical value. Their morphological characteristic is a small indentation of 4–12 cm between two proximate and barely distinguishable humps. Hybridization happen naturally in the border zone of the respective habitats (mountainous deserts with average yearly temperature of 21°C) (Figure 7.3). Meanwhile the hybrid has been developed consistently by human intervention starting from the 1st millennium BCE, accounting for the reduction of the number of pure breeds. In fact, hybrid camels are very prized by being two times larger and two times stronger than the purebred parents. They are 700–1000 kg in weight and able to carry a load up to 400–500 kg, of faster maturation, and more docile, milk-productive and climate resistant than either purebreds.

Many kinds of hybrid camels have been developed, intended for specific functions, but, as a whole, the basic types are three (Figure 7.4):

- The half dromedary (generally female) and half bactrian is called *F1* (filial-1 or generation-1), has one elongated hump and is the largest and strongest among all camels. When a female F1 backcrosses with a bactrian or with a dromedary purebred, it generates a F2 that can be, respectively, of two types.
- The *F2-bactrian*, three-quarters bactrian and one-quarter dromedary, has a high fore hump and a tiny undeveloped rear hump.[7] It is valuable as riding and pack animal: like F1, it is stronger than both pure breeds and faster than the pure bactrian, but more docile than F1 and better adapted to mountainous climates and routes.[8]
- The *F2-dromedary*, three-quarters dromedary and one-quarter bactrian, has one flattened hump and, being less used, is very rare today.

Behavior

Camels are very resistant to heat (they can afford a liquid loss equal to one-quarter of their weight) and the bactrian even to frost, and both vulnerable to humidity. They are gregarious animals, roaming freely in herds made of one male and several females with offspring, or of solitary or bachelor male groups, or in female herds without males. They mate in the wild all year round, lying in decubitus position. They have a very strong memory and sense of orientation. The desert habitat inaccessible to predators made them fearless animals, friendly and bold.[9] The process of domestication didn't change their physiological functions but, out of purposeful selection, increased the productivity of meat, fleece and milk and, like in the case of the fat-tailed sheep, enhanced the accumulation of humps' fat up to 5–7 percent of the animal weight (Baimukanov and Baimukanov 2009).

Historical Domestication and Use of the Dromedary and the Bactrian Camel

Camels are fearless and docile animals, so that the gathering of just their meat (which is not very appreciated) and skin can be easily achieved by hunting. So, their domestication has been first of all motivated for harvesting milk and fleece and then for their use as load carriers and racers. The process happened in three steps, more or less simultaneously for the two

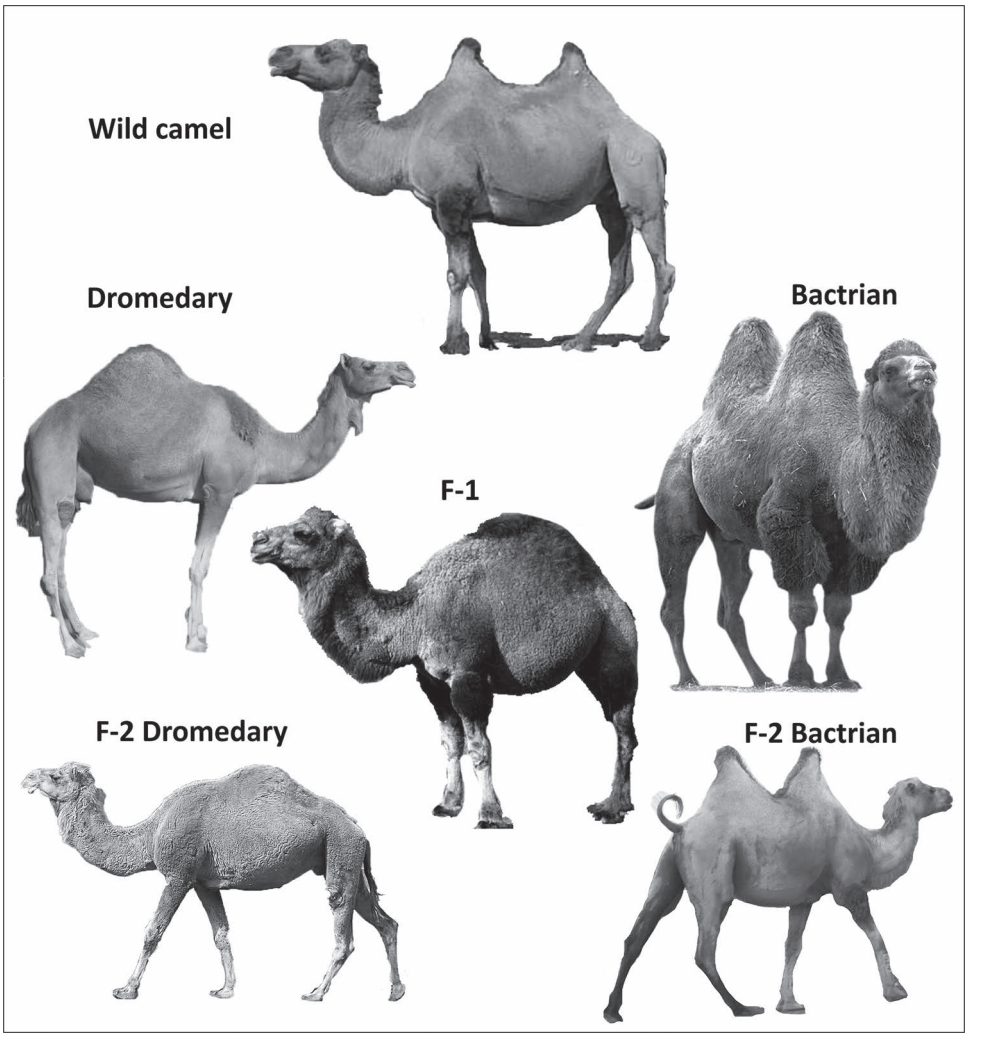

Figure 7.4 Wild camel, purebred camels, and F1-F2 hybrids.

species but independently in their respective habitats, in different forms and referred by different names.[10]

- The early pastoralist domestication by part of nomadic shepherds of the southern and northern deserts probably took place around the 4th to 5th millennium BCE and definitely happened at the turn of the 3rd millennium, for the purpose of procuring milk, hair, dung and meat. Today dromedaries in NE-Africa are mainly domesticated for meat and in Middle East for milk and labor; bactrian camels were domesticated in Central Asia for milk and fleece.
- The domestication as pack and draft animal happened for both the Arabian and bactrian species around the turn of the 3rd millennium BCE, clearly coinciding with the colonization of the deserts in the context of incipient mining and trading activities: at first in

remote peripheries and only then in the proximity of urban centers provided of road infrastructure and draft animals like donkeys and bulls. Most probably, around the same time, camels were also ridden and, in arid areas claimed for farming activities, employed as labor animals (plowing, water lifting, etc.).

- The last domestication step as military animal started at the beginning of the 1st millennium BCE together with the improvement of the saddle and hybridization techniques.

Next are quoted the important archaeological, petroglyphic, and literary documents concerning these three steps of domestication and their chronological attribution.

Hunting and Pastoralist Domestication

Some problems emerge in the study of the archaeological materials related to the earliest steps of camel domestication. In fact the bones of Paleolithic, Neolithic and modern camels present very little differences, making difficult the distinction between wild and domestic species; and the camel trappings, at the difference of the horse ones, just consist of leather reins and wooden nose pins that are not preserved in the archaeological record, impeding the detection of traces of their early use as domestic animals. Such uncertainties grow when going back in time, so that the camel use as military animal can be confidently dated to the first half of the 1st millennium BCE and as transport animal to the turn of the 3rd millennium, but its pastoralist domestication, which could be suspected happening one or two millennia earlier, is in fact more or less fixed archaeologically like its use as load carrier.

Biological camel remains have been discovered in stratigraphic contexts at multiple sites. Leaving aside Paleolithic monuments, the earliest records are provided in Mesolithic and Neolithic sites of South Arabia and Yemen for the dromedary, and of Mongolia, Xinjiang, Uzbekistan, and Kazakhstan for the bactrian. They consist of bone remains, which is a direct witness of camel presence and hunting but not of its domestication. The pastoralist domestication is better suspected when findings consist of dung, hair-ropes, and so on, that is, when pointing to the regular use of the camel's body products.

Dromedary

HUNTING

Some archaeological findings of faunal remains and petroglyph representations point to the presence of dromedaries at these sites and, although they don't prove the establishment of domestication, suggest at least that the camel was here hunted and used as source of meat and body products.

In the coastal site of Sihi (Yemen) has been found a camelid mandible and bone, most probably of a wild dromedary, dated to ca. 7100–7200 BCE.[11] Dromedary bones have been also identified at sites in southeastern Arabia dating between 5000 and 4000 years BCE (Al Buhais, UAE); and in Ras Ghadana (Abu-Dhabi) and in Jericho and Arad (Near East) dated to the late 3rd millennium.

Petroglyph representations of hunting of a wild dromedary are found in the Sha'ib Musamma open-air site (Saudi Arabia) dated ca. 3000 BCE (Anati 1997; Spassov and Stoytchev 2004; Bednarik and Khan 2009); and in the Egyptian art of the New Kingdom attributed to the Late Bronze Age (12th century BCE) (Figure 7.5).

Figure 7.5 Hunting of wild dromedary; Sha'ib Musamma, Saudi Arabia, 3000 BCE (Spassov and Stoytchev 2004, redrawn from E. Anati 1997).

PASTORALIST DOMESTICATION

More significant are some findings pointing to a relatively early presence of domestic dromedaries in the coastal regions of SE-Arabia and in Egypt, probably with the main purpose of milking (Bulliet 1975: 49).

The earliest reliable witness comes from coastal settlements of the southeastern Arabian peninsula dated between 3000 and 2500 BCE. The excavations of the site of Umm an-Nar (Abu Dhabi) dated to the early 3rd millennium BCE exhumed an assemblage of around 200 camel bones that, by showing emphasis on juveniles, suggest an incipient stage of domestication (Hoch 1977). This discovery is strengthened by comparison of DNA samples of ancient and modern camel remains pointing similarly to the origin of camel domestication in the southeast coast of the Arabian Peninsula during the same Umm an-Nar period (Almathen et al. 2016).

Debatable is some evidence of early domestication around the same time in Egypt because based on finds from funerary contexts that possibly hold a ritual meaning: a pottery camel's head and a terracotta tablet engraved with the image of men riding and leading camels, both from Predynastic Egypt, that is, before 3150 BCE; three clay camel heads and a limestone vessel in the form of a sitting camel carrying an ointment pot, dated to the First Dynasty (3050–2890 BCE); and several camel models from the Fourth Dynasty (2613–2498 BCE) (Free 1944; Saber 1998; Kennedy 2014).

Petroglyph representations of humans leading dromedaries, exceptionally dated by juxtaposed inscriptions, testify with certainty the presence of these animals in the region just a few centuries later: near Aswan (Upper Egypt) such scene is accompanied with seven hieratic characters dated to the VI dynasty (2345–2181 BCE); in Wadi Nasif (Sinai) by an inscription referring to the XII dynasty (XIX BCE) (Gerster 1961: 62).

From Egypt domestic camels diffused westward along the Mediterranean coast and southward upstream along the Nile until Nubia; and, from here, after 1500 BCE, to NE Africa and the Sahara region, as testified by petroglyph images at Laga Oda (E-Ethiopia) and at several Saharan sites (Clark and Brandt 1984; Ripinsky 1983).[12]

Camelid faunal remains from Harappan sites of late 3rd and early 2nd millennium BCE have been identified as dromedary (Badam 1984). The hymns of the Rig-Veda (1500–1200 BCE) quote four times the presence of herds of domestic camels in NW-India (Griffith 1999: 01–138, 08–046) and so do the Avestan Ghatas in Iran 500 years later.

In general it can be said that, during the Late Bronze, domestic dromedaries were fairly ubiquitous across Arabia but still relatively few in Near East and Egypt, and possibly even rarer in Middle East and NW-India. Certainly, in Mesopotamia some camels were already present around 1950–1600 BCE, as witnessed by a Sumerian text found at Nippur from the Old Babylonian period alluding to camel's milk (Archer 1970: 17); but a consistent presence is archaeologically witnessed only with the start of the 1st millennium BCE, when large herds are attested from excavations of the Iron Age Tell Abraq on the Persian Gulf, probably as working animals because found in the context of an intensive irrigation system.

Bactrian

HUNTING

Bones of bactrian camels have been found in Neolithic sites near Baotou (Inner Mongolia, 6000-5000 BCE) and around Lake Barkhol (northeast Xinjiang, dated to the 4th millennium BCE) (Olsen 1988; Peters and von den Driesch 1997). Also their petroglyph representations are found in the same regions and similarly dated to the Neolithic period.

In W-Central Asia camels' presence and hunting is evidenced by the archaeological excavations of the Neolithic site of Ayakagytma (Kyzylkum desert, UZ) where bones of two-humped camel dated between 5500–3500 BCE (Neolithic period) constitute the 50–85 percent of the total osteological remains (Szymczak and Khudzanazarov 2006).[13] More south, on the northern piedmonts of the Kopet-dag, camel bones, probably of bactrian, have been retrieved from the Anau-II layer dated between 4500–4200 BCE (Mellaart 1975).

In East Iran, where the bactrian is the only camel pertaining to the native fauna, its depictions are found on sherds from Sialk and Khorab (Iranian plateau) dated at the turn of the 3rd millennium BCE (Compagnoni and Tosi 1978: table 3).

PASTORALIST DOMESTICATION

Concerning the domestication of bactrian camels, definitely convincing are archaeological findings of "domestic camel bones at Anau (Turkmenistan) dated to the later half of the IV millennium BCE, and at Geoksyur-5 dated to the first half of the III millennium BCE" (Kuzmina 2015). Similar faunal remains are also found at Shor-depe, Chong-depe, Hapuz-depe, in contexts dated to the Namazga IV period, that is, 2500 BCE (Kohl 1992: 186).

Even more significant by being outside the native area of the wild bactrian species are the bone, dung, and woven hair (possibly from bactrian camel) found in Shahr-i-Sokhta (Sistan, SE-Iran), preserved in jars and dated to 2700–2500 BCE (Compagnoni and Tosi 1978): the findings "reinforce the suppositions that these are domestic stock and that the bactrian was here domesticated slightly later than at the border of Turkmenistan and Iran" (Wapnish 1981: 104–105).

Within the northern habitats of East Ukraine, Tatarstan, West Kazakhstan and West Siberia, archaeological traces of both *Camelus ferus* and domestic bactrian (the last still unclear if result of northern diffusion or of independent domestication) are found in Andronovo sites dated to the start of the 2nd millennium BCE and in sites of the subsequent Karasuk culture.

In the Middle East the earliest reliable witness of its presence is much later. It consists of two bas-relieves from the black obelisk from Nimrud (near ancient Nineveh and modern Mosul, N-Iraq) depicting two attendants carrying two bactrian camels as tribute to the Assyrian king Shalmaneser-III (858–824 BCE), respectively from the kings of Gilzanu (Van lake) and of Musri (N-Kurdistan), possibly pointing to their high value out of bio-techniques of hybridization incipient at that time (Potts 2003, 2004).

Use as Draft, Pack, and Riding Animal

Camels of both species started to be used as draft and pack animals (*slave dromedaries*) during the 3rd millennium BCE (more or less synchronously with the documentation of their pastoralist domestication) in connection with the managing of distant mines, commercial routes, and agricultural works. Actually, the camel as draft animal is quite useless and cannot compete with bulls, horses, and donkeys. It is instead the best for pack transport, economically more profitable than carts as it does not needing roads, and meanwile is more reliable because of its docile and resistant nature, covering more than 100 km a day without water and with two time less food than a horse. Its use as mount, thanks to its docility and 40 km/h speed, certainly happened simultaneously to its use as load carrier in order to accommodate carovaneers, children, and elders.

The use of camels as transport animals happened earlier in remote peripheries and was postponed in proximity of the centers of urbanization due to the long tradition of using draft transports on road infrastructures involving cattle, donkeys, and mules. This explains the early and large use of bactrian camels in the less urbanized areas of Bactria and Margiana and the postponed involvement of dromedaries in the crowded regions of the Egypt, Near East and Middle East, where in some regions, like Assyria, their military use even anticipated the one for load transport.

The importance and using of transport and riding camels definitely increased at the turn of the 1st millennium BCE with the introduction of hybrid species with enhanced vigor. Another factor increasing the use was the evolution of dromedary and bactrian saddles improving its loading potential as pack animal and its maneuverability as mounted animal.

Dromedary

The earliest document concerning the dromedary as transport animal is the Egyptian limestone vessel quoted earlier, shaped as a kneeling camel carrying a generic burden (possibly an ointment pot) and dated at the First Dynasty (3050–2890 BCE) (Figure 7.6). Its significance is debatable because it was found in a ritual funerary context but, in any case, the date matches the one of terracotta figurines of harnessed Bactrian found in Turkmenistan (see the next section).

During the 2nd millennium BCE, when overland itineraries became relatively safe comparing to the more dangerous sea navigation, the transport use of dromedaries developed together with the emergence of the "incense route" along the western edge of Arabia, connecting the Sabaean coast with Egypt and the Near East, first in remote segments of the tract and then around the urban centers endowed of road infrastructure.

The Bible quotes their use in the Near East as riding and pack animal from the start of the 2nd millennium,[14] that is, among nomadic tribes. Actually such date is not yet supported by archaeological findings that radiocarbon date its first presence much later, between the 12th century and 9th century BCE, in Israel.[15]

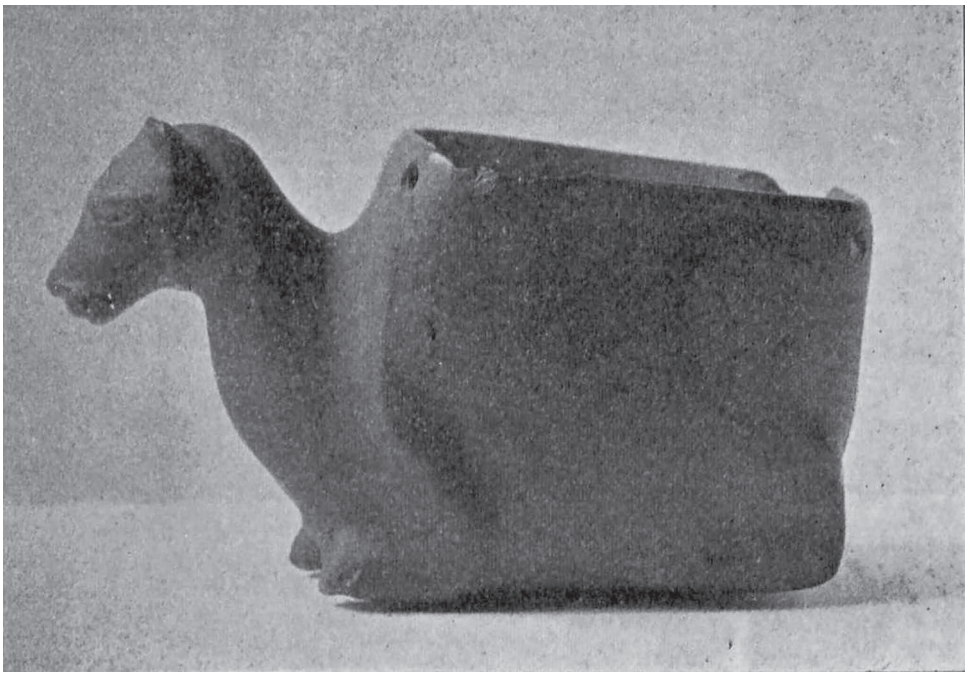

Figure 7.6 Terracotta statuette of camel carrying a burden, from a tomb at Abusir el-Meleq (Egypt), First Dynasty 3050–2890 BCE (Egyptian Museum, Berlin, Moller 1906).

In Egypt a sound archaeological evidence of its transport use is similarly quite late: a dromedary statuette carrying two water jars dated before the 1200 BCE (Redford 1992: 277).

In East Africa, at the turn of the 1st millennium BCE, domestic camels were used along the trade routes connecting the iron mines of the Kush empire and the gold and ivory resources of the Axum kingdom with the Sahara region on the west and the Swahili Coast on the south (Boivin 2009). At that time the establishment of a "camel period" is testified in all the petroglyph sites of the Sahara region, NE Africa, and the Arabian Peninsula, by the sharp increase of number, spatial centrality, and artistic quality of dromedary images.

As for the Middle East, the use of the transport dromedary is even later and documented first as riding animal and then as protagonist of the switch from draft to pack transport. The riding of a dromedary with saddle of S-Arabian style (see Saddle and Hybridization section later in the chapter) is represented on the famous bas-relief found at Tell el-Halaf (Mesopotamia) attributed to the 10th century BCE (Figure 7.7). In the Assyrian bas-relieves of the following four centuries were engraved several representations of ridden camels, clearly for military use (see Dromedary section later in the chapter).

Some tablets from the Neo-Babylonian empire (550 BCE) (Eph'al 1982) and the accounts of Isidore of Charax (Isidore of Charax, 100 CE) are the first unequivocal literary evidences of the use of camels as transport animals during the Achaemenid and Seleucid empires and as pack animals among Parthians, Romans, and Sasanians (Kennedy 1915)

With the rise of the Caliphate, in the Middle East the dromedary totally substituted the bactrian; and its use as pack animal diffused east and west along the Afro-Eurasian caravan routes. In any case, in the rock art record of West-Central Asia images of dromedaries remain

Figure 7.7 Aramaean riding a dromedary on S-Arabian saddle; Tell el-Halaf (Mesopotamia), 10th century BCE (© Walters Art Museum).

Figure 7.8 Dromedary caravan; Bezegli-Dere (Turkmenistan), 8th–10th centuries CE (Muradova 2011).

quite rare and the first ones appeared only after the Arabian conquest of the 8th century CE[16] (Figure 7.8).

The caravan trade was developing without roads, just supported by bridges, caravanserais and caravan towns, mainly composed by dromedaries traveling in line and fastened in groups. The train length was regulated on the basis of available water and pastures, and reached to very large sizes. Small caravans consisted of seven to forty camels led by a donkey; large caravans could be of averaging 100–2000 camels, taking up a few hours to cross a village. But pilgrims' caravans between Damascus and Mecca could include 10,000 camels, and trans-Saharan salt caravans were counting up to 20,000 camels, which was walking across a village for several days. Bactrian camels were used complementarily to dromedaries by winter in the mountainous segments of the itineraries.

Camel caravans started declining during the last 1000 years out of the concurrence of maritime routes. The mode of transportation faded completely only recently with the abolition of slave trade and the introduction of the rail transport (Desert transport, Enc. Brit.).

Bactrian

On the basis of the existing materials, the use of the bactrian as draft animal appears more or less contemporarily to its domestication. In fact, in Turkmenistan, terracotta models of wheeled carts drawn by bactrian camels are found at Altyn-depe, in contexts dated to the Namazga-IV period, (first half of the 3rd millennium BCE) following by just a few centuries the documents of its pastoralist domestication (Kohl 1992: 186).

By the late 3rd and early 2nd millennium BCE the harnessing of the bactrian camel is attested in the iconography of copper-alloy figurines and stamp seals from Bactria and in statuettes and seals from East-Iran and Pakistan (Figure 7.9).

In the Middle East, like in the case of the dromedary, the first witness of the transport use of a bactrian is its depiction as ridden animal on a couple of Syrian cylinder seals where two humans are sitting on its two humps (possibly just ritually, given the iconographic language of the representation), dated stylistically to 1750 BCE (Figure 7.10).

In West Central Asia, several archaeological sites dated to the early 2nd millennium BCE preserved remains of the domestic bactrian, pointing in some cases to its use as pack and riding animal.

Figure 7.9 (a) A small copper alloy statue representing a bactrian camel equipped with a kind of harness; Bactria-Margiana, late 3rd to early 2nd millennium BCE (© Metropolitan Museum of Art). (b) Syrian cylinder seal depicting two royal personages facing each other sitting on the two humps of a bactrian camel (1750 BCE) (© Walters Art Museum).

Figure 7.9 (Continued)

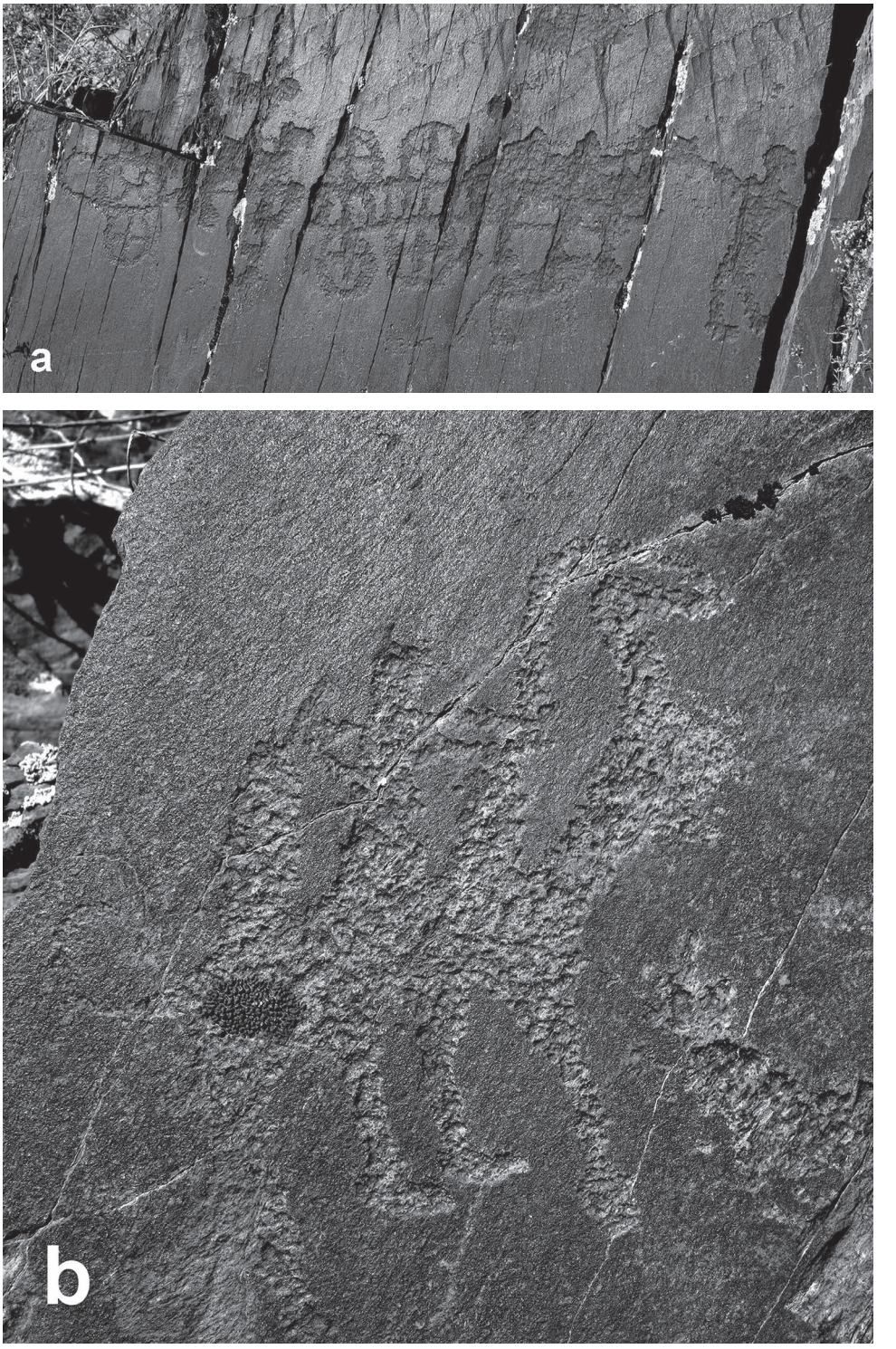

Figure 7.10a, b (a) Bactrian camels harnessed to a cart and a chariot, both held by a driver; Kuljabasy (South Kazakhstan), Bronze period, 15th–14th centuries BCE. (b) Rider of bactrian camel sitting between the humps and holding reins; Tekeli (Semirechie), Bronze period, 14th century BCE (photos R. Sala).

In Kazakhstan, excavations of prehistoric settlements exhumed faunal remains of domestic bactrians starting from the local Early Bronze Age (2000 BCE), which were very rare and scanty in Central and South Kazakhstan,[17] but more abundant in the desert landscapes of the Syrdarya and the Aral regions. This is the case of the Toksanbai settlement site (Ustyurt, XIX–XVII BCE) where the osteological record doesn't contain a single bone of wild camel but just of domesticated bactrian species, with some largest animals weighting around 600 kg. The remains refer to 141 individuals, which is a relatively small number counting for just the 0.6 percent of the heads of all species found in the site, and for the 9.7 percent of the domesticated ones[18]. The small number of camels in the site testifies a primary use of the Bactrian not for its body products but as pack and riding animal (Gauduchenko 2012).

Among the petroglyphs of South and Central Kazakhstan, images of the bactrian are very numerous, spanning from the Bronze to the Medieval periods. The animal is represented in various postures (running, standing, grazing, fighting, etc.) and scenes. They were never drawn as hunted but with front legs tied together (hobbling), held by bit and bridle, mounted by one or two riders, harnessed to a four-wheeled cart or a two-wheeled chariot. Shortly, its morphology and context only rarely allow one to suspect a wild species but clearly point to the domesticated bactrian. The images of harnessed and ridden animals are among the earliest, that is, the first half of the 2nd millennium BCE as the upper chronological limits of its domestication or of its introduction in the region as domesticated species. Representations of pack animals are absent (Figure 7.9).

Not until the Zhou Dynasty (ca. 1100–771 BCE) do Chinese literary sources confirm that Bactrian camels were domesticated and employed for carrying burdens (Olsen 1988). Apparently in the Chinese culture their significance was initially low and started growing uninterruptedly from the Late Bronze Age. By the end of the 1st millennium BCE they were listed in the Annals among the animals taken captive on military campaigns, or sent as diplomatic gifts and tributes, or as objects of trade; and their image competed the one of the horse in literature and visual arts.[19]

This progressive enhancement of the Bactrian importance could be the consequence of the strengthening of the camel vigor by incipient hybridization techniques (see Saddle and Hybridization section). In fact, also in the Middle East, it is around the middle of the 1st millennium BCE that Bactrian camels start to be quoted by literary sources and artistic representations as high status animals: they were seized by Assyrian kings as booty and tribute from the surrounding eastern and northern territories, represented in the relieves of the Apadana hall at Persepolis (Figure 7.11), harnessed to the chariots of the Roman emperors Nero and Heliogabalus. In Central Asia, besides petroglyphs, their images are found on metal plaques from the Oxus treasure (6th–4th century BCE) and from the Sarmatian kurgan at Filippovka (Urals) (4th century BCE).

Only under the Parthians and the establishment of long distance Eurasian trade, the bactrian camel, due to its good adaptation to cold mountain regions, became the irreplaceable pack animal of the impervious segments of the itineraries, where caravans of loaded bactrians were traveling by winter because consistent heat is intolerable to the animal. Moreover, O. Lattimore observes that "the Mongols prefer a fast camel to a pony for a long journey in haste, if they cannot get relays on the road", and favor young specimens because these "are much the best for riding, as they are not only faster but softer-gaited" (Lattimore 1929: 133).

Like the "dromedary period" detected in the petroglyph sites of the Sahara, E-Africa and Arabia, a "bactrian camel period" is established in the petroglyph sites of Central Asia starting from half of the first millennium BCE and enduring until the Turkic Middle Ages (Sala and

Figure 7.11 High-relief of the Apadana hall; Persepolis, 5th century BCE (photo A. Davey).

Deom 2016). But, with the Arab conquest the number of bactrian camels decreased in North-Syria, East-Iran and South-Afghanistan, superseded by the dromedaries and the one-humped hybrids of the newcomers (Bulliet 1990).

Saddle and Hybridization

SADDLE FOR DROMEDARY

Four main types of dromedary saddle are documented: Somali, South Arabian, North Arabian, Tuareg (Baum 2013).

1. The *Somali saddle* (or *stick saddle*) is the first and most primitive type, mainly intended for bearing loads. It uses the area of the camel's shoulders just in front of the hump, bounded by one or two pairs of vertical wooden branches fixed together on the top and under the abdomen of the animal. The date of its introduction is not fixed but, because its simplicity, it could be very early. It is commonly used today in Somalia and Kenya (Figure 7.12a).
2. The *South Arabian saddle* was introduced around the 12th century BCE in S-Arabia for riding and packing purposes. It accommodates the rider on a padding fastened by ropes in the rear part of the camel where he can hang on the hump hairs for reaching maximal speed but faces some difficulty in driving. Loads are carried in bags hanging on both sides of the rider's seat (Figure 7.12b). Its introduction coincides with the enhancement of the use of the camel as riding animal, like on the Aramaean bas-relief of Tell el-Halaf dated to the 10th century BCE (Figure 7.7), and also as military animal (see Dromedary section later in the chapter) as witnessed by several relieves of the Assyrian palaces of the 7th century BCE (Figure 7.13a). Today it is still used around the Persian Gulf, in parts of N-Africa, and in camel races.

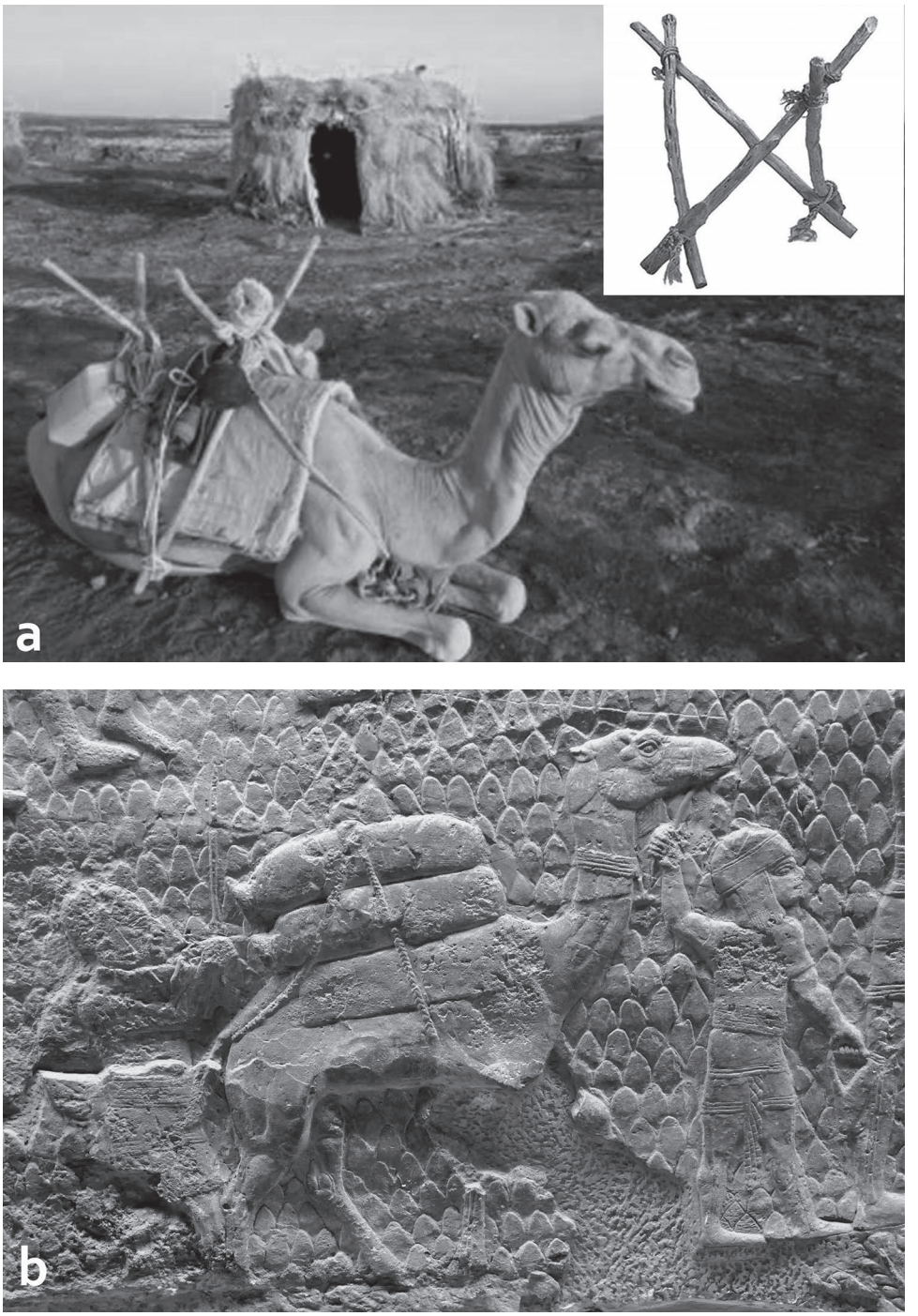

Figure 7.12a, b, c (a) Somali saddle for pack dromedary (frame N. Keller, Baum 2018). (b) South Arabian saddle for loaded dromedary; Assyrian Lachish relief from Sennacherib palace (Nineveh), 700 BCE (© Trustees of the British Museum). (c) North Arabian saddle for pack or riding dromedary (frame N. Keller, Baum 2018).

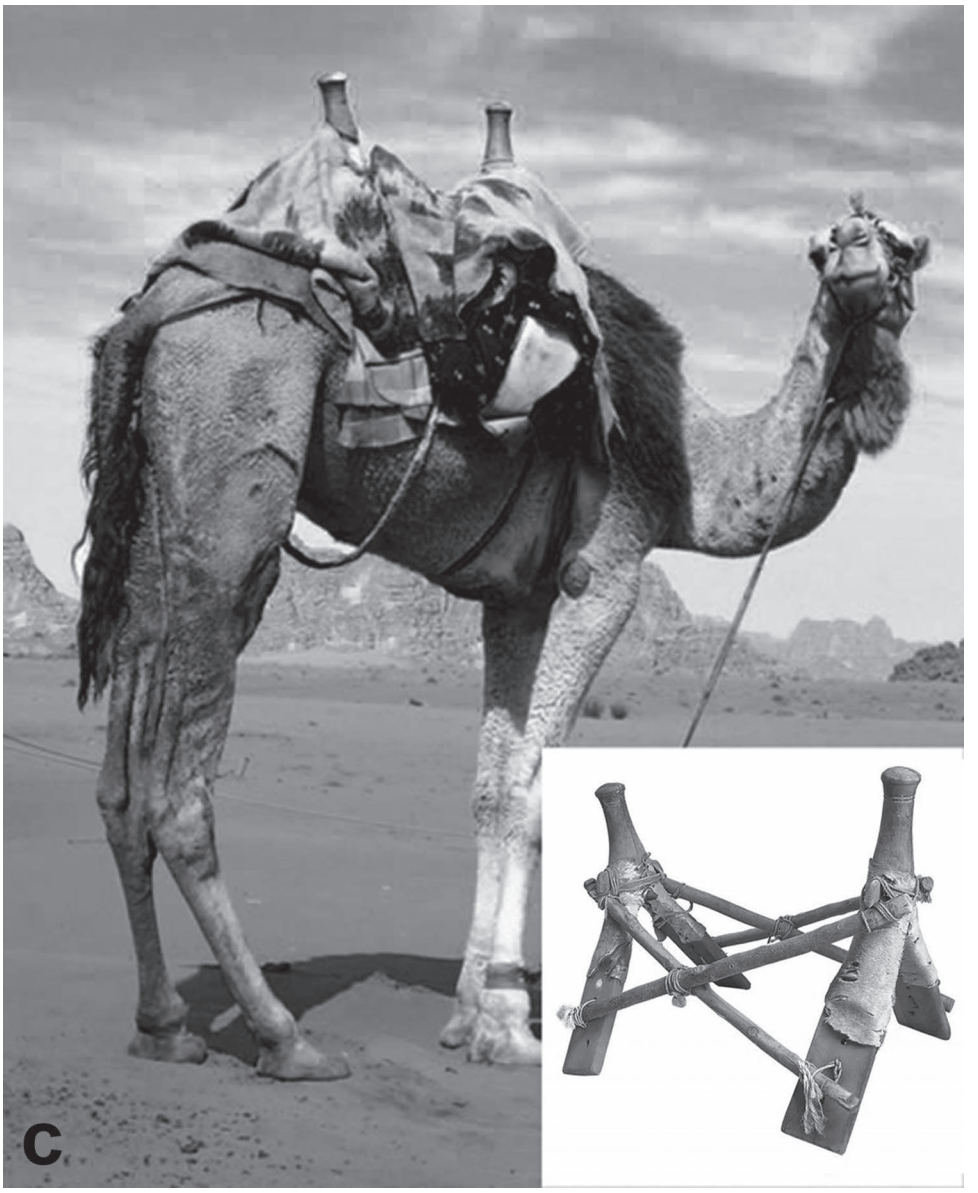

Figure 7.12a, b, c (Continued)

3. The *North Arabian saddle* appears in the 5th century BCE and represents the best riding as well as packing design up to our days. It is placed directly on the camel's hump as a frame made of two inverted "Y" interlaced together. It can load a burden weighting almost half of the camel itself and improve the efficiency of the daily packing and unpacking of loads. It accommodates the rider, improving his stability, enhancing his height as well as giving better maneuverability of the animal, making of it a mount superior to the horse in desert warfare (Figure 7.12c).

4. The *Tuareg saddle* is just one of the many saddle designs using the camel shoulders that developed in the Sahara during the last two millennia. Similar to the Somali by frontal location and technical stabilization, the Tuareg saddle is sitting the rider on the frontal shoulders where he is stabilized between two cross-pieces (frontal and rear) and by putting his feet on the camel neck, which is not so comfortable for the animal but gives to the rider exceptional stability and control of the drive. It is mainly intended for riding, but the back of the saddle can be set up for packing a load.

SADDLE FOR BACTRIAN

1. The simplest and earliest use of the bactrian as riding and packing animal is similar to the one of the horse. The rider sits between the two humps on a bareback pad with two stirrups (which are absent in the dromedary culture) and light packs hanged on either sides. In that way the bactrian can be easily mounted and used in war but not as pack animal because that will incur an excessive pressure on the central part of its backbone, where the burden cannot weight more than 100 kg (Figure 7.13a).
2. Its use in transportation was improved with the introduction of the "new bactrian saddle" around the end of the 1st millennium CE and is still employed today. It is made more comfortable and efficient by adding two longitudinal wooden poles (or bundles of poles), inflexible and bent, all along the back and sides of the animal in order to distribute the burden's or the rider's weight (Figure 7.13b).

The introduction of the North-Arabian and the new bactrian saddle enhanced in several ways the potential use and historical significance of both camel species. It allowed to carry two times more weight, promoting pack camels versus wheeled carts along desert routes and favoring the transport of tents (velum tents made of black goat hairs in the southern deserts, heavy framed tents covered by camel felt in the north);[20] in the dromedary case, the North-Arabian saddle, by stabilizing the rider, promoted camelry against cavalry in desert environments; and all together these factors conferred to the nomadic tribes of the southern and northern deserts a higher mobility, the total monopoly of the long distance trade, and a military superiority against neighboring civilizations (Bulliet 1975: 183).

HYBRIDIZATION

The camel hybridization occurs naturally along the climatic band where the two camel species coexist, and the first generation offspring of the cross between a dromedary and a bactrian purebred is stronger than both parents, and milky and fleecy half way between them (see Hybrid Camels section near the beginning of the chapter). Its anthropogenic realization can be suspected quite early, and certainly developed during the 1st millennium BCE among Medians and Assyrians together with the increasing use of camels as transport and military animals (Potts 2003, 2004). But literary and archaeological documents only emerged at the turn of the Christian Era, when Anatolia, Middle East, and Afghanistan became pioneering centers of its implementation and interregional diffusion.[21]

The first archaeological witness comes from the morphometric analysis of selected camel bones from twelve graves of the cemetery near Mleiha (Sharjah, UAE) dated to the 1st to 2nd centuries CE (Jasim 1999). "According to their central position in the graveyard, the hybrids seem to have been status animals" (Uerpmann 1999: 102–118).

Figure 7.13a, b Bactrian camel with simple saddle (a) and new saddle (b). China, Early Tang dynasty, 8th century CE (© Metropolitan Museum of Art).

Osteological remains of hybrid camels and hybrid figurines with characteristic hump indentation are found in several sites (Troy in Turkey, pre-Islamic Pella in Jordan) dated to the Roman-Parthian period (1st to 2nd centuries CE). Determined as hybrid individuals are also three camel bones dated to the 4th century CE from excavations of the Viminacium amphitheatre (in Moesia, Serbia), a unique find within the territory of the Roman provinces of Europe (Vuković-Bogdanović and Blažić 2014).

Figure 7.13a, b (Continued)

After their introductions, hybrids have been continuously used in various ways, and even ridden in warfare until present times in the Ottoman and Indian armies.

Use as Military Animal

The riding of both species of camels happened as early as their use for transporting loads. In terms of their riding for military purposes, camels, when compared with horses, are less aggressive, more emotional and less predictable. They have less maneuverability, and cannot explode into different tempos, but they also present military advantages: they have longer

endurance without water, are heavier, stronger, less nervous, they scare horses with their stench, and trample on stranded enemies. Anyhow, only at the turn of the 1st millennium BCE, after the introduction of stronger breeds and new types of saddles enhancing stability and maneuverability, armies started to use camels against horses for mounting archers or as freight animals against horses and mules.

Dromedary

Dromedaries didn't have appreciable military impact until the Late Bronze Age, when the introduction of the South-Arabian saddle (1200 BCE) promoted its military use:[22] it started among Arabian camel breeders and then diffused in all wars throughout the Middle East and north and northeast Africa.

The Bible (Samuel 30:17) refers that, around 1000 BCE, "David fought them from dusk until the evening of the next day, and none of them got away, except four hundred young men who rode off on camels and fled"; and Isaiah (Isaiah 21:7), around 700 BCE, says: "When he sees chariots with teams of horses, riders on donkeys or riders on camels, let him be alert, fully alert".

Assyrian inscriptions and bas-relieves are the first datable documents about the use of dromedaries and Arab mercenaries in warfare. They quote the presence of Arab camel riders acting variously within or against the armies of the Assyrian king: more than 1000 camels sent by an Arabian king have been used in the Battle of Qarqar in 853 BCE by an alliance of twelve Syrian and Israeli kings against the Assyrian Shalmaneser-III; under the Assyrian king Tiglath-Pileter (745 BCE), the commanders for small military units were nomadic peoples imported from camel-grazing areas or camels' bazaars (Eph'al I. 1982); relieves of the Central Palace of Nimrud (Niniveh) depict Arab camel riders pursued by the Assyrian cavalry and the king's chariot (645 BCE) (Figure 7.14a).

Herodotus (Blanco and Roberts 1992) writes that camels were used in the Battle of Thymbra in 547 BCE by the Persian king Cyrus the Great in its conquest of Lydia (western Turkey);[23] and by king Xerxes-I together with Arab mercenaries into his massive army during the Second Persian invasion of Greece in 480 BCE (this is when running camels, *dromas*, were first seen by the Greeks).[24]

In the Eastern Roman Empire, Romans encountered camels for the first time in the battle of Magnesia (Syria, 190 BCE) where Antiochus-III deployed Arab bowmen mounted on camels. The Romans appreciated the camels' military potential and introduced auxiliary forces known as "dromedarii" recruited in desert provinces. They even used camels of both species mounted with cataphracts.

During the Middle Ages, armored camels were successfully used in the Muslim expansion;[25] and camel military units were still in use during the First and Second World Wars.[26]

Bactrian

The bactrian has always been mainly a pack animal but, being more comfortable, soft-gaited, resistant and adapted to row terrain than the dromedary or the horse, was mounted from the times of its early domestication, and by the Mongols was actually preferred to ponies for long journeys (Lattimore 1929: 133).

On the basis of historical accounts, it attained military use between 500 and 100 BCE, a date also confirmed by the petroglyph record of South Kazakhstan (Figure 7.14b).

The Dahae and Parni tribes, who lived in the sandy arid expanses of the Aralo-Caspian region during the second half of the 1st millennium BCE, utilized the heavy double-humped

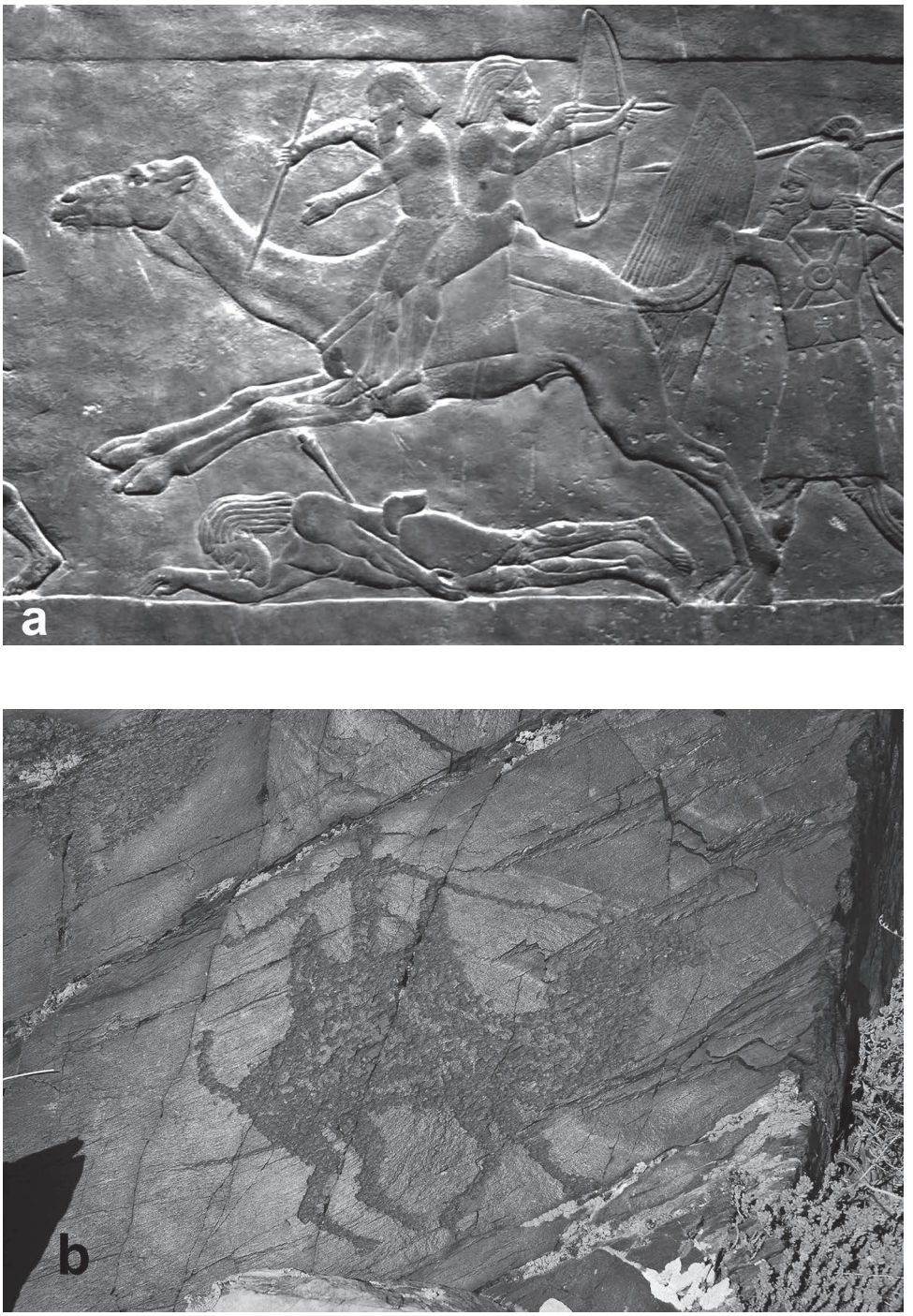

Figure 7.14a, b (a) Couple of Arab soldiers mounted on dromedary with S-Arabian saddle, from a relief of the Ashurbanipal palace (Nineveh), 645 BCE (© Trustees of the British Museum). (b) Rider on bactrian camel holding reins and sword; Kuljabasy (South Kazakhstan), Early Iron Saka period, 5th–3rd centuries BCE (photo by R. Sala).

bactrian camel as a weapon of war and even mounted it with cataphracts against the cavalries of their neighbors. Bactrians were present by tens of thousands in the Chinese Han expedition to the Fergana valley during the 2nd century BCE, as quoted in the Historical Records (Shiji) of 104 BCE.

Anyhow, because its lesser speed and swiftness and higher strength when compared to the dromedary, it was engaged by Parthians (at Charrae, 53 BCE),[27] Mongols and Timurids not so much in direct warfare, but as pack animal in logistic support of the cavalry during military campaigns.

Historical Evolution of the Cultural and Ceremonial Status of the Camel

Thanks to its endurance in desert landscapes and by being an excellent carrier, the camel rose in economical and military importance all along history. Due to its relatively late domestication, at the difference of goats and cattle it missed the possibility to enter the pantheon of the gods, and at the difference of donkeys and horses it became very rarely the carrier of kings (Figure 7.8b). But its role in desert environments conferred to the camel a specific mythical-religious character: more than oxen, sheep, and dogs, it became a main protagonist in funerary rituals as divine servant, messenger, sacrificial animal and carrier of the dead; and was finally appointed as animal of high cultural and religious status.

The earliest witness of camel sepulture is a skeleton buried under a building at Mohenjodaro in 1900 BCE. Camel burials increased around the 1st century CE, as evidenced by their presence documented in several archaeological sites: near Mleiha (UAE); among the Nabateans (Wadi Ram, Jordan); in the Christian royal Nubian tombs of Ballana (together with a dog) and of Qustul (as remnants of the funerary banquet). In India, among the Ajivikas of the 5th century BCE, camel-shaped large vessels were used as ritual hideouts for ascetic practices. Chinese texts speak about the burial in the Genghis Khan secret grave of a young camel sacrificed in front of its mother, which in that way would become the only living being remembering the grave's location.

The camel status inherited from previous cultic practices rose particularly high in the Islamic culture. The Quran praises it for its humility and obedience, and the "she-camel of Allah" is the very "sign of the religion of Allah" acting as divine messenger among sinners and idolaters (Quran 7:73). It is considered the first among the sacrificial animals and is a well-established tradition that, after a burial, everybody sits at the graveside during the slaughtering of a camel and the distribution of its meat.

In the times of the blossoming activity of the Silk Road from the Han until the Tang and Ming Dynasties, also in China camels, and white camels in particular, were kept in high ceremonial esteem. They were sent as gift for transporting the corpse of noble persons; and camel images were represented in frescoes, terracotta figurines (*mingqi,* "spirit utensils" in the afterlife), oil lamps, censers, and silk fabrics, underlying their role as guardian statues at the tombs' entrance and as pack animals ready for "extreme" desert travels (Knauer 1998). The adoption of similar burial customs by Christian communities living along the Silk Road is witnessed by the presence of analogous statuettes in archaeological contexts (Figure 7.15) (Baumer 2016: 182).

A strict relation between camel, death and burials is also found among ethnic Kazakhs, where myths speak about camels accompanying spiritual masters in their search for immortality, and special draft and pack camel types are expressly bred for carrying the dead body to the grave.

Figure 7.15 Funerary terracotta statuette shaped as a camel in Tang style, with the load decorated by a representation of the deposition of Jesus; VI-VII AD (The Metropolitan Museum of Art).

Conclusions

The domestication of the camel happened relatively late, at the turn of the 3rd millennium BCE, 6000 years after the one of cattle in the Taurus mountains (SE-Turkey) and 2000 after the one of the donkey in upper Egypt. It occurred in the original camels' habitats, among pastoralist tribes at the arid borders of the earliest civilizations, favored by the confident character of this animal and promoted by its working potential in the colonization of deserts: for the dromedary in the coastal areas of the Arabian peninsula, for the bactrian in the Kopet-Dag piedmonts of SW-Central Asia.

From the archaeological point of view, the harvest of its milk and fleece appears more or less contemporarily with its use as transport animal in the context of the growing trend of mining activities and commercial routes that started from the desert peripheries, diffused from there to the urban centers and finally concerned all the arid regions of Afro-Eurasia.

A decisive step in the man-camel relation happened at the turn of the 1st millennium BCE, when two innovations − the artificial hybridization of stronger types and the amelioration of the saddle design − enhanced the camel's importance at different levels:

- In arid zones deprived of road infrastructure, their introduction determined the superiority of the camel as pack animal against all the other types of wheel and draft transport, diffusing in that way the camels' use in the continental networks of caravan routes;
- They allowed the transport of tents, enhancing the mobility of camel breeding communities;
- And, finally, they promoted the use of the camel as military animal, favoring camelry versus cavalry in the territorial control of the desert expanses.

As a whole, with the start of the Christian Era, these factors conferred to nomadic camel breeders the monopoly of the Afro-Eurasian land transports and the military control of the entire arid zones. If in the northern deserts the bactrian camel still faced the military concurrence of the horse, in the south the dromedary became the unique arbiter of commercial business and war, heightening the power of the Arabic societies up to the rise and spread of Islam and the establishment of the Caliphate.

In that way a "camel period" became well established in the Afro-Eurasian arid regions and will endure until a couple of centuries ago.

> Once, in ancient times, the Middle East teemed with carts and wagons and chariots, but they were totally driven out by the coming of the camel. . . . When the first motor car chugged defiantly off the road and into the desert, an entire epoch in world history began to pass away, the epoch of the camel.
>
> (Bulliet 1973)

Notes

1 Fossil remains of Paracamelus have been found in the Pontic region dated to 7 Ma (Titov and Logvynenko 2006; Colombero et al. 2016), in N-Africa dated to 5 Ma (Likius et al. 2003) and, of very big size, in the Karatau mts (S-KZ) dated to 2 Ma (Kozhamkulova and Kogenov 1988).

2 Some embryologists support the descent of the wild dromedary from an early two-humped ancestor by the fact that, in its embryonic stage, the modern dromedary still has two humps that fuse into one before birth (Mukasa-Mugerwa 1981).

3 Mid-Pleistocene remains of a wild Camelini species (*Camelus Thomasi*) have been found in Algeria and N-Sudan, belonging to the line of two-humped Asian camels, which supports the idea that the present diffusion of the dromedary in Africa is the recent result of the spread 3000 years ago of the domesticated Arabian species. During the Late Pleistocene a well differentiated fossil species of wild two-humped camel, *Camelus bactrianus Knoblochi*, lived in Central Asia. Some bones were found in the Paleolithic site of Samarkand, witnessing that this Bactrian ancestor was here present and hunted before its extinction at the Holocene transition (Lev 1965).

4 Information about the existence of Camel ferus was first recorded in the Chinese Annals, and then widespread at the end of the 19th century CE by Przhevalsky and Hedin.

5 In Central Asia, the earliest records of camel bones consist totally of Bactrian camels; and the presence of the dromedary is only suspected in the southwestern Central Asian region starting from the end of the 1st millennium BCE (Harris 2013).

6 Of the fourteen million camels existing in the world, 90 percent are dromedaries, and 80 percent of these are found in NE-Africa. Of the other one and a half million Bactrian camels (and Bactrian-like hybrids), 30 percent are bred in Mongolia, 30 percent in China, and 10 percent in Kazakhstan. A population of 700,000 feral dromedaries (and few Bactrians) are living in the central parts of Australia.

7 With repeated backcrosses to Bactrian, there is at first a single hump with two raised regions, then two humps with fused bases, then two separate humps.

8 Today in West Central Asia, at the exception of the Kopet-Dag region where pure dromedaries are relatively common, the majority of camels is constituted by hybrids of different type. Hybrids of various grade, mainly F2-bactrian, constitute the almost totality of the camels of Kazakhstan, where three sub-types are distinguished: Uralian, Kyzylordinski, and South Kazakhstanski.

9 This fearless character of the camel was well known to the authors of the hymns of the Rig-Veda, who sang: "drive, camel-like, our foes afar" (Rig-Veda, 1.138.2).

10 The Sumerians called the camels by two names*, abba* and *kurra*, that is, "donkey of the sea" and "donkey of the mountains", most probably referring respectively to the dromedary and the bactrian domesticated species; and so did the Akkadians and Assyrians, who called them *ibilu* (humped), *gammalu* (dromedary) and *udru* (mountain elephant). These terms are derived, like the Khotanese *ula* and *urda*, from the Indo-Iranian *ustra* (from which Zara-thustra = with aging camel) and referred in particular to the two-humped male. Then, for a while in the Middle East the root '*gamal*' stood alone for the two species: among the Hebrews *gamal*, among the Greek *kamelos* (running camel) and among the Romans *camelum*. Aristotle, in Historia Animalium 2.1, has been the first to reintroduce the distinction between the two species on the basis of the number of humps, and called them *Arabian* and *Bactrian*, referring not to their place of origin but of their historical breeding at that time.

11 This finding pertains to a Mesolithic culture, being that Sihi has been established as Neolithic site about 4000 years later than the mandible itself (Grigson et al. 1989).

12 Some sources suggest Somalia as the earliest place of domestication of the dromedary just on the fact that today this country hosts the highest number of existing camels. Against that hypothesis, see endnote 3. In reality, the dromedary reached NE-Africa and the Sahara region only as domesticated animal at the turn of the 1st millennium BCE together with the development of trade routes. The few petroglyph representations of camels found in the Somali site of Las Geel are dated to that time, in the context of the 'global' establishment in the Arabian peninsula and all over N-Africa from Tassili until N-Kenya, of a petroglyph 'camel period' characterized by a high number of images of domesticated camels with saddle, trappings and riders with weapons.

13 The abundance of camel remains in the Ayakagytma site makes suspecting an early domestication of the wild two-humped bactrian. Until the discovery of this site not only the bactrian's domestication was doubtful but even the extension of its natural habitat to the southern part of W-Central Asia; and Inner Mongolia was considered the only candidate region of its domestication and western spread as domesticated species (Potts 2004).

14 In the book of Genesis, camels are quoted as domesticated and used for riding as well as pack animals. Genesis 24: 11–61 says "He made the camels kneel down outside the city by the water well; it was toward evening, the time when women go out to draw water . . . Then Rebekah and her maids rose up and mounted the camels". Genesis 37:25: "looking up they saw a caravan of Ishmaelites coming from Gilead (Jordan), with their camels carrying aromatic gum, balm, and resin, on their way to carry it down to Egypt". All quotes are referring to the XIX BC. Actually in Israel at that time camel flesh was not eaten as it was ranked among unclean animals (Leviticus 11:4).

15 Bones from excavations in the Aravah valley, dated to 930 BCE, witness the use of camels as beasts of burden in the context of copper mining operations (Sapir-Hen 2013).

16 In Kazakhstan, petroglyph representations of the Arabian camel are very few, only found in the middle Syrdarya region (Karatau range) and dated to the Medieval period.

17 Faunal remains of Bactrian camels are found in Andronovo sites of the Urals and of the Chu valley (Tenlyk, Alekseevskoe).

18 Among the wild species found in the site, most abundant is the saiga antelope (56 percent) and the wild donkey (kulan, 18 percent); among the domesticated species, sheep counts for the 52 percent and horse for 26 percent.

19 Under the Tang, camels, and white camels in particular, were kept in high ceremonial esteem: they were sent as gift at funerals of the aristocracy for transporting the dead; and their images were represented in funerary statuettes, frescoes, silk fabrics, and as guardian statues at the tombs' entrance (see section titled Historical Evolution of the Cultural and Ceremonial Status of the Camel).

20 Archaeological sites with stone circles and low-walled curvilinear architecture for the support of transportable roofs are documented from the Bronze Age. Old Babylonian and biblical literary sources testify the existence of tent camps during the 2nd millennium. The Assyrian relieves of 701 BCE depict raids (by camels loaded on South Arabian saddle) of Jewish camps made of framed square tents. Anyhow, clear tent outlines are archeologically documented only starting from the 2nd millennium CE in Negev (Israel) (Rosen and Saidel 2010).
21 See the quotations of Diodorus Siculus concerning, if not hybridization, at least the large variety of camel types: "Along the coast . . . above Arabia Felix (Yemen) . . . this land also breeds camels in very great numbers and of most different kinds, both the hairless and the shaggy, and those which have two humps, one behind the other along their spines, and hence are called 'dituloi'. Some of these give milk and are eaten for meat, and so provide the inhabitants with a great abundance of this food; and others, which are trained to carry burdens on their backs, can carry some ten medimmi (c. 900 lbs) of wheat and can bear up five men lying outstretched upon a couch. Others, which have short legs and are slender in build, are dromedaries, and can go at full stretch a day's journey of very great distance, especially in trips made through waterless and desert regions". *Library of history: 2.54.16* (de Sicile 1989)
22 Dromedary riders when sitting on a good saddle are faster than horse riders, so that camelry can easily compete against cavalry and, in lesser extent, also against chariots. The challenge represented by camelry has been one of the main reasons for the introduction of horse cataphracts and of very mobile infantry units armed with pikes, bows, and slings.
23 Herodotus says that "The reason why Cyrus opposed his camels to the enemy's horses was because the horse has a natural dread of the camel, and cannot stand either the sight or the smell of that animal" (Blanco and Roberts 1992: I.i.:220).
24 Herodotus (Blanco and Roberts 1992: books VI and VII).
25 In the Islamic period dromedaries have been extensively used as racers, becoming in that way highly appreciated and at least four times more expensive.
26 In modern days, dromedary units are still used by the Border Security Force of India. Camel races and Polo Federations of both species are very popular in Saudi Arabia, Middle East, and Mongolia.
27 Plutarch, Life of Crassus, 25.1.

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8

CANNABIS AND OTHER PLANTS WITH PECULIAR PROPERTIES ON THE SILK ROAD

Kazim Abdullaev

Introduction

A rather extensive literature is devoted to the study of the role of cannabis[1] in the culture of ancient peoples, especially when it comes to the cult side of the issue[2] and the properties of cannabis as a psychoactive component. In addition, hemp as a technical culture occupies a prominent place in ancient agricultural cultures; hemp and industrial products are an important component in the trade of various peoples on the Silk Road.[3] In this regard, I would like to recall the work of Bertold Laufer, published back in 1919 and not losing its relevance to the present.

Information about the properties of plants and their effects on the physical and spiritual state of man were the first steps in the study of medical, in particular pharmaceutical qualities, can be found in ancient sources[4] and works of the authors of the classical period.[5] Unfortunately, we cannot find in them an answer to the question in which period the "supernatural" properties of these plants were established. In this sense, our conclusions are hypothetical and theoretical in nature and are based on logical premises.

Some clarity in this picture can make the data of archeology. Findings in the archaeological layers of ancient monuments of traces of certain plants, cereals in the context of cult items or coupled with agricultural implements provide a specific chronological framework. Of course, paleobotany data is of great help in this sense.

The geography of finds of plant remains in archaeological sites of the prehistoric era is very extensive. However, according to the theme of the volume, we will restrict ourselves only to monuments located on the busiest section of the Great Silk Road, which runs through Central Asia. As for chronology, we are most attracted to the origins and early stages; no less interesting is the period of antiquity and the early Middle Ages, when cannabis[6] and other psychoactive plants are used for various purposes both in the textile and food industries, and in medicine.

The era of the early Middle Ages can be considered one of the busiest periods of the functioning of the Great Silk Road. On the one hand, this was the development of active trade relations of the Tang Dynasty of China in a western direction,[7] on the other hand, the activity of merchants from Central Asia was no less active, among which Sogdians stood out.[8]

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The holy book of Avesta emphasizes the divine essence of the haoma drink plant, which occupies a significant place in the life of adherents of the Zoroastrian religion.[9] However, the absence in the Avesta texts of direct indications of the plant from which the haoma was prepared[10] creates a spacious field for various conclusions and hypotheses. The commentary on the interchangeability of plants[11] in the preparation of the Indian parallel of haoma–soma has given rise to many conflicting hypotheses, up to the identification of haoma with mushroom (Fly agaric).[12] However, the question of determining the composition of haoma has remained at the stage of "eternal debate".

In this regard, we can only assume that cannabis as an ingredient of a psychoactive nature could be added to the prepared cult drink. This assumption is to some extent confirmed by archaeological finds on the archaeological sites of Gonur and Togolok-21[13] (the territory of modern Turkmenistan).

Cannabis in Archaeological Context

In one of Gonur's temple rooms (the "White House"), traces of plants were found in vessels smeared with clay plaster. Laboratory analysis of the contents of the vessels revealed the remains of hemp.[14] It should be noted that along with hemp in other parts of the cult premises, in the vessels and trays, traces of other plants were also found: ephedra and poppy.[15] These and many other data allowed the author of the excavation V.I. Sarianidi put forward the suggestion that a drink was used in the temple rooms of Gonur and Togolok, used in ritual ceremonies.[16] Not all researchers agreed with this assumption,[17] but more emotionally than convincingly; further studies and a combination of indirect evidence more likely confirmed the validity of this assumption.[18]

Recently, a report was published in the journal Science Advances about the findings of traces of cannabis in wooden braziers in the necropolis of Jirzankal in eastern Pamir. It is believed that cannabis was used as a smoking product for ritual or religious activities by residents of western regions of China in antiquity about 2500 years ago. Wooden braziers containing stones with burning traces were extracted from eight graves of the Jirzankal Cemetery (also known as Kuman cemetery) on the Pamir plateau.[19]

As analyze of extracted material from "10 wooden brazier fragments and 4 burnt stones showed there was used cannabis". Ancient cannabis was obtained also from Necropolis Jiayi, and Turpan. The latter was dated by 790–520 BCE. All these remarkable discoveries compel the authors of the publication to touch upon previous discoveries at the archaeological sites of Margiana by V.I. Sarianidi.

As the authors of publication note "The soma debates entered Central Asian archaeology with Sarianidi's accounts of the excavations of several large architectural structures of the Bactria-Margiana Archaeological Complex in the southern Karakum Desert of Turkmenistan (Figure 8.1), which he interpreted as temples".[20] The claiming of Sarianidi that plant remains on the wall of ceramic vessels from "white room" indicate to the using of plants (*Ephedra, Papaver somneferum*) as ingredient for the preparing of the cultic beverage was greeted with skepticism. As well as "perforated ceramic vessels at the site were further assumed to be associated with preparation of the haoma/soma beverage, although similar strainers are found across Central Asia and often associated with cheese production in other areas".[21]

Further investigators write that

> follow-up studies of the reported cannabis from Gonur have demonstrated that the original identifications were erroneous. Despite the fact that these finds are often

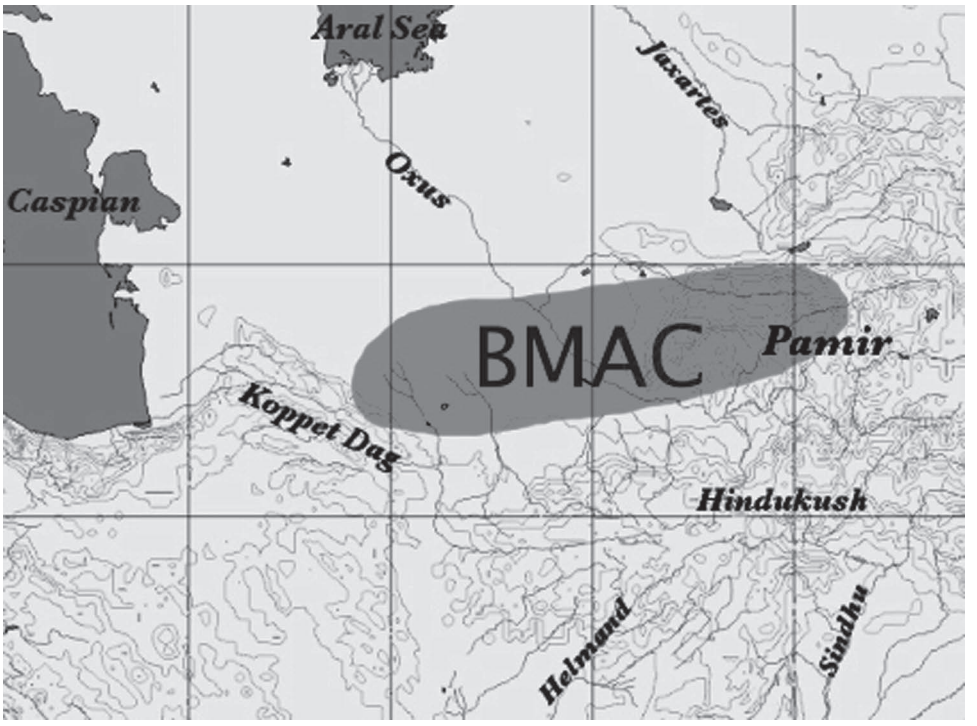

Figure 8.1 Bactria-Margiana Archaeological Complex.

> discussed as if they are actual archaeobotanically preserved remains, the original published photo shows that they are actually impressions of plant parts on a ceramic sherd. In addition, the sherds have been re-examined by specialists, and the round impressions are clearly of broomcorn millet grains (*Panicum miliaceum*), not of *Cannabis* or *Ephedra*.[22]

Regarding the claim that "the original identifications were erroneous" this seems categorical and disputable to me. Such a counterargument is based on the conclusion of a specialist who himself is not sure whether the source material comes from the same objects.

Professor C.C. Bakles in his article says:

> of the plant remains it was said that they had already been described and published by N.R. Meyer-Melikyan and N.A. Avetov (1998). The photographs in the publication (Fig. 46) suggest that the objects seen by me concern indeed the same material as far as the material from the Gonur temenos is concerned. (A polite way of refuting the observations of the claimants.)
>
> The white substance shows on the section several layers, as has been described by the authors mentioned above. Some of these are very thin, with a thickness of more or less 1 mm, others are thicker, but the thickness of the whole does not exceed 1.5 cm. N.R. Meyer-Melikyan and N.A Avetov succeeded in separating the layers and could describe different contents for each of them. I did not succeed in separating layers with significantly different aspects. It might be that I did not obtain quite the same material as what was published, or a different part of the deposit in the vessels.

> Most of the impressions are round to oval. A small minority has clearly been left by stems. The round impressions have been published as having been left by hemp seeds (Cannabis sativa) and the stems by Ephedra. The material sent to me reveals, however, neither of these. The impressions caused by seeds are not of hemp. They are too small, for instance, do not have the right shape nor the right type of surface pattern. The long, grooved stems are not incontestably identifiable as Ephedra.[23]

All of these are not entirely clear, sometimes we can say vague discussions about the impressions of plants left on the walls of the vessels and in particular the reliability of their origin prompted me to turn to the current leader of the Margiana archaeological expedition N.A. Dubova asking for comment on these findings. Next I give an excerpt from her letter received in August 2019.

"What can I say in essence? These ideas of 'refutation' (you correctly evaluate everything, completely agree with you) are really based on the thesis "It cannot be, because it can never be". The reason for this is very simple. About ten years after the research by Meyer-Melikyan (I have never heard in Russia or in other countries that she is not a professional), samples were taken on Gonur's temenos from different vessels of the same "white rooms". The vessels, of course, all these ten years were in open space, under the influence of rain and wind. And in these samples, the Western testers did not find traces of those seeds that Nona Robertovna (Meyer-Melikyan) identified. I didn't hear that millet was found in the "white rooms". There is millet in only one pot, in a burial. The same Lily Sataeva has a mention of this. In reports, among other plants, she wrote about this.[24] Unfortunately, we did not find anything new, like those vessels with ephedra and hemp. Neither with Viktor Ivanovich (Sarianidi) during the years of my work (i.e. from 2000 to 2013), nor after him. There were no such "white rooms" in the satellite settlements of Gonur 20 and Gonur 21.[25]

Another category of archaeological sources, namely, objects of figurative art, in particular, seals-amulets, can shed light on this situation, which is doubtful among Western scholars.

Stone Amulets – Seals With Image of Plants From Bactria and Margiana and Some Ritual Composition With Them

Unfortunately, V.I. Sarianidi did not pay due attention to the analysis of images on ancient amulets and seals, although the author mentions a rather inexpressive image on one of the amulets.[26] It seems that V.I. Sarianidi does not make full use of this archaeological source.[27]

It should be emphasized that not only V.I. Sarianidi, but almost all authors writing about haoma in particular and psychotropic plants in general, rarely attract information that contains monuments of fine art. In general, this set of finds has been poorly studied, and as for Central Asia, we can safely say that the pictorial complex was practically not involved in this regard. Meanwhile, finds from the same monuments can serve as an exclusively informative source for the issue under consideration. It is a series of images of plants on stone amulets and cylinder seals. The finds of these amulets and seals in the context of the temple complex, and especially special rooms or burials, hold special, fundamental significance. The cult character of these images, as well as other characters and compositions on the seals, is not in doubt. The creation of images of these plants was most likely affected by the special, unusual properties that they possessed.

It would not be an exaggeration to say that from time immemorial, ancient creators included images of these plants in their repertoire, understanding the unusual properties of plants and the important place they occupy in worship. For example, one of the most

ancient and at the same time widespread compositions in the art of the ancient East is the image of the Tree of Life with animals standing in the heraldic pattern or other real or mythical creatures on its sides. The tree as a symbol of fertility, providing food for all living things, also dates back from its sources, in all likelihood, to the prehistoric era of collectors and hunters. Along with this widespread motif in ancient art, there are images of individual plants. Iconographic analysis of these images and comparison with real plants can be very productive.

In this regard, the seals from archaeological sites of the Late Bronze Age, the so-called Bactrian-Margian archaeological complex are very interesting.[28] These seals in themselves were a kind of amulets. And some of them with images of plants are of particular interest as cult artifacts of an apotropaic nature, which are important for their owners.[29]

These images represent obviously specific plants, not just "floral motifs", and I think that by comparing these images with real plants growing in the region, it is possible to calculate with high probability those that were associated with certain cults. If they coincide with the real remnants of those plants that were determined in laboratory conditions, then we can talk about their use in the cult actions of both Bactria and Margiana, and these coincidences will be difficult to ignore or attribute to random.

At first, I would like to touch on less expressive images made in a very schematic conditional manner. In the Sapallitepa archaeological complex (Northern Bactria), the amulet seals contain images made in the form of circles drawn with a drill. In the center there is a vertical line (stem), along the sides there are symmetrically inclined lines of three or four pairs (branches).[30] The determination of their species is very difficult, although we can say with confidence that this is a plant.

Despite the conventionality of some images of plants, they convey characteristic features that allow us to talk about their belonging to a particular family. In this regard, I would like to return again to the famous plot of the Ancient East, namely, to the tree of life. It is a composition on a cylindrical seal of the Bronze Age from Dzharkutan (southern Uzbekistan). The impression depicts an image of two animals with horns curved in different directions (goats?), standing at the "tree of life". This tree is a thin stalk, the top of which is depicted as a slightly flattened sphere resembling a box of poppy.[31] Of course, there is no sufficient reason to say that this is a poppy, and we are talking only about the similarity of a long thin stem and a rounded relief, which, however, can also mean the crown of a tree (?). More specifically, the image of the poppy can be discussed on the seal from the temenos of Gonur, which will be discussed later.

There is a seal of black stone (a kind of chlorite?) square in shape with a picture of a plant inscribed on a diagonal axis.[32] The plant consists of a thin long stem crowned with a rounded relief. In the lower part of the stem, two lush leaves symmetrically diverge, the surface of which is covered with a frequent stroke.[33] Another pair of symmetrically arranged leaves, but smaller, is shown in the upper part of the stem (Figure 8.2).

Another poppy image can be seen on the cylinder seal. A seal was found in 1987 in burial 10 in the settlement of Togolok 1.[34] A cylindrical seal was in the vessel along with two amulets of the Murgab style. So far this is the first case of such a joint find in a closed burial complex. The seal in the form of a cylinder with an eye is made of black steatite, an image of a poppy is engraved on the lateral part of the cylinder.[35] The image of interest to us is inscribed in a circle according to the heraldic pattern and consists of two symmetrical sheets with lower serrated edges (Figure 8.3). A short stalk topped by a box of poppy leaves from the middle. Such a characteristic detail is clearly traced as an overgrown stigma in the form of a disk in the upper part of the box.[36]

Figure 8.2 Amulet seal of black stone (Chlorite?) from temenos of Gonur with depiction of poppy.

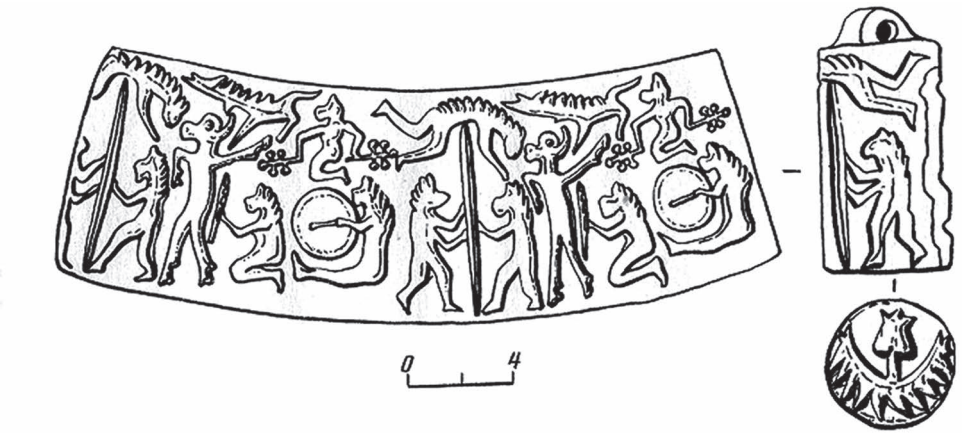

Figure 8.3 Cylinder seal with composition of ritual character and image of poppy on lateral side. From the temple Togolok 1.

The images of poppy as were noted earlier are also found in other forms of decorative art. I cited materials from Sapallitepa (17th–15th centuries BCE) and another neighbor archaeological site, Dzharkutan, located in the same area of southern Uzbekistan. Among various motifs in the design of bronze hairpins, an image of a poppy box is often found.[37]

It is probably no coincidence that the poppy is depicted on a hairpin. The healing properties of a real plant had to be magically transmitted through its image and, attached to a vulnerable place, heal or protect it.

A depiction of another plant associated with psychoactive property is represented on the amulet that we give here. It was found on the archaeological site Gonur 1. The amulet is carved from a greenish stone and has an almost square shape.[38] The central stalk runs diagonally, from which two branches symmetrically depart (Figure 8.4). There are no leaves as such, and the branches are built of joints of triangles, as if strung on each other, with their vertices facing down.[39] On the reverse side of the same amulet, the same plant is depicted in a slightly different perspective. If on one side a branch is given whose drawing allows us to talk about its structure, then on the reverse side the creator tried to depict the whole plant. The thick trunk is shown in the lower part, apparently adjacent to the rhizome, from which many branches depart (Figure 8.5). The author of the publication believes that this may be an image of *saxaul* (Haloxylon),[40] "a typical desert plant of the plains of Central Asia".[41] However, if we compare

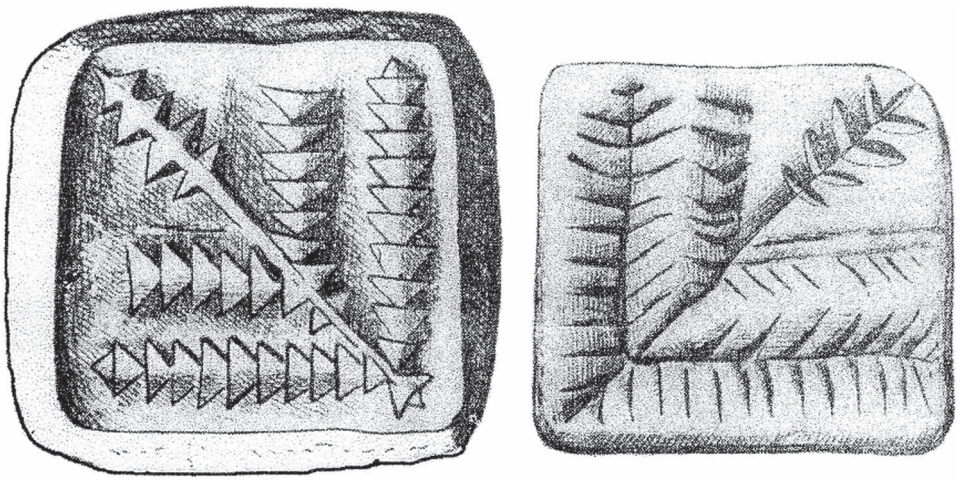

Figure 8.4 Amulet seal with depiction of a plant with central stalk and two symmetrically placed branches. Greenish stone. Gonur 1.

the picture with a number of real plants, the most noteworthy is its similarity to the ephedra bush (Figure 8.6), in which you can find all the main signs of this plant,[42] graved on a stone amulet. A characteristic feature common to the image on the amulet and the real plant are dense branches extending from a thick short trunk. The structure of the branches of ephedra is in many ways similar to the pattern. Of course, some conventionality of the image should be taken into account, but in general it is quite recognizable.

More schematic in character is the image on the seal-amulet, originating from the fortress of the ancient settlement of Gonur 1. V.I. Sarianidi defines this plot as "an incomprehensible image in the form of four long arcs". An engraved drawing is printed on the back of the amulet, on the front side of the relief (cameo) depicts a scorpion.[43] The plot of interest to us is an arched parallel line drawn on the entire surface of the amulet. In the middle of the arc in the center runs a straight vertical line (stem?). A notable detail of the image is transverse notches applied to strips of arcs. It is clear that with these lines the carver wanted to emphasize the surface structure characteristic of the plant – an additional touch to the assumption that we have before us a stylized image of the same ephedra branch.

Add to this that on the surface of the Auchin-161 settlement a rectangular stone print was found on which an image of a plant strictly similar to the plant that we identified as ephedra was engraved. Less definitively, we can talk about an impressed image from the lower reaches of the Murghab published by I.S. Masimov, representing a plant with branches extending on the sides.[44]

As for the image of cannabis, on the amulet seal found on Gonur 1, it is so expressive and contains so many characteristic details that the resemblance to a particular plant is guessed with almost no doubt (Figure 8.7).[45] The seal is made of black steatite and has a square shape with through holes for hanging.[46] It should be noted a rather skillful hand of the creator, who gracefully entered the plant into the square field of the amulet, placing it symmetrically with respect to the diagonal (Figure 8.8).

Two lush branches with elongated leaves are placed on the sides of the corner, and at the base of the stem, the leaves have the largest size and gradually decrease towards its end.

Figure 8.5 Depiction of a bush of Ephedra on the back side (reverse) of the amulet seal. The thick trunk is shown in the lower part, apparently adjacent to the rhizome, from which many branches depart. Fortress of Gonur 1.

Inflorescences come from the middle of two branches, their elongated forms have a wavy profile with roundish depressions in the center. Inflorescences are attached to the trunk with a narrow stalk. I identify this plant with hemp (cannabis) – another plant with psychedelic properties, the remains of which were archaeologically recorded in the temple complexes of Gonur and Togolok.

Thus, controversial issues in the interpretation of archaeological data: whether cannabis and other psychotropic plants existed in this area and how they were used in the ritual practice of carriers of the Bactrian-Margian culture is supplemented by objects of fine art. One can hardly call the selection of the depicted plants random. In this regard, I would like to recall the composition on the cylindrical seal from Togolok 1, where the main composition is dedicated to the ritual festival.[47] Polymorphic creatures participate in the scene; the figure of the seated creature in the upper part of the composition attracts special attention. The creature holds an

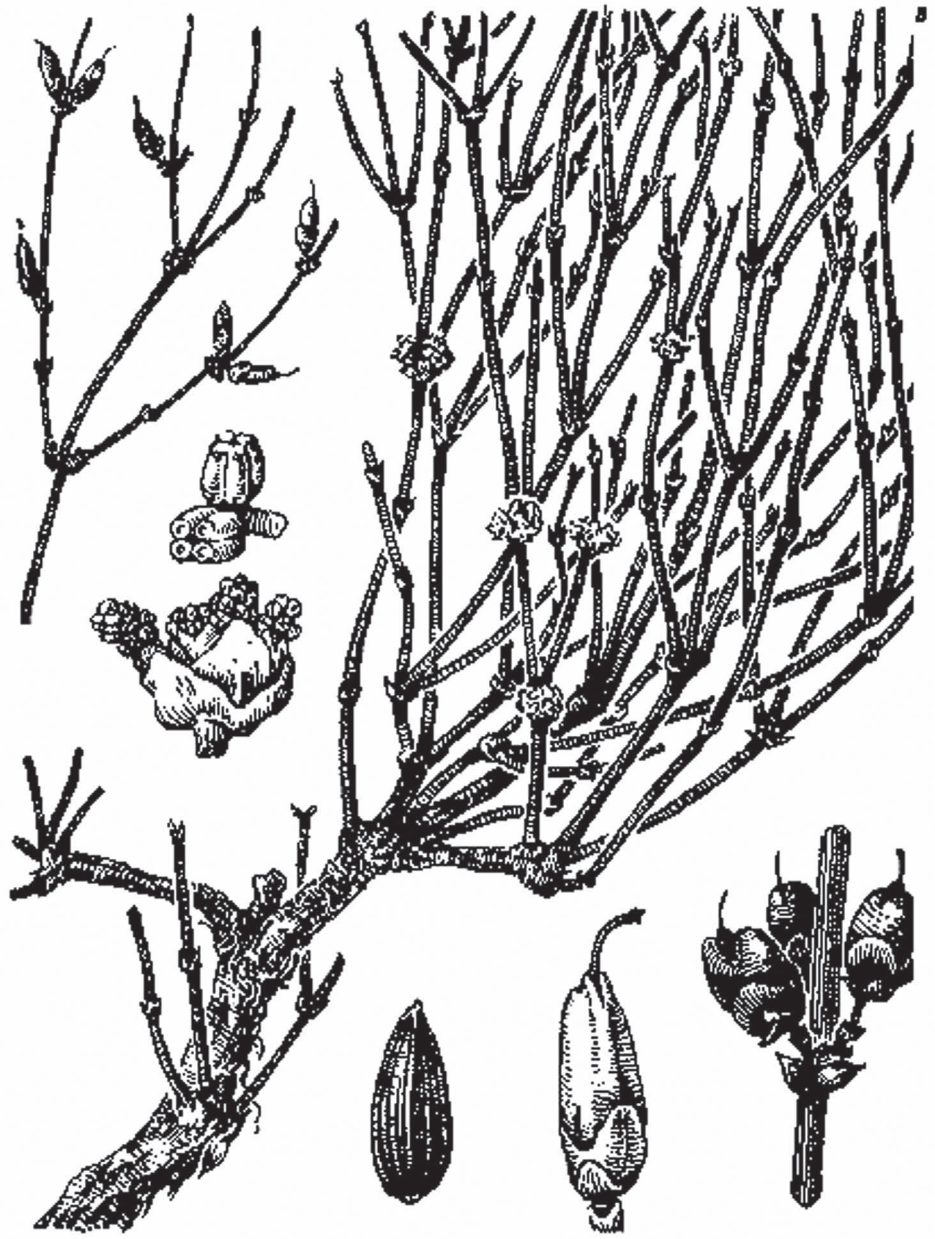

Figure 8.6 Depiction of a real plant Ephedra.

Figure 8.7 Depiction of a real cannabis plant.

Figure 8.8 Amulet seals with depiction of cannabis. Steatite.

object resembling a twig. It is hard to say what kind of plant it is or whether it is a plant at all. More confidently we can talk about a box of poppy with lush leaves on the front bottom face of the cylinder-seal (Figure 8.3).

Speaking about compositions of images of plants, one cannot ignore the composition from Kashkadarya (Uzbekistan), although one should take into account a rather significant chronological gap between the monuments of the Late Bronze Age and the early Middle Ages, which date back to the find from Kashkadarya. This is a terracotta composition[48] in the form of a disk with extremely primitive figures stuck around its edges and in diameter (Figure 8.9a–c).

Two trunks of "columns" rise along the line of this diameter. One of them is crowned at the top with a poppy head, the other with two animal heads. If we disengage from the base of the subject and present this detailed, but sketchy composition in a spatial perspective, we get a round platform – the arena of ritual action (Figure 8.10), which the ancient creator could not depict, using plastic art otherwise than as a solid disk, on which the composition itself is then built. It should be noted that compositions reflecting cult dances or other actions around the object are not so popular in ancient art, but they still occur in different regions and at different periods. Here we can give as an example a terracotta composition from the same Margiana (Figure 8.11), relating to the Late Bronze Age, published by V.I. Sarianidi.[49] Or, for example, another terracotta composition with a dance around a tree from Cyprus, dating back to 1000 BCE.[50] And, finally, a composition similar in meaning from Colima (Mexico), dated 300 BCE–100 CE, depicting a group of men dancing around a mushroom (Figure 8.12).[51]

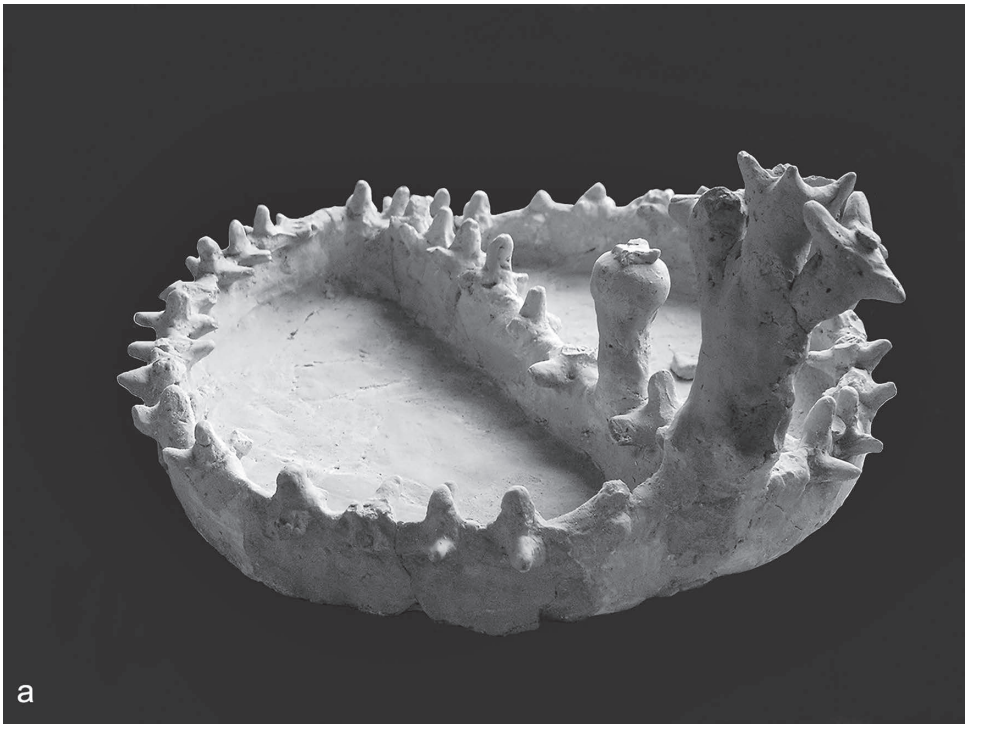

Figure 8.9a–c Terracotta composition with ritual action around poppy and altar. Kashkadarya region (Uzbekistan). Early Medieval period (6–7 CE).

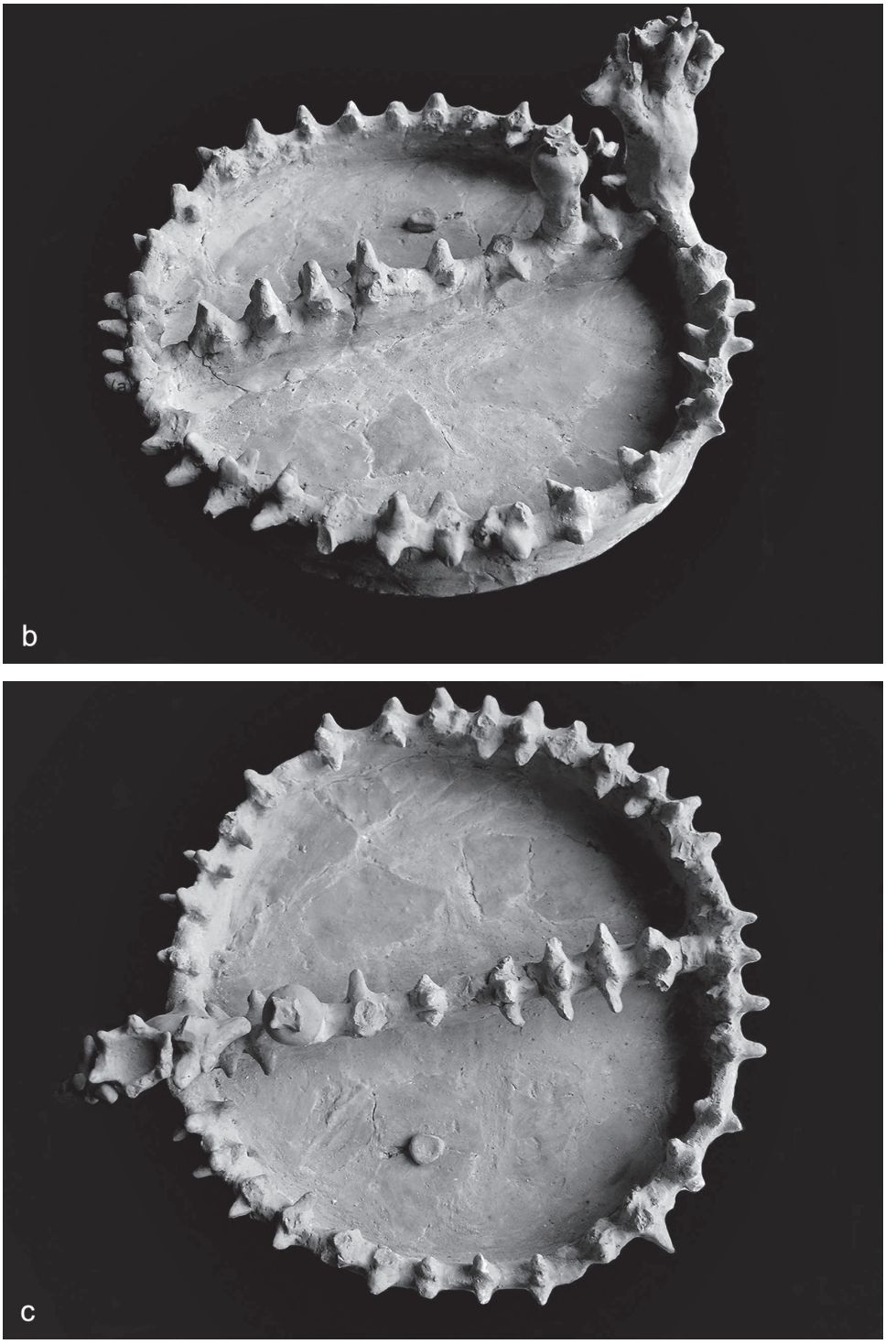

Figure 8.9a–c (Continued)

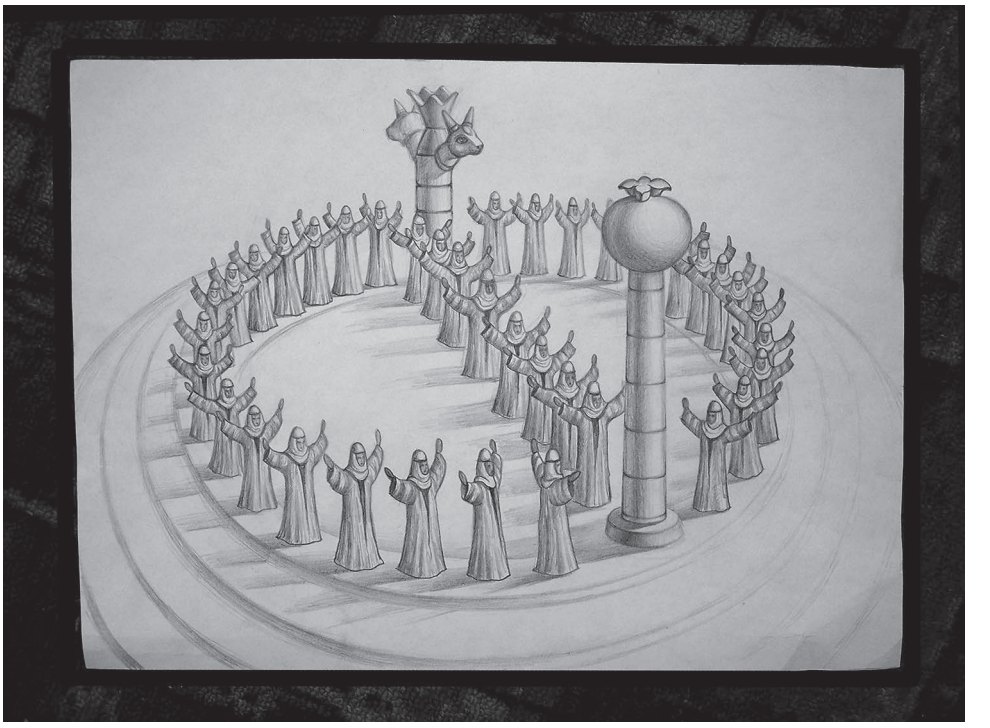

Figure 8.10 Drawing of the terracotta composition. Reconstruction.

In brief, we described the situation with cannabis and some other plants with psychotropic properties in the culture of ancient societies. The preparation and use of these plants as psychotropic drugs for the ritual and religious purposes is actually a complex issue and it is unlikely that a single denominator can be reached in this sense. Many sides of this issue remain open. In some ancient cultures (ancient Iran, Central Asia), there was a cult drink whose composition was complex and not entirely clear was elevated even to a divine rank. Along with this, these plants are used during religious events – as part of the ceremony.

The message of Herodotus about the Scythians and Massagets is somewhat different. Herodotus clearly indicates that hemp seeds are used by these tribes for pleasure – bringing them to an excited and elevated state of mind. In this case, it is difficult to distinguish sacred aspect and "pleasure" in their actions, although all this, it would seem, is connected with the rite of purification in the final cycle of the funeral ceremony. Here we can confidently say that this is a conscious action based on experience and knowledge of the properties of the plant.[52] These features of the plant were discovered, in all likelihood, in prehistoric times – the era of hunters and gatherers. That is, we can assume that the properties of cannabis, like other plants with psychoactive properties (poppy, ephedra, certain varieties of mushrooms, etc.) were recorded in the minds of primitive people much earlier than using this plant as a technical culture.

This is due to the process of comprehension by the primitive man of the surrounding world and the development of abstract thinking. It is possible that this circumstance played a significant role in the emergence of cults – totems associated with the worship of natural phenomena and its elements, including animals and plants.

Figure 8.11 Terracotta composition from Margiana. Late Bronze Age.

One of the most valuable sources is extant, despite their semi-legendary and fragmentary nature. A very interesting message about hemp is contained in the chapter of "History" of Herodotus, dedicated to the Scythians. It is believed that it was the Scythians who introduced Europeans to the culture of hemp.[53] In any case, classical authors indirectly indicate this. Herodotus reports that there is wild hemp and there is cultivated hemp. He also says that it is very similar to flax, but higher and rougher. According to Herodotus:

> the Thracians make garments of it which closely resemble linen; so much so, indeed, that if a person has never seen hemp he is sure to think they are linen, and if he has, unless he is very experienced in such matters, he will not know of which material they are.
>
> (IV. 74)

No less interesting is the information that:

> The Scythians as I said, take some of this hemp seed, and, creeping under the felt coverings, throw it upon the red-hot stones; immediately it smokes, and gives out such a vapour as no Grecian vapour-bath can exceed; the Scyths, delighted, shout for

Figure 8.12 Composition depicting a group of men dancing around a mushroom. Colima (Mexico), dated 300 BCE-100 CE.

> joy, and this vapour serves them instead of a water bath; for they never by any chance wash their bodies with water.
>
> (IV. 75)

It should be noted here that the Scythians inhaled vapors and smoke formed from seeds thrown on hot stones.[54] However, the question arises what exactly the Scythians threw at the hot stones and whether it was hemp seeds. If so, could this desired effect be achieved with the desired effect Herodotus speaks of? It can be assumed that in this case, a tool made from hemp resin and leaves was used – like hash. And how was this combined with the steam bath with which Herodotus compares the Greek steam bath? In any case, the ancient author tells us a rather original method of using hemp, from which the Scythians ultimately enjoyed. This method of cannabis consumption is significantly different from the ritual with the use of the haoma-soma drink – the Indo-Aryans drink, whose composition was much more complicated.[55]

Figure 8.13 Caldron of "Scythian type", brazier and hexapod from Second Pazyryk kurgan.

The purification rite, carried out after the funeral ceremony, described by Herodotus, is comparable with the archaeological material of the Pazyryk mounds discovered by S.I. Rudenko.[56] In particular, in the Second Pazyryk kurgan in the corner of the burial chamber a bronze cauldron filled with broken stones was found, in the same chamber in the western half a second bronze vessel of the Scythian cauldron type, also filled with stones, was found. As Rudenko describes,

> in both vessels, besides stones, there was a small amount of hemp seeds (Cannabis sativa L., form C. Ruderalis Janisch). Cannabis seeds were also in a leather flask tied to one of the poles of a structure above a vessel of the shape of a "Scythian cauldron" (Figure 8.13). Incense stones were placed in incense burners in shape of brazier. Part of the seeds burned. In addition, the handles of the boiler's censer were wrapped in birch bark, since the censer apparently heated up from the hot stones to such an extent that it could not be taken by the hands with bare hands.[57]

As suggested by S.I. Rudenko, in the second mound, all the attributes for the purification rite described by Herodotus were found. According to the scientist, hemp smoking was practiced not only in purification rituals, but also in everyday life, both by men and women.[58]

In the ancient period, plants and fruits became objects of exchange along with outlandish objects. Cultural exchange between peoples and tribes usually took place during diplomatic missions,[59] various cultural contacts and, paradoxically, wars. Commercial exchange should be emphasized, it was the representatives of the merchant strata and merchant guilds who made rather difficult and risky trips to distant and exotic countries. I just want to recall the well-known position that one of such busy periods of trade and cultural contacts was the functioning of the Great Silk Road. More or less regular ties between Western countries and China were established from the 2nd century BCE. This period is characterized by migrations of nomadic peoples from the western borders of China towards Central Asia (Bactria, Parthia, Kangyu, etc.).[60]

Cannabis most likely comes to China from Central Asia via Dawan (modern Ferghana in Uzbekistan), where it has been cultivated since ancient times. According to the Chinese source Bencao Gangmu (Pentsao Gang-mu) *hu ma* was brought by Zhang Qian from Dawan. Bretschneider[61] in his study "Botanicum Sinicum" asserts positively that hu ma or foreign hemp, is a plant introduced from western Asia in the 2nd century BCE.[62] However, this assumption was criticized by Laufer, who sees this as attributing to Zhang Qian the merits of introducing this plant into Chinese culture.[63]

It should be noted that in Chinese sources along with *hu ma*, that is, Iranian hemp also has another designation *ta ma* (great hemp) and along with this the name *yu ma* (oil cannabis). In appearance, this plant is similar to hemp, and, therefore, it is called *hu ma*. One gets the impression that in Chinese sources *Sesamum indicum* (family Pedaliaceae) and *Linumusitatissimum* (family Linaceae) are mixed in the same term *hu ma* ("Iranian hemp");[64] the only obvious reason for this is the fact that the seeds of both plants produce oil that is used for the same medicinal use. These two completely different plants do not have anything to do with hemp.[65]

Based on an analysis of Chinese sources, Laufer makes an important conclusion. "It is a point of great culture-historical interest that the Chinese have never utilized the flax-fiber in the manufacture of textiles, but that hemp has always occupied this place from the time of their earliest antiquity".[66] This is one of the points showing fundamental diversity between East-Asiatic and Mediterranean civilizations, – there hemp, and here flax, as material for clothing. The most active stage in commercial activities between China and the Western countries, as I noted earlier, was the Tang Dynasty. Around 750 CE, 55 percent of state revenue was made from silk and hemp fabrics.[67]

I would like to briefly dwell on hemp as a raw material for the production of fabric. Hemp fabrics are especially popular in the early Middle Ages. In terms of quality and finish, they are valued on a par with fabrics known in the east. Thus, a sublime and noble name is given to a fabric called "fragrant hemp, purifying water". An excerpt from the romantic novel Su E is given in the work of E. Schaefer Golden peaches of Samarkand, which states;

> When in the middle of the 9th century the envoys of the "female kingdom of the barbarian mania", the beautiful women as bodhisattvas brought gifts to the courtyard in Chang'an, the offerings included "brocade with patterns in the form of luminous clouds at sunset". "They claimed that this fabric was made from" fragrant hemp "that cleanses the water". Radiant and radiant, she exuded a sweet fragrance on people. Painted with five flowers alternating among themselves, she was more beautiful than 8 brocades of the Middle State (China).[68]

In the description of Samarkand in Khudud al-Alam, along with the famous paper of Samarkand, hemp ropes are exported to the whole world.[69]

In an extremely short form, I gave only some aspects in the use of plants having special properties and which undoubtedly had a wider range of applications both in cult ceremonies and for medical purposes. The use of plants in the textile industry occupies a special place in the culture of peoples and requires special research. The examples presented in this chapter indicate the important role that plants have played in human life since its inception.

Notes

1 Cannabis sativa L. The hemp family. An annual herbaceous dioecious plant 30–180 cm tall, with an upright branched stem. The leaves below are opposite, on the top are alternate, deep-fingered, with lanceolate coarse-lobed blades. Male flowers on pedicels, five-membered, whitish-green, collected in panicled branchy inflorescence; female – with a rudimentary perianth, form a spike-shaped inflorescence, sit in the axils of the upper leaves.
2 The history of the study of the issue of ancient cult drinks is reflected in the works: Merlin 2003, 295–323; Abdullaev 2009; Abdullaev 2010; Long et al. 2017, 245–258.
3 Xinru Liu 2010.
4 For example, Eber Papyrus as Herbal medicine includes opium, cannabis, myrrh, etc. (Patrick et al. 2009; Aboelsoud 2010, 82–86).
5 Sumler 2018.
6 As for the etymology of the name "hemp", we find a similar word among Iranians and Indo-Aryans in the form of an Avestan *bangha* or Sanskrit *bhang*. At the same time, European languages have a clear designation, which is probably a borrowed word referring to the Finno-Ugric name (Gombocz 1912, 92). The ancient Türkic word *kendir* echoes it, which has a consonance with the Finno-Ugric version (Laufer 1919, 294).
7 Schafer 1963.
8 De La Vessier 2005.
9 Judging by the fact that Zoroaster initially opposed the intoxicating drink of haoma, it is probable that it existed long before the teachings of the prophet (Abdullaev 2009, 56).
10 It is interesting in this connection to recall some objects of a cult character originating from the excavations of Persepolis. It is a stone pestle and mortars made of grayish-green stone. The inscription on these items mentions a cult ceremony associated with crushing (plants?). Items belong to the reign of the Achaemenid king Artaxerxes 1 (465–425 вс) (Bowman 1970, no. 43, pl. 11; Sami 1970, 98–99, plate. on the page 105).
11 It is a commentary on the Rigveda of the medieval scholar Sayana (14th century).
12 Wasson 1969. A critical article on these hypotheses see (Brough 1971, 331–362).
13 Sarianidi 2007.
14 Meyer-Melikyan, Avetov 1998, 176–177.
15 Meyer-Melikyan, Avetov 1998, 178–179.
16 Сарианиди 2002, 174–175.
17 See V. Sarianidi. My Reply to K. Lamberg-Karlovsky: http://ashga.sitecity.ru/ltext_1405172346. pht ml?pident=ltext_1405172346.p_ 1405172641
18 Abdullaev 2009.
19 Ren et al. 2019.
20 Ren et al. 2019, 3.

21 Ren et al. 2019, 3.
22 Ren et al. 2019, 3.
23 Bakels 2003.
24 Sataeva 2015, 215–224.
25 I should like to thank Prof. N. Dubova for her kind help and commentaries to my questions.
26 Sarianidi 1976, 42–68.
27 However, according to V.I. Sarianidi: "Large-scale excavations in geometric proportions increase the appearance of ever new archaeological material, for which archaeological thought, or otherwise, a historical interpretation of new archaeological material, no longer has time to keep pace". V. Sarianidi. My answer is K. Lamberg – Karlovsky: http://ashga.sitecity.ru/ltext_1405172346.phtml?p_ident=ltext_1405172346.p_ 1405172641
28 The Bactrian-Margian Archaeological Complex (BMAC) is understood to mean the close culture of cattle-breeding tribes and the agricultural population that lived in the ancient territory along the Murghab valley, the middle reaches of the Amu Darya and its tributaries in the Bronze Age, especially in the middle and end of 2nd millenium BCE.
29 As an example, one can bring here the findings of long metal (bronze) hairpins. Often, such pins are fixed in female burials of the Late Bronze Age in the south of Uzbekistan. They were found *in situ* in parietal part of the head (Askarov 1973, 51; Askarov, Abdullaev 1975, 37; Abdullaev 1977, 33–40). These hairpins in upper part are decorated in shape of a poppy. It could mean that they executed a protection function against headache or other physical pain.
30 Askarov 1973, 96, fig. 47, 9; Askarov 1997, pl. XLV, *23*.
31 Sarianidi interprets this scene as "The Goats Facing the Flower", although this does not contradict the poppy (Sarianidi 1999, Fig. 15; see also Sarianidi 2002, 300).

The seal is found in the burial of the 11th–10th centuries BCE on the archaeological site Dzharkutan in Sherabad district of Surkhandarya region of Uzbekistan (Meitarchiyan 1984, 41–45, Fig. 1; Culture and art of ancient Uzbekistan 1991, No. 39; New Finds of Uzbek Archaeology 2002, No. 90).
32 Sarianidi 2002, photo below on the page 266.
33 Abdullaev 2009, 36–38, fig. 14.
34 According archaeological context specifically molded potteries the burial as well as funerary complex is dated by 13th century BCE (Sarianidi 2002, 265–266).
35 Sarianidi 1989, 20, figs. 5, 1, 2.
36 *Papaver somneferum* is an annual cultivated herbaceous plant 1–1.5 m high. The stem is small-branched, densely deciduous, erect, round, bare, covered with a bluish waxy coating (Fig. 2). The root is rod. Basal leaves are elongated (20–30 cm long), stem leaves are wide-lanceolate, coarse, simple, sessile, stalk-bearing. The flowers are large, solitary, located on the tops of branches and stems on long pedicels, with a double regular perianth. Corolla separate, consists of four petals of various colors (from white to dark purple), at the base of the petals there is a large dark spot. The buds are drooping, covered with a two-leafed cup, falling off when the flower blooms. There are many stamens, the upper ovary. Fruit – a box of spherical or ovoid shape, opens with holes; at the top there is an overgrown woody stigma in the form of a disk. The box is first green in color, juicy, after ripening, straw yellow, dry. The whole plant contains white milky juice.
37 Askarov 1977, 100; See also note 29.
38 Sarianidi 1976, 51, figs. 11.12. The amulet is flat of a lenticular shape in dimensions: 1.7 × 1.6 × 0.8 cm. Two through holes in opposite corners.
39 Abdullaev 2009, 32–33, fig. 11.
40 For comparison: Saxaul (Haloxylon) is a genus of shrubs or small trees belonging to the plant family Amaranthaceae of a height of 1.5–12 m, with forked branches and articulated fragile young shoots. The crown is thick or openwork, in the summer green, in the fall – dirty gray or brownish. The leaves are opposite, in the form of small, colorless scales or tubercles pressed against the stem. The flowers are bisexual, sitting 1 on short branches, in the axils of scaly bracts. Perianth of five membranous leaves forming wide, protruding wings of the fetus. Ten species, in semi-deserts and deserts of Asia (Central Asia, Iran, Afghanistan, Northwest China, Mongolia) (Trees and shrubs of the USSR, 1951; Leontiev 1954).
41 Sarianidi 1976, 51.
42 *Ephedra Distachya* L. Genus – Ephedra. Family – Ephedraceae. Ephedra two-spike – a perennial, branched, evergreen shrub 20–50 cm high, from the family
43 The amulet has a rectangular shape (2.6 × 1.9 × 0.8 cm), Sarianidi 1976, 51, figs. 9.10.
44 Masimov 1981, figs. 4, 9.

45 Abdullaev 2009, 35–36, fig. 13.
46 Dimensions of the seal-amulet are 1.8 × 1.7 × 0.7 (Sarianidi 1976, 52, figs. 13, 14).
47 Abdullaev 2009, fig. 15.
48 For more on this composition see (Abdullaev 2009, 64–72).
49 Sarianidi 2007, fig. 10, 10.
50 Abdullaev 2009, fig. 31.
51 Schultes and Hofmann 1979, fig. on the page 149.
52 The use of plants of a psychotropic property in medicine in the era of antiquity remained not completely disclosed. In the treatises of ancient scholars, one can see a systematic and detailed approach in describing both the plant itself and its properties (Theophrastus, Dioscorides, Pliny the Elder, etc.) (Sumler 2018).
53 Pliny, XIX, 1–3; Candolle de 1885, 148.
54 Interestingly, in another chapter on the Massaget tribe, Herodotus describes a similar situation: Book IV.203, Moreover it is said that other trees have been discovered by them which yield fruit of such a kind that when they have assembled together in companies in the same place and lighted a fire, they sit round in a circle and throw some of it into the fire, and they smell the fruit which is thrown on, as it burns, and are intoxicated by the scent as the Hellenes are with wine, and when more of the fruit is thrown on they become more intoxicated, until at last they rise up to dance and begin to sing.
55 For the alleged composition of the haoma, see Abdullaev 2009, 48–55. It should be noted that in antiquity the majority of intoxicating drinks were multi-component. In Jarkutan necropolis (Southern Uzbekistan) of late Bronz Age period in the burials at the bottom of the jug, the seeds of grape and silver berry were found. In the other three graves at the bottom of large vessels were found the remains of wheat bran, silver berry seeds (Elaeagnus angustofolia – commonly called Russian olive, oleaster, Persian olive or wild olive), grape seeds (Vitis vinifem), dwarf grain (Tr̈iticum compactum Host) of soft wheat (Triticum aestivum l), and barley (Hordcum vulgare) were found. According to the archeologist A. Askarov, the tanks contained an intoxicating drink that was made on the basis of grapes using silver berry, which served to ferment (Askarov 1977, 151). On the composition of wine in antiquity see also McGovern 2003.
56 Rudenko 1953.
57 Rudenko 1953, 333.
58 Rudenko 1953, 77.
59 In this regard, the activities of Zhang Qian, sent by the Han emperor Wudi in search of the Yuezhi tribe as potential allies to fight another nomadic tribe of the Xiongnu, should be highlighted. The ambassador and diplomat's task included not only intelligence reports on the situation of the peoples of the Western countries, but also, as later Chinese sources of collecting seeds of plants, not known in the Celestial Empire, ascribe to him.
60 Abdullaev 2007, 73–98.
61 Bretschneider 1882.
62 Chinese Recorder, 1871, 222; adopted by Hirth 1895, 439, and maintained again in Journal Am. Or. Soc, 1917, 92. Pt. II, 206. See also Doolittle Justus 1870–1871.
63 Tao Hu-Kin (451–536 CE), a historian on whose work Bretschneider based is attributed to Pen ts'ao Kan Mu. It states that *hu ma* ('hemp of the Hu') originally grew up in Dawan (Fergana) and that, therefore, he received the name hu ma ('Iranian hemp'). However, in the records concerning Dawan, there is no mention of a person, and this term does not appear in the annals. According to Laufer, T'ao Huh-kin was a Taoist adept, a drug hunter and an alchemist, he never crossed the borders of his country, of course, did not have any information about Dawan. He simply imagined, based on the fact that mu-su and the vine were brought by Zhan Qian from Dawan that he brought the hu ma plant as well. An analysis of Chinese sources leads the researcher to the conclusion that hemp was introduced in a later period. In any case, in the Tang era this legend was completely unknown. T'ao Huh kin probably knew about hu ma – he gives a chronicle, which says that in ancient times in China only "great hemp" (ta ma – Cannabis sativa) grew in abundance (Laufer 1919, 288).
64 Iranian hemp does not mean at all that it was brought directly from Iran, but most likely from northern Khorasan and the territories of the Central Asian interfluve.
65 Laufer 1919, 288–289.
66 Laufer 1919, 290, 293.
67 De la Vessier 2005, 176.
68 Schafer 1963, 261.
69 Hudud al'-Alam 1937, trans. Minorsky, 113; and commentary 352.

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PART II

Pastoral Nomads and Agricultural Societies

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9

HORSE ARCHERY AND THE RISE AND FALL OF NOMADIC EMPIRES ON THE EURASIAN STEPPE

Craig Benjamin

Introduction: The Emergence of Militarized Nomadic Confederations

The Silk Roads constituted the most important trade network of the pre-modern world, linking much of Afro-Eurasia together into a single, interconnected system of exchanges. The primary function of the Silk Roads was to facilitate material exchanges between the great civilizations of Eurasia. During the First Silk Roads Era (ca. 100 BCE–250 CE) four huge imperial states controlled much of Afro-Eurasia – the Han Chinese, Kushan, Parthian, and Roman Empires. Civilizational collapse across Eurasia in the mid-3rd century CE led to a dramatic decline in trans-regional trade, but the flourishing in the 7th century of the Tang, Sasanian, and Byzantine Empires, and the rapid expansion of the *Dar al-Islam*, led to a Second Silk Roads Era (ca. 600–1000 CE). The Silk Roads then entered another period of decline, only to be reconstituted for a final time under Mongol hegemony during the Third Silk Roads Era (ca. 1250–1350). While each of the imperial states that controlled vast regions of Afro-Eurasia were fundamental to Silk Roads exchanges, equally crucial for the operation of these civilizational linkages were different groups of pastoral nomads, without whom none of these periods of exchange would have been possible.

The lifeway of pastoral nomadism emerged following the transition to agriculture, which began roughly 11,000 years ago. Prior to the agricultural revolution, humans lived as foragers for 300,000 years, living off the natural fruits of the land, and eventually also learning to hunt animals for their meat and hides. Sometime during the 4th millennium BCE some communities of humans living in the grasslands of Eurasia learned more efficient ways of using certain types of animals other than just killing them for their meat and hides. These communities were part of what archaeologist Andrew Sherratt dubbed the "secondary products revolution", when humans learned to use the "secondary products" of animals while they were alive – their wool, their milk and blood, their traction power to haul carts and plows, and their mobility as a means of rapid transportation through horse riding.[1]

These discoveries led to the emergence of the lifeway of *pastoralism*, or nomadic livestock herding. Pastoralists are primarily nomadic (although they also practiced farming when the environment facilitated this), and it was this mobility that was so important to the operation of

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the Silk Roads. Because these pastoralists were now able to take their food, clothing, tool, and dwelling materials with them as they migrated across the landscape, they were able to move into and "colonize" the great steppe and desert regions of Eurasia, which they did in a series of generally west to east migrations. They were able to thrive in regions where humans had thus far been unable to survive, and use their mobility to move freely between the border regions of sedentary states. It was as a direct result of the emergence of pastoralism then that the states and empires of Afro-Eurasia became linked together into a single system of exchanges for the first time.[2]

Pastoralists flourished all across the Eurasian steppe, a massive expanse of grassland that stretches 5000 miles from Eastern Europe through Central Asia to Manchuria. It is bounded in the north by Siberian taiga, and in the south by large mountain ranges associated with the Greater Himalaya. The sheer size of the steppe explains why some of the empires constructed by militarized pastoralists were so huge. The formidable cavalry of all the great nomadic confederations was able to range freely from one end of Eurasia almost to the other, because wherever they went there was pastureland for their horses.

It was the exploitation of the "secondary products" of these animals that made the lifeway of pastoralism possible, so it is hardly surprising that the pastoralist diet consisted mostly of dairy products. These include various types of cow, goat and sheep's cheese, yogurt, meat, and even alcohol in the form of a powerful fermented mare's milk called *kumis*. Along with their food, other animal secondary products that were utilized were hair and wool, and horns and leather. Some of the meat in a pastoralist's diet comes from their domesticated animals, but much of it also comes from hunting. The slaughtering of the family's animals for meat was handled very carefully and sustainably, because the very survival of the family depended upon maintaining their herds and flocks, which is also how the nomad's stored their wealth.

Despite the efficiency of pastoral nomads in utilizing the secondary products of their animals to live and live well, there were some needs that could not be met by their herds and flocks. Because of this the nomads were never completely self-sufficient, which meant they simply had to interact with contiguous sedentary societies from the beginning. This interaction was often in the form of trading, but if that didn't work, of raiding. All over Eurasia archaeological evidence reveals the emergence of a type of symbiotic relationship between pastoralists and neighboring sedentary farming societies. Pastoralists had valuable goods to trade – their animal products and often some of the animals themselves, particularly horses. What they wanted in return were textiles like silk, grains and other foodstuffs not available on the steppe, various metal weapons and tools, and some other luxury items that were produced by artisans in sedentary societies, although many nomadic confederations also possessed superb artisans.[3]

Although pastoralism first appears in the archaeological record in the 4th millennium BCE, it was not until some 3000 years later, during the early 1st millennium BCE, that formidable armies of mounted archers first appear, the armies of militarized nomads. We have excellent literary evidence of the activities of some of the most powerful of these early militarized groups, such as ancient Greek historian Herodotus' account of the Scythians or Saka, and Han Chinese historian Sima Qian's account of the activities of the Xiongnu, Wusun and Yuezhi.[4] Each of these groups used their military prowess to establish "empires of the steppe". These were not empires in a traditional sense – they looked nothing like the Han Chinese or Roman Empires in administration and infrastructure – but the success of these steppe empires showed that well led pastoralist confederations could prosper in large, well-organized structures that essentially took control of vast interior of Inner Eurasia. The Mongols constructed the most famous of these steppe empires, but they had many successful precursors to look to for inspiration.

Several factors help explain the success of these steppe empires, but fundamental to all of them were the supreme horse-riding skills of the cavalry, and their effective use of the composite bow and arrows. By the 5th millennium BCE large numbers of wild horses were flourishing in various regions of Inner-Eurasia. Eventually human communities living at places like Dereivka in Ukraine learned to domesticate some of these horses, and the process of domestication then spread outwards from some focal point, and certainly spread eastwards as a result of the pastoral nomadic migrations noted earlier.[5] It is difficult to conceive of any animal that has had a more important influence on human history than the horse. Even today we remember just what an energy revolution the domestication of the horse was by measuring the strength of our engines in "horsepower". Every group that constructed a steppe empire held their horses in the highest regard, and looked after them both physically and even spiritually. The Mongols scattered mare's milk on the ground before setting out on their campaigns, for example; and sometimes the horses of great Khans and other military commanders were sacrificed to help carry them to heaven. Every boy who joined the Mongol army would have learned this maxim: "A Mongol without his horse is like a bird without its wings".

A crucial technological development that allowed skilled horse-riding pastoralists to gain an even more significant military advantage over their opponents was the development of the composite bow. Edwin Pulleyblank argued that the development of the composite bow was *the* most significant factor of all in explaining the success of militarized nomads. The composite bow, as its name suggests, was a laminate constructed from a range of materials including different types of wood, animal horn and sinew. Wood was used to make the core of the bow. A thin layer of animal horn or bone, usually from goats or sheep, was then attached to the inner side, and some type of animal sinew usually harvested from the legs and back of wild deer, was attached to the outer side. A strong glue made by boiling animal hide was used to bind the layers together.[6]

In ideal conditions, when an archer drew back the bow prior to firing, the horn and sinew between them stored far more energy than was available in a similarly sized all-wooden bow. The bow worked best in a dry environment – too much rain or humidity and the glue would begin to lose its binding power. So this type of bow would not have been much use to Romans fighting in Scotland, or Han Chinese soldiers in Vietnam; but in the dry and generally sunny Eurasian steppe, the composite bow gave the pastoralist mounted archers a huge advantage. We cannot be certain about when and where the composite bow was first developed, both because it was invented by early pastoral nomads who left no written records, and also because the materials from which it was constructed are organic and thus left little in the form of archaeological evidence. One possible candidate is the Sintashta culture. Archaeological evidence shows that they adopted the chariot, but they might also have been involved in the innovation of this powerful new bow. Some arrow heads have been discovered by archaeologists at sites associated with the Sintashta, such as in chariot burials at Krivoe Lake in the Ural Mountains in Russia dating between 2100 and 1700 BCE. But the bows that fired these arrows have not survived.[7]

So, it was the domestication of the horse and the subsequent development of superb horse-riding skills by migrating pastoral nomads, coupled with the innovation of the composite bow and the acquisition of superb skills with bow and arrow, that led directly to the appearance of powerful contingents of mounted archers in Inner Eurasia. These armies were almost unbeatable by the forces of sedentary states – until, that is, many of these states adopted similar technologies and strategy. The only way the Chinese military was able to take on the awesome power of the nomads, for example, was by adopting massive horse-breeding schemes, turning

their infantry into cavalry, adopting the composite bow, and even copying the tactics that were being employed against them so successfully by the nomads.

But it was not just the horse and composite bow that explains the success of groups like the Xiongnu, Turks and Mongols. These great cavalry contingents were also incredibly well disciplined, and could survive off the land, so were superbly tailored for mobility and speed because they did not need to wait for supply trains to catch up with them. The soldiers were brilliant archers of course – whether firing forwards, sideways or backwards! – but were also highly skilled with swords, axes, daggers, lances, even maces. And they were incredibly well-led. The commanders of all the great steppe armies carried out very carefully planned campaigns that used reconnaissance to collect accurate intelligence about the strength and deployment of the forces arrayed against them. Pastoral nomadic armies were also skilled at using terror and fear to control conquered peoples, and to send brutal messages to others of what would happen to your city if you dared to stand against them, as the Mongols so supremely demonstrated.

There are many cultural similarities between the various pastoral nomadic groups that made the Eurasian steppe their homeland, including the Xiongnu, Yuezhi, Turks, Uyghurs and Mongols. These include the use of gers (yurts) for accommodation, superb skills at horse-riding and military skills as we have just discussed, and even common board games and epic songs, such as Mongolian long song. Another similarity is that virtually all the powerful militarized nomadic confederations that created empires of the steppe were centered in the region of modern Mongolia. We cannot be sure that the core elite groups that controlled these confederations were ethnically related. But we can be certain that all the ruling elites possessed similar military and political skills that allowed them to create confederations that could compete with and often dominate not only other groups of militarized nomads, but also the great sedentary civilization of China to the south. This was certainly true of the Mongols, but it was also true of their regional predecessors. Indeed, it was the rulers of the early steppe empires who created effective templates for the construction and maintenance of huge confederations, and also for supremely efficient military organization, templates that would later be used so effectively by the Mongols. It was these vast empires of the steppe that played a crucial role in the operation of the Silk Roads during all three eras.

Nomadic Empires of the First Silk Roads Era

There are two pastoral nomadic confederations that are of particular importance to the story of the first Silk Roads Era, the Xiongnu and the Yuezhi, both neighbors of ancient China. The Xiongnu make their first appearance in history in a superb account of their lifeway in Sima Qian's great history the *Shiji*, where he discusses a powerful confederation that controlled the steppe lands to the north of the Yellow River. He describes their lifeway as purely nomadic: the Xiongnu move about with their herds of horses, cattle, sheep, goats, and camels in migrations ranging from short excursions among hilly pastures to longer trips into the Gobi. In battle Sima Qian tells us that the highly skilled Xiongnu mounted archers used composite bows that could fire arrows with sufficient force to penetrate armour; and they were also adept with swords and spears.[8]

However, archaeological evidence shows us that, like all pastoral confederations, the Xiongnu were not always nomadic. Xiongnu sites such as Noin-Ula and Ivolga display evidence of farming activity, fixed dwellings and fortified settlements, and advanced craftsmanship including rug-weaving, leather-making, and the crafting of fine gold, iron, and bronze implements and works of art. These discoveries have altered our impression of the lifeway

of not only the Xiongnu, but of pastoral nomads in general, who often followed a far more sedentary lifeway than that outlined in the histories of the Han Dynasty.[9]

The Xiongnu reached the peak of their power under the leadership of *Shanyu* Modu, who reigned from 209–174 BCE. Under Modu the Xiongnu became a dangerous force numbering perhaps 300,000 archer warriors who were superbly adept at warfare. Modu's rise to power is a compelling story that begins with an attempt by his father Touman to get rid of his oldest son, in order to promote as his successor a younger son from a more favoured consort. To do this, Touman first sent Modu as a hostage to the Yuezhi, the Xiongnu's great rivals. After Modu had been accepted as hostage by the Yuezhi, Touman suddenly attacked them, expecting that the Yuezhi would kill his son in retaliation. But the resourceful Modu managed to steal one of the Yuezhi's best horses and escape. His father was so struck by his bravery that he put Modu in command of a force of 10,000 cavalry![10] After this incident however, Modu was relentless in his attempt to kill and replace his father, a goal he soon achieved before declaring himself the new Shanyu.[11]

During thirty-five years of brilliant rule, Modu extended Xiongnu power far beyond its traditional heartland, conquering his nomadic neighbors and incorporating them into the confederation, before turning to confront the Han Dynasty itself. As Sima Qian describes it: "When Modu came to power the Xiongnu reached the peak of their strength and size, subjugating all of the other barbarian tribes of the north and turning south to confront China as a rival nation".[12] By unifying other tribes under his leadership, Modu constructed a steppe empire that eventually stretched from Lake Baikal in the north to the new Chinese Great Wall in the south, and from the Tian Shan mountains in the west to Manchuria in the east. Modu then turned on the Xiongnu's only real rivals in the region, the equally powerful Yuezhi nomadic confederation, who were located along the northwestern borders of Han China.

The ancestors of the Yuezhi were pastoralists who, during the Bronze Ages, had migrated long distances across Inner Asia, from the Caucasus region to the western border of ancient China. Here they dwelt for many centuries, growing wealthy and powerful through trade and military strength. Their prowess was such that they became well known to many ancient Eurasian peoples who mention them in various texts – Chinese, Tibetans, Turks, Persians, Greeks, and Romans. So, even though they left no written records of their own, it has been possible for historians to piece together their history because of this range of references in many contiguous sources.

The principal settlement of the Yuezhi was in the Hexi Corridor in modern Gansu, where melting snows from the high mountains sustained numerous oasis settlements such as Dunhuang. We learn from Sima Qian that the Yuezhi had a force of 100,000 trained mounted archers, and before the rise of Modu they treated the Xiongnu with disdain. Like the Xiongnu, this enormous Yuezhi force of horseback archers was made up of contingents from subordinate groups that all probably followed a range of different lifestyles, from farmers to full-time nomads and everything in between. In fact, when we use names like Xiongnu or Yuezhi, or later Turk and Mongol, we are really referring to the ruling clan that gave its name to these stable confederations of different tribes, which would have varied substantially in their cultural practices and even their languages.[13]

Before the rise of Modu, the Yuezhi were justified in their dismissive attitude towards the Xiongnu; but the moment the great Shanyu appeared on the scene, the Yuezhi were in trouble. As Modu began to authorize or personally lead raids upon the Yuezhi, he was also launching wave after wave of attacks against the Chinese Han, who for several decades were hard pressed to keep them out. During the early decades of the Han Dynasty, the emperors decided to adopt a strategy of negotiated peace treaties – the *heqin* or "marriage alliance" policy – with

Modu and his successors, who accepted valuable Chinese tributes (including beautiful Han princesses), while still sending disdainful letters to the emperors demanding even more. It was through such letters that the Han court heard of the devastating attacks upon the Yuezhi, which culminated in a final disastrous defeat around the year 166 BCE, leaving the Yuezhi with no alternative other than to migrate far away from their homeland.

The Yuezhi initially traveled a few hundred miles north into the fertile Ili River valley, a desirable resettlement site that they occupied for the next three decades. But sometime around 133 BCE a powerful contingent of vengeful Xiongnu and allied horsemen routed the Yuezhi and forced them to resume their migration. This time their journey took them thousands of miles west, deep into the heart of Central Asia until, around the year 130 BCE, they settled again in fertile river valleys that drained into the Amu Darya, one of the great rivers of Central Asia. When the Yuezhi arrived, they fought a battle against a powerful group of resident Saka (or Scythians) who they defeated and evicted. This victory gave them control of the kingdom of Bactria to the south (modern Afghanistan), which had already been part of several previous empires – those of the Persians, of Alexander of Macedon, and of his successors the Seleucids.[14]

Bactrian resistance to the Yuezhi takeover is dismissed by the Han historians, but few sedentary kingdoms would have been able to withstand an invasion by this powerful militarized nomadic confederation with some 100,000 skilled archer cavalry. The Yuezhi conquest of Bactria is just one example among many in world history of the conquest of an agrarian society by pastoral nomads. But this particular invasion represents something more; it is recognized as the first recorded event in the history of world history writing, because it was the very first incident ever commented upon by both western (as in Greco-Roman) and eastern (as in Chinese) sources. In the years following their conquest of Bactria, the Yuezhi consolidated their position in the region, a situation noted by a Chinese ambassador named Zhang Qian when he arrived in Bactria a couple of years later, after his own epic journey from the Han capital of Chang'an.

As the Yuezhi were undertaking their western migration the relationship between the Han and Xiongnu continued to evolve. The "marriage alliance" with the Xiongnu agreed to by early Han emperors was never particularly successful, and the Xiongnu continue to raid into the fertile farmlands of the northern China almost at will. When Han Emperor Wudi, the "Martial Emperor", came to the throne in 141 BCE, he was determined to end the policy and take the fight back to the Xiongnu. Wudi adopted Xiongnu military technologies and strategies (including instituting a massive horse breeding program), and enormous Han cavalry contingents worked relentlessly over the decades that followed to drive the Xiongnu back to the north, sometimes successfully, sometimes not. After several victorious campaigns during the late 2nd and early 1st centuries BCE, the Han gained enough breathing room to extend the Great Wall deeper into Central Asia, and also establish a series of military garrisons through modern Gansu Province. Following the reign of Wudi, however, Chinese strength and will waned, and incessant border warfare with the Xiongnu broke out again, allowing the nomads to reestablished their presence in northern and western China.[15]

Eventually, in the middle of the 1st century of the Common Era, a revitalized Later Han Dynasty recovered these territories and forced the Xiongnu back into the steppe north of the Gobi. The Later Han also established a new official position, the Protector General of the Western Regions, who used his mobile cavalry to great effect in confronting the Xiongnu wherever they appeared along the Silk Roads. Eventually the Xiongnu empire went into serious decline after it split in two, allowing the Han to further weaken the confederation by playing one Shanyu off against the other. As the confederation disintegrated, the Northern

Xiongnu might have evolved into the Huns that so terrorized Europe during the later period of the Roman Empire, although that identification remains tenuous.

The Xiongnu were most influential on subsequent steppe empires through their political-military organization. Sima Qian offers a detailed account on how the Xiongnu organized the administration of their empire by creating a system capable of controlling a confederation of ethnically diverse tribes spread over enormous distances. Power was delegated by the *Shanyu* to twenty-four Great Leaders, who constituted a sort of Council of State. Directly beneath the *Shanyu* were the four most senior members of the Council (known as *wangs* or kings). The kings were ranked in order of seniority from one to four; they were the recognized successors to the *Shanyu* and the four most senior military commanders. Beneath these four supreme commanders were the remainder of the twenty-four "Great Leaders", each of whom was personally entitled to a military unit known as the "Ten Thousand Cavalry". Each Great Leader had the right to appoint his own Lesser King to take charge of his personal staff and administrative matters. These Lesser Kings were often selected from amongst the chiefs of federated tribes that were probably of very different tribal affiliations to the core Xiongnu. This was a highly effective way of keeping together a stable confederation of ethnically and linguistically diverse tribes who had sworn allegiance to the *Shanyu*.[16] Subsequent militarized nomadic confederations would adopt and adapt many elements of this political and military administrative structure, which facilitated the formation of the first great Xiongnu Empire of the Steppe. In their ability to unite disparate tribes, their political organization, and their military strategy, technology and prowess, the Xiongnu essentially established the template for the great steppe empires that followed them.

As part of the Early Han's strategy against the Xiongnu, Wudi had dispatched envoy Zhang Qian on a mission to find the Yuezhi and urge them to return to form an alliance with the Chinese against their common enemies. After many adventures, including being held prisoner by the Xiongnu for a decade, Zhang Qian eventually arrived at the court of the Yuezhi ruling dynasty in perhaps 126 BCE. The Han envoy soon gained an audience with the king of the Yuezhi, and attempted to persuade him to bring his people and troops back to the borderlands of China to form an alliance with the Han against the Xiongnu. But the Yuezhi king, having successfully led his people on a thirty year-long migration to a safe, wealthy and fertile region, and having established hegemony over the entire Bactrian state, was not interested in returning to confront the Xiongnu.

Zhang Qian remained in the region for about a year and accumulated considerable information about Bactria and other contiguous regions, information that constitutes the first known Chinese reports on Central and West Asia we are aware of and thus is of incredible interest to historians. Zhang Qian eventually returned to the Han court in ca. 125 BCE, and delivered his report in person to the emperor. Zhang Qian described to the emperor and court all the places he had visited or heard about during his journey, places that had previously been completely unknown to the Chinese. He described the Ferghana Valley with its heavenly horses, the powerful kingdom of Sogdia, the great mercantile state of Bactria, Parthia with its hundreds of large cities and grape vines, and India where the soldiers ride elephants into battle. He described them as large states with many rare goods; if they could be won over, either through alliances or conquest, it would be possible to extend Han territory for 5000 miles, until the emperor's might would be known to all the lands between the seas. This was an argument no emperor could refuse. Over the decades that followed Han Wudi had the Great Walls extended deep into the deserts of Western China, and sent out numerous large diplomatic missions into Central Asia. These expeditions mark the beginning of Chinese engagement with Central Asia, and indirectly with Western Eurasia, and thus constitute the effective beginning of the Silk Roads.

The great confederations of the Xiongnu and Yuezhi thus played a critical role in the establishment and subsequent operation of the First Silk Roads Era. The war against the Xiongnu was the reason Wudi despatched Zhang Qian to undertake his epic mission to the Yuezhi. As a result of that mission the Han went on to establish a vast tributary empire in Central Asia, sending enormous quantities of silk and other valuable goods into the region that were commercialized by Chinese and Central Asian agents, and sent further west via the land and maritime routes of the Silk Roads. The Xiongnu remained a troublesome opponent during the first two centuries of the First Silk Roads Era, and because of this the Han extended the Great Wall deep into Central Asia, established military commanderies, and even a new official position, the Protector General of the Western Regions, thus more securely linking Han China to the other empires of ancient Eurasia. And the Yuezhi eventually transitioned into one of those great empires, that of the Kushans, which controlled the crossroads of Eurasia throughout the era and ensured the smooth functioning of the trade and exchange networks. The collapse of the Kushan Empire in the mid-3rd century CE was one of the key factors that led to the end of the First Silk Roads Era.[17]

Nomadic Empires During the Second Silk Roads Era

The next great empire of the steppe appeared some 300 years later, constructed by Turkic tribes who may or may not have been distantly related to the Xiongnu. Bilge Khagan, the "wise king", one of the founders of the Second Turkic Empire, describes the ascent of the Turks and their creation of a vast steppe empire on an enormous stela that was erected in the 8th century in the Orkhon River Valley of Mongolia:

> When the blue sky above and the dark earth below were created, human beings were created between the two. My ancestors Bumin Kaghan and Istami Kaghan rose above the sons of men. Having become their masters, they governed and established the empire and the institutions of the Turkic people. They had many enemies in the four corners of the world, but waging military campaigns, they subjugated and pacified them, making them bow their heads and bend their knees.[18]

"Turk" means "strong"; it was a term that a small clan called the Ashina used to describe themselves. During the 6th century the Ashina established dominance over other Turkic clans like the Oghuz and Karluks. The term "Turk" then took on a wider meaning and was extended to cover all tribes under Ashina control during the First Turkic Khaganate. Centuries later, Muslim historians started using the word "Turk" to describe all the peoples that spoke some form of the Turkic language. The name Ashina probably meant the color blue; certainly elites of the later Turkic khaganates referred to themselves as the Gokturks, or "Blue Turks". This term was probably chosen because it was associated with the color of the sky, the realm of the most powerful god in the shamanistic pantheon of all Inner Eurasian pastoral nomadic peoples, Tengri.[19]

Like all the nomadic empires that formed on the steppe, the Turks inevitably came into conflict with various Chinese dynasties to their south. The name "Turk" actually appears for the first time in history in Chinese Tang Dynasty annals describing a steppe people who had created a large empire. This was the First Turkic Khaganate, founded in 552 by Bumin Khagan, one of the rulers named in the inscription of Bilge Khagan. Bumin used diplomacy and warfare to take control of the steppe, but after the sudden death of his son and successor, the Turkic confederation split into an eastern half ruled from the Orkhon Valley by another of Bumin's

sons, Muqan (r. 553–572), and a western half ruled by Ishtemi Yabghu (viceroy, r. 553–575) from his headquarters in the Tien Shan in Xinjiang.[20]

Both the eastern and western khaganates had a significant impact on Eurasian history. As Turkic forces expanded westwards, they gained control of major Central Asian commercial cities such as Samarkand and Paykent. The Sogdian merchants who lived in these towns, who would become crucial commercial intermediaries during the Second Silk Roads Era, thus became Turkic vassals. Further west the Turks entered into a long struggle with the Sassanians, who had constructed their own enormous empire that ruled much of Persia and the Middle East from the mid-3rd to early 7th centuries. After campaigning in Sasanian territory, the Turks continued westwards into the fringes of Europe, where they interacted with Byzantines, Lombards, and even Frankish kings.[21] In the end the Byzantines and Sogdians formed a strategic alliance with the Western Turks against the Sasanians in the 570s, which was followed by regular diplomatic exchanges between Constantinople and the Turks.

While these events were unfolding, the Eastern Turks were also flourishing and expanding, but with the emergence of the Sui Dynasty in China in the late-6th century, the Eastern Turkic Khaganate began to self-destruct through civil war. Sui Emperor Wendi (r. 581–604) effectively played the Turks off against each other. But the Sui Dynasty was short-lived, and as it crumbled after just thirty-six years Turkic power was reasserted. By the time the first emperor of the Tang Dynasty came to power in 618, the Turks were strong enough to force him to pay them tribute. Even when the formidable first emperor's son Taizong came to the throne in 626, he was forced to pay the Turks an enormous ransom so that they would leave Chinese territory. Taizong swore revenge, and like Han Wudi before him, established multiple units of mounted archers to match the mobility of the Turks.[22]

The Chinese had a lucky break when a volcanic eruption occurred on the Mongolian steppe in 626, leading to brutal winters and famine amongst the Turks.[23] Tang cavalry attacked, and by 630 the First Turkic khaganate had been defeated. For the next fifty years any sort of Turkic revival was headed off by Chinese gifts and marriage alliances, and the adoption of Chinese cultural customs by some Turkic elites. Other Turks resented this. Kul Tegin, one of the leaders of the Second Khaganate, later wrote:

> The unity of Turkic peoples had broken. . . . The Chinese had made slaves of your noble sons and beautiful daughters. . . . Tribal leaders refused their Turkic titles and took Chinese titles. . . . The common people said "I had a state, where is it now. Which country do I serve?"[24]

A new Turkic ruler; named Ashina Qutlugh (r. 682–691), and his advisor Tonyukyuk (r. 646–672), were particularly resentful of this accommodation with the Tang, and used this resentment to reunite the tribes and establish a Second Turkic Khaganate, which controlled the steppe from 682 until 745. Ashina Qutlugh and Tonyukyuk took advantage of the fact that the Tang had been weakened by wars with the Tibetans, who in 677 had wrested control of the Tarim Basin back from the Chinese. The Turkic leaders formed a new confederation of nine tribes, centered on the Orkhon River Valley in Mongolia. This powerful new khaganate destroyed their nomadic rivals the Khitan and the Kyrgyz, then forced Tang Empress Wu Zetian to pay them an enormous treasure. In 715, Ashina Qutlugh's son Kul Tegin seized power, retained the now seventy year -old Tonyukyuk as his advisor, and installed his elder brother Bilge Khagan (who was married to Tonyukyuk's daughter) on the throne as Kaghan. This brilliant triumvirate – Bilge Kaghan, Kul Tegin, and Tonyukyuk – now masterfully continued the unification of the Turks, bringing various rebellious tribes back into the confederation. The leadership

even offered a peace alliance with Tang Emperor Xuanzong (r. 713–756), which he foolishly rejected and was subsequently forced to pay an enormous tribute to the Turks in 721.[25]

Tonyukyuk advised Bilge not to adopt any elements of Chinese culture, nor built Daoist and Buddhist monasteries, nor fortified cities. "If we build fortresses to live in them and change our old habits", he said, "then one day we will be beaten and we will be annexed by the Chinese".[26] This was the dilemma faced by all the nomadic empires of the eastern steppe, and one that the Mongols would also have to deal with 500 years later. Tonyukyuk argued that the strength of nomadic cavalry came from the pastoral steppe lifeway of the soldiers; cities were traps from which they would never escape. He also saw Buddhism and other organized religions as too pacifist and opposed to militarized nomadism; plus it took young men out of the military and into monasteries. Tonyukyuk's warning was echoed by Kul Tegin, who emphasized the importance of steppe lifeways to nomadic success:

> The words of Chinese people, who give us gold, silver, alcohol and treasures in abundance, have always been sweet and silks have always been soft. Deceiving by their sweet words and soft silks, they attract people to come from remote places. After people have settled close to them, they make people to be addicted to them even more. . . . If you go towards those places, oh Turkish people, you will die! If you stay in the land of Otukhan (the Orkhon Valley) and send caravans from there, you will have no trouble. If you stay at the Otukhan Mountains, you will live forever dominating the countries.[27]

The three leaders all died between 725 and 733, and as Uyghurs gradually took control of the steppe, several Turkic tribes migrated westwards and settled on the fringes of the Abbasid Caliphate, where they converted to Islam. The conversion of these Turkic clans, which included the Seljuqs and the ancestors of the Ottomans, was of tremendous historical significance, because as the Turks continued their migrations they carried their new faith with them, helping to expand Islam throughout Western Eurasia.

After the collapse of the Second Turkic Empire the Uyghurs constructed their own imperial state that lasted from 744 to 840. The Uyghur Empire might be termed the Third Turkic Empire because it represented a shift in power from one Turkic clan to another.[28] But although the Uyghurs spoke a Turkic dialect, their political and social policies were very different to the Gokturks. Rather than following the tradition of regularly raiding northern China and forcing tribute, they instead exploited Chinese rulers through favorable trade. They also built cities and fortresses and adopted Manichaeism as the state religion.

Uyghur leaders Bayanchur and his son Bogu, who between them reigned from 747–779, were responsible for the establishment of the Uyghur Empire. They destroyed an army of Kyrgyz in 758, and then intervened in the An Lushan rebellion in China on the side of the Tang, helping save the Tang state from collapse. The Tang eventually became so dependent on Uyghur troops in their conflict with the Tibetans that the Uyghurs effectively turned China into a client state. The Uyghurs forced the Tang to agree to trade contracts that were very advantageous to the Uyghurs, and also to provide enormous quantities of silk that were then transported to the west by Sogdians acting on behalf of the Uyghurs. The Sogdians now functioned as the key commercial intermediaries during this Second Silk Roads Era, and grew enormously wealthy as a result.

The demise of the Uyghur Empire was partly a result of the ambition of Sogdian advisors, who tried to unduly influence Uyghur khagans. When Tang Emperor Daizong died in 779, the chief Sogdian advisor of Uyghur Khan Bogu encouraged the Uyghurs to use the opportunity to

launch a surprise attack on Tang China. This led to a crippling split amongst the Uyghurs, and eventually to widespread anti-Sogdian sentiment amongst both Uyghurs and Chinese. Uyghur ruler, Alp Kutlugh Bilge Khagan, opposed his Sogdian advisors and adopted pro-Chinese policies including marriage with a member of Chinese imperial family, and the forging of an alliance with the Tang against the Tibetans. This allowed the Uyghur Empire to continue to flourish until the early 820s, although Uyghur troops suffered serious losses to the Tibetans in 816. In 822 the Tang Emperor turned down an offer of military help from the weakened Uyghurs, and the Chinese left Uyghur suzerainty once and for all, which led to a bloody succession crisis on the steppe. A brutal winter in 839/40 led to famine and epidemics, and also to an attack by Kyrgyz forces that led to the death of the Uyghur Kaghan. The Uyghur tribes then dispersed in all directions, but mostly into western Gansu and the Tarim Basin, where their descendants live to this day.[29] Sixty-seven years after the demise of the Uyghur Empire, the Chinese Tang Dynasty also collapsed in the 907, bringing to an end the Second Silk Roads Era.

Nomadic Empires of the Third Silk Roads Era

By far the best known of all the empires of the steppe is that established by the Mongols in the 13th and 14th centuries, a period that coincided in the final flourishing of the land-based routes of the Silk Roads. The Mongols (and their successors the Timurids) constitute the final great efflorescence of the crucial role that militarized pastoral nomads played in Eurasian history since the appearance of the Xiongnu. The Mongols and Timurids were inheritors of the military tactics and political organization of the Xiongnu, innovations that, as we have seen, were introduced by *Shanyu* Modu. But the Mongols also shared with all the other great steppe empires an imperial tradition that evolved into an ideology about the destiny of the nomads to rule, an ideology that has been called "Tengriism" after the great sky god of the steppe, Tengri. The Mongols believed they were destined by the gods to create a steppe empire, and they turned this belief into a divine imperative to conquer the world.[30]

Mongol founder Chinggis Khan, who was singly responsible for creating the Mongol Empire, claimed this mandate from Tengri to rule the world. Although popular history still remembers Chinggis and the Mongols as mass murderers and destroyers of cities, a more nuanced view reminds us that they were also great unifiers. There is no denying that the Mongols killed millions of humans and destroyed dozens of the greatest cities of the ancient world, along with the agricultural infrastructure that had sustained them for millennia. But once Chinggis and his successors had created the Mongol Empire, East and West Eurasia were linked together as never before. The Mongols supported merchants and facilitated intensified levels of trade and exchange between east and west, effectively creating the Third Silk Roads Era. They also patronized the finest artisans and craftsmen, promoted religious tolerance, and provided sufficient security across Eurasia to allow travelers like Marco Polo to undertake in safety extraordinary journeys from one end of their empire to the other. These conditions made possible the diffusion westwards of numerous East Asian technologies that had a galvanizing impact on European states. Because of this some historians claim the Mongols as one of the principal architects of the modern world.

Although the Mongols distinguished themselves from those they conquered by their formidable military skill, they also enjoyed a more egalitarian social structure than all the sedentary states they interacted with. In the Mongol world decisions were made by a council of political and military elites, including the decision as to who would be elected Great Khan. This meant that, although the Khans had great power and prestige, they were still regarded as first among equals. Mongol women also enjoyed considerable freedom, respect and influence, particularly

when compared to the status of women in most contemporary sedentary societies. There are several examples known to us of Mongol women who gained great political power as regents and queens.[31] It was partly because of these more egalitarian social and political structures, and the lifeway of pastoral nomadism itself, that the Mongols held a decided military advantage over even the best equipped and trained sedentary armies. These advantages, as we have seen repeatedly, included advanced cavalry tactics and supreme horse-riding skills, enhanced mobility and field craft skills, and their extraordinary prowess with the composite bow and arrow. The Mongols were rarely beaten in the field, and uniquely amongst their nomadic cousins, they also acquired the skills of siege craft so well they were rarely thwarted in their attempts to capture cities.

A detailed history of the Mongols and Timurids is beyond the scope of this chapter, but we can offer a brief survey of the last great empire of the steppe from the late 12th to the early 16th centuries. The man who became Chinggis Khan was born probably in the year 1162 as Temujin, the son of a minor Mongol chief. Over the next four decades he made many allies and just as many enemies as he slowly clawed his way to the top of the Mongol world, until in 1206 at the age of forty-four he was proclaimed Chinggis Khan – the Universal Ruler or Strong Ruler. Chinggis then consolidated his position by bringing various Turkic tribes into his coalition, and also waged war against the Xi Xia tribes that controlled parts of western China and Tibet.[32]

In 1211, Chinggis launched his first assault on northern China, then under the control of the Jin Dynasty, eventually capturing its northern capital of Zhongdu. Chinggis then tried to establish commercial relations with the Shah of Khwarazmia to the west, a huge Islamic state that stretched from the western edge of China to Persia. But the Shah treated Chinggis' envoys so disdainfully that Chinggis had no option other than to declare war. The brutal Khwarzmian Campaign that followed lasted five years, and by the end many of the great Silk Roads cities of Central Asia were in ruins. After concluding this brutal "masterpiece of warfare", as Tim May describes it, Chinggis died in 1227 at the age of sixty-five, in the midst of yet another campaign in western China.[33]

Chinggis' successor as Khan was his third son Ogedai, who was elected in 1229. Ogedai inherited an empire some 10 million square miles in area, already four times the size of the Roman Empire, but this was not the end of Mongol expansion. Under Ogedai the war in northern China was resumed and successfully concluded with the collapse of the Jin. Korea was also conquered, and far to the west Mongol armies invaded Armenia, Georgia and Russia before destroying the flower of European knighthood in major battles in Poland and Hungary. There is every reason to believe that Western Europe was only saved from Mongol devastation by the death of Khan Ogedai in 1241.[34]

The decade between 1241 and 1251 gave Eurasia breathing space as disagreements over succession led to an eruption of internal disputes between the families of Chinggis' four sons that made further expansion impossible. But that ended in 1251 with the succession of Mongke Khan, the son of Chinggis' youngest son Tolui. Mongke staged a Toluid revolution that destroyed the power of rival lineages, then dispatched his brothers Hulagu and Qubilai on new campaigns of conquest to the Middle East and China respectively. Qubilai was intent upon destroying the Southern Song Dynasty, while Hulagu's capture of Baghdad in 1258 brought to an end the Golden Age of Islam.

By the mid-13th century tensions were running so high amongst the Chinggisids that there was no longer any possibility of reunifying the Mongol Empire, which now devolved into four autonomous khanates. The Yuan Dynasty ruled China and East Asia, the Chagatayid Ulus controlled Central Asia, the Ilkhanate ruled in Persia and the Middle East, and the Golden Horde

controlled the steppes of southern Russia. Mongke's death in 1258 led to civil war between various factions that further entrenched the divisions between the khanates. Qubilai was eventually elected Great Khan in 1264, but his position was by no means universally accepted. Qubilai finally completed the conquest of China in 1274, sixty-three years after Chinggis Khan had launched his initial assault on the Jin Dynasty back in 1211.

For the remainder of his life Qubilai worked to expand his domain throughout much of East Asia, although invasions of Japan and Vietnam both failed. Qubilai died in 1294, as nominal ruler of something like one-sixth of the land surface of the earth. But such a massive empire riven with so many factions and internal disputes could never last, and so gradually the Mongol khanates fell apart. The Ilkhanate in Persia collapsed in 1335, and the Yuan Dynasty was eventually destroyed by the Chinese Ming Dynasty in 1368. The Chagatayid Ulus in Central Asia suffered a much more gradual disintegration and eventually morphed into the heartland of the Timurid Empire, while the Golden Horde in Russia maintained some degree of power and prestige in the region for almost another four centuries.

The last great empire of the steppe was constructed by the Turkic-Mongol conqueror Timur, who was born in modern Uzbekistan probably in the 1320s.[35] Like his hero Chinggis Khan, to whom he was related by marriage, Timur gradually rose to power through diplomacy and inter-tribal warfare. Timur was badly injured in the 1360s and acquired a limp for the rest of his life, hence the name by which he is better known in the West, Timur the Lame, or Tamerlane. Timur was the last great nomadic conqueror in world history, and in a series of major campaigns all over Eurasia he created his own enormous empire. After his death in 1405, his sons and grandsons ruled the remnants of empire through to the early 16th century, with one descendant, Babur, creating the Mughal Empire in India that went on to rule there until the British arrived in the 18th century.

Politically, the Xiongnu model of a ruling clan that seized and maintained power over other clans through war and conquest clearly influenced both the Turks and the Mongols. The Xiongnu and Yuezhi confederations had included a range of different nomadic and semi-nomadic peoples, who probably spoke different languages and followed different cultural traditions, but who had all agreed to follow the powerful Xiongnu Shanyu or Yuezhi king and their elite clans. The later Turkic confederation also consisted of many different tribes that agreed to acknowledge a core political elite as their overlords. After Chinggis Khan carved his way to power over Mongols, Merkit, Keraits, Turks, Uyghurs, and others, thus uniting under his banner a diverse range of peoples speaking different languages, he and his family were similarly acknowledged as the *altan urgh*, the Golden Clan. And as Chinggis then secured victory after astonishing victory, this idea that the Khan and his golden family had been chosen by heaven to unite the tribes and lead them to world conquest only strengthened. This belief helps explain the continuing prestige of the Chinggisid lineage over the centuries that followed.

After the devastation of initial conquest, the Mongols put in place reasonably effective civil administration across the vast extent of their realm, which led to the establishment of a *Pax Mongolica*, or Mongol Peace. Of course there were extensive periods of conflict within and between the various khanates, but all the evidence indicates that, because of their support for merchants, trans-regional trade and cultural exchange flourished across Eurasia. It was during this final flourishing of the Silk Roads that crucial technologies and ideas spread from one end of Eurasia to the other. In his landmark study, *Culture and Conquest in Mongol Eurasia*, Thomas Allsen traces the extensive dissemination of material and non-material products between East and West Asia.[36] These exchanges included ideas about history writing, and geographical knowledge including topography and map-making. S.A.M. Adshead has argued

that a crucially important step towards the emergence of a modern world system was the diffusion "and integration of geographical knowledge".[37] Once this knowledge of the shape of Eurasia, and of the physical features it contained, came into existence, it became permanent. There were now far fewer blanks on the map. Marco Polo and the hundred or so other Europeans who traveled extensively throughout the Mongol Empire added further details to this geographical knowledge, and there can be no doubt that it was the *Pax Mongolica* that made its dissemination possible.

Allsen also points to agricultural exchanges, including ideas about agronomy and actual seed exchanges, so that new crop species were introduced in both East and West Asia. This in turn led to the spread of new ideas about food, which meant that as the Mongol Empire evolved, so too did the sophistication and variety of foods across Eurasia By the time Marco Polo arrived at the court of Qubilai Khan he was astonished at the great diversity of meat, fish and bird dishes available, as well as a wide range of alcoholic beverages.[38] Medical exchanges during the *Pax Mongolica* were also of considerable consequence; Mongol rulers brought into their service entire retinues of medical professionals, which meant that as they traveled, so too did ideas about medicine. We know that Chinese doctors were transported westwards as early as 1219, and both Chagatai and Hulagu had Chinese physicians in their personal retinues. Many of these remained in the Ilkhanate and became physicians to later rulers.

As important as each of these cultural diffusions were, the argument that the Mongol Empire helped create the modern world rests substantially on their role in the spread of two technologies in particular, printing and gunpowder. The Chinese invented paper in the 2nd century CE, and block printing by at least the 7th century and perhaps earlier. Experiments with moveable type printing began in the early 11th century, and the technology was in widespread use in China, Korea, eastern Central Asia, and Tibet by the advent of the Mongols, who quickly became enthusiastic users of printing. In 1236, Ogedai ordered the establishment of a series of regional printing workshops across much of northern China.[39] And because the Mongol script used far less characters than classical Chinese script required, the Mongols immediately embraced the use of moveable type printing even as the Chinese were making tentative steps towards adopting it. Knowledge of moveable type printing soon spread from the Yuan Dynasty to the Ilkhanate and on to Europe, facilitated by the large number of western travelers in the Mongol Empire who probably brought printed books back home with them, which in turn stimulated discussions in Europe that provided, as Allsen puts it, "an incentive to innovation".[40] Certainly Marco Polo makes several references to printed materials he encountered.

Gunpowder was another Chinese invention destined to change the world. Perhaps as early as the Han Dynasty, and certainly by the Tang Dynasty, the Chinese military was using gunpowder weapons of various types. Just before the Mongols began attacking China, the Jin and Song had been using formidable gunpowder weapons in their battles for control of northern China, including a shrapnel device called the "thunderclap bomb" that blasted pottery shards and iron coins to cut a swathe through the enemy wherever the weapon was detonated. Many historians have argued that the Mongols played a major role in the spread of gunpowder technology from China to the Middle East and eventually on to Europe, but because textual evidence of the Mongol's use of gunpowder outside of China is ambiguous, other scholars downplay their role. Tonio Andrade argues that, not only did the Mongols use gunpowder weapons, they used them so effectively and consistently they should be labeled "the first gunpowder empire".[41] He points to Jin Dynasty sources that clearly record Mongol bombs raining

down on besieged cities, as just one of several types of gunpowder weapons the Mongols employed in their conquest of China. Some evidence also suggests that Mongols armies used gunpowder weapons in the Middle East and Europe, although historians like Tim May are not convinced. As May concludes: "Although the spread of gunpowder is directly related to the rise of the Mongols and the *Pax Mongolica*, it is unclear whether the Mongols themselves contributed to the spread".[42]

Undoubtedly the Mongol's most important contribution to world history was to establish conditions that made it possible for dozens of European merchants, missionaries and envoys to travel deep into Asia and then return to their home countries. This gave European rulers and intellectuals a new awareness of the world beyond the borders of their own small city states and kingdoms, which acted as a powerful spur to the Renaissance, to subsequent European global exploration, and ultimately to European imperial control of most of the surface of the earth. It is principally because of this that historians such as Jack Weatherford see the Mongols as the architects of the modern world. If there had been no *Pax Mongolica*, these historians argue, it would have taken the Medieval world system much longer before it gave way to the early-modern, and to the emergence of political and economic structures that were soon utterly dominated by European states. In other words, the interconnected trans-Eurasian system created by the Mongols was the foundation upon which the subsequent emergence of capitalism, globalization and European imperialism was built.

That the Mongols did all this in only about a century of control of the largest contiguous empire the world had ever seen was extraordinary. But the logistics of administering such a vast world state were beyond the control of any peoples in the 13th century, let alone steppe nomads. Indeed, in the very nature of the lifeway of steppe nomadic pastoralism lay the seeds of eventual imperial dissolution, as Michael Prawdin so astutely noted: "During four centuries their hordes wandered over the land, crowding one another out, and engaged in a warfare of mutual destruction. They produced rulers and warriors for conquest or defense, but nowhere did they take root".[43] This was equally true of the Xiongnu and the Khitan, the Mongols and most of the Timurids, although not of Babur who established the powerful sedentary Mughal Empire, nor of the Turks who built the formidable Ottoman Empire.

For roughly 1500 years then, militarized pastoral nomadic confederations played a key role in the operation of the Silk Roads, an exchange network that provided vital and transformative connections between nomads, small states, kingdoms and huge imperial civilizations from one end of Eurasia to the other. Along these challenging routes through some of the harshest geography on earth traveled great armies of mounted archer warriors, caravans of merchants and diplomats, small parties of adventurers, and monks and missionaries from all the religions of Eurasia, along with their weapons, commodities and ideas. As a result of this interaction, and despite the diversity of participants, the Eurasian world zone has preserved a certain underlying unity, expressed in common technologies, artistic styles, cultures and religions, even disease and immunity patterns, a unity that had profound implications for subsequent world history. This coming together of previously separated human communities, a process made possible by the powerful empires of the steppe, led to a steep increase in levels of material and non-material exchange that had global ramifications. The synthesis of so many goods, ideas, and diseases was the catalyst for an extraordinary increase in the complexity of human relationships and intellectual exchanges, a complexity that, particularly during the era of the Mongols, drove all the communities involved along a path that pointed directly toward the modern world.

Notes

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11 Sima Qian, 'Shiji', in *Records of the Grand Historian by Sima Qian*, trans. Burton Watson, New York: Columbia University Press, revised edition 1993, Chap. 110, p. 136.
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14 See Benjamin, *The Yuezhi*, Chap. 5.
15 See Benjamin, *The Yuezhi*, Chap. 3.
16 See Benjamin, *The Yuezhi*, Chap. 2.
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10

THE KUSHANS, VIZ. THE DÀ YUÈZHĪ

A Century-Long Fallacy

Shoshin Kuwayama

Most western scholars familiar with the topic have had little doubt that the Kushans have blood relation with the Dà Yuèzhī. This assumption, however, should prove to be odd if we take into consideration that the Dàxià 大夏 (Tokhāra) section of the *Hànshū* 漢書 clearly refers to the Kushans among five *xīhóu* 翕侯 in Tokhāra and the Dà Yuèzhī having migrated from Gānsù as nomads. This chapter aims to refute the preceding understanding of the Kushans' identity by directing attention to clear textual evidence found in the *Hànshū* and the *Hòu Hànshū* and by illustrating their concrete examples of *xīhóu* that also appear in the *Hànshū*'s accounts of the Wūsūn 烏孫 and Kāngjū 康居.

Han Called the Kushans the Dà Yuèzhī, Based on Its Previous Designation

This caption is from a well-known paragraph in the Accounts of the Dà Yuèzhī State in the *Hòu Hànshū*, which says that more than a hundred years after [the Yuèzhī migrated to Dàxià,] Qiūjiùquè 丘就却 (Kujula Kadphises), the Guìshuāng (Kushan) attacked and defeated the four other *xīhóu*s. He himself ascended to the king, and called his nation Kushan. The king invaded Aršak Parthia and occupied the land of Gāofù 高附, while obtaining Púdá 濮達 and Jìbīn 罽賓. He had these countries in his possession. Kujula passed away at the age of more than eighty, and his son Yàngàozhēn 閻膏珍 replaced him as a second king. He again defeated Tiānzhú 天竺 to place a general there to supervise the occupied Tiānzhú. From then on, Yuèzhī 月氏came to be much wealthier. Many countries all called it Guìshuāng-wán 貴霜王(Kushānshāh), while it is said that *Han called it the Dà Yuèzhī, based on the previous designation*. (The italics have been made by the author.)

The paragraph contains a lot of awkward problems sprung from the editorial misinterpretation of the texts of the *Shǐjì* 史記 and the *Hànshū* 漢書. The italicized part of the text in particular has caused scholars to equate the Kushans with the Dà Yuèzhī, or at least to understand it as basic evidence for such identification. What the text really indicates is that the Kushan Empire was newly established by Qiūjiùquè 丘就却 (Kujula Kadphises), a Kushan *yaβγu*, and Yàngàozhēn 閻膏珍 succeeded Kujula. So, adjacent kingdoms called it *Kushānshāh*. Yet only Han China again called it the Dà Yuèzhī as before. Scholars have, therefore, assumed that the

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Kushans originated from Yuèzhī people, as Han again called it Da Yuezhi despite the fact that nearby nations called it Guishuang (Kushan).

We have clear disproof for this. China must have understood that the Kushan uprising under Kujula had been only an internal strife just within the Dà Yuèzhī's territory. So, it was not strange for China to call it Dà Yuèzhī again. Jituzo Kuwabara 桑原隲藏 also considers that the size of the Kushan territory at their independence was almost the same as that which the Dà Yuèzhī had. The real state of affairs is that the Kushan *yaβγu* replaced the Dà Yuèzhī and that, discarding the title of *yaβγu*, the Kushan Kujula ascended to a king of the Kushan. We are not known in any written sources about the Dà Yuèzhī who lived coevally with the Kushan kings beginning with Kujula Kadphises. So, inevitably we have to suppose that the Da Yuezhi disappeared with the rise of Kujula. Certain they did not come back again to real Central Asian history, yet only the word "Yuèzhī" had been used as a refined and graceful designation, or a classical expression by historians of Chinese court. The Kidāra Yuèzhī 寄多羅月氏 in the *Wèishū* and the Yuèzhī Dūdū 月氏都督 (Tang Governor-general for Tokharistan) are some of the good examples for such usage.

*Xīhóu*s in the Dàxià Section of the *Hànshū*

The *Hòu Hànshū*, abridging the original texts of the *Shǐjì* and the *Hànshū*, says that initially, the Yuezhis were destroyed by Xiōngnú 匈奴, and eventually transferred into Dàxià 大夏 (Tokhāra), which were *divided into all five xīhóu* 翕侯 (*yaβγu*), such as Xiūmì 休密, Shuāngmǐ 雙靡, Guìshuāng, Xīdú 肹頓, and Dūmì 都密. (The original text says that 初月氏爲匈奴所滅. 遂遷於大夏. 分其國爲休密雙靡貴霜肹頓都密. 凡五部翕侯.)

The first two sentences of thirteen Chinese characters are neither independent accounts nor a new source when the *Hòu Hànshū* was edited. Since they originated from the accounts of Dàwǎn 大宛傳 in the *Shǐjì*, we should be very cautious as to its authenticity. The third and fourth sentences apparently come from the accounts of the State of Dà Yuèzhī in the *Hànshū* 漢書大月氏國傳, which were reshaped. Moreover, reshaping reflects the wrong understanding by the *Hòu Hànshū*'s editor of the original texts, as he did not understand previous sources properly. At the time of editing, any fresh information about Central Asia of the Former Han time must have been unavailable in the court library of Southern Dynastic Sung. So, the five *xīhóu*s do not cover all of the *xīhóu*s of Dà Yuèzhī, as suggested by Paul Pelliot.[1]

Migration of the Dà Yuèzhī Towards Dàxià From Gānsù

Before examining the references to *xīhóu* in the accounts of Wūsūn, we need to consider some pivotal incidents of Dà Yuèzhī's history after their migration from the home land in western Gānsù 甘肅 to Dàxià 大夏 (Tokhāra).

Since the 3rd century BCE at the latest, the Yuèzhī nomads had been occupying the territory in western Gānsù together with the Wūsūn nomads as their eastern neighbor. The Yuèzhī defeated the Wūsūn and drove them out to the Xiōngnú 匈奴, where Mòdú Chányú 冒頓單于 (176–172 BCE) was to raise a Wūsūn 烏孫 infant prince up until he became a stout youth. As a result, the Yuèzhī abutted on the Xiōngnú nomads who had just started flourishing under Mòdú Chányú. He attacked the Yuèzhī and Lǎoshang Chányú 老上 (172–161 BCE), a successor of Mòdú, killed the Yuèzhī King and used his skull as a drinking vessel. Such repeated blows were fatal to the Yuèzhī, causing them to leave the homeland and move for better pastures northward beyond the modern Tiānshān 天山 ranges. The *Hànshū* tells – as reported by Zhāng

Qiān 張騫 – that Yuèzhī went as far as the upper Ili valleys, where they attacked and defeated the Sài people 塞種, the original dweller. The latter were eventually driven away mainly southward to be overlords of the Kabul valleys, that is, Jìbīn 罽賓. The Yuèzhī replaced the Sài at the latter's homeland. Small groups of the Yuèzhī who could not leave their homeland near Dunhuang 敦煌 remained there, keeping the Qian 羌 Tibetan people on the northern foot of the Nánshān mountains 南山 under their protection. Such small groups of the Yuèzhī were called Xiǎo Yuèzhī 小月氏 (Lesser Yuezhi). The major Yuèzhī migrators were called Dà Yuèzhī 大月氏 or Greater Yuezhi. When the Dà Yuèzhī lost the pasture in the Ili valleys on the attack of the Wūsūn, they were forced to move westward through Ferghana. They seem to have stopped for a while around Samarkand, which had been under the hegemony of Kāngjū nomads. Eventually, the Dà Yuèzhī migrated to Dàxià 大夏 (Tokhāra) from Samarkand area.

Although the Dà Yuèzhī is believed to have been able to occupy the Ili valleys after leaving Gānsù, the Western Region Chapter of the *Hànshū* keeps silent on the occupation of the Ili valleys by the Dà Yuèzhī. It only mentions that Lǎoshàn Chányú of Xiōngnú murdered the King of Yuèzhī in the latter's homeland to make a drinking vessel out of his skull and that the Dà Yuèzhī then migrated to Dàxià via Dàwǎn.

However, this incident in the Ili valley was a hard fact. When Zhāng Qiān 張騫 crossed the western border of Han China in the eastern Gānsù around 139 BCE,[2] Lǎoshàng Chányú captured him to examine his visit to Dà Yuèzhī. In the dialogue with Zhāng, Chányú clearly says that the Yuèzhī is staying in the north of Xiōngnú. The upper Ili valleys are obviously the most suitable in both chronological and geographical circumstances for the abode of the Dà Yuèzhī. Kuwabara drew attention to the "north" in the dialogue, pointing out that the Dà Yuèzhī was evidently to the north of the Xiōngnú, or in the Ili valleys, soon after Zhāng Qiān's departure. However, it is still not clear whether the Dà Yuèzhī really dispelled the Sài people, because of the lack of any written evidence that should support such an event or reference to the Sài nomads in the Ili valleys in the *Shǐjì*.

Kuwabara surmises that Dà Yuèzhī's departure from the Ili valleys on Wūsūn's attack and their arrival in Ferghana were shortly after BCE 139. According to him, roughly speaking, Samarkand is to the north of the Amu, and the *Xīn Tángshū* says the distance between Khojend in Ferghana and Samarkand is about 700 Tang Chinese *lǐ* 里 which is roughly equal to 690 Han *lǐ* in the *Hànshū*. Then he astutely asserts that the Dà Yuèzhī stopped migrating and settled down for a while, around Samarkand.

In fact, the Dàwǎn accounts of the *Shǐjì* provide the four cardinal points from the Dà Yuèzhī and they give clear evidence for the Dà Yuèzhī's camping around Samarkand. The Dàwǎn accounts of the *Shǐjì* tell:

> *(a) Dà Yuèzhī is about two or three thousand li to the west of Dàiwǎn* 大宛 *(Ferghana)* and *(b) located north of Guīshuǐ* 嬀水 *(Amu Darya). Going to the south from there one reaches Dàxià. (c) To the west is Ānxī* 安息*. To the north of Dà Yuèzhī is* Kāngjū, which is a nomadic country.
>
> (The italics and capitalization in brackets have been made by the author.)

The first italicized part (a) clearly indicates that the Dà Yuèzhī seems to be located to the west of Ferghana, which is Samarkand and environs. However, (b) does not fit well with (a), which consciously indicates the area north of the Amu. On the other hand, (c) again alludes to the Dà Yuèzhī's location around Samarkand with Ānxī (Aršak Parthia) to the west of that town and nomadic Kāngjū to the north. In order for the *Shǐjì* to indicate the four cardinal points of Dà Yuèzhī, the *Shǐjì* apparently mixes together information from two different unknown

sources. One shows that the Dà Yuèzhī was around Samarkand, while the other says it was to the north of the middle reaches of the Amu, or the Dà Yuèzhī's final abode. Scrutiny of these four cardinal points for the Dà Yuèzhī in the *Shǐjì* leads to a postulation that the Dà Yuèzhīs might have stopped their westward migration somewhere around Samarkand and then moved on after a while to the area east of the Derbend pass in the district south of the Zeravshan range to establish the king's camp there.

At this point we need to have a closed look at the Dàxià Accounts of the Dàwǎn Chapter in the *Shǐjì* and the Accounts of the Dà Yuèzhī State in the Western Region Chapter of the *Hànshū*. The sections of the Dà Yuèzhī and the Dàxià in the Dàwǎn Chapter state that:

(1) The *Shǐjì*: Dà Yuèzhī

The Dà Yuèzhī is about two or three thousand *li* to the west of Dàwǎn (Ferghana), and located north of Guīshuǐ 嬀水 (Amu Darya). To the south from there is Dàxià (Tokhāra), to the west of which is Ānxī. The Kāngjū is to the north of the Dà Yuèzhī, which is a nomadic country: People move following cattle. Their manners and customs are common to those of the Xiōngnú. . . . Accordingly [Dà Yuèzhī] went far away. Passing Dàiwǎn, they attacked and subjugated Dàxià. Eventually they laid a seat of government to the north of the Guīshuǐ and built a court of king . . .

(2) The *Shǐjì*: Dàxià

Dàxià 大夏 is more than two thousand *li* to the southwest of Dàwǎn, and is south of Guīshuǐ. Their manners and customs are sedentary, holding towns and houses. . . . They do not have a greater king 大王長 ruling all over the country, but often have town heads 小長. Private soldiers are weak and fear a battle, while the people are good at business. When the Dà Yuèzhī came from west, they attacked to crush this country, subjugating all of Dàxià. Dàxià has a big population of about one million. The capital is called Lànshì 藍市, in which is a market place where people buy commodities. Southeast of Dàxià is a country called Shēndú 身毒 (Sindh).

And the Accounts of Dà Yuèzhī State in the *Hànshū* says:

(3) The *Hànshū*: Dà Yuèzhī (i)

The king governs in a town called Jiānzhī 監氏. The country is 11,600 *li* to Chángān and does not belong to the Protectorate General. Families are 100,000 in number with a population of 400,000. Excellent soldiers are 100,000. It is located 4740 *li* to the east of the Protectorate General's office (at Wūlěi 烏壘城) and forty-nine days to the west of Ānxī (Aršak Parthia), bordering on Jìbīn (the Kabul valleys) to the south. The land, climate, products, all ethnic customs such as coinage are same as those of Ānxī. The land produces single-humped camels.

(4) The *Hànshū*: Dà Yuèzhī (ii)

The Dà Yuèzhī originally is a nomadic country (行國 Xíngguó). People move around together with animal stocks, their manners and customs being same as Xiōngnú. They hold more than 100,000 archers. Accordingly, when stronger, they lightly treat Xiōngnú. Originally they were living in between Dūnhuáng 敦煌 and Qílián 祁連. Turning into the time of Mòdú Chányú, he crushed the Yuèzhī. The successor Lǎoshàng Chányú, moreover, murdered [the king of] Yuèzhī to make a drinking vessel of his skull. Yuèzhī therefore left far away. Going

through Dàiwǎn, they attacked and subjugated Dàxià to the west. They laid a seat of government to the north of the Guīshuǐ. 嫣水 and established a court of king (*ordo*). The remaining small group of the Yuèzhī who could not leave the original land kept the Qiān 羌 people in the Nánshān ranges, called them Xiǎo Yuèzhī (Lesser Yuèzhī) 小月氏.

Then, with reference to the *Shǐjì*, the editors of the *Hànshū* continue to explain Dàxià as subjugated by Dà Yuèzhī.

(5) The *Hànshū*: Dàxià (i)

Dàxià originally had no greater king, but often had town heads (小長). Private soldiers are weak and fear a battle. Migrating, therefore, Dà Yuèzhī subjugated all of this.

Directly following the above, the editor suddenly adds a new paragraph that concerns the "five *xīhóu*s", which are, as he says, all subject to Dà Yuèzhī.

(6) The *Hànshū*: Dàxià (ii)

Providing supplies for Han envoys, there are five *xīhóu*s: the first is called Xiūmì *xīhóu* 休密翕侯 who resides at the town Hémò 和墨城, 2841 *li* to the Protectrate- General and 7802 *li* to Yángguān 陽関. The second is called Shuāngmǐ *xīhóu* 雙靡翕侯 who resides at the town Shuāngmǐ 雙靡城, 3741 *li* to the Protectrate-General 都護 and 7782 *li* to Yángguān. The third is called Guìshuāng *xīhóu* 貴霜翕侯 whose residence is at the town Hùzǎo 護藻城, 5940 *li* to the Protectorate-General and 7982 *li* to Yángguān. The forth is called Xīdùn 肹頓翕侯 whose residence is at the town of Bómáo 薄茅城, 5962 *lǐ* to Yángguān and 8202 *lǐ* to the Protectorate-General. The fifth is called Gāobù *xīhóu* 高附翕侯 whose residence is at the town of Gāobù, 6041 *li* to the Protectorate-General and 9283 *li* to Yángguān. All of five *xīhóu*s is subject to the Dà Yuèzhī.

As a structure of the Dàwǎn chapter 大宛傳 of the *Shǐjì*, Dà Yuèzhī and Dàxià appear as two separate heads, while the *Hànshū* integrates these two heads of the Dàwǎn chapter under one head such as the State of Dà Yuèzhī 大月氏國傳. The Accounts of Dà Yuèzhī strictly followed an editorial scheme planned at the edition of the *Hànshū*. In other words, each country, whether sedentary or nomadic, is under the cognizance as a state. Particularly in the Western Region Chapter, a Han character *guo* 國 (nation) was added to the end of each nation's name, that is, Dà Yuèzhī Guo 大月氏國, Dàwǎn Guo 大宛國. It would be challenging to get a full understanding of the texts of the Dà Yuèzhī State in particular, if we do not take such a format into consideration.

The five *xīhóu*s appear here in the Dàxià section, not in the Dà Yuèzhī. This restriction clearly defines the five *xīhóu*s to be unable to be placed outside Dàxià, or Tokhāra, a land south of the Amu. That is, the five *xīhóu*s must be placed within the land south, or the left bank of the Amu. Insofar as the five *xīhóu*s are concerned, the original text gives no evidence for them to live on the right, or northern bank of that river. Accordingly, the Kushan *yaβγu* was in Tokhāra. With this in mind, we should geographically locate the five *xīhóu*s. The *Wèishū* in fact refers to the five *xīhóu*s in the *Hànshū*, each place of *xīhóu* being allotted to the place known in the Wèi period. Readers should refer to the other essay as for the identification of the whereabouts of the five *xīhóu*s.[3]

Xīhóu Among the Wūsūn 烏孫 People

The Dà Yuèzhī sections of the *Hànshū* do not explain what the *xīhóu* is, although the *xīhóu*s live in Tokhāra as subjects to the King of Dà Yuèzhī. Careful scrutiny of the references to *xīhóu* in the accounts of the Wūsūn reveals something much more specific.

The *xīhóu* of the Wūsūn was first simply explained by Yán Shīgǔ 顏師古 in the Tang period, and then by Xú Sōng 徐松 more concretely in the 19th century. Wáng Xiānqiān 王先謙, his senior sinologist, finally gave a convincing answer.[4] According to the recent explanation in the new *Encyclopedia of Islam*, C.E. Bosworth tells that *xīhóu* is a Chinese version of *yaβγu*.[5] Yet modern scholars have not found the *xīhóu* attractive, except for Hermut Humbach, who assumes a possibility of vague origin in Han China and is later joined in his thinking by Nicholas Sims-Williams.[6] The author will discuss Humbach in the appendix at the end of the text.

Xú Sōng annotated Bùjiù *xīhóu* 布就翕侯in his annotations for the Western Region Chapter of the *Hànshū*.[7] The *xīhóu* appears in the accounts of the Wūsūn nomadic empire. Bùjiù *xīhóu* seems to look after a new born baby – Lièjiāomǐ 獵驕靡, the second Wūsūn King – who could drive away the Dà Yuèzhī from the Ili valley westwards. The story of this baby is also told again in Zhāng Qiān's biography. Yán Shīgǔ 顏師古 annotates that the Bùjiù *xīhóu* is a government official of upper rank comparable to a Han general (将軍 jiàngjūn) among many *xīhóu*s. The records of Wūsūn in the *Hànshū* begins to explain the variety and ranks of governmental officials, yet the *xīhóu* 翕侯 is not included in this list. As a government official, the Bùjiù *xīhóu* seems to have occupied a high rank and be personally trusted as a royal babysitter for the heir apparent.

The Wūsūn held several numbers of the *xīhóu*s, as Yán Shīgǔ mentions. First of all, mention should be made to the Ruòhū *xīhóu* 若呼翕侯. The accounts of the Wūsūn in the *Hànshū* describe that around 93 BCE, Wēnguīmǐ 翁歸靡 succeeded the third Wūsūn King Jūnxūmǐ 軍須靡, and married Jiěyōu解憂. She was a consort of Jūnxūmǐ, previously sent to Wēnguīmǐ from Wǔdì 武帝, and a granddaughter of Prince Chǔ 楚. Married again to the new king as a Wūsūn's custom, she eventually gave birth to three sons and two daughters. Judging from their official roles, each seems to have had a political duty within the nomadic royal family.

Yuánguìmǐ 元貴靡, the eldest son, is an heir to the fourth king and the second son Wànnián 萬年 is appointed as the King of Yarkand (莎車), although he is dismissed short after his accession. The third son Dàyuè 大樂 came to be the General of the Left. The eldest daughter called Dìshǐ 弟史 gets married to the King of Kucha. Thus, the Wūsūn nomads gained power in major towns such as Kucha and Yarkand in the western half of the northern route along the Taklamakan desert. It seems that Wūsūn could be controlling Kucha and Yarkand in the sedentary zone.

In order to know what the *xīhóu* worked about in the Wūsūn, attention is called to the second daughter who married the Ruòhū 若呼 *xīhóu*. The roles of the sons and daughters of Wēnguīmǐ are really revealing to the ruling system of the nomadic Wūsūn. Yuánguìmǐ, the King of Wūsūn, then held winter quarters in the Ili valleys, while residing in the summer season around Chìgǔchéng 赤谷城 in the Tianshan ranges, or Chìshānchéng 赤山城 in the Tang periods, which was to the northwest of Kucha and to the southwest of Lake Issyk. His supremacy presumably covered the western half along the northern Taklamakan Desert. More precisely, Yuánguìmǐ got control of western strategic points – such as Kucha and Yarkand – utilising his sons and daughters, amongst which the Ruòhū *xīhóu*, a son-in-law of Yuánguìmǐ, was an important personage. Our particular interest is directed to the *xīhóu*. Such a title is not found anywhere amongst the official positions given to his family. Although they are closest in blood to the king, nobody is anointed *xīhóu*. Quite different from the trend of the Wūsūn title is the Western Turks's case in the 7th century CE. Their long official titles contain *yaβγu*, which was rendered into Chinese at that time to be *yehu* 葉護, not *xīhóu* 翕侯.

However, the case for the second daughter is not same as the elder. She married the *xīhóu*. Surmising the official posts held by spouses of the other siblings, we cannot but think that

the *xīhóu* of the second daughter's husband was quite a high rank. Her sister also married the King of Kucha, which was the most powerful amongst the towns along the northern route, and the younger sister in fact entered into matrimony with the *xīhóu*. Comparing one with the other in the political and social circumstance surrounding the Wūsūn nomads, it is surmised that the young princess had also been obliged to take a political role in the case of marriage, in particular to a leader of strategically or commercially important places outside of the Wūsūn territory and played a significant role in nomadic relation to oases people. The second son was appointed as the King of Yarkand for a short period of time. Yarkand is a strategic place at the western fringe of a desert and connects directly to Tashkurghan, or Kharbandan in ancient times, through which one was able to reach Wakhan and farther west.[8] The senior daughter went to marry the King of Kucha. Here we can understand that the Wūsūn's political power extended to the western half of the routes around the Taklamakan desert. It might not be surprising that Ruòhū *xīhóu* possibly dominated even Kashghar or ancient Sule 疎勒. In the case that the Prince of Wūsūn be married to someone within the Wūsūn tribe, such marriage to a Wūsūn subject might have been regarded as low, and moreover, nothing of political merit is expected for the Wūsūn themselves. The Wūsūn found their princesses valuable and irreplaceable if they had ties to oasis chieftains. They took advantage of women and sent them to local oases for marriage. The present writer presumes it to be reasonable that the *xīhóu* is a nomadic title to be bestowed to local chieftains of oasis towns when a nomadic king subjugated them. In the case of the Bùjiù *xīhóu*, who worked as a caretaker for the royal prince, he would not seem to return back so readily to his hometown. Hence the *xīhóu* could have been a hostage. With this title given to subjugated local chieftains, the nomadic king must have incorporated sedentary populace into his nomadic political system.

Apart from the Bùjiù and the Ruòhū *xīhóu*s, we can illustrate how *xīhóu*s were dynamic in the Wūsūn government. There were many *xīhóu*s who seem to take joint actions with the Wūsūn King, including military operations.

1. When Kuáng-wáng 狂王 first received a sword cut at his first assassination, Wūjiùtú 烏就屠, a son of Wēnguīmǐ 翁歸靡, and his Xinōgnú consort were scared to run away together with various *xīhóu*s and retreated to the northern mountains (in the Tianshan ranges). However, he boasted that the Xinōgnú soldiers would come from his mother's country for helping them, so people responded to his call.
2. In 73 BCE, or in the earlier year of Emperor Xuāndì 宣帝, the Wūsūn King and his Chinese consort Jiěyōu wrote to the Han Emperor about their nation's crisis, that is, Xiōngnú's attack of the Wūsūn country. The emperor responded to them, sending 150,000 soldiers under five generals. The accounts of Wūsūn in the *Hànshū* say, "*Kūnmí* 昆彌 (the Wūsūn King) entered the Xiōngnú territory from the western border at the head of the *xīhóu*s and 50,000 soldiers".
3. Later on, in BCE 11, the same accounts referred to "As Cílìmǐ 雌栗靡, the Great *Kūnmí*, was so sturdy that all of the *xīhóu*s were subdued to him". What is even more surprising is that after this event there was an incident in which Nanxi 難栖, a *xīhóu* of the Great *Kūnmí*, killed Mòzhènjiàng 末振將, a lesser king (小昆彌), and then Nanxi appointed Ānlímǐ 安犂靡in his place, a new lesser king who was a son of Ānrì 安日 and an elder brother of Mòzhènjiàng. The event announces that the *xīhóu* might have held strong power, acting together with the king.
4. The following tells another story about the *xīhóu*. His political power appears narrowed down in the case of the Wūsūn's matrimonial or diplomatic matters toward the Han

> Dynasty. As the Accounts of the Wūsūn State says, Emperor Xuāndì 宣帝 received a request from the King of Wūsūn Wēnguīmǐ 翁歸彌 that on the occasion of enthronement of his eldest son Yuánguìmǐ 元貴靡, the king hoped Yuánguìmǐ would be given a new consort from a royal Han family in the same way his father's consort Jiěyōu 解憂 had. His demand culminated in the emperor's decision that Xiāngshī 相失, a daughter of the young brother of Jiěyōu, would be a candidate for marriage. Accordingly, the Wūsūn grandiosely dispatched a delegation for Han Chángān in order to receive the bride. King Wēnguīmǐ, Prince Yuánguìmǐ, Generals of both the Left and the Right, and Dūwèi 都尉 (commandants), each officially make a selection of his messengers, so the envoy consists of more than three hundred persons in total number.

Surely the state of Wūsūn held the *xīhóu* in plural numbers, containing a caretaker, those doing every role for the king, those taking important roles in manoeuvring, and one, like Ruòhū *xīhóu*, being in matrimonial relation to the king's family. In this way, the *xīhóu* usually takes part in the king's matters of vital importance. Therefore, it is rather strange to see in the aforementioned ceremonial marriage that no *xīhóu* appears in the list of the delegates to Han China in an event involving the whole nation. Yán Shīgǔ's 顏師古 analysis is valid in that the *xīhóu* of Wūsūn was a person of high rank and office and quite close to the king. However, in the events exclusively of Wūsūn people in particular, the *xīhóu*s seem to have been stepped away from the scene, and understandably did not touch upon it. It is likely that the *xīhóu* – whose title was given by the Wūsūn King – assists him for both interior and exterior affairs of state including warfare; but the local town head with a title *xīhóu* could not get involved in the essential matters, such as with the Wūsūn people themselves. Though the title itself is bestowed by the Wūsūn King, *xīhóu* would not have been of Wūsūn origin. To bring the Wūsūn people into the king's inner court might often be perilous in view of security, but a close use of the subdued local leaders in case of needs is much more manageable and safer, and moreover, useful – especially from the viewpoint of friendly relations of nomadic people in oasis towns.

Xīhóu of the Kāngjū 康居

The official name is not known of the *xīhóu* of Kāngjū. It does appear in the second book of the Accounts of Xiōngnú as well as the biography of Cheng Tang 陳湯, both in the *Hànshū*. When Gān Yánshòu 甘延壽 of Protectorates-General of the Western Region (西域都護) and Chéng Tāng 陳湯 of his Associate Colonel (副校尉) intended to attack the Kāngjū – which had been under the hegemony of Zhìzhī Chányú 郅支單于 – the royal court could not give any prompt decision to start a war or not. Liú Xiàng劉向, one from war party, addressed a memorial to the emperor, saying:

> Yánshòu 延壽, Protectorate-General of Western Region, and Tāng 湯, Associate Colonel (西域都護延壽副尉), receiving the Instruction of His Majesty and relying on divine protection (承聖指倚神靈), lump together hundreds of chieftains of the Western Savages (總百蛮之君) to capture soldiers of fortified towns (檻城郭之兵). Proceeding out to the lands of hundreds of demises and entering a secluded land (出百死入絶域), we eventually step on the country of Kāngjū to destroy the town with triple fortifications (遂踏康居屠三重城). Taking by force a banner held fast by the *xīhóu* himself (搴歙侯之旗) and decapitating Zhìzhī Chányú (斬郅支之首) to hang it out afar to hundred-thousand Han miles of our

> nation (縣万里之外), we hope to increase the prestige of His Majesty's to the west of the Kūnlúns.
>
> (揚威昆山之西)

However, the second book of the Accounts of Xiōngnú tells about something different from the preceding, saying:

> Since the king of Kāngjū had often been suffered by the Wūsūn, he fathomed this matter to the *xīhóu* [of Kāngjū.] They thought, "The Xiōngnú country is big, but the Wūsūn has been since beginning subdued to Xiōngnú. Zhìzhī Chányú is now living hard outside his country. We should receive him and settle down in the eastern borders of Kāngjū and let him get Wūsūn's land in association with our soldiers, then we may put him in the post there in that Wūsūn' old territory. Any anxiety about Xiōngnú will be lost long in future".
>
> (會康居王數爲烏孫所困. 與諸翕侯計. 以爲匈奴大國. 烏孫素服屬之. 今郅支單于困阨在外. 可置東邊. 使合兵取烏孫. 以立之. 長無匈奴憂矣.)

The King of Kāngjū also had several *xīhóu*s around him and was given advice whenever something critical may have occurred, such as national peril. This is the same as in the case of the Wūsūn King. The *xīhóu* of Wūsūn has been under the immediate control of Greater *Kūnmí* 大昆彌 (overlord).

At the end of the *Hànshū*'s Accounts of the Kāngjū State, the text of Yancai 焉蔡 is followed by the explanation of the five lesser kings in the territory of Kāngjū. It says as follows:

> There are five lesser kings in Kāngjū: the first calls Sūxiè-wáng 蘇薤王, who governs at the town Sūxiè; . . . the second Fùmò- wáng 附墨王 who governs at the town Fùmò; . . . the third Yǔnì-wáng 窳匿王who governs at the town Yǔnì; . . . the forth Jì-wáng 罽王 who governs at the town Jì; . . . the fifth 奥犍王 Aojiàng-wáng who governs at the town Aojiàng. Five kings are altogether subject to Kāngjū.

The preceding paragraph looks similar to the five *xīhóu*s in the State of Dà Yuèzhī of the *Hànshū*. Elucidation of the whereabouts of the above towns depends upon the geography recorded in the Western Region Accounts of the *Weishu* 魏書. K. Siratori 白鳥庫吉 succeeded in 1911 to identify Sūxiè 蘇薤 with Shahr-e Sabz, Fùmò 附墨 with Kushanya, Yǔnì 窳匿 with Tashkent, Jì 罽 with Bokhara, and Aojiàng 奥犍 with Khiva.[9] These towns are in Sogdiana with Samarkand at the center. In short, the *Hànshū* and the *Weishu* claim that during Han times, five lesser kings ruled Sogdian towns under the hegemony of a great overlord (大昆彌) of Kāngjū. Five lesser kings – which politically belong to the Kāngjū king – are presumably native. Otherwise, the phrase of the *Hànshū* that "five lesser kings belong altogether to Kāngjū" is repetitively excessive and meaningless, as Kuwabara also says. It means that the land with Sogdian towns belongs to the Kāngjū territory.

Compare these five lesser kings here to the five *xīhóu*s living in Tokhāra of the Dà Yuèzhī State of the *Hànshū*. The Accounts of Kāngjū in the *Hànshū* describe them as lesser kings, or xiǎo-wáng 小王. In the case of Dà Yuèzhī, the *xiǎo-jūnzhàng* 小君長 is possibly identical in usage to xiǎo-wáng in Kāngjū. Accordingly, the present writer presumes that xiǎo-wáng was used locally in Sogdiana, as if *dihkan* seems to be a representative of a Sogdian town in later times. On the other hand, the nomads certainly used *xīhóu* throughout their oases in Central Asia. However, *xiǎo-jūnzhàng* in Tokhāra is rarely met elsewhere.

It is clear that the Central Asian *xīhóu* during the Han times is a political, official title of the nomadic kingdom, which is given to the local lesser kings of the sedentary populace. Therefore, in the Dà Yuèzhī case, the Yuezhi overlord bestowed that title to *xiǎo-jūnhàng*, who had ruled as the local chief in each town and area of Tokhāra. Each *xīhóu* was appointed to work with the nomadic Dà Yuèzhī King and followed his orders, as deduced earlier with a number of examples in the accounts of Wūsūn, Kāngjū, and Dà Yuèzhī.

Last but not least is a question about which areas of nomadic territory the *xīhóus* come from? First of all, the five *xīhóu*s of Dà Yuèzhī can be narrowed to inhabiting Dàxià or Tokhāra, which was conquered by the migrated nomadic Yuezhi; the Dà Yuèzhī themselves must have been living between the Amu and the Zeravshan ranges. The Kāngjū holds the five lesser kings in Sogdian towns. Such towns were in a land of oasis under the control of the Kāngjū nomads who stayed in the Chu valleys with good pastures. The Wūsūn nomads occupied the Ili valleys as winter residence, while in the summer months they camped around a town Chìgǔ 赤谷城 in the Tianshan ranges. Yet, as the Ruòhū *xīhóu* is possibly from Sule 疎勒 (modern Kashghar), the towns under the Wūsūn's hegemony might be in the northwestern oasis zone, probably between Kucha and Yarkand. The homeland from which *xīhóu* originated were oasis towns. Throughout these Central Asian nomads, the native towns of *xīhóu*s are perfectly separated from the places where the nomads were living with pasture.

Here we must draw attention to the problem, which some scholars prefer to maintain. That is to say, a postulation that Dà Yuèzhī transferred their capital from north of the Amu to the city Lánshì 藍市 south of the river in the time between both dates of the closing of the *Shǐjì* edition and of beginning of the *Hànshū* edition. The *Hànshū* says that Jiānshì 監氏 is the capital of Dà Yuèzhī, and the *Shǐjì* tells that Lánshì is a merchant town south of the Amu – apart from whether a difference of Lánshì from Jiānshì came from the copiers' error. No evidence proves that the Dà Yuèzhī crossed the Amu southwards to Tokhāra. But the preceding argument on a nomadic way of life does not allow us to even imagine such transfer of the capital to any place in the oasis, sedentary zone. The nomadic migration into such zones is impossible from a human-ecological viewpoint.

Careful scrutiny of the references to the *xīhóu* in the Han accounts reveals that *xīhóu* is a title located at the second highest rank to the nomadic king. It was always bestowed by a nomadic king/conqueror to local town rulers under his sway in order to make them work together in close collaboration in the capacity of nomadic bureaucrats. The local leader with the *xīhóu* title certainly multipled in number throughout the aforementioned three empires in Central Asia. It is now possible to understand that the town head under nomadic rule can be qualified to be *xīhóu* (*yaβγu*). The Kushan *yaβγu* is locally a town head in the Kushan domain in western Wakhan, whom the Yuezhi King bestows the title *yaβγu* to take part in matters in the nomadic world. So, the local Kushan people cannot be descendants of the Dà Yuèzhī at all.

Appendix: Humbach's Delusion

Helmut Humbach seems to have explored the origin of yaβγu. His trial must have been in vain since there is no written evidence for it. The *Shǐjì* accounts of Xiōngnú (史記標點本 p. 2907–2908) and the first book of the Xiōngnú accounts in the *Hànshū* (漢書標點本 p. 3768) tell that in the battle against Xiōngnú in the summer, the fourth month of the sixth year of the Yuán-shuò元朔 era (BCE 123), the Han lost two of the generals and 3000 mounted horsemen. Sū Jiàn蘇建, the General of the Right, could narrowly escape from the battles, but Zhàoxìn 趙信, who was Qián Jiàngjūn 前將軍 (General of the Front) *Xīhóu* 翕侯, was submitted to the enemy (Xiōngnú), his soldiers having hardly any fair chance of winning. The *Hànshū* here

annotates that Zhàoxìn originally is a lesser king of *Hú* 胡 (Xiōngnú). According to the *Zīzhì Tōngjiàn* 資治通鑑 (Hànjì 漢紀 11), Sīmǎ Guāng 司馬光, the editor, believes that Zhàoxìn was given fief in the tenth month of the four year of the Yuánguāng 元光 era (BCE 131). Zhàoxìn had lived in Han China for about eight years and eventually left for Xinōgnú. Presumably it might be this Xīhóu of the Han Dynasty that Humbach suspects to be an origin of xīhóu. Humbach commits misunderstanding, because the xīhóu is a Chinese version of yabγu, while Xīhóu is a lord (hu 侯) of the feudal estate at Xi翕which equates to modern Nèihuáng 内黄縣 of the Hénán Province 河南省, according to the Shǐjì Suǒyǐn 史記索隱. The annotation continues to describe that *Chányú* 單于 got Xīhóu *Zhào Xìn* and respected him as being the next to *Chányú* in official rank and let him marry *Chányú*'s elder sister. Together with *Zhàoxìn*, *Chányú* also schemed against the Han.[10]

Humbach thinks it unlikely that the title Xīhóu given by the Han Emperor in China reached the Kushans through Xiōngnú. If such a title originated in China, more examples must have been found among the texts concerning the Han Dynasty. Nothing in particular exists of the Humbach's *xīhóu* in any sources. In order to examine Humbach's view, further search for Zhào Xìn goes to the biography of Huò Qùpíng 霍去病 in the 55th volume of the *Hànshū*, where it says that Zhào Xìn surrendered to Han China holding the status of *xiāngguó* 相國 (chief minister) of Xiōngnú and that in the eighteenth year of Wǔdì 武帝he became the Qián Jiàngjūn (frontal general) 前將軍 to fight against Xiōngnú with a result of his tactical loss and surrender to Xinōgnú (趙信以匈奴相國降爲侯．武帝立十八年．爲前將軍與匈奴戰．敗降匈奴). Meanwhile, according to the List of Feudal Lords (侯*Hóu*) Arranged in Chronological Order Since BCE 140 in Volume 20 of the *Shǐjì*, Zhào Xìn was granted – in the first year of the Jiànyuán 建元era – a rank of the lord at Xī 翕in place of former *Xīhóu* Hán Dān 邯鄲 who had been removed because of his lack of respect to the Han Royal Court. Four years later, in BCE 127 (the second year of the Yuánshuò 元朔 era) attacking the Xiōngnú troops following a general Chēqí Jiàngjūn (general of chariot and cavalry) 車騎將軍, he was an officer in war to be allowed an additional grant. Nevertheless, he suffered a defeat by Xiōngnú in BCE 123 (the sixth year of the Yuánshuò era) who surrendered him. Eventually he was helplessly removed from the lord of Xī.

After all, Zhào Xìn was a minister when he had been among Xiōngnú. Surrendering to Han, he was appointed to a feudal lord of the Xī 翕state. He became one of the feudal lords in the Former Han Regime, not yabγu bestowed by a nomadic king. In this connection, the official xīhóu of the nomads is called without exception in such a way as 布就翕侯，若呼翕侯，休密翕侯. The *xīhóu* is postposed to the name of a place, while in the case of feudal lord, it was put before his personal name in such a way as 翕侯邯鄲 and 翕侯趙信. There is a strict difference between the two different kinds of *xīhóu*s.

According to the actual examples in the sources on Wūsūn and Kāngjū, presumably the *xīhóu* as a nomadic official was just below the overlord of the nomads in the official rank. As I argued in the same volume, some of the Han wooden strips recently found in the excavations at the Xuánquán-zhì 懸泉置 site of the ancient station revealed that the *xīhóu* was called Dà Yuèzhī Xiumi *xīhóu* 大月氏休密翕侯 and Dà Yuèzhī Shuāngmǐ Xīhóu 大月氏雙靡翕侯.[11] They came from their homelands to Han China along with the Dà Yuèzhī, or even by themselves. Xīhóu's independent envoys exposes the fact that the *xīhóu* were privileged to send envoys to Han China even if they were incorporated in the government of the nomadic empire.

The Hanshu calls nomads the xíng-guó 行國 (transhumance nation) and calls native people the tǔzhāo 土着 (sticking to the land). Such words are philosophically of different idea, but historically not opposed to each other. The conqueror and the conquered in pre-Islamic Central Asia seem rather cooperative than antagonistic. The *xīhóu* could mediate between two political

and social masses, as the nomadic conqueror gave oasis leaders such a title. The migrant and conqueror Dà Yuèzhī gave the title yaβγu to town leaders of Tokhāra; only five yaβγu known with their role that they were officially responsible for Han envoys to be provided with travel necessities such as lodging, foods, and means of transport, as imagined from the findings at Xuánquán-zhì 懸泉置. It is now clear that town leaders with a title of *xīhóu* residing in Tokhāra are not from Dà Yuèzhī people, but local residents in Tokhāra, even if one might imagine that the Kushans are not necessarily native, but had settled there from outside Tokhāra before the Da Yuezhi appeared there.

Notes

1 Paul Pelliot 1934, pp. 38–40.
2 Kuwabara, Jitsuzō, Chōken no Ensei (Chōken's Expedition), *Kuwabara Jitsuzō Zenshu* (Complete Works), Vol. 3 (1986), p. 277ff. (In Japanese). He first published it in the Zoku- Shiteki Kenkyu (Kyoto, 1916), revising a draft read in 1910 at the opening session of the Historical Research Society of Kyoto University.
3 Kurakichi Shiratori's proper identification done in between 1911 and 1913 was supplemented by the present writer in 2017. See Kuwayama 2017.
4 Wáng Xiānqiān 王先謙, *Hànshū Bǔzhù* 漢書補注 (Supplementary Notes of the *Hanshu*), 100 Vols., Changsha, 1900.
5 Bosworth, C. E., Yabghu, *The Encyclopedia of Islam*, New Edition, (eds.) Bearman, P. J. et al., Vol. 11, Fasc. 181–182. Leiden: Brill, 2001, p. 224.
6 Helmut Humbach, *Baktrische Sprachdenkmaler,* Wiesbaden: O. Harrassowitz, 1966, pp. 24–28; Sims-Williams, 'Ancient Afghanistan and Its Invaders: Linguistic Evidence from the Baktrian Documents and Inscriptions,' *Indo-Iranian Languages and Peoples. Proceedings of the British Academy*, ed. Nicholas Sims-Williams, 116, Oxford: Oxford University Press, 2002, p. 229 in particular); Sims-Williams, 'Further Notes on the Bactrian Inscription of Rabatak', *Proceedings of the Third European Conference of Iranian Studies*, Part 1, Old and Middle Iranian Studies, 1995, p. 89 in particular.
7 Xú Sōng 徐松, *Hànshū Xīyù zhuàn Bǔzhù* 漢書西域傳補注 (The Western Region Chapter of the *Hanshu* and its Supplementary Annotations), Shanghai, 1829.
8 According to Yutaka Yoshida, the ancient form for Tashkurghan is *xrβntn* in a rock inscription at Chilas. See Yoshida, *Sogdian Miscenany* (III), *Nairiku Azia Gengo-no Kenkyu* (Studies of Innermost Asian Languages), No. 5, 1990, pp. 91–93.
9 Shiratori, K. Saiiki-shi-jyō no Shin-kenkyū, Complete Works, 6, Tokyo, 1970, pp. 86–87, see Bibliography.
10 *Shǐjì*史記, Zhōnghuā Shūjú Biāodiǎn běn 中華書局標點本, Beijīn: Zhonghuashuju, 1970, pp. 2907–2908.
11 As for a rash report of the excavations at the site of Xuánquán-zhì, see Wenwu 文物 2000, Part 5, pp. 4–20.

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11

LOOKING FOR THE CITY OF HORSE

Mingtepa During the Time of Dayuan Kingdom

Zhu Yanshi, Liu Tao, and Translated by Xinru Liu

The site of Mingtepa has been an outstanding landmark at the eastern edge of the Ferghana valley (Figure 11.1). The ancient city there could be the capital of the Dayuan kingdom, or one of the horse husbandry bases for the famous "Blood Sweating Horse" of the kingdom. The ancient city was a well-fortified military headquarters and a large scale urban settlement, playing a key role in the political economy of Dayuan as well as in the Silk Road world. It is located in the Marhamat County, Andijan Region, Uzbekistan. It is 40 km south to the city of Andijan, 45 km to the west of Osh city in Kyrgyzstan, and 30 km to the east of Kuva city. Since the 1930s Soviet and Uzbekistan archaeologists explored Mingtepa when surveying sites of Ferghana valley, but no systematic excavations had been carried out. In December 2011, the Institute of Archaeology of Chinese Academy of Social Sciences and Institute of Archaeology of the Academy of Sciences of Uzbekistan launched the "Archaeological Research Project on Ancient and Early Middle Age Oriental Cultural Exchanges Focusing on Northeast Part of Central Asia". The joint project planned to systematically excavate the Mingtepa site in Andijan Region of Uzbekistan. Starting from 2012, the joint archaeological team of Chinese and Uzbekistan executed five seasons of excavations at the site. Preliminary results of the excavations have been published in 2019 under the title "Archaeological survey and excavation of the Mingtepa Site in Andijan Region, Uzbekistan", in *Chinese Archaeology*.[1] This chapter here is summarizing all the discoveries from the excavations of Mingtepa to estimate the strategic and economic significance of the city in its existing years, that is, from the 2nd century BCE to the 3rd century CE. In addition to updating the report with more information, the chapter is focusing first on the historical process of silk-horse trade, which gave the first momentum to the Silk Road trade; second, the economic impact of the exchanges between the Dayuan Kingdom and the Han Empire, especially the introduction of new crops from Ferghana to China. The notable consequence of the early encounter between Dayuan and Han China here is that how alfalfa the very fodder for the Blood Sweating horses not only changed husbandry but also improved agricultural practices in China during the following 2000 years.

Mingtepa archaeological site is located near the east border inside Uzbekistan, almost at the eastern end of the fertile Ferghana Valley. In the pinch of the mountain systems of Tianshan to the north and the Alai Mountains, the foothills of the Pamir Plateau, to the south, rivers flowing into the Syr Darya provided water for cultivation in the valley. More than 2000 years ago, Mingtepa was a fortified city guarding the land of viticulture and horse breeding. During the late 4th century

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Figure 11.1 Location of Mingtepa site.

BCE, Alexander Macedonia expedition reached Sogdiana, stopped at the west end of the Ferghana Velley. Thus, before Zhang Qian the envoy of the Han Emperor Wudi arrived at Dayuan Kingdom in Ferghana around 129 BCE, there is no historical information from outside sources about the communities living there. Zhang Qian, however, was stunned by the lush land dotted with seventy or more cities, fields of both rice and wheat, abundant grape wine, and excellent horses of the Dayuan Kingdom. The information about Dayuan that Zhang Qian reported to the emperor initiated the search for its horses. It was the time that the Han Empire desperately needed strong cavalry to fend off the intruders from the Xiongnu. Zhang Qian's mission, after all, was to look for allies from the Da Yuezhi to fight against the Xiongnu. The fortified city discovered and excavated at Mingtepa by Sino-Uzbek Joint Archaeological Team thus would be the first witness of the ancient Dayuan Kingdom which withstood and survived the strenuous efforts of the imperial agenda of the Han Empire. The archaeological results provided information of the key position of Dayuan on the Silk Road, not only for facilitating commercial transactions, but also for technological transfer between the part of Central Asia west to the Pamir Plateau and the Han China.

Landscape Around Mingtepa

The satellite view of Mingtepa reveal the outline of the site (Figure 11.2). The area of inner city (Figure 11.3), covered with vegetation, are clearly visible. Even though modern roads and a canal cut into the city wall, and residential buildings encroached from the south thus damaged the integrity of

Figure 11.2 Satellite image of the Mingtepa site in 2016.

Figure 11.3 The west wall of the inner city (N-S).

the city wall, the parallelogram shape of the city is clear. The fertility of the land described by Zhang Qian is still displayed in the lush landscape. In addition to the plowed fields surrounded the site, alfalfa, the very fodder for the precious horses of Dayuan, grows ubiquitously in and around the site. The outline of the outer city walls are not obvious on the satellite view, but on-ground measurements and exposure of remnants of wall structure that had been buried underground through exploring excavations provide an outline of an irregular polygon shape of the outer city wall.

A Summary of the Archaeological Works

A comprehensive measuring project of the 500,000 m^2 Mingtepa site created a three-dimensional model and a data set of precise measurements of all structures of the city. Excavations of sixteen trenches amount of 1500 m^2 surface further confirm the structure of the city and provide information of construction technology and materials. Meanwhile, surveys on zoological and botanical environment expand our vision and improve our understanding of the Mingtepa site.

Through systematic excavations, we verified the foundations of the currently aboveground ruins of city walls, bastions, high platforms, and so on, thus reveal the entirety and time sequences of the constructions. In the process we also discovered underground sections of the city walls, bastions, a city gate, roads, house foundations, burials. These data tell us there were two layers of city walls; bastions were evenly distributed on both inner and outer walls; the west gate of the inner city was unveiled; foundations of No. 1 and No. 2 structures in the inner city were excavated; two major roads inside the city were discovered: the east-west road connected the west gate to the Foundation No.1, and the north-south road was located approximately in the middle of the southern part of the city; the southeast quarter of the inner city was a neighborhood of densely distributed houses, where craftsmen lived and worked. An outer city wall surrounded the inner city. Primary inspections indicate the two layers of wall coexisted for a period of time. Sediments inside the city, especially in the inner city, shows that there could be large amount water flowing, probably flooding, around the time when the city under occupation.

City Wall of the Inner city

The plan of the Mingtepa inner city is an elongated parallelogram: northern and southern walls are parallel, roughly east-west in direction; eastern and western walls are also parallel, have a tilt at 350°. The city walls are well preserved except for the southern wall which has been breached by modern residential buildings. Explorations and excavations, however, recovered the positions of the southern wall. The east-west span of the city is about 500 m, and the north-south length is 800 m. As a whole, the remains of the wall is 5 m above the ground, and the highest southwest corner is 12 m above the ground. Dissections of the city wall reveal that the construction technique was using both clay ramming and adobe, and experienced reconstructions and utilizations during several time periods. In 2015, an explorative trench on the southern wall revealed a remnant wall: 11.4 m of the upper × 12.4 m lower × 2.1 m in section. It was rammed with yellow-brown earth directly from red-brown ground earth, without a foundation built in trenches. Each ramming layer is 0.1–0.2 m thick in average (Figures 11.4, 11.5).

There are gaps on the remnants of the north, west and south inner city walls, and no gap is detected on the east wall. A large canal passing through the gap on the northern wall prevents excavations. Modern roads pass through gaps of both south and west walls. The gap on the west wall is located between the bastion W08 and bastion W09, and the width of the wall sections there is about 11m. Excavations reveal the structure of the west gate, which could be the only gate of the inner city of Mingtepa (Figure 11.6).

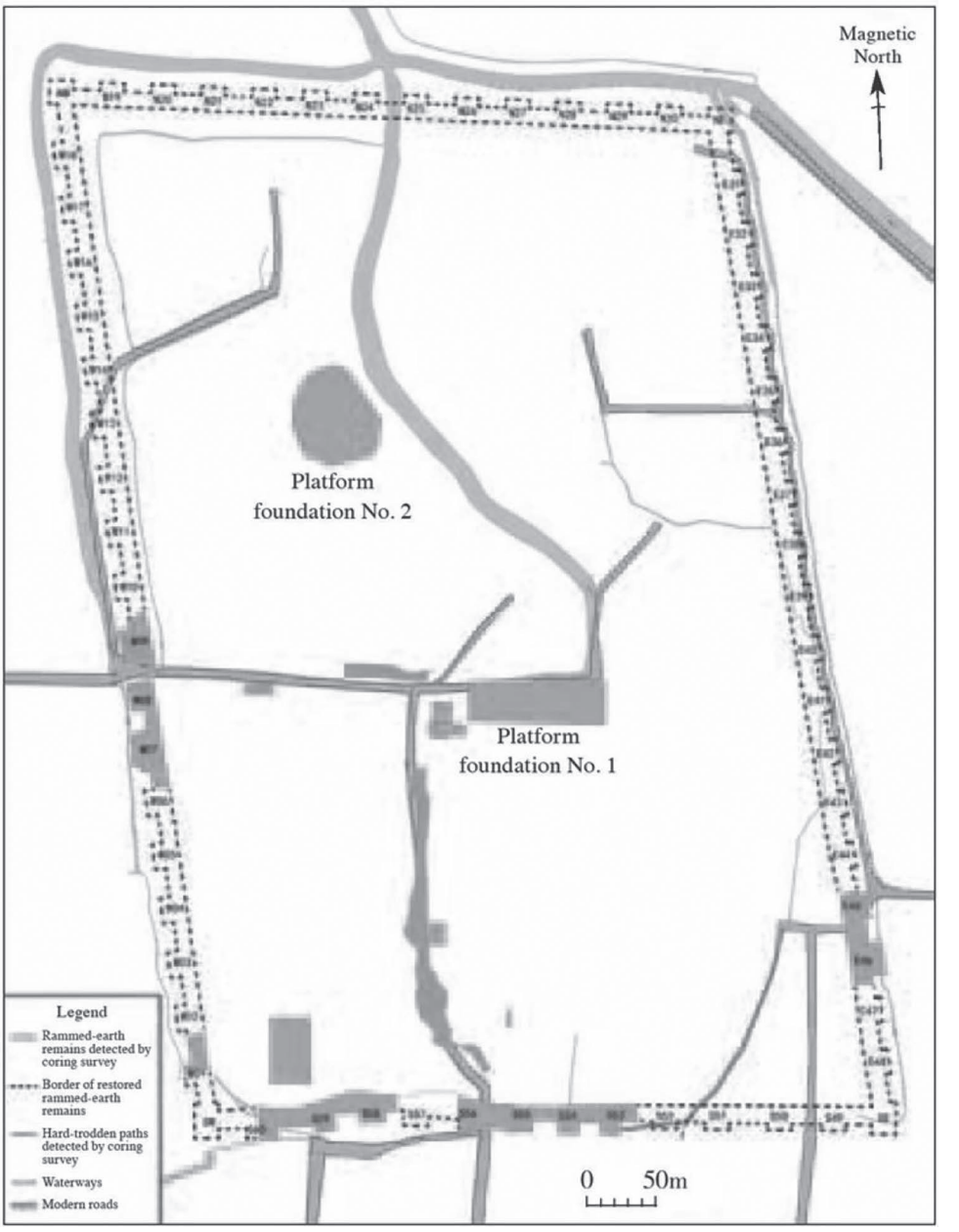

Figure 11.4 Detected structures on the inner-city site of Mingtepa.

Fortifications of the Inner City

In addition to the four large corner towers, sixty bastions projecting outside the city wall forming the defense system. The bastions on the west wall are numbered as W01 W18; those of north wall as N19 N30; those of the east wall are E31 E48; those of the south wall as S49 S60. The four corner towers are label according to their positions as SW, NW, NE, and SE.

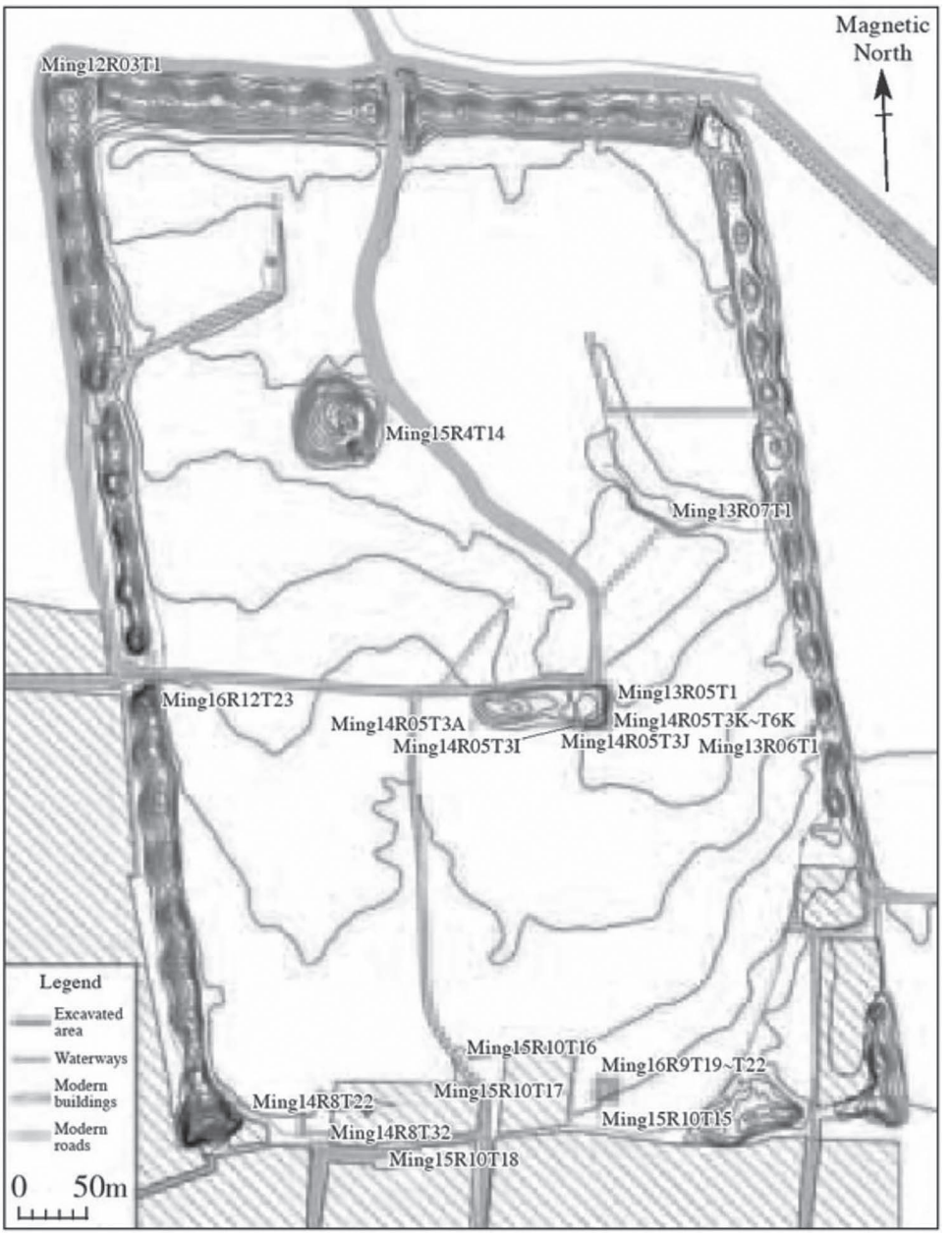

Figure 11.5 Scale drawing of the plan of Mingtepa inner-city site by ground measurements.

The bastions are about 15 m wide, projecting out the wall in the range of 8 m to 10 m, and the distance between two bastions are about 17 m. The bastions were built with ramming and adobe as extensions of the city wall. The archaeological works on W08 show that the bastions of the ancient city were not solid structures filled by ramming and adobe, but composed of two rooms adjacent in the direction of east and west. The two rooms are about the same size, about

Figure 11.6 The west gate of the inner city.

Figures 11.7 Horse stumbling devices.

2.6 m (east-west) × 3.5 m (north-south). An adobe wall of 1.5m thick divides the two rooms. The remains of the room walls are about 4.6 m high. This structure of bastion is totally different from the defense system of the Central Plain in China. There are traces of a moat outside the west wall, which could be another component of the defense system.

A possible device used for the city defense is a kind of triangle based pyramid shaped terracotta piece about a human fist in size. Pieces of this device were scattered around the city ground. According to Uzbekistan archaeologists, these are devices made to deter the gallop of enemy horses. Horses in high speed stumble on the terracotta pieces could break their legs. The "horse tumbling device" is still in use in modern warfare (Figure 11.7).

Structures in the Inner City

There are two major structural remains in the city, Platform Foundation No. 1 and Platform Foundation No. 2 (Figures 11.4, 11.5). The Platform Foundation No. 1 is located in the center of the city. The plan is a rectangle shape of 101 m (E–W) × 31.3 m (N–S), about 2 m above ground, but the ruins are uneven in height. The west and east ends are higher than the middle. After a thorough survey, we decided to excavate the east end of the platform. The excavations revealed that the platform were composed of five blocks of structure of rammed earth varied in depth and features. The section of the platform shows that it was built from 1.3 m deep foundation trenches using ramming. The excavation also reveal remains of a cobblestone road, about 3.2 m in width (Figure 11.8). The scale of the Platform Foundation No. 1 indicates that a huge building once stood there. It could be a palace structure and or governmental administration building.

The Platform Foundation No. 2 is located in the northwest quarter of the inner city. It is a roughly circle platform 9m in height and uneven top surface. The east-west diameter is about 63.5 m, and

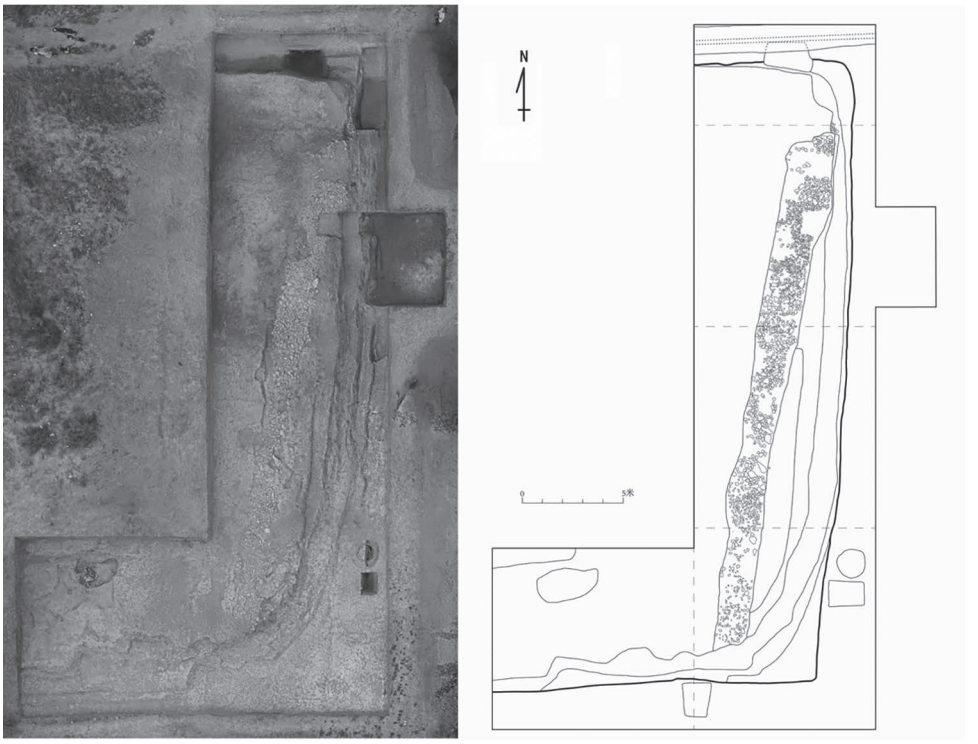

Figure 11.8 Trace of road revealed on the site of the Platform Foundation No. 1.

the north-south diameter is about 75.2 m. It was built by ramming yellowish brown colored sandy soil. This platform is not only large but also tall, judging by the remaining portion above the ground. Therefore it should have been a taller structure than the building on Platform Foundation No. 1. The round shape of the foundation could be for palatial, religious, or monumental structure.

In addition to the two platforms, explorative excavations discovered several foundations of rammed earth.

A ward of workshops is located in the southeast quarter of the inner city, under the south wall. Excavations of the site reveal foundations of houses, burners, piles of stones, and giant urns. The workshops produced large quantity of potteries, sherds of them now are scattered around the city (Figures 11.9, 11.10).

Surveys and excavations reveal a road of south-north in direction (L1) and another in east-south direction (L2) (Figure 11.5). L1 is located in the middle of the southern part of the city. It starts from the cut in the southern wall where a modern road runs through, and stops at the west side of the Platform Foundation No. 1, where it meets L2. L1 is 290 m in length, and 10 m in width, runs roughly alongside the modern road. It is about 1.2 m under the ground. Sections of the road shows that road surfaces were paved with cobblestones. The layered structure and depth, in addition to excavated artifacts, prove that L1 coexisted with the Platform Foundation No. 1 and the south wall of the inner city.

L2 is located in the middle of the western part of the city, starting from the west city gate and ending at the Platform Foundation No. 1. It is about 185 m in length, 10 m in width, and is connected with the L1 before it reaches Platform Foundation No. 1. L2 is 1.36 m under

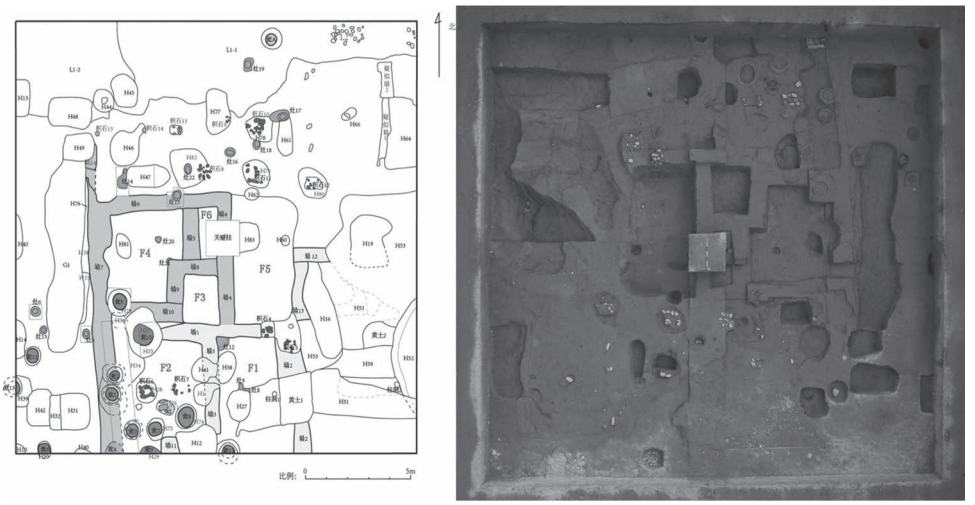

Figure 11.9 The excavated ward of workshop inside the south city wall.

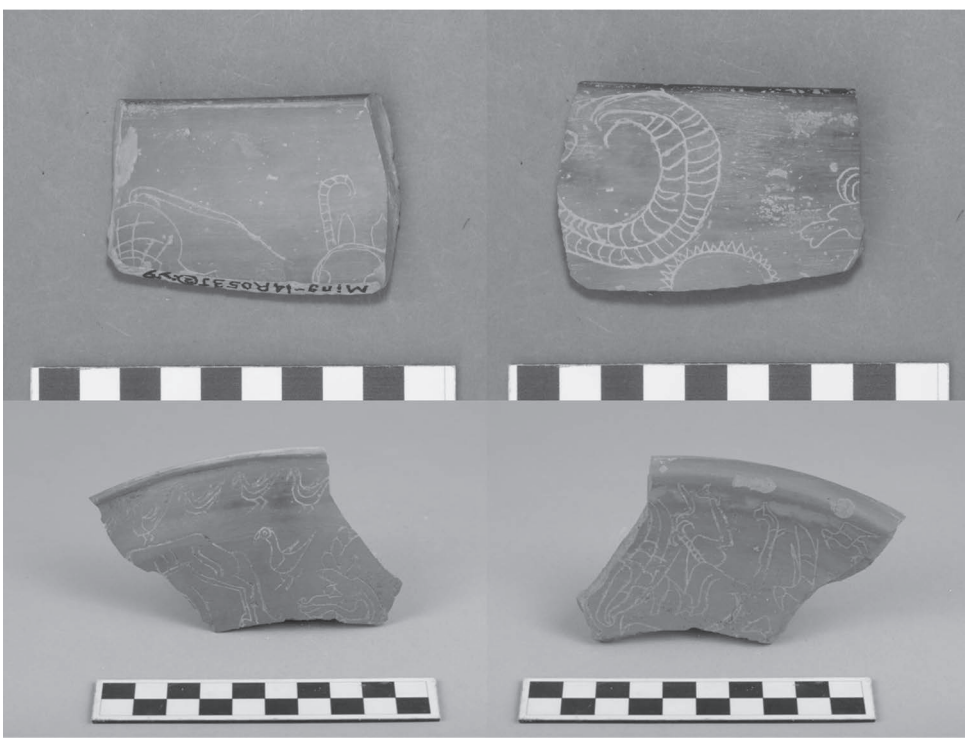

Figure 11.10 Samples of carved pottery sherds from Mingtepa.

current ground. The pavement is about 0.20.5 m thick, but it is less well preserved than L1. The structure and conditions of the two roads are similar. The two road connect the west city gate with the Platform Foundation No. 1 and the southern part of the city, forming the L shape road system in the city. In other words, the roads connect the west city gate, the center city structure and the area of workshops to form the infrastructure of the city functionaries.

Discovery of the Outer City

It has been speculated for decades that there was an outer city wall around the inner city, but the speculation had not been proved by archaeological evidence. The discovery of the outer city was a process. In 2015, we noticed a triangle platform thrust out in a location about 250 m to the east of the eastern inner city wall. Explorative excavation around the platform reveal traces of earth ramming. The breakthrough happened in 2016, when explorations and excavations displayed a 400-m section of the outer city wall runs in north-south direction, and verified that it was a part of the east wall of the outer city. Based on the pattern that this section of wall was covered on the ground and the features of ramming, we discovered sections of walls at the locations to the directions of south, west and north of the inner city. The section of east outer city wall is about 420 m long, the section of west wall is about 430 m, section of south wall is about 750m, and that of the north is about 500 m long. The outer city walls are 1012 m wide. Both the south and west walls are distant from the inner city walls about 450 m; the east wall is 200 m from the inner city wall; north wall is about 1100–1250 m from the inner city wall. The outline of the outer city can be reconstructed from the four sections of the wall (Figure 11.11). Dissection of the outer city walls shows they were rammed yellow-brown soil mixed with light yellow soil. Measurements between the north and south is about 2100 m, and 1300 m between the east and west walls of the outer city. Therefore the enclosure of the outer city is roughly 273 ha. The large scale outer city wall was the first defense system of the ancient city.

Graveyard

A graveyard was discovered outside the east wall of the outer city in 2016. Excavations revealed twenty-two graves, though most of the graves had been destroyed during 1950s when the land was reclaimed for cultivation (Figure 11.12). Among the excavated graves, M1 cuts into the outer city wall, thus provides the latest date for the end of the outer city wall. As a whole the shapes and textures of the potteries date the burials to the 1st to 3rd centuries CE; carbon dating points at 1800 before present. The two set of data match thus provided the terminal date of the outer city which should be around 200 CE.

Dating Mingtepa Site

Samples of C^{14} dating have been taken from ground, rammed remains, and the cultural level under the construction. The laboratory data range from 2120+/−30BP to 1860+/−30BP. The date of M1 which cut through the east wall of the outer city provides the C^{14} date of 1750+/−30BP, which should be the terminal date of the outer city. Our conclusion of the dating is that the inner city existed from the West Han Dynasty (206 BCE–24 CE) to the Wei and Jin Dynasties (220–316 CE) in China. The outer city wall could not have had survived later than the Three Kingdom period (220–265). Table 11.1 lists all the primary data of dating from graves outside Mingtepa city.

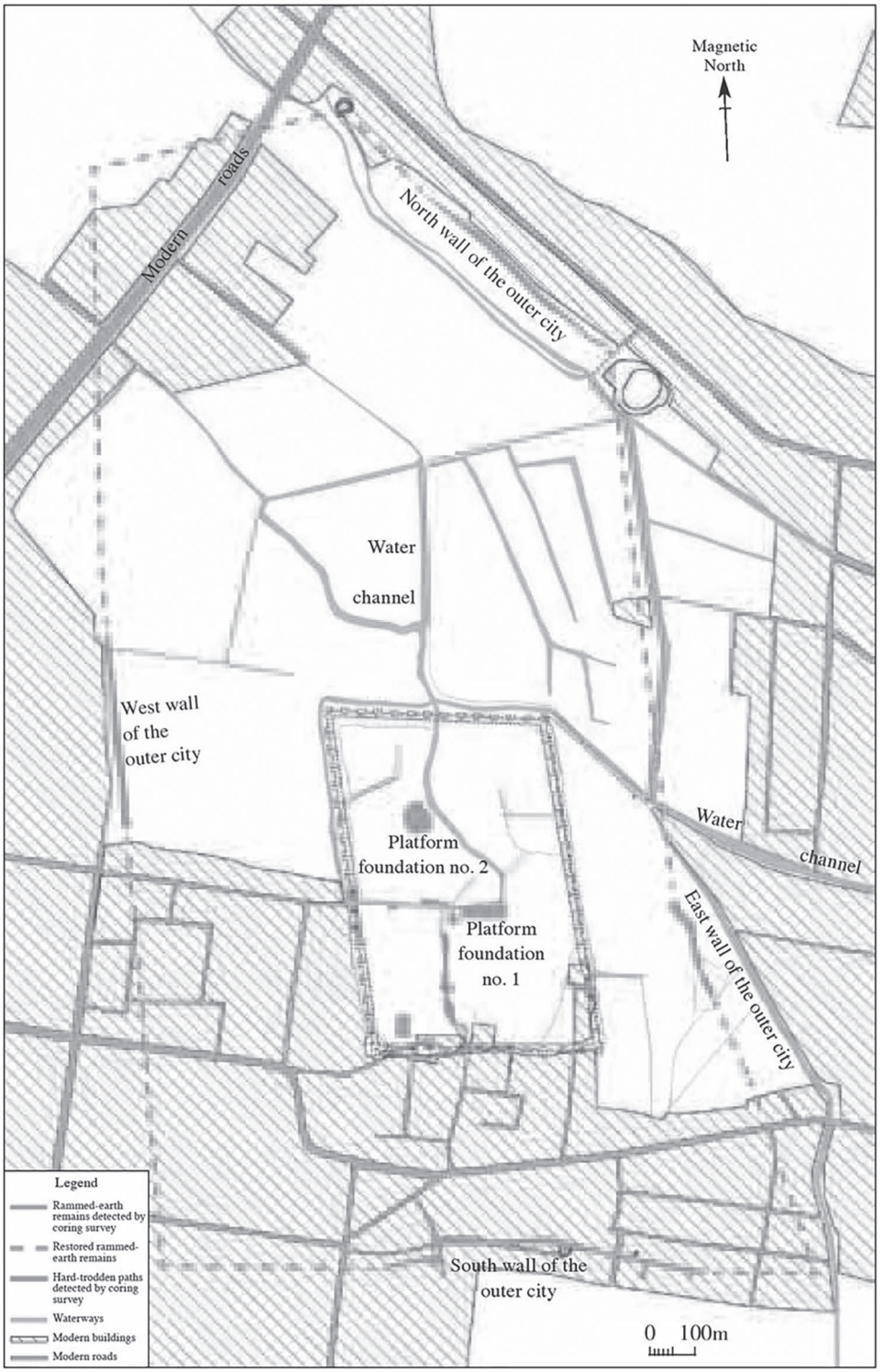

Figure 11.11 Plan of the inner city and outer city at Mingtepa.

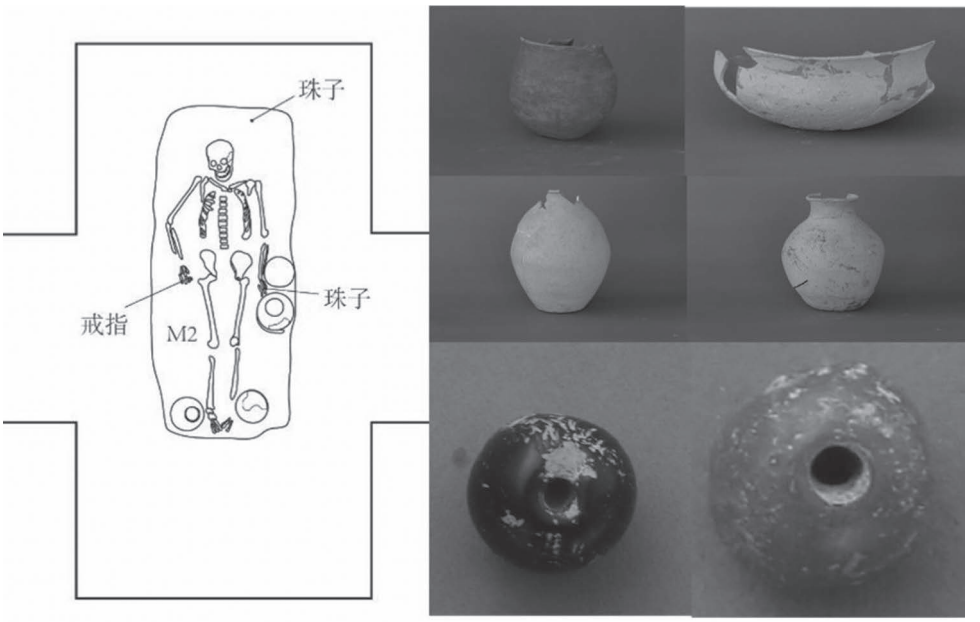

Figure 11.12 M2 of Mingtepa graveyard.

Table 11.1 Mingtepa dating data from graves.

No.	*Grave No.*	*Descriptions*	*Dates (BP)*	*Beta dates (BP)*	*Note*
1	M1	2012UFMG1 M1 Human bone	1750+/-30BP	2120±30	
	M2	2016	/	2120±30	
2	M4	2017, left Phalanges	/	2030±30	
3	M5	2017, right Phalanges	/	2080±30	
4	M6	2017, Left Phalanges	/	2010±30	
5	M7	2017, Phalanges	/	1990±30	
6	M8	2017, Phalanges	/	1950±30	
7	M9	2017, left Phalanges	/	1970±30	
8	M9	2017, animal bone	/	1960±30	
9	M10	2017, Clavicular	/	2090±30	
10	M10	2017, Phalanges	/	2100±30	
11	M10	2017, Tooth	/	2120±30	
12	M11	2018, right Tibia	1690±20	/	
13	M12	2018, right Fibula	1915±20	/	
14	M13	2018, right Ossa metacarpi	1670±20	/	

(*Continued*)

Table 11.1 (Continued)

No.	*Grave No.*	*Descriptions*	*Dates (BP)*	*Beta dates (BP)*	*Note*
15	M14	2018, left Phalanges	1945±20	/	
16	M15	2018, left Clavicular	1775±20	/	
17	M16	2018, human bone	1535±20	/	
18	M17	2018, human bone	1850±20	/	
19	M18	2018, human bone	1755±20	/	
20	M19 M20- M24	2018, human bone	1760±20	/	
21	M25	8/12/2019 Human bone	2003±20	1990±30	Sample was collected by Han Qinglin
22	M26	8/12/2019 Human bone	2002±20	2010±30	Sample was collected by Han Qinglin
23	M27	8/12/2019 Human bone	1953±20	1980±30	Sample was collected by Han Qinglin
24	M29	8/12/2019 Human bone	2026±20	/	Sample was collected by Han Qinglin
25	M30	8/12/2019 Human bone	1961±20	1910±30	Sample was collected by Han Qinglin
26	M31	8/12/2019 Human bone	1730±20	/	Sample was collected by Han Qinglin
27	M32	8/12/2019 Human bone	1901±20	/	Sample was collected by Han Qinglin
28	M33	8/12/2019 Human bone	2011±20	2070±30	Sample was collected by Han Qinglin
29	M34	8/12/2019 Human bone	2025±20	1960±30	Sample was collected by Han Qinglin
30	M35	8/12/2019 Human bone	2089±20	2140±30	Sample was collected by Han Qinglin
31	M36	8/12/2019 Human bone	2038±20	/	Sample was collected by Han Qinglin
32	M37	8/12/2019 Human bone	1963±20	/	Sample was collected by Han Qinglin
33	M39A	8/12/2019 Human bone	1913±20	1850±30	Sample was collected by Han Qinglin
34	M39B	8/12/2019 Human bone	/	1790±30	Sample was collected by Han Qinglin
35	M40	8/12/2019 Human bone	2053±20	/	Sample was collected by Han Qinglin

Identifying the Ancient City on Mingtepa

Mingtepa site is located in the fertile Ferghana Valley, which was an intersection of nomadic pastoralism and agricultural settlements since the Bronze Age. Nomadic communities from very early times built fortifications of walls, moats, and dykes to protect their domains. So far discovered the earliest urban site in Ferghana Valley is Dalverzin-Tepe (8th–5th centuries BCE), which originally was a round citadel around 2.2 ha, then developed into 24 ha irregular shaped settlement. Eventually it was a city of three zones: the citadel, residential zone, and an animal enclosure.[2] Eylatan site

(6th–3rd centuries BCE) was a city of two layers of city walls formed a rectangular enclosure. The inner city occupied 20 ha, when the outer city wall enclosed 200 ha, both were rammed earth in structure and strengthened with bastions distributed in equal distances.[3] It seems that Eylatan city could be the precedent of the city built at Mingtepa, which occupied about 273 ha.

The ancient city at Mingtepa was no doubt a great city of the Dayuan Kingdom, and could be the capital city. Inside the two layers of city walls, the huge foundations mean that they were palatial or administrative or religious structures. In Sima Qian's record of Zhang Qian entering the Dayuan around 129 BCE, the valley was a country of tillers who cultivated both wheat and rice, in addition to producing large quantity of grape wine and excellent horses of divine origin. There were more than seventy fortified settlements, vary in sizes, in the Dayuan country. Soldiers on horse backs were armed with archery and spears.[4] It seems Dayuan was the most impressive state among those of Zhang Qian had visited, therefore Sima Qian named the chapter on the region west to the Han proper as "History of Dayuan". Zhang Qian, however, did not give the name of the capital city of Dayuan. Later envoys to the West Region named Ershi as the city of the source of the very heavenly horse of Dayuan, therefore Li Guangli who conducted the conquest of Dayuan to get the horses in 104 BCE was designated as General Ershi. Though the record of the Dayuan campaign named Yuancheng, or Yuan City, instead of Ershi, as the battleground where the king of Dayuan and his council defended city to protect their treasured horses.[5] In his *History of the Han*, Ban Gu (32–92 CE) name Guishan as the capitol of Dayuan. Guishan was a city of 60,000 households which roughly equal to 300,000 population. The country was defended by a military of 30,000 soldiers in strength. The most impressive was the viniculture of Dayuan and its surrounding counties: some rich households held a storage of wine could be as many as 10,000 jars. The technique of wine preservation was so good that some real good wine could hold the quality for decades. People there loved grape wine and horses there loved alfalfa.[6] The description of Ban Gu on Dayuan, based on records of more than a hundred years communications with the Western Region including Dayuan, further confirmed that of Sima Qian. Here the picture of Dayuan as an intersection of steppe and sown societies emerged clearer. As a nomadic state often fortified more than one headquarters to enable their state functionary, the pastoral cum agricultural state such as Dayuan could have more than one capital to control its resources. The city the king resided and General Ershi conquered should be the city of horses, and name of the city could be Ershi.

The Strategic Position of the Dayuan Kingdom on the Silk Road

During the entire period when the Han dynasties engaged with the Western Region, its military forces hardly crossed the formidable Pamir Plateau. Zhang Qian and his companions reached Ferghana Valley after escaping from the Xiongnu camp as hostage ca. 129 BCE. It took the group scores of days to reach the capital of Dayuan. The record does not specify which routes they tracked and how they traveled. As they ran away from the nomadic Xiongnu's camp, the assumption could be that they traveled through the steppe routes on horses. Zhang Qian promised big rewards from the Han court if the king of Dayuan could help him to reach the camp of Da Yuezhi. The king of Dayuan thus sent an interpreter/guide to assist Zhang Qian to pass the Kangju kingdom and reach the Yuezhi on the bank of the Amu River. Zhang Qian traveled with his loyal companion Ganfu who was a native of Central Asia. Ganfu probably could manage the languages spoken at the Xiongnu domain, and Zhang Qian probably also learned a lot, as he lived in the Xiongnu camp about a decade and married a Xiongnu wife with children. Once they arrived at Dayuan, they observed that the languages spoken in Dayuan and countries further west all the way to Arsaces (Parthia) were varied, but mutually understandable.[7] In short, Dayuan was not easily reachable country for the Han imperial missions, and

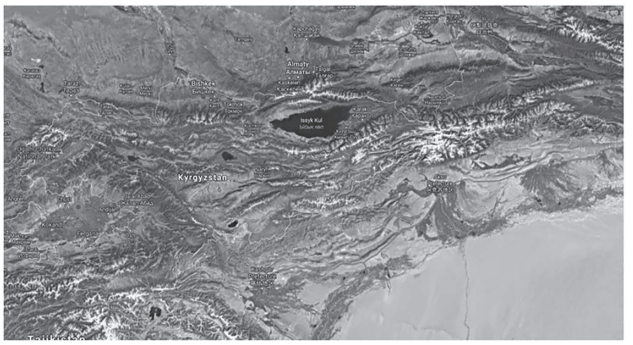

Figure 11.13 Satellite map of Ferghana Valley (marked) and its adjacent areas.

was the starting point of a cultural and linguistic domain distinguished from both the world of steppe and Tarim Basin where Han officials gained some familiarity.

More than two decades later, when General Li Guangli started the expedition to Dayuan for its famous horses in 104 BCE, the Han Empire had strengthened its control of the oasis states on the rim of the Tarim Basin. The route passing through the oases along the edges of the Tarim Basin was the safest for missions from the Han court and traders on both directions. As one can see from the satellite image of the region (Figure 11.13), the Tarim oases route, on the lower right quarter of the map, provided way stations for travelers. When the Han Empire held suzerainty of the oasis states, military march through the rim of Takla Makan Desert was feasible. However, the routes of Tarim Basin to the Ferghana Valley is blocked by the Pamir Plateau. Therefore, General Li Guangli had to take the steppe routes along the foothills of the Tianshan, same as Zhang Qian did. The major obstacle on this route was a vast salty water lake, which made the difficult terrain for traveling.

It took two strenuous expeditions and mobilization of allies of Tarim oases and nomadic forces to overcome the proud Dayuan council of nobles. When the army of General Ershi finally reached the city, they cut of water supply and besieged the city. The defense of the outer city collapsed after forty days of attacks. The nobles entrenched inside the inner city wall decided the arrogance of the king caused the hardship which was the possible end of the Dayuan Kingdom. They therefore surrendered the head of the king to negotiate a truce with the Han army, and meanwhile citing that the army of Kangju was on the way to aid them. Li Guangli accepted the offer and took a score of the heavenly horses and 3000 and more good horses and returned to the Jade Gate triumphantly, though with a heavy casualty of soldiers.[8] This story of the expeditions of General Ershi verifies our archaeological evidence of a double layer defense system of a large urban site at Mingtepa. Thus Mingtepa could indeed be the city attacked by Li Guangli, whether it was called Ershi or Yuancheng.

The military encounter between the Han and Dayuan also convinced both sides that military conflict was not an affordable means either to keep the horses in Dayuan or maintaining the supply of the best horses to the Han Empire. A pattern of exchanges took shape after the battle. As the Dayuan horses must be fed with alfalfa in order to maintain their excellent capacity, the Han imperial administration inducted alfalfa cultivation as well as grape vine to the capital Changan for the stable of royal horses. According to the connotation of the *Han History* by Yan Shigu of the Tang times, the alfalfa planted in northern prefectures such as Anding and Beidi all started from the Han times.[9] The first archaeological evidence

of alfalfa in China is from Zagunluk Cemetery on the southern edge of Tarim Basin, near Qiemo oasis. Burial goods in the cemetery show the people then engaged in cultivation and pastoralism. The well preserved alfalfa remain sample no. 2 is dated to 1665+/-25 BP by C^{14}.[10] As there was not a convenient routes linking Tarim Basin to Dayuan and other countries west to the Pamir Plateau, it is hard to surmise whether the alfalfa at Zagunluk was introduced from west or spread from China after it became a popular crop. Alfalfa since became an important crop in Chinese agriculture, but grape cultivation did not develop into mature viniculture till the Tang times.

Dayuan was not merely a horse country. It was abundant with grape wine and cultivation of both wheat and rice. Its ecological-geographical setting could have enabled a strong connection with steppe forces and South Asia via Bactria even before the coming of the Han envoys. The rice cultivation could have been introduced from South Asia via Bacteria and upper Indus valley. The rich households owning more than 10,000 jars of high quality grape wine could not be anything but the storages of merchants of wine. During the Mauryan Dynasty (ca. 321–185 BCE) India imported grape wine from "kāpiśāyana" and "hārahūraka".[11] Kapisa in Afghanistan was a trading depot for horses and wine from Central Asia, and later becoming the northern capitol of the Kushan Empire. Harahura, however, has not been identified. The wine of Dayuan could be one of the sources of supply for Bactria and Gandhara, where the newly arrived Yuezhi and later the Kushan Empire were thirst for grape wine. Grape wine was a government monopolized product under the Kushans and was widely consumed.[12] Though Dayuan was separated from Bactria by Sogdiana, the land between the Syr and Amu rivers, the transactions could conducted across the area which did not produce wine at that time. Kongju chieftains moved around Sogdiana at that time were still pastoralists who yet settled down to cultivate grapes and ferment wine. Sima Qian clearly designated Kangju as nomads, while Ban Gu named five chiefs associated with their fortified headquarters.[13] Thus Sogdiana could not be the major supplier of wine till they build viniculture much later. To manage and export the abundant product of grape wine, Dayuan Kingdom might have needed an urban center to facilitate the transactions. Therefore there could be another capital city other than the horse city Ershi. The Guishan city Ban Gu referred as the capital city of Dayuan could be possibly found at the Kasan Tepe, located in the middle north edge of the Ferghana Valley. If Kasan Tepe indeed was a fortified city at the time of Dayuan kingdom, it could have been served as another urban center of Dayuan. This hypothesis, of course, has to be testified by archaeological works.

Conclusion

Mingtepa was a stronghold defending horse husbandry of Dayuan. Dates of the site confirmed that the city was contemporary of the expedition of Li Guangli and was an active urban center till the early 3rd century CE. Dayuan submitted to the request of the Han for its precious horses, and sacrificed its chief to make a peace with the Han Empire. But the war did not change the regime and the status of Dayuan among its neighboring states. The most significant legacies of the expeditions are that the encounter initiated the treaty of Silk-Horse trade, and Dayuan surpassed the Yuezhi in reputation as the horse country; the horse husbandry of Dayuan brought alfalfa to China and benefited agriculture there in the following 2000 years and more. As a unique country engaged in both land cultivation and horse husbandry in the middle of the extremely varied geographic and ecological terrains, Dayuan was the key link of the worlds of steppe, Central Asia oasis settlements east and west to the Pamir Plateau, East Asia agricultural zones, and South Asia, from the 2nd century BCE to the 3rd century CE.

Notes

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12

QÏRQÏZ/KYRGYZ, A PEOPLE LIVED BETWEEN EMPIRES

Jia Yiken

The Altai-Sayan Mountains and the eastern Tianshan Mountains are considered to be the homelands of the early Qïrqïz people, which means that the stage of the Qïrqïz historical activities was mainly in Central Eurasian Steppe. Since the Qïrqïz people entered into historical records, they survived the rivalry, competition, conflicts among the empires surrounding the steppe, and rise and fall of hegemons on the steppe and even became a dominant force on the steppe during a period from the middle of the 9th century to the early 10th century. After more than 2000 years living between the forest and steppe, the Qïrqïz people maintained their ethnic identity, though they have been affiliating with and subjected to numerous regimes. Their engagement in the complicated politics of pastoral nomadic and agricultural sedentary empires and forest communities in the 2000 and more years displays the dramatic geopolitical changes and socio-economic evolvement in the vast region that hosted the Steppe Silk Road.

The Qïrqïz in the Xiongnu-Xianbei Period

From 209 BCE to 176 BCE, the Xiongnu under Modu defeated their neighboring nomadic enemies the Donghu in the Eastern Inner Moglia, and the Yuezhi to the west of the Yellow River, subjugated the tribes of Loufan and the Baiyang in the Ordos region, then suppressed the Hunyu, the Chüyi (Chüshe), the Dingling, the Qïrqïz (Gekun), and the Xinli in the north, conquered the Western Regions, that is, Central Asia.[1] The Xiongnu thus hold suzerainty over Mongolia, Southern Siberia, and Central Asia, brought the Silk Road under their control and dominated the eastern steppe almost at the same time the Qin dynasty collapsed in China. The Western Han under Emperor Wu (r. 141–87 BCE) won several major victories over the Xiongnu, capturing the Ordos region and taking the Qilian Mountains and Hexi Corridor (in Gansu province), also sending out expeditions into the Western Regions in an attempt to "cut off the right arm of the Xiongnu"[2] by taking control of the Silk Road towns.

By the mid-1st century BCE, the Xiongnu was divided into two rival camps – one was the southern Xiongnu tribes under the *Chanyu* Huhanye who submitted to the Han later, another was the northern tribes under the *Chanyu* Zhizhi who moved westwards with his army when he heard of his rival Huhanye received supports from the Western Han and thus was aware that his own strength was not enough to settle the internal affairs of the Xiongnu. Zhizhi defeated the Wusun state which was mainly in the valley of the Ile river and Chüy river,[3] and succeeded

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in imposing his authority over the Wujie, the Qïrqïz and the Dingling in the north, then set up his court in the territory of the Qïrqïz state and stayed there until he moved to Dulai (Talas/Taraz) river valley at the invitation of the king of the Kangju state in 43 BCE.[4] The Qïrqïz state was in the north-east[5] of the Kangju state which mainly occupied areas from the north of the Syr Darya to the Talas River, and the eastern border of the Kangju state stretched from the east of Talas River to the Chüy river.[6]

The Xiongnu under Huhanye regained the Steppe after Zhizhi moved to the Kangju state. By the mid-1st century, the Xiongnu Empire broke up due to internal strife over succession, finally collapsed between 83 and 87 CE. The Xianbei who had lived in the eastern part of the Xiongnu realm, in what now is the regions of the Greater Khingan Range, replaced the Xiongnu as rulers of the eastern Eurasian Steppe. Its territory expanded as far as the land of Wusun to the west, and that of the Fuyu and the Huimo to the east, the Dingling to the north, and the Eastern Han (the 25–220 CE) to the south. The Toba Xianbei, one of Xianbei groups, moved from the north of the Greater Khingan Range to the Hulun Lake regions in the early time of the Eastern Han Dynasty, then reached the homeland of the Xiongnu that is, the areas of the Yin mountains in the late period of the Eastern Han dynasty, established the Northern Wei dynasty (386–534) later. A branch of the Qïrqïz (Hegu) seemed to have become one of their core tribes during expanding of the Toba Xianbei in the north of the Steppe after they had occupied Hulun Lake regions, from which formed eight royal clans[7] of the Toba Xianbei state, that is, the Northern Wei dynasty later.

Rouran, a branch of the Toba Xianbei,[8] rosed in the Eastern Steppe in the early 5th century while the Northern Wei dynasty engage in north China. Much of Mongolia, from the Gobi, northwards to the Lake Baikal, came under the domination of Rouran. They extended their sway westwards to the Western Regions[9] and eastwards to the regions of north of Korea, made themselves master of the Central Asian Silk Roads in a century and a half before they were defeated by the Turks.

Qïrqïz/Krygyz in the Early Middle Ages (6th Century to 9th Century)

The First Eastern Turkic Kaghanate and the Xue Yantuo (Sir Tarduš) Kaghanate Period

The Qïrqïz (Hegu) as a steppe power reappeared along with many tribes at the foothills of the Tianshan Mountain in the west of Yiwu in what now is near the Komul and the north of Yanqi, that is, Karashar in Xinjiang, under the name of Tiele in the *Sui shu*.[10] Tiele is a general term of the pastoral nomadic tribes who thrived across a vast region that stretched from the Mongolian Steppe, through Southern Siberia and the northern Kazakhstan, as far as the northern and western reaches of the Caspian Sea from the 6th to the 8th century.[11] They were subjugated to the eastern Turks and the western Turks in the 6th century. The Turks established the empire that stretched from the Liao River in the eastern steppe to the Caspian Sea, and from the northern border of China to the Baikal Lake regions.[12] The Turkish Empire was divided by Altai mountains into two parts: the eastern realm and the western realm, so called the Eastern Turkic Kaghanate and the Western Turkic Kaghnate. The Turks under Muqan Kaghan (r. 553–572) subjugated all states including the Kitan, the Qïrqïz (Qigu), and so on, after overthrowing their overlords Rouran in the eastern steppe. Meanwhile, the Turks under Istemi (r. 552–575/576) had begun the conquest of the western steppe. By doing so, he connected all the peripheral civilizations of Eurasia via its urbanized core in Central Asia, which

quickly became the commercial-cultural hub not only of Central Eurasia but of the Eurasian world as a whole. Central Eurasian economy – the Silk Road – flourished as never before.[13]

The Qïrqïz people who lived in the Abaqan River and the Kem River regions in the Southern Siberia became a vassal tribe of the eastern Turkic Kaghanate. They usually supplied the eastern Turks iron ingots produced in their land and weapons made by themselves as taxes/tribute.[14] The Greek historian Menander Protector records that a captured Qïrqïz female was given to Zemarchos, the Byzantine ambassador, by the western Turkic Kaghan Istemi in 568.[15] The court of Istemi was probably in the valley of Akdere or Akyiaz in Monghulkörö grassland of Ile, Xinjiang.[16] It is hard to know whether she came from the Qïrqïz tribes in Tianshan mountain regions or in the Yenisei, or from the Qïrqïz tribes in the north of the Altai mountain regions, for there were Qïrqïz (Jiegu) people living in the north of the Turkish Ilči Čabi Kaghan's (?–650) homeland, which was in the northern Altai Mountain regions. These groups of the Qïrqïz were affiliated to Ilči Čabi Kaghan after 630.[17]

According Chinese sources, the Qïrqïz (Jiegu) people once were controlled by an Elteber[18] of the Sir Tarduš Kaghanate (630 to 646) after eastern Turkic Kaghanate collapsed. Their native affairs were co-managed by three Begs (commander, nobleman): Keser Beg, Čabïš Beg and Amey Beg.[19] Meanwhile, the western Turkic Kaghanate gradually became further divided. In the second half of 7th century, the Tang dynasty expanded into eastern Central Eurasia and other neighboring regions; the Tibetans rose rapidly and expanded to surrounding areas, and the Arabs actively expand into Central Asia while the three forces inevitably fought fiercely for each of their interests during the 8th century.

The Tang Empire Period

The Tang dynasty became the overlord of the eastern steppe after the first eastern Turkic Kaghanate and the Sir Tarduš Kaghanate were destroyed by the alliance forces of the Tang dynasty and Tiele tribes in the eastern steppe. The emperor Taizong (r. 627–649) was respectfully honored as the "Heavenly Kaghan" by the Tiele tribes. The leaders of the Tiele tribes, such as the Uighurs, Bayïrgu, Tongra, Buqu, Tolangut, Izgil, Ediz, Kibir, Qun, Qošu and so on came to Chang An, the capital city of the Tang dynasty in succession to offer their loyalty to the "Heavenly Kaghan" in 646 when the Tang court summoned them. They were awarded the title of governor-general or Čigši as an official of the Tang Empire to lead their state or tribes under the Yan-Ran Protectorate which was responsible for states and tribes in the eastern Steppe on behalf of the Tang Dynasty. They were obliged to pay tribute to the imperial court and to aid armies of the Tang Dynasty by sending their troops. In turn the Tang Dynasty rewarded them precious artifacts or silks including the preferential treatment on horse-for-silk trade. The road was built for "visiting the Heavenly Kaghan" with sixty-eight stations lined up from the Piti lake in what now is the northwest of the Urat Back Banner of Inner Mongolia, to Selenga River basin where the Uighur tribes distributed.[20] This royal road facilitated communications between states or tribes on the Steppe and the Tang Dynasty.

The Tang court sent the first envoy Wang Yihong to the Qïrqïz state in 632.[21] Then the Qïrqïz, taking advantage of weakening of the Sir Tarduš, sent their envoy to the Tang court with mink coats and mink furs in 643.[22] Hearing stories of the Tiele tribes, the Qïrqïz sent envoy to the Tang Dynasty in the first month of 648,[23] then their Elteber Ïšbara Ačan came to Chang An to meet with emperor Taizong in the second month of this year.[24] Taizong was more than pleased and feasted Ïšbara Ačan at the Tian Cheng Hall. Ïšbara Ačan was conferred the title of the General-in- Chief of the left (or right) encampment[25] and the Commanders-in-Chief of the Qïrqïz Area under the Yan-Ran Protectorate like other leaders of the Tiele tribes. As a result, access to the

Tang China was unimpeded for the Qïrqïz. The Qïrqïz envoy came to the Tang court again with their superb horse around 675～676. Taking the chance of the collapse of the eastern Turkic Kaghanate and knowing the new lord of the Stepp the Sir Tarduš would not be capable of cause China serious problems, the Tang empire began to expand westwards by a series of actions. It set up Xiyizhou prefecture in what now Komul region, east of the Xinjiang in 630; defeated the Tuyuhun in Koknur region in 634; made peace with Tibet who rose and expanded almost simultaneously with the Tang dynasty; then in 640 attacked the Gaochang (Qocho) Kingdom and transformed it into Tang prefecture Xizhou in what now Turfan region; established Tingzhou prefecture in what now Jimsar, northwest of Turfan, established the political and military center, the Protectorate of the Pacified West in Xizhou, brought the eastern Tianshan Mountain region under its control. The Tang dynasty continued to penetrate deep into Central Asia, controlled the Karashar in 644, Qiuci (Kuchar) in 648, broke up the Western Turks in 657, set up Four Garrisons under the Protectorate of the Pacified West, that is, Kuchar, Shule (Kashkar), Yutian (Yuetken), and Suiye (Suyab), and extended its power to the west of Pamir, reached its greatest extent during the rule of Emperor Xuanzong (r. 712–756).

At the same time, the Tibetans expanded into the Pamir region in 661 after their territory extended as far north to the Tuyuhun Kingdom, south to Nepal and India and east to Songzhou and liangzhou of the Tang dynasty under the king Srong btsan sgam po (?–650). In 663, the Tibetans defeated the Tuyuhun and incorporated their land and people into the Tibetan empire. The Tibetans subdued Yuetken as early as 665. After two years, the Western Turks nominally accepted Tibetan overlordship.[26] By 670, Tang dynasty had to abandon the Four Garrisons of the Pacified West, thus the Tibetans brought the Tarim Basin under their control, and defeated the Tang army in Jima Gol[27] in what now south of the Kok Nor in Qinhai province, China. From then on, fiercely fighting for the suzerainty of the Western Regions and the Silk Road between the Tang dynasty and the Tibetans last for more than a hundred years. The Tibetans gradually declined due to internal troubles and division from 842.[28] They lost Gansu Corridor from 848 to 861,[29] and were expelled from the eastern Tianshang Mountain regions in 866 by the Uighurs.

The Arabs conquered the provinces of the Eastern Roman Empire, North Africa, and Persian Empire and expanded into the Central Eurasian within thirty years of the prophet Mohammed's death. By the late 7th century, there were the Arabs living in the cities of Khurasan, some of them also had acquired land and been assimilated to the local population. In 714, the Arabs invaded deep into Transoxiana, as far as Ferghana,[30] there they allied with the Tibetans in their military action in 715. Then in 717,[31] they took over the "Four Garrisons of An-Xi" of the Tang dynasty with allies the Tibetans and the Türgiš, one of tribes of the Western Turks. The Türgiš declined after they defeated by the Tang in 736 and by the Arabs in 737.[32] Thus, the Arabs became overlord of the Transoxiana and the Tang dynasty strengthened their influence in the Central Asia. In 750, an allied army including Chinese, Ferghana, and Qarluq under Gao Xianzhi, a general of the Tang dynasty, attacked the Tashkent and arrested their king and people, which made prince of Tashkent ask the Arabs for help. The Arabs army forces met with coalition forces of Gao Xianzhi at Talas River region in 751. During the battle of Talas the Qarluq defected to the Arabs thereby contributing to the Arab victory. The Arabs brought the western Central Asia to their control at last.

The Second Eastern Turkic Kaghanate Period

Rising of the Eastern Turks again in the end of 7th century hindered contacts between the Qïrqïz and the Tang dynasty. The Eastern Turks under Kapghan Kaghan (r. 691–716) reached their heydays in the early 8th century. They brought the eastern steppe under their control,

frequently plundered northern border of the Tang dynasty, and launched attacks on tribes of the Western Turks. The expansion of the Eastern Turks to the neighborhoods pushed the Tang, the Qïrqïz and the Türgiš into alliance. The emperor Zhongzong (r. 683–684 and 705–709) made a decision to counterattack the Kapghan Kaghan when he regained imperial throne. He granted the leader of the Qïrqïz Kel Ong Jan (?) Beg Bügü Bagatur the title of the General-in-Chief of the Left Dignified Guards and the Commanders-in-Chief of the Qïrqïz Area,[33] also granted the leader of the Türgiš Wujul (r. 690–706) the title of the King of Huai-de eparchy in 706 and granted to his successor, that is, his eldest son Sakal (r. 706–711) the title of Tutuq of the Walu prefecture, the General-in-Chief of the Left and the King of Huai-de eparchy.[34] Furthermore, the Tang Dynasty recaptured the area north of the Yellow River and built garrisons there in the third month of the year 708, taking the opportunity that the Kapghan Kaghan had gone to attack the Türgiš in early time of this year. In the eleventh month of this year, the Qïrqïz ambassador came to the Tang court with their local specialties and news of death of their leader. Emperor Zhongzong feasted the ambassador at the Liangyi Hall and showed his affection to the Qïrqïz by saying: "your nation and ours are of the same family, you cannot be compared with other foreigners".[35] He also expressed his sympathy and sadness for the death of the Qïrqïz leader. More than once the Qïrqïz sent messages to the Tang court to call for annihilating the Turks.[36] In the seventh month of the year 709, the kaghan of the Türgiš Saqal was conferred a Chinese name Shouzhong which means keep a loyalty and the title of the Qinhua Kaghan by the Tang dynasty.[37] Zhongzong deployed his troops and issued a command to start a campaign against the Kapghan Kaghan the Turk in the fifth month of the year 710. Unfortunately, he died in next month. In the winter of this year, the army of the Turks crossed the Kögmen Mountain, in what now is the Sayan Mountain, attacked the Qirqiz in the forest of the Songa Mountain in the dark of night, and killed their kaghan who is considered to be Bars Beg in the inscription of Kultegin.[38] Bars Beg had been granted the title of the kaghan by the Turks, he also had been given a bride who was a niece of the Kapghan Kaghan.[39] But this did not make Bars Beg to obey the Turks, he was killed at last. The Turks conquered the Türgiš and killed their kaghan after they suppressed the Qïrqïz, then they made peace with the Tang dynasty in 711.[40]

The Kapghan Kaghan died in 716. As a successor, his nephew the Bilge Kaghan (r. 716–734) tried to get along with the Tang dynasty under the circumstance that many subject tribes of the Second Eastern Turkic Kaghanate were out of his control. The Tang dynasty under the emperor Xuanzong (r. 712–755), however, planed a punitive expedition against the Turks with allied forces including the Qïrqïz, Basmil, Kitan, the Qay and so on. The Kutluk Bilge Kaghan of the Qïrqïz was granted the title of the Commander-in-Chief of the Qïrqïz Area and the General-in-Chief of Right Dignified Guards by the Tang court.[41] The plan of the Tang dynasty to attack the Bilge Kaghan with the Basmil, the Kitan and the Qay was aborted because of inconsistent actions of three sides in 720.[42] Thereafter the Turks and the Tang dynasty got along peacefully in the name of father-son relationship. Since then, the Turks kept their overlordship on the steppe in next twenty-five years. Improvement of relationship between the Turks and the Tang dynasty had a significant influence on relationship between the Qïrqïz and the two – the Turks and the Tang dynasty. From then on, the Qïrqïz came to the Tang China mostly for courtesy calls or horse trading.

The chief of the Qïrqïz, Külük Bilge Tuŋ Erkin was granted the title of the Leader of Court Gentlemen while the chief of the Turks was granted a higher title of the General-in-Chief when they visited the Tang court in year 722.[43] And the chief of the Qïrqïz Ïšbara Küč Bašı (?) Erkin was granted the title of the Commandant while ministers of the Turks received a higher title of the General when they came to the Tang court in year 723.[44] In year 724, the ambassador of the

Turks Peiluo čor came to the Tang court, the Qïrqïz sent the ambassador to present their horses to the Tang court at the same time.[45] The Tang court paid out hundreds of thousands of silks for their horses trading with the Turks from 727.[46] The Qïrqïz seemed to get a certain quota of the silk-for-horses trading between the Tang dynasty and the Turks. The Qïrqïz gained a quota of 20,000 pieces of silk in 735.[47] In the fourth month of the year 747, the Qïrqïz presented ninety-eight horses to the Tang dynasty as a gift while nine tribes of the Turks present 150 horses.[48] Again, the Qïrqïz present sixty horses to the Tang dynasty along with Shiwei in the twelfth month of this year.[49] Obviously, there were more Qïrqïz officials and merchants came to the Tang China for the silk-horses trading during the reign of Emperor Xuanzong, especially after the Turks got along with the Tang dynasty. In addition to the Turks', the Qïrqïz horse was one of the main sources of war horses of the Tang Dynasty at that time. The Qïrqïz horse even played an important role in the Tang army's suppressing An-Shi rebellion.[50]

Furthermore, to the Qïrqïz and all the seventy foreign states who kept in touch with Tang empire in Kaiyuan period (713–741), there were some customary rules on their greeting and sending etiquette, banquet, accommodation arrangement, funeral handling, and so on, corresponding to their status and ranks. In 749, Tang court issued an imperial decree on the Qïrqïz and other foreign envoys who died in Tang territory for official business. Tang court would allot one hundred strings of coins to the envoy for his funeral expenses and seventy strings to his wife's or the deputy envoy's. Plus the local government should either pay for the burial grounds of the year or offer carts to carry their dead body to the border of the Tang if they would like to have their body returned to homeland.[51] In brief, by the end of the reign of Emperor Xuanzong, communication between the Qïrqïz and the Tang court had not interrupted.

The Uighur Kaghanate Period and the Rise of the Qïrqïz

However, the official contacts and business dealings between the Qïrqïz and the Tang Empire did not last long. The Uighurs rose and replaced the Eastern Turks as overlord on the steppe after the Second Eastern Turkic Kaghanate collapsed in 745. In the reign of the Tengride Bolmišil Itmiš Bilge Kaghan (747–759), the Uighurs continued to expand, attacked Sekiz Oguz tribes such as the Bayirqu, Tongra, and Čik, Tokuz Tatar from 749–751, then broke down the anti- Uighur alliance of the Qïrqïz, Čik, Qarluq, Türgiš, Basmil, and so on, during 752–753.[52] Meanwhile the Tang dynasty was increasingly weak after the An-Shi rebellion broke out in 755. The Uighur helped the Tang armies retook the imperial cities Luoyang and Chang'an from the rebels in 757, and their relationship was cemented through marital alliances. Then the Uyghurs marched to the Kögmen Mountain, destroyed an army of 50,000 of the Qïrqïz and severed the contacts between the Qïrqïz and the Tang Empire in 758,[53] and made the horse-for-silk trade their monopoly.

The Qïrqïz, however, kept contacts with the Arabs, Tibetans, and Qarluqs. Arabs were adjacent to the Qarluqs after they had destroyed the Türgiš Kaghanate with the Tang dynasty, then defeated the Tang army in Talas. After 756–758 the Qarluqs were in possession of the Suyab and the Talas/Taraz, having supplanted the fading Türgiš as the dominant group in an area lying to the south of Lake Balxaš, around the Issyk Kol, Ile, Čuy, and Talas rivers and the spurs of the Tianshan.[54] The departure of the Tang power from the Central Asia was important both for the Uighurs and their rivals the Tibetans and the Qarluqs. Tibetans occupied the Gansu corridor and the south of the Tarim basin, went on their march to Kučar and Beš balik in 790, but were driven out of Beš balik by the Uighurs next year. Beš balik and Kučar were commercial centers of the Eastern Central Asian on the Silk Road where the Qïrqïz bought silk by a barter trade. Usually, the Tibetan comings and goings there had to stay in the territory of the Qarluqs

to wait for escorts of the Qïrqïz. Furthermore, the Qïrqïz obtained silk by trading with Arabs. As a reward for the Qïrqïz, the Arabs sent their silk to the Qïrqïz by camels every three years.[55] At the end of the 8th century (or the early 9th century), the Uighur launched a heavy attack on the Qïrqïz, killed their kaghan, and confiscated the enormous number of his cows and horses, provisions and fodder, and weapons, piling the booty up like a mountain,[56] thus again dominated the Qïrqïz. The Qïrqïz supplied marten furs as taxes/tribute to the Uighurs.[57]

The leader of the Qïrqïz, A-Re,[58] who overthrew the last Uighur kaghan in 840 once was given the title of Bilge Ton Irkin by the Uighur. A-Re's mother was a Türgiš and his wife was a daughter of Qarluq Yabuqu. The Qïrqïz, obviously, made marital alliances with the Qarluq, and marital tie with Türgiš in earlier time.[59] The Uighur defeated the Qarluqs in 808, but their battles with Tibetans lasted for several decades, which drastically weakened the Uighur.

Sometimes around 820, the Qïrqïz began renewed efforts to throw off the Uighur overlordship. A-Re claimed himself as kaghan. The Uighurs attempted to crush the Qïrqïz revolt, but without success. The battles between two sides lasted for twenty years. In the winter of 839/40, the Uighurs suffered heavy losses of livestock, followed by epidemics, and widespread famine in a catastrophic weather, which was either low temperatures or heavy snowfall. The Qïrqïz took advantage of the crisis to attack the Uighurs with a cavalry numbering 100,000, guided by the general Küčlük Bagha of the Uighur Kaghanate. They destroyed the Uighur capital Ordo Baliq and killed their kaghan, and meanwhile rescued the Princess Taihe, daughter of Emperor Xian Zong of the Tang (r. 806–819), who married with the Uighur Kün Tengride ulug bolmiš Alp küčlüg Bilge Kaghan in 821. This campaign ended the reign of the Uighurs in the steppe in 840, and thus dispersed remnants of the Uighurs to all directions.

The Great Qïrqïz Kaghanate (Middle of the 9th Century to the Early 10th Century)

Eliminating the Uighur remnants and reconnecting with Tang dynasty was the top priority of the Qïrqïz after the Uighur Kaghanate destruction. Fifteen tribes of the Uighur refugees fled to the Qarluqs westwards while thirteen tribes lived in the territory around the capital of the Uighur fled to the Tang border, and some of Uighur tribes fled to the Tibetans southward, and to the Great Shi-wei north-eastward and the Kitan eastward.[60] Chasing their enemies, the Qïrqïz reached the Tianshan mountain regions and Jeti-Suu (Semiryechye)[61] in the west, northern border of the Tang Empire, and the east of the Mongolian Plateau, controlled the Mongolian Plateau and reached their heydays. The Qïrqïz Kaghanate from the middle of 9th century to the beginning of the 10th century was called the Great Qïrqïz Kaghanate.[62] We, however, have limited knowledge on it. It is hard to give a general picture on the Great Kaghanate except for their diplomatic intercourses with the Tang dynasty and a few details of their military activities on the eastern Tianshan Mountain regions and the Mongolian Plateau.

According to Chinese source, in October 842, the Qïrqïz general Ta-bu Alp Sol and all seven persons escorted by 2000 cavalrymen arrived at a northern garrison town, Tiande, in what now is the Urat Former Banner of the Inner Mongolia. This envoy brought a letter of the Qïrqïz Kaghan to the Tang court, which said that Taihe Princess had been sent to the Tang court under escort of general Tolukčï Alp and ten Tarqans, among other things. But he had not learned any news about the fate of Princess and the escorts by far. As the escorts had not returned, he decided to send out 400,000 troops to search for them; If they were kept by others, they would like to know and make every effort to get them, looking for any place where they might be, ascending to Heavens and entering the Earth, eventually they must find the escorts. If they had gone to the Tibet, they would go to there.[63] This envoy also offered information that

the Qirqiz had moved into the He Luo Chuan[64] in the former land of the Uighurs and taken up the Anxi, that is, Kučar, and the Beiting, that is, Beš balik, and five tribes of the Tatar, and so on.[65] Furthermore, they had already blocked the main road Sanhekoudao between the Tibetan and the Uighurs.[66]

The Qïrqïz did not know that the escorts were killed and the Princess Taihe was captured by Ögä Tegin (soon became the kaghan of the Uighurs who fled to the south) on the fifth day of their journey to the Tang China in 841.[67] Ögä Tegin took the hostage Princess Taihe to the northern border of the Tang Dynasty, and plundered northern border towns of the Tang dynasty from time to time. This made the Tang dynasty to wage a surprise attack on Ögä Kaghan and get the Princess Taihe by force in one night in the first month of 843. Ögä Kaghan escaped with several hundred cavalry and fled eastward to the protection of the Heichezi tribes of the Mongolic Shi-wei.

The Tang court did not respond to Ta-bu Alp Sol's coming until the Princess Taihe returned to her home country. In his letter to the Qïrqïz Kaghan, Emperor Wuzong (r. 841–846) praised the kaghan for his righteousness of saving the Princess Taihe, expressed his sadness to the death of the escorts, advised the kaghan to eliminate his enemy completely, affirmed their "allies of the same ancestral clan". The emperor said that he had ordered Zhao Fan, director of the court of the imperial study and deputy director of the tribunal of censors to serve as the envoy carrying the imperial insignia to express his deep sincerity. Then he apprised the kaghan of that only when the outlaying people received the imperial appointment from China could they control a region down the ages, that he had wish to bestow such on the Qïrqïz Kaghan and specially add a fine title. So, he would like to know kaghan's wishes and send another envoy to the Qïrqïz to carry out those formalities after Zhao Fan returns.[68]

Knowing that the escorts had been killed by the Uighurs, the Qïrqïz Kaghan sent Zhu-wu Alp Sol with his retinue to the Tang court carrying his letter and two superb horses as a gift. The envoys arrived in the Tang court on 12th day of the second month of the year of 843,[69] resumed the diplomatic contacts between the Qïrqïz Kaghanate and the Tang Empire, a relationship that had been cut off by the Uighurs for almost a century. This made emperor Wuzong delighted, and he ordered Zhao Fan to entertain the envoys, asked the chief-minister to meet with them. Then, the royal officials Wei Zongqing, the supervisor of the household of the heir apparent, Lü Shu who was in charge of the palace library, and a grand scribe with a translator were sent to meet envoys in their guesthouse to obtain and take full records of detailed information from the envoys. They inquired about the rulers of the Qïrqïz people, their language, and administrative order, customs and traditions, clothing, beliefs, agricultural products, geographical features of their lands, and the routes to China from their homeland. As a result, a pictured and illustrated book of the Qïrqïz tributary with depiction on the land and people of the Qïrqïz, *Xiajiasi Chao-gong-tu-zhuan* was compiled.[70] Meanwhile, the Qïrqïz kaghan's name was ordered to be entered to the register of the Tang imperial household.[71] The Qïrqïz envoys were shown favor and placed in the rank above the envoys from the Parhae when emperor Wuzong met with foreigners.[72] Emperor Wuzong feasted Qïrqïz envoys at his guesting hall and gave them patterned brocades as a gift on February 15. Furthermore, an imperial commissioner was sent to escort Zhu-wu Alp Sol to the Taiyuan to welcome the Taihe Princess coming back home.[73] They returned to the capital on the twenty-fifth day of the second month of this year.[74] Emperor Wuzong gave Taihe Princess some ermine fur and jade ring which had been presented to the throne by the Qïrqïz as a gift.[75] Moreover, emperor Wuzong intended to have Zhao Fan require Qïrqïz to hand over Kučar and Beš Balik to the Tang, but was dissuaded by his courtier Li Deyu for the reason that the Tang dynasty was lack of enough troops and financial capacity to petrol the region.[76]

However, when Zhu-wu Alp Sol expressed his willingness to be confirmed Qïrqïz's overlordship on the steppe by receiving the title to their kaghan, Emperor Wuzong hesitated to do so for worrying about the Qïrqïz would do the same as the Uighur did, that was, to exploit the Tang dynasty by asking for annual gifts such as silk and selling their horses to China in unfair price. Then the chief minister Li Deyu advised that the Qïrqïz Kaghan had claimed himself as kaghan, the Tang court should be on friendly terms with the Qïrqïz by bestowing the title to their kaghan if the Tang court wanted to use the Qirqiz forces. At last, Wuzong accepted his advice and sent Zhao Fan to the Qïrqïz Kaghanate.[77] In his letter to the Qïrqïz Kaghan, Wuzong described how the Tang force saved Princess Taihe from the Uighurs and how Ögä Kaghan escaped away, thus he called for doing away with the Uighurs together. After then he would send special envoys to carry other ceremonies. In the sixth month of the year 843, the Qïrqïz general Uŋġu Alp and more than one hundred personnel arrived in Tang court with a hundred horses and ten falcons as a gift, also with information that the Qïrqïz would send a punitive expedition against the Ögä Kaghan and the Heichezi with an army of 400,000 troops. It was more likely that this envoy had expressed their wish to be bestowed the "Tengri Kaghan" to their kaghan. Wuzong expressed that he would grant the title to the Qïrqïz Kaghan after they eliminate the Uighurs under Ögä Kaghan and the Heichezi at first, and he would rather follow the example of emperor Taizong to give a fine title to the Qïrqïz Kaghan to show his affiliation to the Qïrqïz instead of this old title which was appointed to the Uighurs by the Tang court.[78]

In the second month of the year 844,[79] the Qïrqïz general Tutuk Es Ïnanču came to the Tang court with two white horses as a gift and a letter of the Qïrqïz Kaghan which said that the Qïrqïz was going to move to the Uighur capital this autumn for their military actions on the Uighur and the Heichezi, and they hoped that the Tang armies could coordinate with them, and they would like to know the date and place that they were going to meet with the Tang troops. The Tang court responded to this military action proposal of the Qïrqïz telling them that they would like to encircle, pursue and intercept the Uighurs at the main roads of four military garrisons in the Youzhou, Taiyuan, Zhengwu, and Tiande in the northern borders of the Tang dynasty where the Uighurs would pass by when the Qïrqïz attacked them, instead of sending out troops to the Heichezi which was thousands of miles away from the Tang land and the Chinese troops had never been there.[80] As a matter of fact, a civil war had broken out in Tang China since the fifth month of the year 843 that the Tang court had to make all effort to deal with it. The Campaign between the central government forces and the local forces of five northern prefectures of Zhaoyi Zhen region lasted for one year and three months.[81] In his letter, Wuzong also expressed that he would send an important minister to the Qïrqïz to confer the title to the kaghan employing the traditional way that they did on the Uighur.

Emperor Wuzong granted the title of "Brilliant, Powerful, Sincere and Wise Kaghan who was of the Same Ancestral Clan (with Tang)" to the Qïrqïz Kaghan in the fifth month of the year 845 after the Tang court won a decisive victory in the campaign and completely pacified the northern regions. But this imperial bestowing ceremony did not perform immediately due to emperor Wuzong was sick and in poor condition. Wuzong died in third month of the year 846. His uncle, that is, Emperor Xuanzong (r. 846–858) came to the crown. After several months, Ögä Kaghan was killed by his men. Emperor Xuanzong wanted to carry out his predecessor's unfulfilled imperial bestowing ceremony, but some officials suggested that the Qïrqïz was far away from China and wasn't able to contend with the Tang Empire, arguing that now they were free from the Uighur, there was no reason to build up the Qïrqïz. Ultimately, the Tang court bestowed upon the Qïrqïz Kaghan the title of "Brilliant, Powerful, Sincere and Wise Kaghan" in the sixth month of the year 847. Li Ye, a chief minister of the court of the state ceremonial and a vice censor in chief, were sent to the Qïrqïz Kaghnate to carry out the

commission. The new title omitted the reference to the kaghan's kinship to the Tang imperial family.

After Ögä Kaghan died, E-Nian, a young brother of Ögä, was crowned as khaghan. His group and he got a shelter from the Qay temporarily. In 848, the Qay was defeated by the army of the Tang, the Uighurs lost their shelter and were scattered, and the rest of 500 nobles and headmen fled to the Shiwei. Then, Apa, the chief minister of the Qïrqïz, dispatched an army of 70,000 cavalry to attack the Shiwei, took the Uighurs they had captured back to the north of the steppe.[82]

Since then, the Qïrqïz envoys came to the Tang court at least twice around 852~854 and in 856 during the reign of the emperor Xuanzong,[83] and three times in the period of the emperor Yizong (r. 859–872).[84] In year 863, the Qïrqïz chancellor Alp Ïnanču came to the Tang court to ask classics and permission to send their envoys to the Tang for horse trading and calendar every year, and said that they were going to attack the Uighurs and they would like to offer land east of the Kučar to the Tang. But this land offer was not accepted by the Tang.[85] In the twelfth month of the year 866, the Qïrqïz general Elči Elenki come to the Tang court for their kaghan "sending a horse with saddle" to welcome the envoy of imperial bestowing ceremony and asked for the calendar of the next year.[86] Usually, to bestow imperial title to the new kaghan of the steppe was an important task in Tang diplomatic tradition. There might be a new successor crowned as khaghan in Qïrqïz Khanate in 866. The damaged jade bar on which carved text of imperial bestowing of the Tang court upon the Qïrqïz Kaghan, found in Abakan, the Hakas Republic of Russia, confirms this important event.[87] It was likely that the Qïrqïz still kept their overlordship on the steppe during 860s. Hereafter, events on the Qïrqïz's visiting to the Tang court and the bestowing of Tang court to the Qïrqïz were lost[88] as the Tang Dynasty was entering its final decline at this time. About tens of thousands of the Qïrqïz and other northern tribes and troops involved in warfare between local warlords Helianduo, the Commanders-in-Chief of Tuyghun and the prefect of the Yunzhou prefecture of the Tang dynasty, and Li keyong from Shatuo tribe, the military commissioner of Hedong of the Tang dynasty in 890.[89] It seems that the Qïrqïz was still a force on the steppe by the end of the 9th century.

The Qïrqïz During the Rise of the Khitans

A group of the Uighur ousted from Mongolia by the Qïrqïz in 840 occupied the eastern part of the Tian-shan, gradually formed the Gaochang (or Xizhou in Chinese, *Qocho* in Turkish) Uighur Kingdom which was based on Besh-balik and Turfan in 866. It was also known as Toghuzghuz in Persian literature. Toghuzghuz was the most powerful polity of eastern Central Asia during the 10th to 11th centuries. The western territory of the Gaochang Kingdom shrank continuously from the end of the 9th century or the early 10th century to the 11th century. Its western border reached Kucha in the south of Tian-shan and Bayan bulak in the north of Tian-shan steppe till 930s, and reached further west to Ile valley in 940s~50s. Aksu and Uch-Turpan in the south of Tian-shan and the southeast bank of Issyk-köl became parts of the kingdom after the rising of the Karakanids, a polity for those Turkic tribes who did not believed in Islam but would rather be under sovereign of the Gaochang. The western border of the Gaochang Kingdom shrank to Karashar from the 1070s.[90] The Kingdom submitted to the Qara Khitai in the 12th century and to the Mongols in the early 13th century.

The Khitans under Yelü Abaoji (872–926) went on their march into the steppe after they conquered the adjacent kingdom of Parhae from 916, where they met moderated opposition. The Khitans conquered the Orkhon region in 924, then attacked tribes between the Altai

Mountain and the Tian-shan Mountain.[91] But the regions of Altai Mountains and the up Irtish River were still under sway of the Qïrqïz. Some groups of the Qïrqïz were in the east and west of the Altay Mountain, and some of them stayed along the Irtish River.[92] They were adjacent to the Gaochang Kingdom of which the northern boundary lay in the northern foothills of the Tianshan Mountains.[93] According to the *Hudud al-Alam*, a Persian geography written in 982, the west and the north of Toghuzghuz were the Qïrqïz "(who) extend along all the Toghuzghuz country".[94] The Qïrqïz territory was extending down to the Northern Uninhabited Land and the Eastern Ocean, on the west a mountain separated them from the Kimak, and some isolated groups of the Qïrqïz tribes wandered even into the Tarim basin.[95] There were also some Qïrqïz in the Gaochang Kingdom,[96] and "a group of the Qïrqïz in the west of Türgiš"[97] who was remnant of the great Türgiš federation.[98] On the east, the Quriqan around the Baikal Lake was still affiliated to the Qïrqïz Khaghanate.[99]

The contact between the Qïrqïz Kaghanate and the Khitan Kingdom began in 931.[100] The Khitan sent their envoy Pendu to the Qïrqïz Kaghanate in 948[101] after they overthrew the Later Jin dynasty in 947. Thence the Qïrqïz envoys came to the Khitan Liao court at least twice, respectively in the tenth month of the 952[102] and in the twelfth month of the 976.[103]

In the early 12th century the declining power of Liao empire and its economic difficulties prompted the Jurchens, a northern tribe used to subject to them, to rebel. In 1114 a full-scale war broke out between the Khitans and the Jurchens. It resulted in the establishment of the Jurchen Jin dynasty (1115–1234), which succeeded the Liao in 1125 in north China.[104] One of great ministers of the Liao, Yelü Dashi, claimed himself as the king and moved westward with his entourage in 1124 when the Khitans faced a great threat of the alliance of the Jurchen Jin, the Song dynasty and the Tangut.[105] Yelü Dashi left because Emperor Tianzuo (r. 1111–1125) of the Liao did not follow his advice but wanted to launch a war against the Jurchens which may put them in a desperate situation.

Dashi's first step was to go northward and arrived at the Kedun Town in what now is the Chin Tolgoy Balgas in Bulgan aymag in northern Mongolia,[106] the Liao's most important garrison town of the northwest on the Orkhon river in Mongolia. In the second month of the year 1330[107] (or 1131), Dashi began his march out of Kedun with his men as the Jurchen force targeted Dashi and marched to him.[108] Dashi arrived in

> the Qïrqïz country and attacked them (Qïrqïz), the latter counterattacked the Kitans. (Then) they (Kitans) went on their march until they arrived in Emil where they built a town, the site is still there today. Here many Turks and tribes had gathered around him, enlarging his force to 40,000 households.[109]

It was probably there at Emil in 1131 or 1132 that Dashi was enthroned as Gürkhan (universal khan). Dashi entered into Muslim world by way of the Toghuzghuz and came to Balasaghun,[110] one of the capitals of the eastern Karakhanate (another one was Kashghar) due to an invitation of their khan and ascended the throne that had cost him nothing in 1134.[111] From there he started to send his governors to the regions from the Kim-Kim' ji'ut in what now is in the Yenesai to the Barskon at the south of the eastern Issyk-köl and from the Talas to the Yafinch, and gradually succeeded in establishing his authority over the Kangli, Kashghar and Khotan and "sent an army to the Qïrqïz land to avenge the humiliation he suffered in their hands. He also subjugated the Besh balik from which his troops were sent to the Bahanna and Transoxiana, making these states surrender to himself".[112] Gürkhan brought Transoxiana into the Qara Khitan realm after he won the battles with Western Qarakhanids in the valley of Farghana: the battle at Khujand in May 1137 and the battle at the steppe of Qatwan in September 9, 1141.[113]

The Qara Khitai empire as created by Dashi encompassed in 1143 at least the regions of Transoxiana, Farghana, Semirechye, the Tarim basin and Gaochang. This vast territory was roughly equivalent to most of modern Xinjiang, Kyrghyzstan, Uzbekistan, Tajikstan and south Kazakstan; until 1175 it also included parts of western Mongolia.[114]

The Qïrqïz During the Rise of the Mongols

The Mongols rose after Temujin united most of tribes on the Mongolia Steppe and assumed the title Chenggis Khan in 1206. For eliminating remnants of the Merkid under Tuotuo and the Naiman under Güchlük who fled to Irtish from the western Mongolia and keeping them from forming alliance with the Qïrqïz and other tribes in Yenesai, Chenggis Khan sent his envoys Altān and Būkqara to summon the Qïrqïz to submit to him in the winter 1207. The two envoys met the chiefs of three tribes: the Olos Inal, Altï-Yer, and Yedi Inal who respectively sent their envoys Urut Utuju, Alik Timur, and Anqiraq with white gyrfalcons to express their submission to Chinggiskhan.

The Qïrqïz were distributed in a vast area from the upper reaches to the lower reaches of the Yenesai River. The Qïrqïz neighbored with Ibir-Shbïr in Ob' River basin in the north, the Quri (Quriqan)[115] in the east, the Mongols in the eastern and central Mongolia Plateau in the east-south, Naiman state in what now is Altai-Irtish in the south, Barqu(Barqun); Tumāt, Bāyāut,[116] Oirat,[117] and more were also close neighbors of the Qïrqïz. It seems that the Qïrqïz state was co-reigned by the chiefs of three major tribes in the early 13th century.

In the winter 1208, Juji, eldest son of the Chinggis Khan was sent to an expedition on the "forest people" after he annihilated the Merkid in Irtish with the guide by Huduhe Bek from the Oirat who had been allied with the Merkid and the Naiman. The Oirat, Buriyat, Barhun, Ursut, Qapqanas, Kanghas, Tubas, and so on, who were in the regions of the Sayan Mountain were surrendered at first, then the Qïrqïz took their turn. The leaders of three tribes Yedi Inal, Altï-Yer, and Olubek Tegin presented gyrfalcon, white gelding horse, sable skin to Juji, and followed Juji to meet with Chinggis Khan to express their submission. Juji's expedition on the "forest people" is most likely to pave the way for their further expeditions by preventing the "forest people" to join the Qara Khitai, the Gaochang and the Tangut, and making them allied with the Mongols. The regions of the Qïrqïz state seems under the central government of the Mongol Empire, that is, under Chinggis Khan then his successor and the youngest son Tolui.[118] According to the Mongol custom, other parts of the empire were allotted as an appanage (*uius*) to other princes and princesses and younger brothers of Chinggis Khan, as also to certain of the Mongol generals.[119] The regions of the Qïrqïz state as an appanage of Tolui's widow Sorqaqtani, also called the Large Camp of Beki, which was inherited by Arigh Böke, his eldest son Yomhur and his grandson Tsechqan one after another after she passed away.[120]

Vassals of the Qara Khitai the Gaochang in 1209 and the Qarluk in 1211 surrendered to Chinggis Khan. In 1217, Chinggis Khan gave the permission to Horchi Nayan to pick up thirty women from the Tumāt, but he was resisted by the Tumāt. Chinggis Khan ordered the Qïrqïz who was the neighbor of the Tumati to send their army to the Tumāt, the Qïrqïz did not obey him. This leaded to Juji subdued the Tumāt and the Qïrqïz this year.[121] The Mongol went on their march into Central Asian 1218–1221. Like most states in the early 13th century in Eurasian Steppe, the Qara Khitai in 1218 and the Qïrqïz in Central Asia were incorporated into the Mongol empire.

In the reign of Qubilai Khan, the Qïrqïz who had been settled in Jinshan in what now is Yanqing region of Beijing moved to Shandong to farm in 1264, and some households from

Kim-kim ji'ut were moved to the capital in what now is Beijing in 1265. Some Qïrqïz households were moved to Karakorom in the fourth month of the year 1288 and were sent to fight with Haidu in the seventh month of the year 1289.[122] Furthermore, some groups of the Qïrqïz, Usu and Hanhanas were moved to Zhaozhou in what now is Tahu town of Guorluo Mongolian autonomous county, Jilin province, China, and 700 Qïrqïz households were moved to the south of Liaoyang in Liaotung Peninsula in 1293.[123]

Rise of Mongols had a profound impact on the Qïrqïz. The traditional society of the Qïrqïz was broken up, and many Qïrqïz people both in Yenisei and Central Asian were forced to leave from their homeland in the process of the Mongols' conquest. From the 15th century to the 18th century, they were cracked down on by the Western Mongols, that is, the Oirat who rose in 15th century, especially by a branch of it, the Zhungars, who established the Zhungar Khaghanate in the second half of the 17th century. The Qïrqïz in the Yenisei once became the object of corvee levied by the Khalkha Mongols, Zhungars, and Russians.[124] The Qïrqïz in the western Tian-shan Mountain regions who was called Burut by the Oirat were ruled by Zhungars. Some Qïrqïz tribes in the Yenisei were pushed from their homeland by Zhungars.[125] From the 17th century to the 18th century, the Qïrqïz (Burut) around the Issyk Kol, Talas River, Chu River, and Narin River were driven off by Zhungars from their pasture lands to Uch Turpan and Khashgar and to the Jultus (Bayan Buluk) and Qarašar in the southern Tian-shan Mountain regions, also to the Eriyen habirga in the central Tian-shan Mountain regions. And the artillery of the Zhungar Kaghanate was mainly consisted of the Qïrqïz solders. Some groups of the Qïrqïz could not bear the slavery and torture of the Zhungars and migrated to Ferghana valley while some of them fled to the Qing dynasty in the periods of Emperor Yongzheng (r. 1722–1735) and Emperor Qainlong (r. 1735–1795). They were resettled in Turpan, Hexi (Gansu), Tianjin, Qingzhou, Jiangning, Hangzhou, Khalkha under the Qing, and the Uriankhai.[126]

Fall of the Zhungar Khaghanate in 1755 left Central Asia between the Manchus who were moving to the west and the Muscovites who were coming to the east. The Qïrqïz in Central Asia were distinguished as the eastern Buruts and the western Buruts in documents of the Qing dynasty, which were divided by Tar River in Ferghana.[127]

The earliest contacts between the Qïrqïz and the Qing expeditionary forces in the Qïrqïz took place in 1758 when the Qing army was pursuing remnants of the Zhungars near the Issyk-kol and sent emissaries to the Qïrqïz. The Qing sent their emissaries to the Kokhan and the Qïrqïz in Ferghana when they were destroying the Big and Little Khoja's troops in Southern Tian-shan in 1759. The Qïrqïz accepted the sovereignty of the Qing Empire according to Chinese official source. The Qïrqïz played an important role in the Qing's pressing down the troops of Big Khoja in Kashghar. The Qing dynasty steadily declined from the early 19th century. The Kokhan expanded into Talas River and Chüy River regions in the 20s of the 19th century.[128] Meanwhile, the Kazaks who roamed between the Syr-Darya and the Semirechye[129] expanded southwards. Some tribes of the Qïrqïz in Ferghana had to move to China, and one of the eastern Buruts tribes Sarbagysh in Issyk-kol began to seek protection from the Russians in 1785.[130] The Kazaks were gradually brought under the control of Russians from the 20s of the 19th century.[131] Then it was the turn of the Qïrqïz in the Issyk-kol, Naryn River, Chüy River, and Talas River (i.e. northern Qïrqïz in Russian documents) to be under sovereignty of Tsarist Russia in 1850s–60s.[132] Russians continued their expansion eastwards by signing a series of treaties with the Qing government. In the second half of the 19th century, many tribes of the Qïrqïz were brought under the control of Russians except for tribes of Kyshchi, Chong Baghysh, Jooshi, Kypchak, Naiman, Cherik, who were in China,[133] which shaped the modern Qïrqïz in the next century.

Notes

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39 Inscription of Kultegin (east line 20) says: "(The leader of the Qïrqïz) Bars was a beg. It was we, who had given him the title of khaghan. We had also given him my younger sister, the princess, in marriage. But he betrayed (us). (As a result) the khaghan was killed and people became slaves and servants". This happened during the reign of the Kapghan Khaghan of the Turks. Here, the Turkish wife of Bars Beg was a younger sister for both Kultegin and Bilge khaghan, and was a niece for Kapghan khaghan.
40 Sima Guang, *Zi Zhi Tong Jian* (ch. 209), Beijing, Zhonghua Shuju, 2018, p. 6779.
41 Wang Qinruo et al., "Ce Fu Yuan Gui" (ch. 986), *Alien Vassals(31) Conquest 5*, Nanjing, Phoenix Publishing House, 2006, p. 11415.
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51 Wang Pu, "Tang Hui Yao" （ch. 66）, *Honglu Si* 鴻臚寺， Shanghai Century Publishing Co., Ltd, Shanghai Ancient books Publishing House, 2006，pp. 1360–1361; Li Linfu et al., punctuated and collated by Chen Zhongfu, *Tang Liu Dian* (vol. 2), Beijing，Zhonghua Shuju, 2014, pp. 506–507.

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109 Juwayni, *Ta'rikh-I Jahān-Gushā* (Chinese version), He Gaoji translated from English version (Juvaini, *The history of the world conqueror,* translated by J.A.Boyle, Manchester University Press, 1958), The Commercial Press, 2009, p. 392. Without testimony, many scholars hold a viewpoint that the Qïrqïz encountered by Yelü Dashi on his journey moving to the west were in the Yenesai although Juwayni did not give any clear information on where these Qïrqïz people lived in his works. This might lead by an old idea that all of the Qïrqïz were in the Yenesai and their negligence on information that there also the Qïrqïz lived at least in the north and the west of the Toghuzghuz mentioned by author of the *Hudud al-Alam*. And the Qïrqïz still lived in the north of the eastern Tianshan in 11th century and 12th century (Өмүркул Караев, 136–137 бб.). Furthermore, there were Qïrqïz people lived in the Karakhanate (Өмүркул Караев, 145 б.). Based on the context of Dashi' s westward moving, I tend to surmise that Dashi encountered the Qïrqïz in the Altay Mountain region or in somewhere of the north of the eastern Tianshan instead of in the Yenesai although we don't possess direct evidence of that at this moment.
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13

IMAGES OF KNIGHTS ON THE GREAT SILK ROAD

Kazim Abdullaev

Introduction

On the monuments of fine art of the ancient Central Asia, compositions with scenes of battles and images of riders in defensive armor are often found. Kings and rulers, whose portraits are engraved in the coinage of this time, are also often dressed in armor. Heavily armed riders represented a stratum of professional warriors and often acted as mercenaries.[1] At the same time, their associations represented considerable strength and occupied not the last place in political life of societies. There is every reason to believe that during the first centuries BCE to the first centuries CE in the Central Asian region, there are qualitative changes and a significant breakthrough in military affairs. What is the reason for this? What role do nomads play in this process, arising on the borders of agricultural oases of states like *fata morgana*, and often overwhelming their regular troops? In their appearance, armored knights – cataphracts of western sources resemble famous characters of medieval legends.[2] However, we know practically nothing about the predecessors of the early knights of Central Asia, with the exception of extremely brief references to classical authors.

The purpose of this article is to analyze the monuments of fine art and an attempt to more detailed analysis of the armor and their distinguishing features.[3] The geography of finds of the weapons themselves, as well as their images is limited to the territory of Bactria and Sogdia and the adjacent historical and cultural regions (Figure 13.1). This is primarily due to the limited volume of the article, despite the fact that the selected topic is quite extensive.

So, it would be noted in beginning that the present investigation is not at all an object to give a detailed history of Bactrian defensive armor. However, it would be focused especially on the images of horse riders defended by special material (leather, metal plates, chain-mail and so on) and shortly concerns some questions of tactics in warring. Of course, specifically interest arises when we analyze defensive armor not only riders but the horse itself (example of Khalchayan figurative complex). When we touch of specificities of sources on the central Asian sector we have to note that in certain respect the representative source on the topic is richer, that is, more numerous than written one. If we compare, for example, western classic sources and Chinese chronicles we will note that they are distinguished from each other by the manner of presentation. In western sources we can find detailed information about

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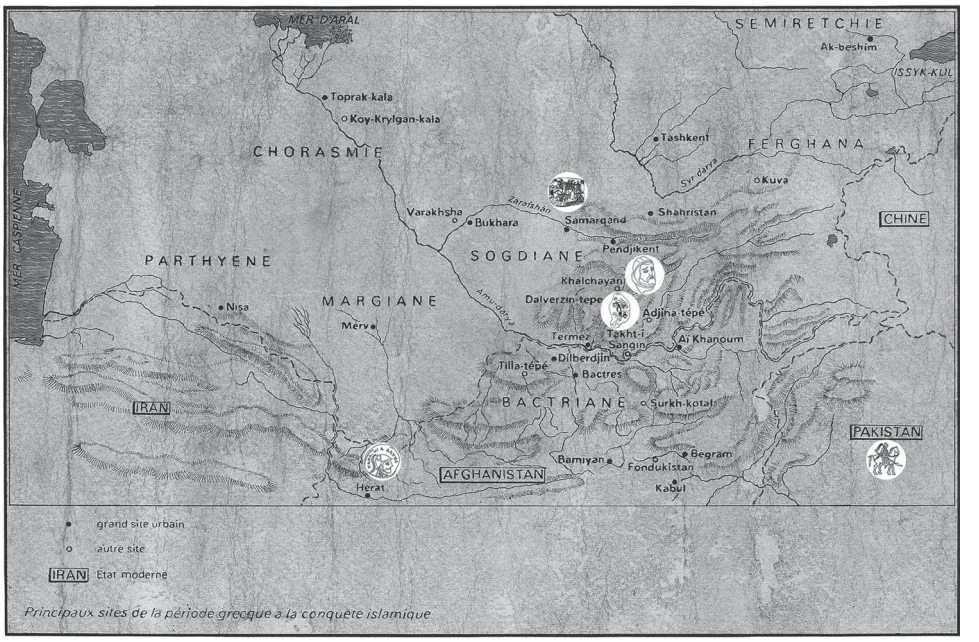

Figure 13.1 The geography of finds with image of knight.

composition of army and tactic actions during the battles.[4] Meanwhile in Chinese chronicles there are lot of tractates of the armors and warfare and description of main historical battles.[5] All these disadvantaged partly compensated by the works of art giving sometimes detailed depiction of the armor and participants of a battle.

The issue of cataphracts was raised in the works of W.W. Tarn and M. Rostovtsev, which gave a detailed summary of historical sources. Before the discovery of clay sculpture (reliefs) of Khalchayan in the early 1960s, this type of army was associated mainly with Parthia[6] and Khorezm.[7] At the same time, new archaeological discoveries on the territory of the historical and cultural regions of Bactria and Sogdia allow a number of additions to this issue. Let us take into account the fact that cataphracts are a logical continuation of the evolution of shell armor wearers into a special kind of heavily armed cavalry. Taking into account the armor and the horse itself, then the sources should be looked for, apparently, in the description by Herodotus of the Central Asian tribe of Massagetae who put on carapace on horse's breast (I, 215). Further, on the shell armor there is a mention of Arrian regarding Alexander's campaign in Central Asia (Arr., IV, 4, 4). The fact that the shell armor was quite developed in the military affairs of ancient Central Asia is evidenced by the finds of this vestment in the layers of the Greco-Bactrian period.

Along with the monuments of fine art, there are samples of protective armor those are crucial findings and one of the most reliable sources. Unfortunately, the fragmentary nature of these finds, which have come down to us in a time-destroyed or deformed form, cannot give a solid image of a heavily armed horseman. In this regard, images captured in various genres of art are more informative. However, this category of sources is not without drawbacks. First, wall paintings or clay sculpture, for example, are also subject to destruction and reach us in fragments or even crumbling. Second, the question arises of the color reproduction of the

ancient master. How, for example, to perceive the color (armor plates) of yellowish-ocher and brownish shades? Does the master in these cases transfer leather "plates" sewn in a row or are they were metal plates (copper, bronze, steel)?

Finds of Defensive Armor in Archaeological Layers

In the archaeological layers of the premises or, less commonly, burials, more or less preserved fragments were discovered. One of the earliest finds of fragments of plate armor was recorded during excavations of the treasury of Persepolis. As a rule, these are either separate plates, or links in the form of small plates located one above the other, resembling a rectangle in shape (1.7 to 6 cm long, or flakes 0.8 to 1.4 and 1.4 wide – 3 cm in length). All these plates (from armor) were found in Persepolis' treasury (5–4 BCE) along with gold plates, apparently representing elements for the stripe (for a suit?).[8]

In the Aral Sea region in a "round funerary building" in the Chirik-rabat[9] settlement, (4–3 BCE) fragments of armor were found in the northwestern building "on the western sufa[10] and near the passage in the layer of extortionate outburst".[11] The armor was poorly preserved and was on fire; however, its fused part makes it possible to trace the location of the plates. One fragment is a square iron plate with a size of 7 cm, the thickness of the plates exceeds 2 mm.[12] The other part of the armor was narrow long plates 3.3 cm wide and, apparently, belonged to the parts of the moving part on the arms and legs.[13]

S.P. Tolstov attributes the armor to the culture of the *appasiakoy* tribe (Chirikrabat culture)[14] and dates the find to the end of the 4th century BCE.[15] The value of this remarkable find he notes in his book *Ancient Khorezm*, emphasizing the leading role of Khorezm in the formation of the Saka cataphractary.[16] The popularity of this type of armor is confirmed by discovery of a fragment of a flask on the site Humbuztepe (South Khorezm of Uzbekistan). The image on the flask is embossed in a low relief and conveys the image of a rider in plate armor shown at the time of the attack.[17]

Findings of metal plates with drilled holes for their fastening were recorded in the layers of the ancient Nisa settlement in the "square hall" (2nd century BCE). In the same complex, bronze and iron arrowheads and other weapons were found.[18]

One of the noteworthy discoveries in the field of military affairs of ancient Bactria was the discovery of large fragments of protective armor in the arsenal on the territory of Ai Khanum, a Hellenistic city (late 4th to 2nd centuries BCE) located at the confluence of the Kokcha and Oxus-Amu Darya rivers (Northern Afghanistan).[19]

The arsenal was located between the foot of the acropolis and the main street of the ancient city; in the process of excavation, objects were discovered confirming the military nature of this structure. A large collection of iron and bronze arrowheads was assembled, the latter being an exclusively Central Asian type attributed to the Saka three-lobed arrowheads and dated mostly 2nd century BCE.[20] During excavations, fragments of decorative design of shields were also discovered. But the most remarkable find was the discovery of many fragments of cataphract weapons in the northern extremity of the western wing (Figure 13.2, 1), including iron pieces placed on the charred lining as they once were:

1. A left leg made of a series of circular slats which were nested upwards by a curved plate protecting the lower part of the thigh and downwards an upper foot (Figure 13.2, 1, left).
2. A corset made of imbricated scales, rectangular in shape with rounded lower edge.
3. A pair of shoulder pads, each made up of three parts: a set of scales on the scapula four lamellas hinged transversely on the roundness of the shoulder and, on the front, an

Figure 13.2 The Images with defensive armor: 1-Ai Khanum; 3, 4, 5 - Khalchayan; 6 - Dalverzintepa; 7 - rider on a Saka coin; Portrait of a king (Tanlismaidates).

elongated plate with rounded tip, provided with a loop allowing to hang the shoulder pad on the corset.

4. A horse breastplate in the form of an apron made of an assembly of narrow vertical lamellae articulated longitudinally and secured to a frame of rigid bands; on each long side the two lateral bands play thanks to hinges and are provided with a ring which served to suspend the plastron (Figure 13.2, 1, right).

Undoubtedly, the finds of the cataphract armor in Ai Khanum contain valuable information not only in the field of the technique of manufacturing this armor, but also in the military affairs of the Hellenistic period. On the one hand, the fact of finding in the arsenal of the ancient city may indicate the presence of this military unit in the Greco-Bactrian army. On the other hand, one cannot exclude armor as a subject of a trophy, that is, it could belong not to the

warriors of the Greek city, but to their military adversaries. Armor of Ai Khanum dates quite clearly, that is, 150 BCE; it is likely that they date back to an earlier time. In any case, according to the author of the publication, we have before us more accurate data on the weapons of Greco-Bactria than we have available so far.[21]

Another example of protective armor (a fragment of the Greek thorax) in the form of two large plates with iron rivets was found on the citadel of the Kampyrtepa settlement (modern Surkhandarya Region of Uzbekistan).[22] A fragment of a bronze corselet was discovered in room 93 under the early floor. In the subsequent layers, two coins of the Greco-Bactrian period were found, one of which is defined as the tetradrachm of King Heliocles (145–130 BCE).[23]

In addition to this real find, the protective armor of Bactria is eloquently evidenced by the finds of terracotta images in the same Kampyrtepa settlement.[24] Particular attention is drawn to the almost completely preserved terracotta figure of a bearded character sitting on a chair (throne?) without a back.[25] The peculiarity of this image is a combined technique. The primitive and conditional manner of treating the figure with clay details (hands, headgear) and scratched lines ("suit") is combined with a head stamped in a matrix with carefully designed facial features.[26] In the literature, this figure is interpreted in different ways.[27] Given the conventions in the modelling of details, in this case, parallel vertical lines from the chest to the hips, where they are separated by a transverse line and then by more frequent scratched lines from the hips to the heels, could be interpreted as strips of protective armor. These lines could indicate the part of the armor made of strips of leather or metal, and together with the rounded disc on the chest made up its entire structure. Although there are no direct indications that the character represents a heavily armed rider,[28] this is apparently implied. Looking ahead, I'll say that all the images of the king standing in armor (the Saka period, Kushan coins) convey the image of a dismounted horseman – it is hard to imagine that the kings could in reality act as a heavily armed foot warrior.[29]

Before proceeding to the monuments of fine art that demonstrate the protective armor of cataphract riders, I want to emphasize one remarkable detail. Localization of fragments of metal armor testifies to their material value and the high status of their owners. In any case, until now we do not know the finds of protective metal armor in ordinary burials or dwellings.

Khalchayan, an outstanding monument of the nomadic migration era (2nd century BCE to 1st century CE),[30] is known to a greater extent for its remarkable sculptural reliefs made in clay with subsequent coloring and, to a lesser extent, for its wall painting.[31] This is due to the poor preservation of murals that have survived in small fragments, found, as a rule, in the rubble of collapsed walls and ceilings. According to G.A. Pugachenkova, in some cases it was impossible to collect and restore pieces of stucco with murals, in such cases a fragment was drawn *in situ*. Unfortunately, not all of these sketches were subsequently published by the researcher. Under such circumstances, one has to rely completely on the author's description and build assumptions and hypotheses on her observations.

Of interest is a small fragment (11 × 10 cm) from the rubble of destroyed clutches in the hall near the eastern wall, somewhat south of the central aisle. The fragment preserved the image of a miniature hand "with some concentrically oval disks above it". It is executed on a white background by "thin red lines and pink halftones".[32] With a high degree of probability, we can assume that this image is an arm protector. A similar piece of armor is presented in the sculpture of Khalchayan. One fragment of such bracers leads G. Pugachenkova:

> The right hand is in an armored arm bracelet composed of plates running on top of each other. It is made in a circular volume (Figure 13.2, 2, left). The arm is bent at the elbow and raised; a dilapidated brush with traces of red paint held some object

> (sword? spear?). The plates are painted white, underlined on the edge with black paint. Two small, bright, red-colored strands are falling onto the shoulder.[33,34]

Another interesting example of sculpture for us is the body of a warrior, dressed in protective armor from quadrangular plates arranged in a row vertically.[35] The edges of these plates are emphasized by a relief strip and painted in dark color. Below, in the femoral part of the plate, they expand (approaching the trapezoidal shape) and are arranged in three rows – at the bottom the edge is underlined by two relief lines (Figure 13.2, 3). The armor is painted ocher yellow, which, according to Pugachenkova, transfers either copper or leather. Its small dimensions relative to other figures of the same composition incline the researcher to the idea that this is "removed armor".[36]

One of the most interesting finds in the Khalchayan art complex is the rather large front part of the horse[37] in protective armor with the remaining fragments of the knee part of the rider Pugachenkova notes that red clothing with a white stripe underlined at the bottom can be traced. Interestingly, the white painted plates are shown earlier, they are highlighted not only by color, but also by relief. They are separated by dark lines.

Description of a horse according to Pugachenkova:

> A black horse dressed in a tight-fitting armored blanket with slits for the eyes, ears, the edge of the muzzle and the mane trimmed with a comb (Figure 13.2, 4). The cutting of the carapace was not performed in volume, but in purely picturesque tricks. On the face, small-scaled armor is shown, the red scales of which are trimmed with black lines, and in the middle are highlighted with one or two white spots (possibly meaning the details of the bonding of neighboring plates). On the neck there are five or six oblong, with a rounded edge of the shell plates, drawn on a white background with black and red lines; a narrow ornamental strip decorated with corners runs along the mane.[38] On top of the shell is a chest strap fixed at the shoulder with a round phalera, with traces of a light pattern; the edge is edged with a strip with brackets and white spots, and in the main round field some large curls are visible. Part of the side belt that follows from the phalera to the saddle is also visible.[39]

From the description it follows that the plates were white and conveyed the color of metal (iron, steel?).

In the reliefs of Khalchayan, a man's figure stands out, pressing the armor to his left leg. According to Pugachenkova, the armor has

> a high cupped collar, a bib with large relief plates (five in five rows), bracers of horizontally running plates; the lap is lost (Figure 13.2, 2, right). The color is white, the plates are outlined with black lines, the collar inside is raspberry pink, along the edge there is a border with an angularly linear pattern.[40]

A similar form of neck armor is depicted in another sculpture, namely, a bearded warrior in a helmet.[41] The high collar going to the bell (extension) in its shape is vaguely reminiscent of a collar in the costume of Spanish grandees of the 16th century (Figure 13.2, 5). In any case, the reliefs of Khalchayan give us two examples of neck armor similar in shape. This is perhaps one of the most remarkable signs in the image of heavily armed riders participating in the scenes of Khalchayan's compositions. However, the question arises of the affiliation of these armors, more precisely, which of the two groups of riders did they belong to? The armor that the man holds

is clearly not his: the armor is clearly smaller, and the fact that he holds rather than clothed him speaks in favor of not "removed" armor, as Pugachenkova believes, but that it is a trophy.

Some fragments of the composition with Khalchayan's warriors indicate that one of the scenes depicted not the "triumphal procession" of the soldiers according to Pugachenkova, but a battle scene. This idea has already been expressed earlier, and here I would not want to dwell on this in detail.[42] To put it very briefly, the composition with the galloping riders conveys the scene of the battle of the light cavalry, which I associate with the Yuezhi, and riders in armor (cataphracts) with Saka. The latter, to my opinion, occupied the territory north of the Oxus River (Amu Darya – Gui Shui of Chinese sources) before the arrival of the Yuezhi.[43] The appearance of these Saka with long whiskers is close to the portrait images on early Sogdian coins.[44] On the reverse of the mentioned coins you can see another important element in the image of a standing archer, namely, a funnel-shaped armored collar expanding upwards.[45]

It is possible that the armor from the arsenal of Ai Khanum, which dates from the third quarter of the 2nd century BCE, belonged to the Sakas, who crushed the Greek city during this period. In any case, this event took place earlier than 129 BCE, when Zhang Qian found the Yuezhi settled in the north of the Gui-Shui River (Oxus-Amu Darya).[46]

In addition to the Khalchayan cycle, the image of a knight in a high armored collar can be seen on a small preserved fragment of wall painting from Dalverzintepa (the same Northern Bactria). The fragment preserved a part of the face of a bearded warrior in profile in a helmet (Figure 13.2, 6). The armored collar was partially preserved in the form of vertical plates in the occipital part, fastened with rivets. Noteworthy in this fragment are a helmet with a visor, similar to the Khalchayan samples and a transparent scarf that follows from the neck (armored collar).[47] The fragment was found in the layer of pre-Kushan time (second half of 2nd century BCE) preceding the overhaul of the building.[48]

Comparing all the surviving fragments of Khalchayan, it is possible to reconstruct the type of protective equipment of the riders. This type includes plate armor covering the warrior's torso. The plates were sewn onto the base of hard tissue, or, more likely, leather. It should be noted that the Khalchayan images show rather large plates of a rectangular shape,[49] and white color most likely means metal, probably steel.[50] The arms were a concentric plate, facing each other and connected in such a way as not to constrain movements. In all likelihood, the armor for the legs was made in the same way (a real example from the arsenal of Ai Khanum Figure 13.2, 1, left). The body armor has an extension downward, where its lower edge reaches approximately to the hips. Further noteworthy is the armored collar going to the bell in the upper part. This element of armor is perhaps the most characteristic and most expressive, which facilitates the search for analogies.

Chronologically and territorially the closest analogies to Khalchayan's images are, as already noted, early Sogdian coins with a portrait of a ruler with long whiskers on the obverse to the right and an image of a standing archer in armor with a high armored collar. This type of collar, which has a slight expansion in the upper part, also resembles the collars of knights depicted on the bone plates from the nomadic burials at Orlat dating the late 2nd century BCE[51] (Samarkand region), made using the engraving technique. The protective armament of the riders is noteworthy. The upper part is an armored jacket with rectangular, transverse plates. The bracers of almost all the participants in the scene are shown by ring-shaped plates, as if entering each other, only on the shoulder is the transitional armor shown by a wider and elongated plate. All characters except the first on the left have triangles showing neck armor. Armored jackets reach approximately to the hips (similar to Khalchayan ones).[52] Judging by the frequent transverse lines, the plate armor is also depicted on the legs (see Ai Khanum). However, images from Orlat show a more pronounced expansion in the upper part of the gate, resembling a bell (Figure 13.3, 1).[53]

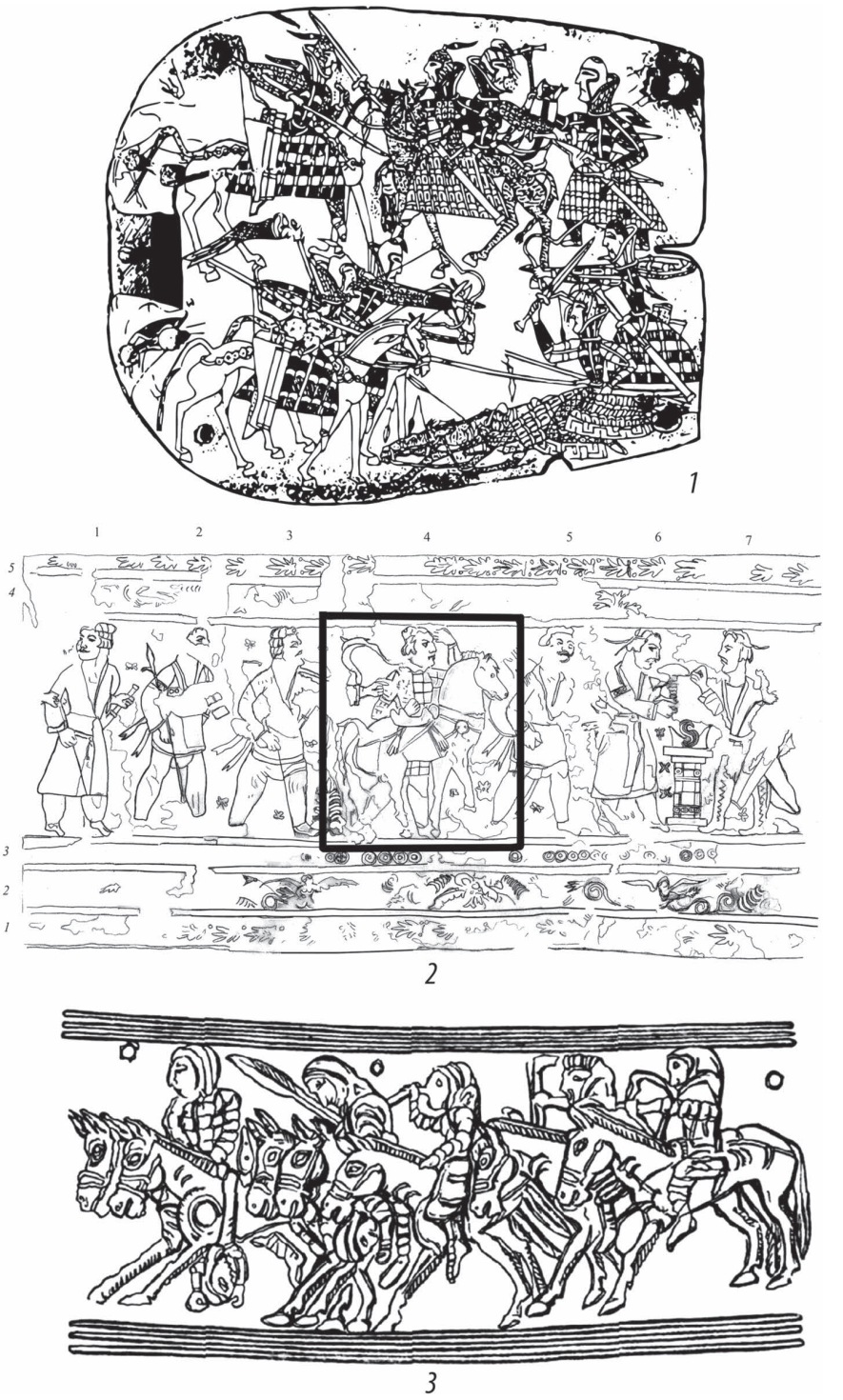

Figure 13.3 1. Scene of battle composition engraved on the bone plate from nomad burial. Orlat, Samarkand Region (Uzbekistan). After G. Pugachenkova 1989; Abdullaev 1995, 20.
2. Fragment of embroidery with composition of sacrifice scene. Noin Ula, Northern Mongolia. After Polosmak 2016. Drawing by author: Abdullaev 2020.
3. Scene of battle on the gold plate. Peter the Great Collection. After Artamonov 1973; Abdullaev 2012.

To the appearance of the Khalchayan knights, (including the form of a helmet and an armored gate), a portrait on the coins of the local ruler Tanlismaidates is close.[54] The localization of these coins falls to the northwest of modern Balkh in Afghanistan (ancient region of Alexandria Areya, modern Herat area).[55] On the obverse is a portrait of the ruler to the right in profile. The neck is closed by a high armored collar (Figure 13.2, 8), which is shown in the form of elongated plates, in the center of which passes a horizontal row of rounded cones (rivets?) – something similar we saw on a fragment of a painting from Dalverzintepa. The shape of the helmet also largely resembles the samples already examined from Khalchayan and Dalverzitepa.

A historical interpretation of these coins was proposed by M. Mitchiner, who sees in the coins of Tanlismaidates minting of Sakaraukes. Chronologically, the local coinage of this ruler is attributed to the reign of king Orod I (about 89–77 BCE), that is, local issue of coins takes place under the suzerainty of the same Orod I.[56] Thus, after analyzing the coins with the image of a knight in armor, we have outlined yet another point on the way towards to India.[57]

Perhaps, one of the most integral images of a knight mounted on a horse, chained in armor, is given by the coins of Saco-Parthian rulers (Figure 13.2, 7) of Vanon, as well as Azes, Aziles, and on certain types of coins of King Vanon the horse is also shown chained in armor, as we saw earlier on fragments from Khalchayan. In any case, the corrugated surface of the horse's body suggests a protective clothing not only of the rider, but also of his horse, that is, that this is an image of cataphract.[58]

Further, if you take Khalchayan as a starting point, the search for knights in protective armor takes us Far East. Relatively recently, in northern Mongolia, quite large pieces of embroidered panels were found in one of the Noin Ula barrows.[59] One of the compositions depicts a scene of sacrifice, in which representatives of the military aristocracy participate. We are interested in the fourth figure (from left to right), dressed in a plate armor, shown by almost square plates (Figure 13.3, 2). The length of this armor reaches the hips. On hands are bracelets from horizontally arranged plates. Another characteristic detail is a waving scarf behind the warrior's head. The horseman is depicted standing in the background behind the figure of a horse. The light color of the armor, in all probability, conveys the color of metal (steel?) plates sewn onto fabric or leather. The iconographic analysis of this composition gives reason to believe that, despite the fact of finding in the Xiongnu burial, the characters depicted on the embroidery belong to the ethnos of the Sako-Yuezhi circle.[60]

In her first monograph on Khalchayan (1966), G.A. Pugachenkova puts forward three main assumptions for the interpretation of the characters: the Khalchayan riders "in armor, covered with armor-clad horses" are Bactrian-Kushan warriors, either Saka or Parthian. In particular, she admits that the Khalchayan palace displays an event related to the crowding out by the Yuezhi of the Sakas of the Amu Darya regions.[61] However, the researcher immediately rejects this idea, since "the displacement of the Sakas dates back to the 2nd century B.C., and the sculpture of the palace conveys real portraits of the Heraios tribesmen of first-century B.C., therefore, the Saka's hypothesis must be rejected".[62] According to Pugachenkova, in the 1st century BC by the time of the construction of the Khalchayan palace, the Yuezhi possessions were adjacent to the strong state of the Indo-Parthian kings, which was located in Punjab, Kandahar and Seistan, which remained a rival of the Kushans until the campaigns of Kadphizes I and II. The assumption that the armored horsemen of the Khalchayan sculpture can transmit Parthian warriors, according to the researcher, contradicts the difference in the shell armor and the shape of the helmets.[63]

The imperfection of Pugachenkova's built reconstruction lies in the fact that she does not allow the idea of military confrontation between two different ethnic groups represented in the

reliefs of Khalchayan: heavily armed riders (Saka) and light cavalry (Yuezhi). The images of the former are so expressive, sometimes reaching the grotesque, that G.A. Pugachenkova often suggests seeing satyrs or buffoons in them. But with all the desire, the images of satyrs cannot in this case correspond to the semantic context of the compositions, the main idea of which is the glorification and heroization of the ancestors and related historical events. This idea, as we see, is rejected by Pugachenkova. Consider this aspect in more detail.

According to Pugachenkova, the main argument against the identification in the compositions of the Sakas and Yuezhi (the events of the 2nd century BCE) is that the main characters of the Khalchayan cycle are associated with the Heraios (the "Clan of Heraios"). Building her reconstruction on an associative basis: the portrait of Heraios on the coins and the Heraios' clan of Khalchayan, the researcher comes to the conclusion that the reliefs of the palace are connected with the activities of this king and were created precisely during his reign (1st century BCE). This becomes a kind of fix idea, which forced G.A. Pugachenkova to abandon several accurate conclusions. The researcher raises the existing similarity of an anthropological type to the rank of generic, almost family similarity, while avoiding a chronological gap. However, the discoveries of recent years have shown that images similar to the image of Heraios may not necessarily be associated with the Heraios' clan and date back to its time. We are talking about the aforementioned embroidered images on the fabrics.[64]

Images embroidered with colored woolen threads on curtains from the mound 31 Noin Ula demonstrate a scene of sacrifice, in which the military nobility takes part. For all the portraits of the characters, they all have something in common that resembles the image of Heraios on coins. You can call it an associative series. The similarity is expressed not only in facial features but also in the form of a haircut, suit, and so on. All of them, including a warrior in armor, resemble knights of Khalchayan reliefs.[65] One gets the impression that these images in their appearance convey some general ethnic type, which is reflected in some images of Khalchayan. The similarity extends even to the breed of horses and horse equipment.

Knights in Historical Battles and the Cult of Ancestors

Returning to the relief compositions of Khalchayan, we are faced with another problem. What period could the events in the scenes reflect and the time of creation of the work of art itself? In one of my articles I proposed to consider a composition involving the battle of two groups of horsemen (Sakas-Yuezhi) as an illustration of the events of an earlier period (third quarter of the 2nd century BCE). Such an assumption was based on the fact that the Sakas of Khalchayan reliefs are similar in appearance to the images on early Sogdian coins. This is expressed in the form of a hairstyle, face structure, and so on. In addition, a warrior in armor on the reverse of coins with an armored collar going to the bell is also iconographically close to the Khalchayan characters. These coins date from the middle to the third quarter of the 2nd century BCE.[66]

However, the idea of an earlier time of historical events reflected in Khalchayan than the time of the creation of the reliefs of the palace itself was criticized by M. Olbrycht. The opponent believes that "it is hard to accept this theory on account of the long interval between the events commemorated and the making of the reliefs".[67] Really it is a sufficiently sophisticated question to relate certain battle composition with a real historical event.[68] In the case of Khalchayan figurative complex I could not ignore such a social phenomenon as historical memory of an ethnos. In numerous examples of antiquity I will confine myself to give just a few well-known examples.[69]

One come from western sources, namely mosaic composition from Pompeii representing a battle scene between Alexander the Great and Darius III Codomanus at Issus in 333 BCE.

Mosaic dates from about 100 or 120–100 BCE. It is believed that the mosaic recreates an earlier work of the Hellenistic era. The authorship of the prototype is attributed to Appeles, the artist or mosaic artist of Philoxenus from Eretria.[70] Such an analogy for the Khalchayan reliefs could seem at first glance as something incomparable. In fact, concerning Greek art we have strongly established tradition of continuity in which the great achievements of the artistic culture of Greece continue to live not only in descriptions of ancient writers, but in numerous replicas of different genres of art. How about nomads?

As for the nomads, the question of the time of creation of this or other a work of a narrative nature is somewhat different. The sculptors who created the Khalchayan cycle, of course, as the Pugachenkova herself notes, were familiar with the Hellenistic tradition of sculpture.[71] However, creating a work of historical meaning they proceeded from the knowledge of the customer and did not know all the nuances of the past time in the interval of about the end of the 2nd century BCE and beginning of the 1st century CE. But notable events related with their ancestors could hardly have been erased in the memory of the masters (customers). It should be noted that in the absence of a written tradition, all this was compensated by the oral tradition. Just like knowledge of the laws by heart.[72]

The cult of ancestors was an important part of the nomadic religious culture. A convincing confirmation of this can be an inscription from Rabatak (Afghanistan). According to the inscription, Kanishka the Great[73] issues a decree on the creation of images of his royal ancestors: Kudzula Kadphizes – great-grandfather, Vima Taktu – grandfather, Vima Kadphizes – father, and Kanishka himself.[74]

Touching upon such a specific phenomenon as historical memory, I want to give one historical episode related to two powerful tribes that lived in antiquity on the western and northern borders of China. On the one hand, this is Xiongnu, and on the other hand, Yuezhi. According to Sima Qian (*Shiji* Chap. 123) after the great defeat by the Xiongnu in 176 BC Laoshang Shanyu made a wine cup from the skull of Yuezhi's leader (Kidolu).[75] More than a hundred years later, the Han Courtyard sends warlord Han Chan and dignitary Zhang Meng on a mission to the Huhanye-Shanyu[76] headquarters. In support of the peace treaty, the oath wine was drunk from the bowl of the "head skull of the Yuezhi's Sovereign".[77] It can be said that the people of Xiongnu for over a hundred years have kept in mind the event associated with their victory over the Yuezhi.

Earlier, I mentioned a large-scale mosaic from Pompeii, striking the imagination with its expression and drama. The power of perception is not inferior to this monumental work in a miniature composition executed on a bone plate from the nomadic burial Orlat near Samarkand.[78] The battle scene of the knights – heavily armed riders protected by plate armor is also full of heat. The appearance of the participants in the battle is directly related to the knights, which are discussed in this article. Here, many elements of armor find analogies in the Khalchayan reliefs, including a high collar in shape of a bell. To a certain extent, these two works are comparable with the only difference: one is a multi-meter mosaic composition (313 × 582 cm), and the other is made using an engraving technique on a surface of 13.5 × 11 cm.

Another scene with the participation of riders in armor is captured on a small gold plate, originating from the Siberian collection of Peter the Great. Judging by the transverse bends, the plate could once serve as a decoration for a standard shaft or banner. According to the style of performance, it gravitates to a nomadic culture. The plate depicts a scene of persecution, where one group of riders catches up with another.[79] On some riders, an armored collar is clearly visible – a likeness of the Khalchayans (Figure 13.3, 3).

Cataphracts on the Borders of Great Empires

(Parthians and Roman Empire)

An analysis of the written sources gives us a picture of how relations are built between nomadic tribes and the settled population of cities and agricultural oases. Often they are a series of military clashes, robberies, seizures and hijackings of the population. Often these short-term raids turn into large-scale military clashes, in which state armies are involved, including both light cavalry and heavily armed riders. Moreover, as ancient sources draw, a surprisingly similar situation is observed in various parts of the Eurasian continent. In his Geography, Strabo narrates about the constant raids of nomads, describing a tribe of Aparnes who made endless raids on Hyrcania, Neseya, and the Parthian valleys (XI, VIII, 3). The raids alternated with peace treaties, which were violated and a new war began.

To characterize this phenomenon, I would like to give two examples. We will talk about the Parthians, who successfully resisted in the war of the Roman army. These events received a rather vivid reflection in Plutarch's Parallel Lives, in particular, in the description of Mark Licinius Crassus.[80] The second example is the relationship of the Han Empire with the nomadic empire of the Xiongnu, described in the Chinese chronicles *Shiji*, *Qian Han Shu*, *Hou Han Shu*. Without affecting all aspects of history and culture, I confine myself to only a few important reports regarding riders dressed in armor (cataphracts). Nevertheless, I emphasize one important detail: the lifestyle and military organization of Central Asian nomads had much in common and easily merged into a confederation in the event of a large external threat.

The mighty Parthian army initially had the features of a nomadic army[81] and was built on cavalry, both light and heavy. As sources show, regular combat troops during the heyday of the Parthian empire continue to use tactics of sudden attacks, deceptive retreats, which is typical for many, as we will see later, nomadic tribes.

Regarding protective weapons, Plutarch notes that, on the orders of the military commander Suren, the Parthians hid their armor from brilliant Margianian steel before the battle under a cloak and skin (Crassus, 23) – a kind of psychological shock. The report on the battle of the Gallic soldiers of Publius (Crassus' son – KA), says that the opponents (Parthians) were dressed "in a shell of raw-mint leather or iron". The Gauls were beaten lightly, shortly with a javelin and they themselves received spears in weakly protected, exposed bodies (Plutarch Crassus, 25). It can be assumed that at the time of the Battle of Carrae, 53 BCE. the Parthians coexisted two types of protective armor made of leather and metal. The metal armor probably consisted of plates sewn onto leather or dense fabric.

The story of the soldiers escaping from the siege of the Parthians, despite the exaggeration noted by Plutarch, speaks of the elusiveness of the Parthian horsemen, from whose arrows it is impossible to hide, and the swiftness of their attacks. "Armament of armored riders of such a quality that their spears pierce everything and the shells withstand any blow" (Plutarch Crassus, 22).

The source says that the Parthians built their armored equestrians against the Romans, while the rest of the cavalry (light?) Was not built in battle order, but moved freely and swiftly around the square of the Romans (Crassus, 25).

According to Plutarch, after a futile attempt to break through the front ranks and destroy the closed formation, the Parthians pretend to retreat in confusion, while surrounding the square with a ring (Crassus, 25). One of the noteworthy tactics of the Parthians in the conduct of the battle, which, however, characteristic of many nomads, is running away, not to stop shelling the enemy from the bow, turning to shoot at full gallop. In this, as Plutarch notes, they are

the most skilled after the Scythians. Retreat was considered a way of defense and did not mean shame. This psychological moment, as we will see later, was also characteristic of the Xiongnu.

Xiongnu and the Han Empire

(On the northwestern borders of China)

The theme of armored knights is adequately covered in the history of the relationship between the nomadic Xiongnu and the Han Dynasty, especially the Western Han. It can be said that the aforementioned Chinese chronicles constitute its source-based basis. The northwestern and northern territories of the Han state were under constant threat of invasion from the Xiongnu tribes those who intensified toward the end of the 3rd century to beginning of the 2nd century BCE. However, the military confrontation, paradoxically, was a stimulating factor in the exchange of military achievements of both parties. At the same time, cultural influence was not limited only to the military sphere.

The fact of cultural interaction is indirectly reflected in the story of the eunuch Zhong-xing Yue, forcibly sent by the court (Emperor Xiao Wen Huang-di) to accompany the princess for a marriage with Laoshang-Jizhou-Shanyu, who had just entered the throne. Yue, on arrival, immediately turned to the side of Shanyu, and Shanyu loved him. A kind of "Spartan" way of life of nomads greatly impressed Yue with his simplicity and freedom, and he tried to instill Shanyu that this is their strength. Yue advised in every way to neglect Chinese products and the way of life of heaven.[82] However, the exchange, contrary to all, took place. Of course, it is impossible to take into account all the nuances in the interaction and interpenetration of military equipment and tactics and strategies of military operations. We can limit ourselves to just a few examples.

So, for example, the captured Chinese general Li Ling taught the Xiongnu soldiers how to build the Chinese army with its distinctive and most characteristic features. Li Ling was declared a traitor by the Emperor, and all family members of Li Ling were put to death on his orders. No less spectacular, unexpected and breaking the stereotypes of building troops, is that tactics of nomadic empire warriors, that of using false retreat and dispersal of luring the enemy, sowed panic even among experienced combatant soldiers of both Rome and Han China. There is reason to believe that compared with previous period of the Zhou Dynasty it is in the confrontation with the nomadic peoples, specifically with the Xiongnu, that the Han China carries out fundamental changes including tactic and strategy.

Since that time, special attention has been paid to the formation and development of equestrian troops including heavy armored cavalry. Naturally, this required large resources at the Chinese court. It was necessary to increase the number of riding horses. Probably, the organization of military expeditions to the kingdom of Dawan for the famous Dawan argamaks – "heavenly horses", the cherished dream of the Chinese military nobility, is associated with this need.[83]

Thus, new types of troops appeared. If earlier the main striking force was slow-moving, heavy chariots on the move, now they were replaced by infantry, and in the northern possessions located next to the nomads, cavalry was instituted on the model of the latter.

The appearance of cavalry in China is connected with the name of Wuling (325–298 BCE), the ruler of the Zhao's tenure, who, following a simple borrowing path, "changing existing customs, began to wear Xiongnu's clothes and learn to ride and bow" (*Shiji* Chap. 110, l. 5b).[84]

Numerous treatises, gathered together in the Han era, show the rich experience accumulated during countless clashes with both the external enemy in the person of the same nomads and

internecine wars. From the point of view of military art sources, for example, in the era of Warring States (475–221 BCE), a much higher level of military development than the Xiongnu.[85]

In the Chinese chronicles of the Xiongnu, they say that "from early childhood they are accustomed to riding and archery; and teenagers shoot foxes and hares, and eat them".

> Those who can wield a bow all enter the plate cavalry. During the free time, as usual following their cattle, they engage in field hunting, and soak themselves with it; and to the extreme, everyone engages in military exercises to raid. These are the essence of their innate properties. Their long weapon is a bow with arrows, a short weapon is a sword and spear. With luck, they go forward; when they fail, they retreat, and they do not shame flight.

"They skillfully lure the enemy to embrace him: why, having seen the enemy, they rush after greed like a flock of birds; and when they are broken, they are scattered like tiles, scattered like clouds" (*Shiji* Chap. 110).

This figurative comparison surprisingly coincides with the aforementioned Parthian tactics against the Roman army of Crassus. An episode of the campaign of the Han army against the Huns led by the founder of the Gao Di of the Han Dynasty (201 BCE) is also interesting. Modun Shanyu leader of the Xiongnu pretended to be defeated and exposed the weakest units, hiding selected troops. Rushing to the enemy's weak army, Gao Di was ambushed on Baideng Mountain. Thanks to cunning diplomacy, Gaodi managed to avoid complete defeat. It is easy to compare the tactics of nomads, and as sources show, this tactic is similar for different tribes of nomads.

At the time, the work of B. Laufer was devoted to the study of armored defensive weapons based on an analysis of Chinese sources.[86] In the archaic period (Zhou period – ca. 1122–255 BCE) protective armor, such as cuirass (*kia*), or helmets (*chou*), were made exclusively from the skin of an animal.[87] Metal armor (*k'ai*) for cuirass and helmets (*tou mou*) began to spread gradually from the time of Qin and Han. At the court of the Zhou dynasty, a special service of gunsmiths was established; they were called Han Zhen, "the people who wrap the body with a protective device".[88] An example of Pre-Han armored armor probably could be seen from the terracotta army of Emperor Qin Shi Huang, excavated by Chinese archaeologists in Xi'an.[89]

It would not be a big mistake to suppose that the reaction to the defensive armor of the original opponents was the invention of a powerful shock gun (crossbow), which was a significant achievement in Chinese military equipment.[90] Indisputable, in our opinion, is the fact that a cataphract is formed in the midst of professional armies, and the representatives of different ethnic communities could be the implementers of the idea itself. Here it should be noted expressive and eloquent material from the regions of Central Asia, which speaks of the high level of military affairs of this region in the ancient era. The close contacts of the Greco-Bactrian state with the surrounding cultural areas, often of a nomadic nature, before its final collapse under the onslaught of the same nomadic tribes, are evidenced by a comparative analysis of the material of Ai Khanum with the Khalchayan complex.

Conclusion

Concluding this brief overview of sources of various nature, we can draw up an approximate diagram of the movement of cataphracts from Sogdia to the Indian subcontinent. The chronological frames are first centuries BCE to first centuries CE and the starting point for us is the territory north of Oxus-Amu Darya (Northern Bactria): Khalchayan, then the Sogdian

complex, which includes Orlat mounds with a beautifully executed cycle of engraved images of knights in defensive armor. The Sogdian region also includes a number of other monuments illustrating the image of professional warriors – these are early Sogdian coins. A series of coins depicting a portrait of a ruler on the obverse and an archer on the reverse is also close to images of Orlat compositions. It should be emphasized that the legend is somewhat distorted, but, nevertheless, readable in Greek letters convey the legend of the coins of the Seleucid king Antiochus. The anthropological type in the portrait is largely reminiscent of the characters of the Khalchayan cycle, namely the Caucasoid type that is characteristic of warriors in armor. It will not be superfluous to recall such a detail as long hanging whiskers, which are striking in early Sogdian coins. On the back, in the image of the archer, we see a high armored collar, both characteristic of the images on the bone plates, and for the characters of the Khalchayan sculpture.

Finally, the shape of the bow on Sogdian coins in its asymmetric configuration, clearly representing a complex version of the ranged weapon, resembles the bows of knights of the Orlat compositions. Thus, combining Sogdia with Northern Bactria, namely with Khalchayan, we can outline the movement of cataphracts. An analysis of the coins of the ruler Tanlismaidates, which are localized on the left bank of the Amu Darya-Oxus territory, allows us to connect it with the same circle of military aristocracy, which are reflected in the monuments of Sogdia (Orlat, Sogdian coins) and Northern Bactria (Khalchayan). The chronologically reliable date is given by the coins of Tanlismaidates, whose reign dates back to the first half of the 1st century BCE, that is, the Orlat complex, most likely, precedes this period and most likely dates to the end of the 2nd century BCE.

As for the ethnicity of the cataphracts on the territory of Bactria and Sogdia, the most likely seems to be their identification with the Saka tribe of Sakaravles (Sakaraukes). Strabo (XI, VIII, 2) reports about them that they "moved from the region on the other side of Iaksart" (Yaksart-Syr Darya – K.A.), and were one of those tribes that defeated the Greco-Bactrian kingdom. If you follow these chronological calculations, then the Sakaraukes historically precede the Yuezhi and are, in a sense, the "followers" and "heirs" of the Greco-Bactrian cultural complex.

Notes

1 The aristocratic (noble) origin of these warriors can be justified by the fact that a set of military equipment, including a war horse and high-tech armored armor for that time, was available only to wealthy families for the rider and the horse. It is hard to say exactly what the service charge was in that capacity. From sources it is known that the Parthian kings paid the agreed amount. So, Fraat II was forced to pay the Sakas for a long transition, despite the fact that they were late and could not take part in the battle (Abdullaev 1995b, 180).

2 The use of this term for the army of Bactria and Sogdia, and the Central Asian region is conditional, since the sources of direct indications on this subject are not available. Kataphraktoy in the sense of "shackled in armor" was first applied to ships protected by armor. Subsequently, this name was used in the description of warriors dressed in protective armor. Armored cavalry was first mentioned at the turn of the 3rd and 2nd centuries BCE (Olbrycht 2010, 66–85; Nikonorov 1998, 131–138). See also generalizing work of Nikonorov (1997).

3 For example, one of the most outstanding monuments of Central Asia of the antiquity – Khalchayan is a valuable source on the history of weapons and, in particular, the protective armor of riders. However, in works dedicated to this monument, when it comes to defensive weapons (Pugachenkova 1960, 1971, 1987b), the same armor is called in different terms: shell, plate armor, etc. (see, for example, Pugachenkova 1960).

4 A particularly valuable source in this regard is the biography of Crassus (Plut. Vitae parallelae. Marcus Licinius Crassus).

5 At the beginning of the Han dynasty, when dignitaries Zhang Liang and Han Xin made an attempt to systematize the military treatises available at that time, they counted 182 authors of works on this subject (Ban Gu, History of the Han Dynasty, Chap. 30), see also Taskin 1968, 17).
6 Tarn 1930, 73; Rostovzeff 1933, 217. See also Bachhofer 1941.
7 This was justified by archaeological finds of fragments of the armor themselves and monuments of fine art (Tolstov 1948; Tolstov 1962).
8 Schmidt, 1957, pl. 77, *8, 12–16*.
9 The Chirik-rabat settlement is located 300 km southwest of the city of Kyzyl Orda (Kazakhstan) on the left bank of the Zhanadarya – an ancient tributary of the Syr Darya. The archaeological complex, including funerary structures, stand out in Chirikrabat culture, which includes other archaeological sites, such as Babishmulla. The first excavations started by S.P. Tolstov (1962). In general, this culture of the Aral Sea *Saka*, which Tolstov connects with the *apasyakoy* of written sources (Tolstov 1958, 236).
10 Sufa (Arabic), a term often used in Central Asian archeology, sufa, in the architecture of Central Asia a clay ledge or a clay or stone bench protruding along the entire length of the wall.
11 Tolstov 1962, 148.
12 The plates were superimposed on each other, and the open part was a third of the width of the plate, so the protective armor module consisted of three plates.
13 According to Tolstov, narrow plates protected the sides of the warrior, which also gave the armor greater mobility. This part of the armor of 14 plates with a length of 40 cm, fastened with a wide iron belt – a leg gait was found in relatively good condition (Tolstov 1962, 148).
14 "Chirikrabat culture" – the name was proposed after the study of S.P. Tolstov (1962), who distinguished this culture as the Zhanydarya variant of the Kokchatengiz culture (Vajnberg & Levina 1992, 47, note 4).
15 Tolstov 1962, 150.
16 In his book Ancient Khorezm S.P. Tolstov devotes to this topic the chapter "Cavalry of Kanguy" (1948, 224–227).
17 Mambetullaev 1977, 278–281.
18 Pilipko & Koshelenko 1985, 220, pl. LXXVIII, A.
19 Bernard 1978, 452–459; Bernard et al. 1980, 51–63.
20 Bernard 1978, 452; Bernard et al. 1980, 1–103.
21 Bernard 1978, 456.
22 The site of Kampyrtepa is located 30 km northwest of Termez on the dry bank of the Oxus-Amu Darya (currently the river bed is shifted southward. Since the 1980s, archaeological excavations have been conducted under the direction of E.V. Rtveladze (1984). The lower layers are dated on the basis of numismatic data by the time of the Seleucids. The upper layers of the ancient settlement based on coin finds date back to the 2nd century AD.
23 Nikonorov & Savchuk 1992, 49–54.
24 These terracottas were published repeatedly. Two figures are noteworthy, which are images of a heavily armed infantryman such as the Greek hoplite with a large shield and in the anatomical cuirass – thorax. The identification of these images as a warrior did not cause any disagreement, although disputes arose over individual details of iconography, see Abdullaev 2012, 77–78, note 10; Pugachenkova 1989c, 55–57.
25 The figurine was found in room 5 on the Citadel in a complex dating from the Saco-Yuezhi period (end of the 2nd century BC) to the 1st century AD (Nikonorov & Savchuk 1992, 50, fig. 3).
26 Abdullaev 1998, 85–87.
27 G.A. Pugachenkova sees in this image the mythical idolized king (1989b, 21). In a publication by Nikonorov & Savchuk (1992, 50), this terracotta image is interpreted as "a chief priest or, more likely, a certain Saka or Yüechi sovereign, who ruled over this part of Northern Bactria after the fall of the Graeco-Bactrian State".
28 Nevertheless, some terracotta images, including depiction on the terracotta plaque from Kampyrtepa, are associated with images of foot warriors (hoplites), also protected by armor such as an anatomical cuirass – thorax (Pugachenkova 1989 *, 55–57, Nikonorov & Savchuk 1992, Figs. 2–5; Abdullaev 1995, Fig. 2.
29 However, completely excluding images of foot warrior kings is also not entirely true. Often such images are symbolic, that is, represent a deity or a cult image (Alexander-Ares, cult images of Kushan kings see: Abdullaev 2016, 579–596; Abdullaev 2017, 155–175).

30 Abdullaev 2001, 197–214.
31 Pugachenkova 1966; 1971; 1987, 253–267.
32 Pugachenkova 1966, 149.
33 Pugachenkova 1971, 60.
34 Fragment dimensions: 16 × 21 × 4.5 cm.
35 Fragment dimensions: 35 × 25 × 3 – 3.5 cm. G.A. Pugachenkova calls this type of armor "armored cuirass." It should be noted that the researcher in his works (1961, 1971) uses different terms as synonyms, without making any differences in the design of the armor.
36 Pugachenkova 1971, 62.
37 Dimensions: 65 × 60 × 20 cm.
38 A slightly different design of the horse's chest armor is given by a find from Ai Khanum (see earlier).
39 Pugachenkova 1971, 66.
40 Pugachenkova 1971, 57.
41 Pugachenkova 1971, 67.
42 Bernard 1987, 758–768; Bernard & Abdullaev 1997, 68–86.
43 Abdullaev 2005, 27; Abdullaev 2007, 75.
44 Abdullaev 1995a, 156–157, figs. 6, 7, 8.
45 Iconographically these images are associated with portraits of early: Sogdiaian coins. For example, treating of the face with peculiar hairstyle including long whiskers. This type of coins are dated by Mitchener from 130 BC to 1st century BC (Mitchiner 1976, Vol. 5, 436, type 669). In this respect it is interesting another coin cited by Zeymal (1983, pl. 31 no. 8) that is dated to 2–1 BC. See also Abdullaev 2007, 92. About archer on: Sogdiaian coins: Abdullaev 1995a, Fig. 8, 4–5.
46 Abdullaev 2001, 199–201.
47 The first authors who published these fragments mistakenly interpreted this detail as an image of a sword (Belyaeva 1978, 38; Pugachenkova 1978, 63).
48 Belyaeva 1978, 33–47.
49 Pugachenkova describes the type of armor as follows (1966, 210): a helmet tightly covering his head with a small visor; lamellar of large rectangular, lapping plates overlapping one another (cuirass), reminiscent of its caftan, fitting to the waist, extended at the knees, with tight sleeves of horizontally running plates. And the helmet and armor, obviously, were made of leather and reinforced with metal plates. " However, one of the above fragments indicates that the plates are painted a buffy yellow color, which, according to Pugachenkova, can mean copper or skin (1971, 66). Plutarch, describing the armor of Parthian warriors, notes the existence of both metal and leather plates (Plutarch. Crassus 25).
50 In this connection, the description of the Parthian army at Carrah (May 53 BC) in Plutarch (Marcus Licinius Crassus, 24) is interesting. 'While the Romans were in consternation at this din, suddenly their enemies dropped the coverings of their armour, and were seen to be themselves blazing in helmets and breastplates, their Margianian steel glittering keen and bright, and their horses clad in plates of bronze and steel'.
51 Pugachenkova 1987a, 56–65; Pugachenkova 1989a, 122–154; Abdullaev 1995a, 151–161, figs. 9–10. However, there is other dating 1–2 AD proposed by Ilyasov & Rusanov 1997/1998, 107–159.
52 Only in the third figure from left to right (top row) does the armored jacket reach the lower leg (see Fig. 3: 1).
53 The dating of the burials of Orlat has a very wide scope from the second half of the 2nd century BCE up to 3rd to 4th centuries CE. Without going into long debates about the time of burials, I will say that, judging by the archaeological complex, I attribute this monument to the second half of the 2nd century BCE.
54 The name, conveyed in Greek letters, is clearly an Iranian theophore compound. The second part of the name ΜΑΙΔΑΤΗΣ (Maidates) variant ΜΙΑΔΑΤΗΣ (Miadates) probably means "given by (the god) Mach". We make a reservation that this definition is preliminary and requires a special philological analysis. See for that (Weber 2005, 247–250).
55 Mitchiner 1975, type 607. See Map: Fig. 1.
56 Mitchiner 1976, 407.
57 On the Sakas in India see: Bachhofer 1941, 223–250.
58 Mitchiner 1975, types 681, 744–751, 769.
59 Polosmak & Bogdanov 2016, 142–143.
60 Abdullaev 2020 (in press).

61 Pugachenkova 1966, 212.
62 Pugachenkova 1966, 212.
63 Pugachenkova 1966, 212.
64 Polosmak & Bogdanov 2016, 142–155.
65 Abdullaev 2020, 197–214.
66 We are talking about the earliest silver coins with a distorted but readable Greek legend ΒΑΣΛΕΩΣ ANTIOXOY (imitation to the Seleucid coinage). They are localized mainly in Central Sogdia (Zeymal 1983, 269, Pl. XXII, 02–03).
67 Olbrycht 2015, 349.
68 Sometimes repeating battle scene take on some epic character. However, this does not mean at all that this event did not occur. In the absence of writing, the oral tradition, which can be passed on from generation to generation, is of great importance. Ancient history abounds with examples. And there is no need to list them.
69 I give more examples in Abdullaev 2020.
70 Cohen 1997.
71 Pugachenkova 1966a, 178–180.
72 Sima Qian. Shiji 110. Narration of the Huns. They do not have written documents, and [all] orders are made orally.
73 Let me remind you that most scholars now accept the initial date of the reign of Kanishka for AD 127 (Falk 2001, 121–136).
74 Sims-Williams and Cribb 1995/1996, 79–80.
75 Modu Shanyu defeated Yuezhi, and Laoshang-Shanyu killed the leader of Yuezhi and made a drinking cup out of his skull" [Bichurin 1950, 183]. History of Former Han dynasty Chap. 95.
76 Huhanye Shanyu, Hūhánxié (Chinese 呼韓邪. Years of rule 58–31 BCE).
77 Laoshang (Chinese: 老上) 174–161 BC Shanyu of Xiongnu Empire.
78 Pugachenkova 1989a, 122–154, figs.70, 71; Pugachenkova 1987a, 56–65, figure on the pages 57, 59; Abdullaev 1995, 151–161; Ilyasov & Rusanov 107–159.
79 According to the very brief description of Rudenko "on this stamped plate in relief there are five horsemen armed with bows, swords and a combat coin. A horse runs between the two front riders, on the saddle of which lies the corpse of a man with a head and legs hanging dow" (Rudenko 1960, 298, Fig. 153).
80 Plutarchi 1881; Plutarchi 1916/1932.
81 Olbrycht 2015, 333–390.
82 Shiji Chap. 110 (according to translation of Bichurin 1950): Yue told Shanuy: the number of Huns cannot be compared with the population of one Chinese region, but they (Huns – KA) are strong because they have excellent clothing and food, and are not dependent on China in this. Now, Shanuy, you change customs and love Chinese things. If China uses only 1/10 of its things, then up to a single Hun will be on the side of the House of Han. Having received silk and paper fabrics from China, tear clothes from them, running along prickly plants, and thereby show that such robes with durability will not reach wool and leather clothes. Having received edibles from China, do not consume it, and thus show that you prefer cheese and milk to them.
83 It is interesting in this regard fragment from *Shiji* Chap. 123 (Discription of Dawan). Having obtained the Wusun horses, the [Han people] fell in love with them and began to call them "heavenly horses". And when they received the "blood-sweating" horses from Dawan, even stronger, they changed the name of the Wusun horses, calling them the "western limit", and they began to call the Dawan ones "heavenly horses".
84 307 BCE is considered as time when Wuling Wang organized a light cavalry. The military reform allowed him to push the Xiongnu from Ordos to the north, to protect against which, he built a wall extending in the east to the possession of Yan. At the end of the Zhan-guo period, taking advantage of the fierce struggle between the kingdoms in China, they once again occupied the lands that once belonged to them, but they were soon expelled by Meng Tian. After the fall of the Qin Dynasty, the Shanyu Maodun regained the Xiongnu lands chosen by Meng Tian and began to raid China from here (Taskin 1968, 127, note 76).
85 Taskin 1968, 17, see also Bodde 2008, 23.
86 Laufer 1914.
87 It should be noted that leather armor also differed among themselves. Often, rhino skin was used for greater strength. For example, in the form of plates or small leather flakes (Laufer 1914, 274).

88 Cuirasses (*kia*) were made from the skin of rhinos. The skins of a bicorn rhino (*si*), consisting of seven layers and a unicorn (*sam*), consisting of six layers, were combined. For the cuirass, a mold was made corresponding to which the skin was trimmed and trimmed according to the parts of the cuirass (Laufer 1914, 274).

89 Nickel 2013, 413–447.

90 In the field of military equipment, China also excelled its rivals. New weapons have appeared, such as a crossbow and halberd. The crossbow consisted of a bow attached to the butt with a trigger and a stirrup to support the foot while pulling the bowstring (Bodde 2008, 23).

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PART III

Silk Trade and Caravan Cities

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14

RISE AND DEMISE OF JINGJUE KINGDOM, A CASE OF TARIM OASIS POLITICS

Ye Junshi

The Silk Road started from Chang'an (Western Han Dynasty) and Luoyang (Eastern Han Dynasty) bifurcated into two routes along the north and south edges of the Taklimakan Desert after passing through the Hexi Corridor, Yang Gate, Yumen Gate into the Loulan Kingdom around the Lop-nor. Walking along the north rim of the desert, go through the Quli, Qiuci, Gumo to Shule, and then crossing the Cong Ling Ridges (the Pamirs), one could have reached Dayuan (in Ferghana) and Kangju (in Sogdiana). While walking along the south edge, one could have reached Da Yuezhi (the Kushan) and An Xi (the Parthian), via Qiemo, Jingjue, Yutian, Shache and Pamirs. The South Silk Road was the main traffic road for a long time in the Han Dynasties, as it was deep in desert and far away from the threat of raids by nomadic tribes. The Oasis Kingdoms along the South Silk Road, nourished by the snow water of Kunlun Mountain, has been serving as transportation posts and supply stations, maintaining the smoothness of the Silk Road for centuries. These kingdoms were like pearls in the desert, linking the Silk Roads and carrying the important mission of transmitting East-West civilization.

The Jingjue Kingdom was one of the thirty-six kingdoms in the Western Regions during the Western Han Dynasty and also a major stop on the South Silk Road. However, due to its remote location, only a few historical records mention it, and after the Eastern Han Dynasty, it completely disappeared in the historical records. It wasn't until 1901, when Marc Aurel Stein, led by a local guide, discovered the Niya Site in the vast Taklimakan Desert, that the lost kingdom was rediscovered. Over the next hundred years, generations of archaeologists have unearthed thousands of documents written in Kharosthi, Chinese, and other languages from the Niya Site, as well as countless artifacts of all kinds. These precious cultural relics provide clues to uncover the mystery of the Jingjue Kingdom. From these materials, we can learn how prosperous the Jingjue kingdom once was, and why it eventually declined. Its rise and demise were closely related to the fortunes of the Silk Road.

The Lost Ancient Kingdom

The first record of Jingjue, in Chinese classics, is in *The History of the Former Han Dynasty*. This book written by Ban Gu covers the Western, also known as the Former Han Dynasty from the first emperor of the Han Dynasty in 206 BCE to the fall of Wang Mang in 23 CE. And

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there is a chapter in the book called the "Biography of the Western Regions", which records the history of the oasis kingdoms, including Jingjue. According to the record, the seat of the king's government was the town of Jingjue, and it was distant by 8820 li (about 3667 km) from Ch'ang-an. There were 480 households, 3350 individuals with 500 persons able to bear arm. The officials included a commandant of Jingjue, the leaders of the left and the right and an interpreter-in-chief.[1] It also mentioned that the terrain of Jingjue was narrow and long and 2723 li (probably 1132 km) away from the Protectorate of the Western Regions in the north, 460 li (probably 191 km) away from Yumi in the west. If you walk south, you can reach Ronglu in four days.[2] These figures are certainly not reliable but these short eighty-one Chinese characters are the all records of the Jingjue Kingdom that we can find in the classical history records. From these records, we could not find out when it was founded, what its political system was, how the residents live, and how its relationship with neighboring kingdoms was; of course, the most important was the relationship with the Xiongnu and the Central Plains. To the court historians at that time, the information in remote and small kingdoms was not worth much ink. Only the archaeologists more than a thousand years later can provide new information.

Although there are very few official records of Jingjue Kingdom, we can get a general understanding of its situation and development through other records about the Western Regions. At the beginning of the 2nd century BCE, the Xiongnu, a nomadic tribe living on the Mongolian grassland, became powerful. Under the leadership of Modu Chanyu, the Xiongnu cavalry annexed the surrounding areas and greatly increased their strength. To their west, the Yuezhi who had been grazing in the Hexi Corridor was defeated and driven from their homeland and fled westward to the Yili River valley in the western Tianshan Mountains. A few clans even moved as far west as Fergana in Present-day Uzbekistan. In the pursuit of Yuezhi, Xiongnu also entered the Western Regions and conquered the local oasis kingdoms. At this time, the Western Han Dynasty in the Central Plains had just finished the civil war and had no power to stop the Xiongnu. In 176 BCE, Modu Chanyu wrote a letter to the Chinese emperor, in which he boasted that he had conquered Loulan, Yuezhi, Wusun, Hujie, and twenty-six other nearby kingdoms.[3] This letter officially announced that most of the land in the Western Regions, including the oasis kingdoms around the Tarim Basin, was now under the control of the Xiongnu.

It is further recorded in *The History of the Former Han Dynasty* that all the kingdoms in the Western Regions at that time were enslaved by the Xiongnu. Prince Rizhu of Xiongnu set up Tongpu Duwei to govern the Western Regions, who lived in Yanqi, Weixu, Yuli, to collect the taxes and levies.[4] Jingjue was no exception. However, as a nomadic tribe, the Xiongnu did not destroy these settlements in the Western Regions, but kept the original kings or chiefs as their vassals. This implies that after the Xiongnu took control of the Western Regions at the beginning of the 2nd century BCE, the Jingjue Kingdom has been under the Xiongnu suzerainty, paid taxes and levies to them, but their internal affairs remained independent.

During the reign of Emperor Wudi (141 BCE–87 BCE), the Han court began to send military forces against the Xiongnu. The main battleground was in the north boarders of China. In 139 BCE and 119 BCE, Emperor Wudi sent Zhang Qian to the Western Regions twice. The first time he hoped to make an alliance with Yuezhi against the Xiongnu and second he hoped to make an alliance with the Wusun. Both ended in failure. Although by the time Emperor Wudi died, the Xiongnu had been driven off the foothills of the Great Wall and was no longer a threat to the Central Plains, but most of the Western Regions was still under the control of Xiongnu.

The oasis kingdoms around the Tarim Basin, such as Jingjue Kingdom, eventually were controlled by the Western Han Dynasty, thanks to the demise of Loulan Kingdom and the establishment of Shanshan Kingdom. As the east gate of the Western Regions, Loulan Kingdom

blocked the Han court's advance to the west. In other words, to control the Western Regions, the Han court had to conquer Loulan first. As the power of the Han court increased, the Loulan, which had been controlled by the Xiongnu, began to submit to the Han court, sending princes as hostages to both the Xiongnu and Han court. However, because the Xiongnu cavalry was closer to Loulan thus it directly threatened the rule of the King of Loulan. After the death of the old king, the prince hosted by the Xiongnu inherited the throne. The new King's attitude towards the Han court changed from the way of his predecessor. He not only refused to provide supplies to the merchants and envoys from the Central Plains, but also attacked them and cut off the traffic under the instigation of the Xiongnu. He successively killed a number of envoys sent by the Han court, as well as the envoys sent by the Parthian kingdom and Dayuan kingdom (in Fergana) to the Han court.

In 77 BCE, the Han court finally decided to send Fu Jiezi as an envoy to the Loulan Kingdom and to kill the Loulan king, named Angui. The king's younger brother Weituqi, who was close to the Han court, succeeded as the new king. The official name of the kingdom was also changed to Shanshan. In order to protect the security of the new king and maintain his rule in the Shanshan Kingdom, the Han court stationed troops in Yixun and the Han court's army established a base in the Western Regions. After that, the Han court defeated the Xiongnu with the joint efforts with the Wusun and stationed troops in other kingdoms around the Tarim Basin such as Quli and Cheshi. From 64 BCE, all kingdoms along the South Silk Road were under the control of the Western Han court, including the Jingjue Kingdom. In 60 BCE, the Prince Rizhu of Xiongnu surrendered to the Han court, and the Han court officially established the Protectorate of the Western Regions, thus establishing its suzerainty in the Western Regions. At the same time, the Xiongnu was weak and dared not to be near to the Western Regions.

However, only a few decades later, the Western Han Dynasty began to decline, and the emperor's sovereignty existed only in name. Meanwhile, the officials dispatched by the Han court to the Western Regions were oppressive and extorted excessive taxes and levies from the kingdoms, which eventually led to rebellions of the local people. Some shifted their allegiance back to the Xiongnu. Especially during the reign of Wang Mang, the Xiongnu regained control of the Western Regions because of Wang's inadequate policies. But at this time, the strength of Xiongnu has been much weaker than before, and they had no control over the remote kingdoms located along the South Silk Road. As a result, the most powerful kingdoms in the Western Regions began to annex small ones.

The first hegemon was the Shache Kingdom. During the reign of Liu Xiu (25–57 CE), the first emperor of the Eastern Han Dynasty, the Shache Kingdom claimed that it controlled the Western Regions. In fact, the kingdoms it controlled were mainly small ones along the South Silk Road, including the Jingjue Kingdom. In 61 CE, the Khotan Kingdom defeated Shache and took control of several kingdoms from the west of the Jingjue Kingdom to the Shule Kingdom. Meanwhile, the Shanshan Kingdom, which was located to the east of Khotan, annexed several kingdoms in the east, including Xiaowan Kingdom, Jingjue Kingdom, Ronglu Kingdom and Qiemo Kingdom. Jingjue Kingdom became the buffer between the two great powers on the South Silk Road when under the control of Shanshan Kingdom. In 73 CE, Ban Chao reopened the Silk Road. From 87 CE to 94 CE, he successively defeated the kingdoms of Shanshan, Khotan, Shule, Shache, Qiuci, Yanqi and Yuli. With his efforts, the Western Regions became the vassal territory of the Central Plains again. As the hegemons lost their power, the number of kingdoms in the Western Regions also recovered to more than 50, a similar situation as in the Western Han Dynasty. This means that the small kingdoms which were once annexed by Shache, Shanshan, and Khotan, such as Jingjue, Qiemo and Xiaowan, had been restored.

By the end of the Eastern Han Dynasty, with the decline of the government of the Central Plains, the control of the Western Regions was also weakened, and some powerful kingdoms in the Western Regions, such as Khotan, took the opportunity to start wars and annex the neighboring small kingdoms. In 184 CE, the Yellow Turban Uprising broke out in the Central Plains. At the same time, the Qiang people living in Liangzhou also began to rebel, which directly caused the traffic between the Central Plains and the Western Regions to be cut off again. During the Cao and Wei period (213–265), several powerful kingdoms, such as Cheshi, Yanqi, Khotan, Shanshan, Qiuci sent envoys to pay tribute to the authorities of the Central Plains but there was no sign of envoys from small kingdoms. It can be speculated that these small kingdoms have been annexed by the powerful ones, and Jingjue might have been completely annexed by Shanshan at this time.

Thus, it is basically clear that the Jingjue Kingdom was first controlled by the Xiongnu (2nd century BCE–64 CE), then became a vassal state of the Western Han Dynasty (64 BCE to the beginning of the 1st century CE), and then successively subject to the control of Shache and Shanshan (the beginning of the 1st century CE–73). After Ban Chao reopened the Silk Road, the Jingjue kingdom might be briefly restored (73–184). Then, since a rebellion broke out in Liangzhou and the traffic between the Central Plains and the Western Regions was cut off, the Jingjue Kingdom was completely under the control of the Shanshan Kingdom.

These are the all historical records of the Jingjue Kingdom. Since then, its name and history have disappeared from the historical records. People have gradually forgotten the existence of the Jingjue Kingdom, and it has become another lost kingdom in history.

Looking for the Jingjue Kingdom

In January 1901, Marc Aurel Stein, who was conducting his first Central Asian Expedition, came to Niya village after a long journey. In the bazar, he found two inscribed tablets which contained some Kharoshthi writing. Ibrahim, the original finder told him that he had dug them out from a house of the old town beyond the Niya River a year ago. As a man with rich experience in investigation, Stein realized that there will be a great discovery waiting for him in the deep desert. Soon, he organized a team with twenty laborers and a convoy of camels to march towards the ruins in the desert under the guidance of Ibrahim.

On January 28, 1901, they entered the Niya site and worked there for sixteen days. Apart from mapping the site's distribution map and plans of some houses, they also took 595 inscribed wooden tablets written in Kharosthi and Chinese, and a large number of various relics. On July 2, 1901, Stein finished his first tour of Central Asia and returned to London. Soon he published *Preliminary Report of a Journey of Archaeological and Topographical Exploration in Chinese Turkestan* and submitted the report at the International Congress of Orientalists held in Hamburg, Germany, in 1902, announcing the existence of the Niya site to the world. In 1903, Stein published *Sand buried Ruins of Khotan: A Personal Narrative of a Journey of Archaeological and Geographical Exploration in Chinese Turkestan*, which disclosed in detail the entire process of the first Central Asian expedition. More importantly, his most significant achievement is the official archaeological report *Ancient Khotan: Detailed Report of Archaeological Explorations in Chinese Turkestan*, which was published in 1907. This heavy-weight report contains nearly one million words and more than 300 pictures and maps, covering the entire process of Stein's first expedition in Central Asia, especially in the Taklimakan Desert The report also contains the information of the thousands cultural relics he excavated from ancient sites. At the end of this report, there are seven appendices. These are related research papers written by

the scholars invited by Stein. The first is *Chinese documents from the sites of Dandan-Uilig, Niya and Endere*, translated and annotated by Edouard Chavannes. Based on the Chavannes's study on the Chinese documents unearthed at the N5, Niya site, Stein was keenly aware that the Niya site might be the lost ancient kingdom, Jingjue Kingdom. Wang Guowei, a famous Chinese scholar, agreed with Stein after reading the photos of these documents. In this way, the mysterious Jingjue kingdom that disappeared in the historical records was discovered by Stein and attracted the world's attention.

From then until the 1930s, Stein entered Niya site for another three times (1906, 1913, and 1931). In the first two times, he excavated at the site without supervision, and obtained hundreds of Kharosthi and Chinese documents, as well as a large number of various artifacts. During the last expedition in 1931, under the protest of all sectors of Chinese society, the Chinese National Government supervised and restricted Stein's activities in Xinjiang, and his excavation plan was not fully realized. But through bribery and other means, Stein still unearthed twenty-six Chinese documents at Niya site. One of them had a few Chinese characters on it: "汉精绝王承书从", which means that the king of Jingjue who was ruled under the Han Dynasty received the letter from somewhere or someone. This discovery, as the most direct and important evidence, once for all proves that the Niya site is the hometown of the Jingjue Kingdom.

Around the same time as Stein, scholars from Russia, Germany, Sweden, Japan, France, and the United States conducted expeditions in the Taklimakan Desert in Xinjiang. Among them, American geographer Ellsworth Huntington visited the Niya site in 1905 while investigating the climate of the Tarim Basin, and took six pieces of the Kharosthi documents with him. After the founding of the People's Republic of China, archaeological sites in China were protected by the state and foreign explorers were banned from Xinjiang. In the 1950s, a group of archaeologists represented by Shi Shuqing and Li Yuchun went deep into the desert and worked hard at the Niya site, making great achievements. The most important discovery was an Eastern Han noble couple's tomb excavated by the Xinjiang Uygur Autonomous Region Museum archeological team led by Li Yuchun in 1959. A large amount of fine silk fabrics and precious cultural relics have been unearthed from this tomb. From then until the end of the 1980s, there was no systematic archeological excavation in Niya site, except for some small scale investigations and discoveries, due to the lack of funds and manpower, as well as the disruptions caused by the Cultural Revolution.

After China's reform and opening up, the Silk Road research began to get the world's attention. From 1988 to 1997, archaeologists as well as scholars from fields of history, Buddhism and others from China and Japan formed the Sino-Japanese Joint Research Team to conduct academic investigation and excavation in Niya site for ten years. From November 3, 1988, when the team first entered the Niya site, to 1994, when the National Cultural Heritage Administration issued the No.1 excavation license for foreign investigation team in China, giving the official approval for archaeological excavations at the site, and then to October 1997, when the excavation ended, the Sino-Japanese Joint Research Team entered the Niya site nine times in ten years (except for 1989). They conducted detailed investigations and systematic scientific excavations at the Niya site. They investigated 215 human remains and collected more than 3000 relics of various types. These outstanding works have brought the Niya archeology and Jingjue Kingdom historical research into a new stage.

In addition to the Niya site, the Sino-Japanese Joint Research Team also made an investigation on the upper reaches of the Niya River. They found the early microlithic site located tens of kilometers north of the Niya site, dated around 10,000 years ago. This discovery provides much information for further study of ancient civilizations in the Niya River Basin.

The Social Life of Jingjue Kingdom Revealed by Archaeological Discoveries

Now let's talk about the Niya site.

Niya site is located about 100 km to the north of the town of Minfeng, deep in the Taklimakan Desert in Northwest China's Xinjiang province. Minfeng County belongs to the Hetian Prefecture of Xinjiang, located at the northern foot of the Kunlun Mountains and the southern edge of the Tarim Basin, with a population of about 40,000. The Niya River, which originated from the Rustag Glacier at the north foothill of the Kunlun Mountains, flows northward into the desert through the county. Starting from Minfeng County and walking north along this river, one can see that the water flow gradually decreases and the river channel gradually shrinks until it reaches Kabak Askanur village 70 km further where the river completely disappeared. Kabak Askanur village is also the closest human settlement to the desert. From here, walking along the ancient channel of the Niya River which has already dried up for about 30 km north, one can reach the Niya Stupa, the landmark of the Niya site. The whole site, buried in the desert, is centered on the stupa and distributed in a north-south belt along the ancient channel of the Niya River. The measurements of the existing site are about 25 km long from north to south, 7 km wide from east to west, and it is about 1250 m above sea level. If you look at the entire Taklimakan Desert from Google Earth, the Niya site is located almost exactly in the middle of the southern edge of the desert. To its east is the Andir River, and to its west is the Keriya River. These three rivers, line up in sequence, were the lifeline connecting the desert section of the ancient Silk Road. The geographical nature made the Niya River Basin and the Niya site a very important station of trade.

According to the latest published archaeological report, there are 11 types of 215 remains in the entire Niya site, including 1 ancient city site, 94 settlement sites, 17 handicraft workshop sites, 3 Buddhist temple sites, 12 animals sheds, 6 orchards, 1 ancient bridge, 12 tombs, and so on.[5] Judging from the distribution, the Niya site can be divided into three areas: north, central and south, and the distribution of relics from north to south is more and more sparse. The northern area is the geographical location of the Jingjue Kingdom in the Han Dynasty, and the N14 is suspected to be the palace at that time. By the time of Shanshan Kingdom, the central area had become the administrative center and religious center. As for the southern area, there are fewer ruins and the age is even later. It can be clearly seen that the main activity space of the Niya site was concentrated in the north and central area, and moving gradually southward in time. The active age of the Niya site is roughly equivalent to the period from the Western Han Dynasty to the Eastern Jin Dynasty in Chinese history, and the absolute age is from the 2nd century BCE to the middle of the 4th century CE.

Most of the residential sites are located on the higher elevations along the river, and composed of several or even dozens of residential sites to form a larger settlement with very close internal connection. Each settlement has its own houses, workshops, pool and square, forming a small social group or community. There are three confirmed Buddhist sites in the Niya site, including the Great Stupa, the N5 Buddhist Temple and the 97A5 Buddhist Temple. The Great Stupa is located in the center of the Niya site and is the landmark of the entire site. The N5 site is located about 2.9 km northeast of the Great Stupa and the 97A5 site is about 2 km southwest of the N5 site. In general, the three are located in the central area of the Niya site and are distributed approximately like an equilateral triangle, forming the religious center of the entire site. Religion plays a prominent role in Jingjue people's daily life. So the central area with Buddhist temples and a stupa was not only the center of religion, but also the center of politics and the Jingjue people's social and economic life. A large number of ruins such as residential

buildings, kilns, fences, and woods are distributed around the Buddhist temple sites. Tombs, especially elaborated tombs, are concentrated in the north and north-central areas. The style of the tombs and the unearthed cultural relics show very obvious characteristics of Chinese culture.

Take the cemetery No. 1, excavated in 1995, as an example. This cemetery is considered to be the royal family cemetery of Jingjue Kingdom. A total of nine tombs have been found in the cemetery, and eight have been excavated. The funerary items unearthed from them are very rich. Especially the M3 and M8, where the archaeologists excavated a large number of exquisite silk fabrics from them. The clothes, quilts and pillows of the tomb owners were all made of silk fabrics from the Central Plains and the Chinese characters embroidered on the silk are still legible.

The burial objects unearthed in these tombs, as well as the relics on the ground, and the collected Kharosthi and Chinese documents greatly make up for the shortage of orthodox historical records and provide rich materials for people to study the social, political, economic and cultural development of the Jingjue Kingdom. In particular, there are more than 1000 pieces of the Kharosthi documents, which contain not only the king's edict, sale contracts, letters, but also ledgers and Buddhist scriptures. Through the efforts of linguists, these antique language documents provide many precious historical details. With the help of linguists and archeologists, the history and social life of Jingjue Kingdom gradually become clear.

In terms of political system, the Jingjue Kingdom had roughly gone through three historical stages. During the first period it was controlled by the Xiongnu. But due to the lack of written record, we have no more information about the regime at the time. Then, after 64 BCE, it became a vassal state of the Western Han Dynasty. The Han court won over the hearts of the Jingjue rulers by giving a large amount of treasures and silk fabrics to the kings and nobles. They also promote Chinese characters for writing in the local area to strengthen the cultural ties. Unearthed Chinese documents indicate that the local residents, mainly the nobles, were learning to use the Chinese language. Of course, soldiers of the Han were also stationed in the local garrison as a force guarantee to ensure the safety of the South Silk Road traffic route. Among the unearthed Chinese documents, there are a number of documents related to customs inspections, which indicate that the Han court regarded Jingjue as an important strategic pass. However, the Han court hardly interfered in the internal affairs. In addition to military, diplomatic and cultural exchanges, the internal affairs were managed by the king. The biggest change occurred during the reign of Shanshan Kingdom. After the Jingjue Kingdom was annexed by Shanshan Kingdom, it became a raja in Shanshan and the governor was appointed by King of Shanshan. Raja was translated by linguists from the Kharosthi documents, meaning state-level administrative establishment and the governor was called cojhbo in Kharosthi. Under the raja, there was an administrative establishment called "avana". In the author's opinion, it should be similar to unincorporated villages. Because of the natural environment, there were not many places to live in Niya oasis, so the people naturally form many settlements according to geographical conditions. The number of these settlements is about the same as the number of avana mentioned in the Kharosthi documents. Each avana has a supervisor, who has not much administrative function. The main task of the avana was to assist officials in collecting taxes.

The Kharosthi documents also revealed that besides the royal family, nobles, and civilians, there are two special classes of slaves and monks in Shanshan Kingdom. The Shanshan people generally believe in Buddhism, so the monks have high social and political status, but they were quite secular, and their daily lives were not restricted by monastic rules. They can own property, serve as officials and witnesses for trial cases or signing contracts. It is recorded that

there were more than 4000 monks in Shanshan at the most. The No. 489 Kharosthi document is a regulation for the community of monks.[6] The contents show that in order to manage the monks, the King set up an organization (Bhichusamga in Kharosthi), and issued rules and regulations to discipline the monks. The existence of slaves and the frequent slave trade indicate that slavery was part of the social structure in Shanshan. Many unearthed slave contracts have stipulated that buyers can do whatever they want with their slaves, including selling, exchanging, pledge, give as a gift, or even "blind her eyes". There was little punitive action for harming the slaves.

During the period of Shanshan Kingdom, the Niya oasis also achieved great social and economic development. There are a lot of legal instruments and judicial precedents in the Kharosthi documents, which contain a lot of information about the protection of personal property. The main object was to protect the private ownership of land. According to the law, the land in Shanshan was allowed to be inherited, traded, and leased. The landowners also hire some farmers to cultivate, in addition to renting out their land, so it was common to hire labor and there were also many labor disputes. The protection of private property provided impetus for economic development. At that time, a relatively complete agricultural management system had been established. Water conservancy facilities and production technology also had improved since the Han Dynasty suzerainty, and there were more crop variety. The main crops were wheat, barley, millet, and broomcorn millet. Remains of fruits such as apricots, peaches, plums, and narrow-leaved oleasters have also been unearthed in the sites and tombs. These were common varieties widely popular in the Western Regions during the Han and Jin Dynasties, and also important source of local food. Of course, the most popular fruit was grapes. Many vineyard ruins can be seen in the Niya site, with dead vines remaining on it. In the Kharosthi documents there are a lot of records about brewing and drinking grape wine. The livestock industry, which was dominated by camels, horses, sheep and cattle, has developed to a considerable scale, and there were control measures for both captive and grazing. These were the most common animal species in the western regions at that time, and their bones can be seen everywhere in the site. The camel was the most important means of transportation in the desert. In Kharosthi document No. 291, the king requested that forty camels be sent to carry the grain tax and fifteen camels for the wine. Sheep were the most important source of meat. The Sheep bones have been found in many burials, placed on wooden plates as burial food, some with knives for cutting. The number of sheep raised by the locals was very large. In the Kharosthi document No. 369, it was even recorded that some people received 230 sheep at one day. These livestock were not only important sources of wealth, transportation and food source for local people, but also the main objects of taxation, and served as a kind of currency. In addition to camels, horses, sheep and cows, traces of dogs and donkeys were also found in the Niya site, but in small Numbers. There were also some handicrafts, still relatively primitive, mainly wood and wood carving, pottery, wool, silk, metallurgy and wine. In addition to farmers and herdsmen, there were also some craftsmen, mainly engaged in woodwork, pottery, textiles, metal smelting and wine making.

The fact is that, as a small kingdom deep in the desert more than 1600 years ago, the political and economic development of Jingjue Kingdom has far exceeded the level of a small oasis in the same period. This undoubtedly benefited from the opening and prosperity of the Silk Road in the Han dynasty. As a hub between eastern and western civilizations, Niya oasis had developed to one of the important towns on the Silk Road from an ordinary small desert oasis of a few people. Various people from east to west converged here, turning it into a melting pot of civilizations. Those merchants, envoys, soldiers, monks, and even fugitives walking on the Silk Road have brought rich material production and cultural resources to this relatively closed

and primitive oasis. As a result, both the basic necessities of life and the religious beliefs of Jingjue Kingdom have a deep imprint of foreign culture. Camels, cows, sheep, horses, donkeys, wheat, pomegranates, glass from the west, dog, turnip, peach, silk fabric, chopsticks from the east, and Buddhism from South Asia, countless species, technologies, religions and cultures have converged here and not only influenced the development of eastern and western civilizations, but also enriched the material and cultural life of the Jingjue Kingdom.

However, the impact of these foreign cultures had made the kingdom's social development extremely unbalanced. They did not have their own written language. Only a small number of nobles and officials had access to foreign culture. The vast majority of ordinary people were still living in the primitive oasis agriculture. It was just like a colony, and one can hardly see its native culture and characteristics from archaeological excavations. Of course, whether it is Eastern culture or Western culture, when it comes to the Niya oasis, it must adapt to the special natural environment of the oasis in the desert. For example, in the Kharosthi documents there are recorded activities of sacrificing cows and sheep to the gods; witches were mentioned in the locality. But the king's attitude towards the witchcraft was very cruel, requiring officials to arrest the witches and put them on trial and even execute them. This may be related to the spread of Buddhism. In order to survive in the desert, the locals' clothing has a special sand-proof design at the neck. Their buildings use a lot of tenon-and-mortise work from the Central Plains, but the wall was framed by reeds and branches to hold the mud in place. This is a unique construction method in the desert. All these reflect the wisdom of locals adapting to the desert environment.

However, it should be noted that the final abandonment of Niya oasis was also related to the continuous deterioration of its natural environment.

The Demise of Jingjue Kingdom

The Jingjue Kingdom as a political entity disappeared in history after being annexed by the Shanshan Kingdom in the late 2nd century. The archeological discoveries have confirmed that it has existed as a vassal state of Shanshan Kingdom for nearly 200 years since then. By the middle of the 4th century, the Niya oasis was abandoned and there has been no trace of human activity ever since. It also means that the Jingjue Kingdom which had thrived on the Silk Road for centuries finally demised.

But how did this happen? Some geographers believe that the root causes is water. River diversion and water reduction could have made the oasis area shrink, and Civilizations that rely on the oasis will naturally decline. This is the common reason why the ancient oasis cities in Taklimakan Desert finally went to abandonment. Some climatologists have also proposed that around the 4th to 5th century, the climate around Niya experienced a very obvious temperature rise, which caused a decrease in river water and exacerbated the desertification of Niya oasis. It is true that the Niya River has been unable to reach the Niya site for a long time, and the ancient local people have been facing serious water shortages. But as we know, the change of the natural environment is a relatively slow process. The natural environment did not deteriorate to the point that it was not suitable for living when the Niya site was abandoned. The presence of large trees in the site shows that the local natural environment was very good. It can also be seen from the Kharosthi documents that the locals had realized the shortage of water resources and started to control the use of water and protect the environment. Moreover, the shrinking of the Niya River was not a new problem for the Jingjue people, whose range of habitation has been moving southward along the Niya River for centuries. But this time, archaeologists did not find a large-scale site on the south of the Niya site. As stein, the first man

to make a comprehensive study of the Niya site, said: "While this physical fact fully explains why the ancient site was never re-occupied, it does not prove that the original abandonment was directly and solely due to it".[7]

Another possibility is that the Niya oasis was invaded by the enemy. The excavations showed that the residents appeared to be in an emergency and had to hurry away with their valuables. Among the houses on the ground, Stein and later archaeologists found little valuable objects, but large quantities of grain, exquisite furniture and important documents remained in the houses. A dog was even found tied to a pillar in a living room. Its owner had evidently forgotten to untie the rope when he left. All these seemed to indicate that the Jingjue people were in danger and had to flee. This speculation is also supported by the records in Kharosthi documents. There have been repeated references that the king ordered strengthening the vigilance against the attacks of the Supis and Khotan in these documents. The Supis was considered to be a nomadic tribe living in the Altun Mountains. They often plunder the oasis. The Khotan Kingdom was the neighbor to the west of Shanshan and the Niya oasis has been caught between these two kingdoms since Shanshan annexed Jingjue. Therefore, war was a frequent occurrence for the Jingjue people. But archaeologists did not find any traces of war in the Niya site. All the signs point to the fact that, after the departure of the Jingjue people, there were neither plundering nor settlement in Niya oasis, and time seemed to freeze until the treasure hunter and Stein found it. So, after this invasion which didn't really happen, why did they choose to leave completely without returning?

Of course, more people tend to believe that the abandonment of the Niya oasis was due to a combination of factors. The long-term deterioration of the natural environment, coupled with the threat of war and other factors, forced the people to abandon the oasis to live elsewhere. This view seems to be more logical. But don't forget the point at which they decided to leave. The same situation has lasted for decades or even hundreds of years. Why did they finally make this decision someday in the middle of the 4th century?

This may be related to the situation in the whole Western Regions at that time, not just Khotan and the Supis. The greatest threat to Shanshan Kingdom was Yanqi Kingdom in the north around the middle of the 4th century. The Yanqi kingdom lied in the center of Yanqi Basin in the Tianshan Mountain. It bordered on Wusun Kingdom in the north, Turpan Basin in the southeast and Qiuci Kingdom in the west. Its south was blocked by mountains and deserts, but it could reach the oasis kingdoms on the south Silk Road, such as Yuli, Shanshan, Qiemo and others along the Tarim River, and the Kongque River. The Yanqi Basin was an important channel connecting the north and south of the Tianshan Mountains in the Western Regions. Therefore, the Xiongnu used it as the core of its rule in the Western Regions and stationed cavalry here to monitor the kingdoms. After the Han court defeated the Xiongnu, it set up the Protectorate of the Western Regions as the governing body, and the station the Han chose was in Wulei Town which was not far from Yanqi. But Yanqi was never willing to be a vassal of the Han court. Whenever the strength of the Central Plains declines, it would take the opportunity to rebel and annex neighboring kingdoms. In the late Western Han Dynasty, Wang Mang usurped the throne and became emperor, but wars against him broke out across the country. Yanqi took the lead of the rebellion in the Western Regions, and captured the Wulei Town and killed Danqin in 13 CE. At 16 CE, Wang Mang sent Wang Jun to lead the army, jointly with Shache and Qiuci, to attack Yanqi Kingdom but was defeated. By 94 CE, Banchao led more than 70,000 soldiers from Qiuci, Shanshan and other six kingdoms to attack Yanqi. That campaign killed the king and recaptured Yanqi. But at the end of the Eastern Han Dynasty, the Central Plains once again fell into civil war and Yanqi immediately started the war and annexed Yuli, Weixu, Shanshan and other kingdoms. During the Taikang period of Emperor

Wu (280–289) in the Jin Dynasty, Yanqi even occupied the Qiuci Kingdom for a while and became the most powerful kingdom in the Western Regions at that time.

After that, the Zhang family who occupied the Hexi Corridor wanted to conquer the Western Regions, and sent troops to defeat Qiuci and Shanshan first and put off suppressing the most powerful Yanqi at the end. In the winter of 345 CE, Zhang Jun, the leader of the Zhang family, sent troops to defeat the Yanqi army, forcing the King and his 40,000 people to surrender. But within a few months, Zhang Jun died. The areas under his rule rebelled and his heirs also lost control of the Western Regions. Shanshan and Qiuci, which had just gone through the war, suffered heavy losses, while Yanqi remained strong because of its timely surrender. There were at least 40,000 residents in the capital of Yanqi Kingdom. It was a huge number of population in the Western Regions. Without the intervention of the Central Plains force, the Yanqi Kingdom which annexed neighboring kingdoms and still had strong power would obviously have not stopped the pace of merging. It once conquered Qiuci Kingdom in the west, Yuli Kingdom in the east and the next targets were Shanshan Kingdom in the south and Cheshi Kingdom in the southeast.

Under such circumstances, for the Shanshan Kingdom, it was undoubtedly a wise move to adopt a strategic contraction and give up the Niya oasis voluntarily. This would help it gather its power against the Yanqi. Niya oasis was a small oasis in the west of Shanshan and far from the hinterland and with a desert barrier in the middle. When the Silk Road was open, its geographical location brought rich tariff and wealth, which would be sufficient to maintain the prosperity of the oasis, and even bring great benefits to the Shanshan kingdom. But once the Silk Road was cut off, the Niya Oasis also loses the vitality. After hundreds of years of development, the agriculture and animal husbandry of the Niya oasis had been quite developed, and the population was increasing, but the inevitable result was the shortage of water resources. In addition, the local people used a lot of wood to build houses and make furniture. Even the utensils in daily life were made from wood. All these have caused severe damage to the vegetation in the desert and further accelerated the local desertification when the climate was gradually drying. In this case, continuing to migrate upstream along the Niya River was certainly one of the solutions, but it was obviously unrealistic to complete it in a short time. Moreover, the Niya Oasis was frequently attacked by the Khotan and the Supis. Defending the oasis needed the support of the materials and army of Shanshan.

At the same time, the Shanshan Kingdom was facing the danger of being annexed by the Yanqi. Instead of sending troops to protect the Niya oasis, they needed to gather all the forces in the kingdom to defend the capital. So abandoning the Niya oasis and moving all the residents to the capital with the strongest defense have become the only option. It was also the common practice of the kingdoms in the Western Regions when facing foreign invasion. Because in the Western Regions, the small towns and oases rarely had walled fortification, or only low earthen walls, which provided almost no defense facility. Only the capitals of several large kingdoms built the city walls and strong defense system. During the same period, a number of oasis towns on the southern edge of the Tarim Basin were also abandoned, probably for the same reason.

This scenario is certainly more than conjecture. Though there are neither records of the war between Shanshan Kingdom and Yanqi Kingdom in the documents unearthed from the Niya site and nor in the historical books, from other historical records, we can still find some clues that the Shanshan Kingdom and Cheshi Kingdom were struggling to resist Yanqi Kingdom.

In Jin Shu (the history of the Jin Dynasty), it was recorded that in 381 and 382 CE the Kings of Shanshan and Cheshi traveled thousands of miles to the Central Plains to pay tribute to the Emperor Fu Jian of Former Qin Dynasty.[8] It was very rare to pay tribute to the Central Plains

for two years in a row, especially the king himself did the trip. And on the second time, the two Kings offered to pay tribute every year. But Fu Jian refused, saying that the Western Regions was too far away from the Central Plains and the tributes did not need to be so frequent. This unreasonable dialogue obviously implies that the King of Shanshan and Cheshi had another purpose. After being refused, they put forward their real request, hoping that Fu Jian could set up the Protectorate of the Western Regions as the Emperors had done in the Han Dynasty. They were willing to act as guides if he sent troops to the Western Regions. This request just showed that these two kingdoms were facing a huge crisis of being conquered, so that they took the initiative to ask Fu Jian to send troops to protect them.

Fu Jian finally agreed to this request. In 383 CE, He sent Lü Guang to lead the army from Chang'an to the Western Regions and the King of Shanshan and Cheshi led their soldiers as guides and vanguards. As a result of the war, Yanqi and Qiuci, the two most powerful kingdoms in the Western Regions, were completely defeated by them. This result proved once again that the ultimate goal of all their actions was Yanqi. In order to resist the annexation of Yanqi Kingdom, the Shanshan kingdom persisted for years or even decades and finally resolved this crisis with the help of the Former Qin Dynasty. Those who have left the Niya oasis for decades may have forgotten that there was once an oasis waiting for them in the desert. The Jingjue Kingdom and Niya oasis were thus forgotten and lost into the vast desert.

As a small kingdom, or even just a town in a desert oasis, the existence, development, and final demise of the Jingjue Kingdom were closely related to the vicissitude of the Silk Road. It was prosperous thanks to the traffic on the Silk Road, and its special geographical location had brought it a wealth of material and culture, which has promoted its leapfrog development. All these were mainly based on the Central Plains' control of the Western Regions. Because the Central Plains, either the Western Han or the Eastern Han, never intended to annex the Western Regions and directly govern the oases. For the rulers of the Central Plain, the most important thing was to maintain the existing order of kingdoms in the Western Regions and ensure the smooth passage of people and goods on the Silk Road. Once the Central Plains declined, the major powers in the Western Regions will take the opportunity to annex other small kingdoms. And those small kingdoms, especially the oasis kingdoms, have no power to defend themselves. After the Silk Road traffic was cut off, the geographic locations of these oasis kingdoms also lost their value, but became the burden to those big kingdoms. Some will be reoccupied after the Silk Road reopened, and some will eventually be abandoned. The Jingjue Kingdom is the best case for studying these oasis kingdoms that once appeared around the Tarim Basin.

Notes

1 The size of the Jingjue could hardly be called kingdom in historical writing. The entire Western Regions did not have a unified and powerful country, but was scattered into dozens of small chiefdoms before the Xiongnu and the Central Plains entered the Western Regions. Although most kingdoms are small, not only the area but also the population. By today's standards, it's just a village or a town. After the Western Han Dynasty entered the Western Regions, these chiefdoms were defined as'Guo'（国）in official records, and ruled by the king's family, which is equivalent to a kingdom. When the Central Plains was strong, these kingdoms would obey the orders of the court, like the vassal states. The Central Plains did not interfere with their internal affairs or levy taxes, but instead rewarded these kings with a lot of treasures. But once the strength of the Central Plains weakened, these kingdoms would rebel. So in general, although these kingdoms were very small in size, they remained independent most of the time under the rule of Kings.
2 Ban Gu, *Han shu*汉书 (Beijing: Zhonghua Shuju, 1962), 96a/3880.
3 Sima Qian, *Shi Ji* 史记(Beijing: Zhonghua Shuju, 1959), 110/2896.
4 Ban Gu, Han shu, 96a/3872.

5 Zhong Ri Gongtong Niya Yiji Xueshu Kaocha Dui, *1988–1997 Niandu Minfeng Xian Niya Yizhi Kaogu Diaocha Jianbao 1988–1997* 年度民丰县尼雅遗址考古调查简报[Brief Report of Archaeological Survey of of Niya Site in Minfeng County from 1988 to 1997], in Xinjiang Wenwu, 2014, Vols. 3–4, p. 3.
6 T. Burrow, *A Translation of the Kharosthi Documents from Chinese Turkestan* (London: The Royal Asiatic Society, 1940), 95.
7 Marc Aurel Stein, *Ancient Khotan: Detailed Report of Archaeological Explorations in Chinese Turkestan* (Oxford: Clarendon Press, 1907), 385.
8 Fang Xuanling, *Jin shu* 晋书 (Beijing: Zhonghua Shuju, 1974), 113/2900, 2904.

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15

ASTANA, JIAOHE, AND OTHER TURFAN CEMETERIES

The Movement of People, Ideas, and Objects in Gaochang Kingdom (442–640)

Armin Selbitschka

Introduction

The Silk Roads have excited scholars and wider audiences for the better part of the last century. Their allure mainly rests in the fact that artifacts traveled thousands of miles more than two millennia ago. Undoubtedly, the most prominent kind of object are various types of Chinese silk cloths that emerged at distant locales such as Palmyra in modern-day Syria. The so-called tower tombs (dated ca. 1st century CE) of some well-off citizens in the Roman province Syria yielded some fragments of technically highly complex monochrome (*qi*) and multicolored composite weaves (*jin*).[1] More often than not, scholarship takes references to objects and actual material culture that appear in culturally foreign contexts as signs of "cultural exchange" or "cultural influence". Yet, such explanations often remain somewhat narrow in the sense that they focus on single (groups of) artifacts and their more or less superficial impact on local customs. Simply stating that culturally foreign objects "influenced" native societies essentially says little, for instance, about how widespread their use may have been or how deeply they may have penetrated indigenous social practices. Moreover, the historical processes that were associated with the act of transmission itself scarcely feature in Silk Road studies.[2]

Attempting to encourage more nuanced analyses, I have suggested the concept of "movement" as an analytical tool to examine ancient acts of transmission.[3] It compels us to concentrate on the process that purportedly lies at the core of all Silk Road exchanges, that is, the movement of things through space and time (although scholarship rarely pays attention to the latter), while forcing us to ask additional questions of our sources. Undoubtedly, it is important to study what goods might have moved from point A to point B and how objects from point A might have affected people's lives at point B (and, ideally, vice versa). However, I would argue that it is as, if not more crucial to explore the coincidental facets of movement processes. For instance, we have to take into account that traders did not only move merchandise. Rather, they carried genes and pathogens that they consciously or unconsciously might have spread *en route*. The same was true for their beasts of burden. More generally, people might have moved through space and time for reasons other than financial gain. Inner Asian and Chinese Buddhist monks famously went to Northern India with the explicit goal to collect religious

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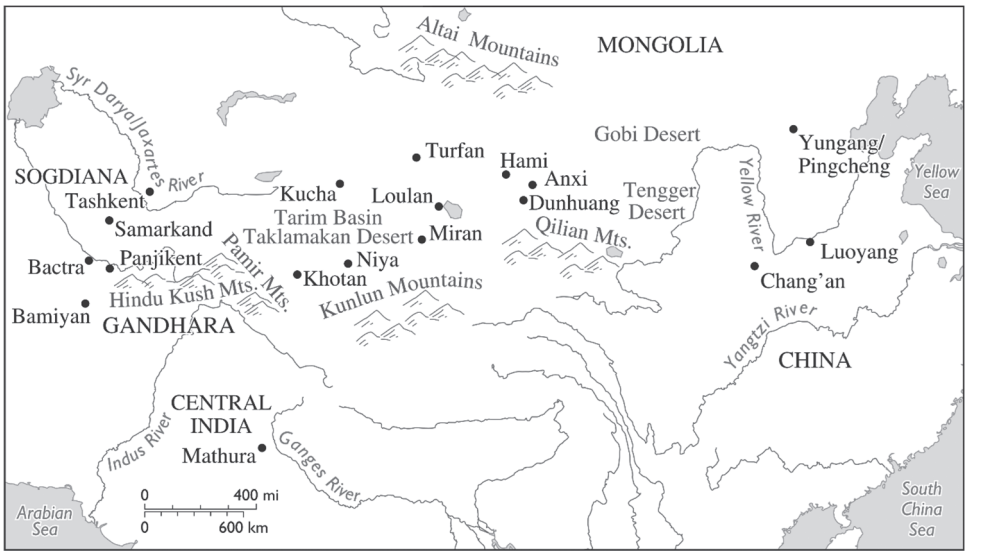

Figure 15.1 Major archaeological sites along the transcontinental routes of the Silk Roads (ca. 5th century CE). After Liu 2010, 63.

scriptures, but they also brought back new kinds of material culture and associated customs such as the use of chairs, sugar, and tea.[4] Then again, the spread of various kinds of ideas and technologies might just as well have been a side effect of wandering lay people who interacted with the populations they encountered on their travels. That is to say, the movement of individuals, groups of people, animals, things, and ideas beyond their places of origin involved many layers of cross-cultural interaction and not all of them might have been purposeful. It follows that taking "movement" seriously as a heuristic device yields much more nuanced insights into historical processes of the past.

The archaeological finds and features from several cemeteries in close proximity to the ruins of Gaochang city (Qocho) near Turfan at the eastern rim of the Tarim Basin in Xinjiang Uyghur Autonomous Region provide fertile ground for such an approach (Figure 15.1). Ever since Sir Mark Aurel Stein (1862–1943) discovered the site in the early 20th century,[5] many kinds of finds that surfaced from "Turfan tombs", that is to say, the necropoles at Astana (Chin. Asitana), Karakhoja (Chin. Halahezhuo), and later Jiaohe (Yarkhoto), Badam (Chin. Badamu), and Muna'er have become staples of Silk Road research. Scholars largely have examined single artifact categories, but steered away from comprehensive analyses of the archaeological data from Turfan tombs. For instance, finely crafted human effigies dressed in silk or paper clothes are popular subjects, as are awe-inspiring, crouching figurines with feline bodies and human or zoomorphic heads that guarded some burials.[6] In particular, excavated manuscripts and intricately decorated silk and other textiles have spawned countless studies.[7] Given the somewhat haphazard and overall poor publication standards of the Turfan tombs, scholarship unsurprisingly has avoided integrated studies of the archaeological finds and features they yielded. The available excavated data are anything but complete. Nonetheless, two recent analyses have demonstrated that significant conclusions regarding the society of Gaochang kingdom actually are possible, when we aim to study the available archaeological sources as comprehensively as possible.[8]

Thus, in what follows I will rely on the concept of "movement" in order to illustrate the flow of material culture, people, and ideas to early medieval Gaochang and explain how initially culturally alien elements affected its population. Apart from archaeological records, I will rely on early medieval Chinese histories and my own previous research.[9] For nearly 200 years, Gaochang city was the capital of Gaochang kingdom (442–640). In 640, the Tang empire (617–908) conquered Gaochang and turned it into its Western Prefecture (Xizhou; 640–ca. 755).[10] My focus will remain on the Gaochang period, since archaeological data from that era show more cultural diversity than under Tang rule. I will first discuss the history of Gaochang kingdom and how it was tied to two powerful families, Qu and Zhang.[11] Second, I will introduce key finds and features yielded by Turfan tombs before exploring the movement of people, ideas, and objects in a third section and end with concluding remarks.

History of Gaochang Kingdom

Judging from the wealth and cultural diversity of excavated materials, Gaochang kingdom undoubtedly was a vibrant community on the Inner Asian Silk Roads. Indeed, most of the available information on Gaochang stems from settlement sites and cemeteries. Although manuscripts yielded by more than 200 Turfan tombs have added considerably to our understanding of everyday life, only external sources such as Chinese dynastic histories discuss major political events.[12] Until the Tang incorporated Gaochang into their fledgling empire in 640, both states only occasionally interacted with each other. Accordingly, Chinese historians did not have too much to report on this remote kingdom on the northwestern margins of various Chinese empires.

Still, we learn that the Rouran (Ruanruan) steppe empire conquered Gaochang in 460 and put Kan Bozhou on its throne. Barely two decades later, Tiele (Gaoju; Tölös), another pastoralist power whose home were the northern and northwestern grasslands of the current People's Republic of China, meddled in Gaochang's internal affairs. In 481, Tiele made Zhang Mengming, a native from Dunhuang in modern-day Gansu province, king. The locals seemingly were unhappy with Zhang's rule and soon killed him. Instead, they chose Ma Ru as their new leader. Ma appointed Gong Guli and Qu Jia as his two most important ministers. After 497, increasing conflicts with the Northern Wei dynasty (386–534) put severe strains on the people of Gaochang, who yet again disposed of their acting ruler. Qu Jia became the new king (r. 502–519?).[13] His tenure on the throne marked the beginning of an era of relative peace under his family's reign; it also initiated a flurry of diplomatic interactions with the Northern Wei court between 508 and 532.[14]

The compilation of several Chinese dynastic histories largely coincided with Qu rule over Gaochang. As I have stated earlier, historians relayed few details on major events. For instance, Wei Shou's (506–572) *Weishu* covers Qu Jia's and his successor Qu Jian's (r. 519–590?) reign by briefly sketching some political developments. Linghu Defen's (583–666) *Zhoushu* and Li Yanshou's (died ca. 677) *Beishi* are marginally more forthcoming with information. Both books largely mirror the *Weishu* account, but add a brief description of administrative structures. The histories that were roughly contemporaneous with the Qu's sway over Gaochang cover Qu Jian and his son Qu Boya's (r. 590–619) reign,[15] but only the much later *Jiu Tangshu* compiled in the early 10th century mentions that Qu Boya died in 619 and was succeeded by his own scion, Qu Wentai 麴文泰 (r. 619–640). In 640, Qu Zhisheng 麴智盛 (reg. 640) took the reins from his father Qu Wentai shortly before being crushed by the Tang court. The latter ended a period of increasing conflicts with Gaochang by absorbing it into its empire.[16]

In addition to addressing some significant political changes, Chinese histories claim that Gaochang extended over 300 *li* (ca. 130 km) from east to west and 500 *li* (ca. 210 km) from north to south. They also state that it comprised eight cities in total.[17] As far as administrative structures were concerned, a king was at the top of the hierarchy, immediately followed by two ministers. Recall that Qu Jia, the first sovereign of the Qu dynasty, started out by holding one of these positions. The next tier encompassed the so-called Lords of Jiaohe (*Jiaohe gong* 交河公) and Tiandi (*Tiandi gong* 田地公), which were usually held by sons of the ruling kings. Jiaohe and Tiandi were two of Gaochang's major cities and the seats of eponymous counties.[18]

Such observations may make for dry reading, but they are not at all trite since they support and sometimes supplement archaeological data. For instance, diplomatic missions to the Northern Wei court not only were supposed to maintain peaceful relations, but also to foster the movement of ideas. In 519, Gaochang augmented their request for the Five [Ru/Classicist/Confucian] Classics (*wu jing*), several dynastic histories, and the training of some of their own people as "erudites" (*boshi*) in the imperial capital by offering tribute.[19] Similarly, archaeological evidence suggests that certain members of Gaochang's population indeed were avid students of Classicist teachings.

The Turfan Cemeteries: Excavations, Published Data, Funerary Customs

The limited scope of the present article prevents a comprehensive discussion of the discoveries and archaeological excavations of the six known graveyards in direct vicinity of modern-day Turfan. Rather, this section will briefly introduce the "Turfan cemeteries" at Astana, Karakhoja, Jiaohe (2x), Badam, and Muna'er and some key finds and features. The fact that the vast majority of the tombs at all six locations date between the 4th and 8th centuries CE illustrates that the necropoles were mainly in use during Gaochang kingdom and Tang rule.[20]

Past Excavations and Publication Standards

The Astana and Karakhoja sites on the eastern outskirts of Gaochang city figure prominently in Silk Road studies. Aurel Stein's discovery of tombs at Astana late in 1914 gave way to over a century of archaeological research.[21] More than ten excavation seasons particularly in the 1960s, 1970s, and early 2000s, have brought over 1000 tombs to light; only 360 of which have been excavated to date (Table 15.1). Considering the large number of documented tombs and the long research history at both cemeteries, one might reasonably expect a plethora of published data. Yet, the publication standards of Astana and Karakhoja cemeteries are poor and often confusing. Numerous preliminary reports rarely introduce the finds and features of individual tombs by detailed descriptions. One's only recourse is to piece together fragmented information that is scattered across different publications. Compiling reasonably complete tomb assemblages this ways is hardly possible.[22] So far, a full excavation report is missing and may never see the light of day.

The situation for the remaining four graveyards essentially is the same. There are about 1500 known tombs at two discrete cemeteries called Gouxi and Goubei near the ruins of Jiaohe city roughly 13 km west of modern-day Turfan. As Table 15.1 highlights, only one hundred tombs have been excavated.[23] Moreover, the archaeologist Huang Wenbi (1893–1966) had collected 124 epitaphs from tombs surrounding Jiaohe in 1930.[24] Published data for at

Table 15.1 Number of excavated tombs at the six Turfan cemeteries.

Reference	*Cemetery*	*Excavation season*	*No. of excavated tombs*
Stein 1928, 645–667.	Astana	1914	35
Xinjiang Weiwuer 1960: 21.	Astana	1959	6
Xinjiang Bowuguan 2000a: 8–9, 24.	Astana	1960	30
Xinjiang Bowuguan 2000b.3–4: 69.	Astana	1960	4
Xinjiang Weiwuer 1973: 11.	Astana	1963–1965	42
Xinjiang Weiwuer 1972a: 14, fig. 15.9.	Astana	1966–1969	105
Xinjiang wenwu 2000a: 95, 111.	Astana	1972–1973	57
Xinjiang wenwu 2000b: 171, 179.	Astana	1973	20
Tulufan 1992: 154.	Astana	1986	8
Tulufan 2006a: 7.	Astana	2004	2
Xinjiang Bowuguan 1978: 3.	Karakhoja	1975	51
Tulufan 2006d: 57.	Badamu	2004	82
Tulufan 2006c: 33.	Muna'er	2004–2005	42
Lianhe 1998: 15.	Jiaohe Goubei	1994	55
Xinjiang Wenwu 2001: 44.	Jiaohe Gouxi	1994	4
Xinjiang Wenwu 2001: 54.	Jiaohe Gouxi	1995	9
Xinjiang Wenwu 2001: 74.	Jiaohe Gouxi	1996	9
Xinjiang Wenwu 2001: 4.	Jiaohe Gouxi	1996	23
			Sum total: 584

least eighty-two burials at Badam on the northern outskirts of Gaochang and thirty-six tombs at Muna'er, which is located halfway between Gaochang modern-day Turfan, remain limited as well.[25]

Funerary Customs

Most tombs at any of the Turfan cemeteries were built in similar ways. Slanted access ramps (length 8–9 m) lead down to burial chambers with roughly square or rectangular footprints (lengths ca. 3–4 m; widths ca. 3 m) and vaulted ceilings (heights ca. 1.6–1.7 m) (Figure 15.2). In general, burial chambers were dug into the dry and hard soil and lack any additional structural fixtures. The looting of most tombs might significantly diminish their hermeneutic value as certain (kinds of) burial goods and human remains may be forever lost.[26]

Such methodological limitations aside, some general conclusions are still valid. For instance, joint burials of male and female individuals were the norm, but occupancies of three, four, and five individuals (mostly one male and several females) frequently occur as well.[27] Uniting at least husbands and wives in death seemingly was very important to the deceased and their descendants. Occasionally, wooden figurines or straw manikins substituted the missing bodies of spouses.[28] Epitaphs written in Chinese yielded by more than 330 tombs suggest that some occupants barely grew older than twenty-five years, while others lived well into their nineties. Seventy-eight percent of male individuals who received such epitaphs died between the age of fifty and seventy-nine whereas only sixty percent of female occupants fell into that age bracket. Perhaps due the dangers involved in childbirth, women perished at considerably younger ages than men.[29] At less than fifty characters, the Turfan tomb inscriptions were succinct and highly formulaic. Red and fewer black ink inscriptions on small ceramic

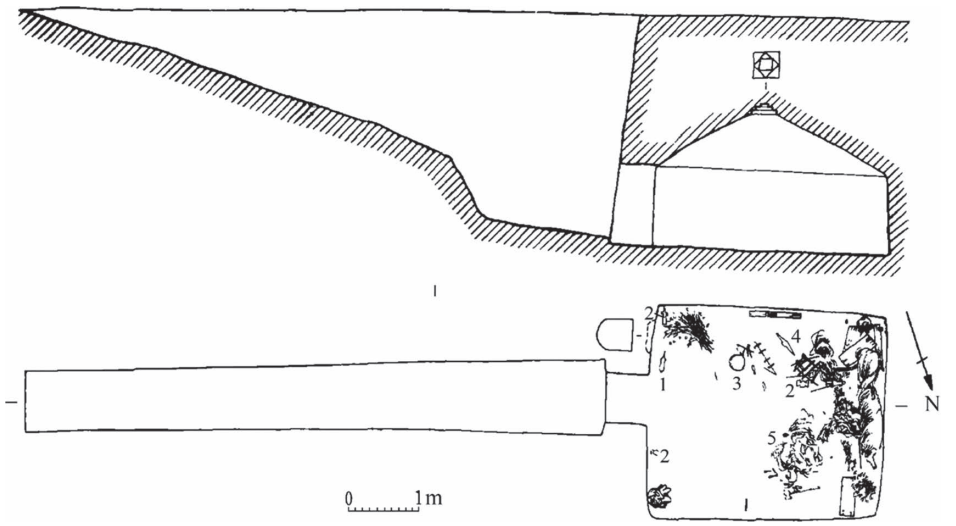

Figure 15.2 Plan of Tomb 04TAM408 at Astana cemetery (ca. early 5th century CE) including a selection of finds (1 = wooden elephant figurine; 2 = wooden anthropomorphic figurines; 3 = wooden plate; 4 = inventory list; 5 = embroidered silk). After: Tulufan 2006a, 4, fig. 1.

tiles (length 35–40 cm; thickness ca. 4 cm) record the exact days of death, the full names in case the deceased were male individuals, their official ranks, and the years of internment. Out of 220 published inscriptions, 199 are legible; out of the 199 legible inscriptions, only forty-five addressed female tomb occupants. The respective epitaphs refer to the forty-five women exclusively as the "wives of" (*qi/furen*) certain male individuals and only sometimes mention their paternal lineage (*shi*). Thus, the relationships with their husbands and native families clearly defined the roles of women in Gaochang society. This is all the more obvious when we consider that the inscriptions on the epitaphs of females *always* record the full names of their husbands and often their official titles.[30]

On the ground surface, Turfan tombs display two distinct features: mounds as visible markers and rectangular enclosures.[31] The latter are adobe brick walls that separate small tomb clusters from surrounding burials. They were considerably less common than mounds. Names recorded on epitaphs yielded by tombs within such enclosures indicate intimate links between their respective occupants. Seeing that all male individuals shared one single last name, such tomb clusters undoubtedly were compounds of patrilineal families (Table 15.2).

Common Archaeological Finds

Apart from epitaphs, numerous of the 2000+ Chinese paper manuscripts that excavators retrieved from over 205 Turfan tombs feature personal names and absolute dates.[33] More than sixty-five so-called inventory lists (*yiwushu*) not only record various kinds of burial goods that once purportedly were deposited with the deceased, but explicitly mention the male and female occupants they were assigned to by their full names.[34] The fact that various epitaph inscriptions mirror names on inventory lists confirms that both kinds of finds were deliberately interred to accompany specific individuals.[35] Yet, the vast majority of manuscripts from Turfan

Table 15.2 Clusters of tombs of patrilineal families within walled enclosures (except for the cluster 86TAM384-M390 that actually lacked an enclosure).[32]

References	*Cemetery*	*Tombs in cluster*	*Family name*	*No. tombs in cluster*
Tulufan 1992: 146–148.	Astana	86TAM384-M390	Zhang	8
Xinjiang wenwu 2000.3–4: removable map.	Astana	72TAM110-M510	Zhang	52
Stein 1928: 645–650.	Astana	Ast.i	*unknown*	8
Stein 1928: 663–667.	Astana	Ast.ix	Fan	5
Tulufan 2006c: 28–29; 41–43.	Muna'er	04MNM101-M104	Song	4
Tulufan 2006b: 13, fig. 2; 21–23.	Jiaohe Gouxi	04/05TYGXM1-M35	Kang	27

tombs were not intentional deposits per se. Rather, hundreds of contracts and administrative documents, for instance, were fashioned into hats, shoes, and "handgrips" (*wo*; length ca. 8–12 cm) for the deceased and used as limbs for tomb figurines with clay or wooden torsos.[36] In other words, most manuscripts were not buried with the dead due to their inherent qualities; they were repurposed waste paper.[37]

The arid and relatively stable climate of the Turfan area also was conducive to the preservation of textiles made from cotton, hemp, wool, and silk. The latter came to light in different qualities such as embroideries, tabby weaves (*juan*), monochrome compound tabby and twill weaves (*qi*), and polychrome warp-faced and weft-faced compound tabby and twill weaves (*jin*).[38] Usually, textile finds were associated with clothes (e.g. shoes, socks, skirts, etc.), highly idiosyncratic face covers, and small pouches of tomb occupants. As such, they were not intentional deposits either, but part of the personal equipment of the deceased that featured in dressing rituals prior to the actual interment.[39]

The most common genuine burial goods are wooden and pottery food containers. Judging from the relatively low firing temperatures of many ceramic vessels and somewhat coarsely carved wooden objects, the majority of containers specifically were produced for funerals. Once more, Turfan's favorable climate not only helped to preserve objects made from organic materials such as wood, but also different kinds of foodstuffs. For instance, remnants of meat (e.g. capriovids, porcine), fruits (e.g. grapes, jujubes, apricots), cereals (e.g. barley, millet, rice), legumes (e.g. soybeans), and doughy treats such as dumplings and pastries show that Gaochang's residents relied on balanced diets.[40] As part of tomb assemblages, foodstuffs and prepared meals were supposed to nourish the deceased in the afterlife.

Some Tang-period Turfan tombs contained moderate numbers of exquisitely produced clay and wooden figurines of humans and livestock.[41] Much cruder versions of such miniatures also have emerged from tombs that date from Gaochang kingdom. Their shapes and sizes differ considerably. For instance, the hulking bodies of small humans (height ca. 10 cm) with incised facial features consist of roughly kneaded and dried clay.[42] Inscriptions on 10-to-20-cm tall anthropomorphic wooden tablets hint at the function of human figurines in funerary contexts. The red or black ink inscriptions *dai ren* on several of such finds translate as "substitute humans."[43] Thus, anthropomorphic miniatures clearly were believed to represent living individuals. The fact that humanoid tablets have surfaced in sets of three to nine suggests that they were not signifiers of close relatives, but slaves or servants. This might very well explain the explicit reference to "ten male and female slaves" (*nu bi shi ju*) by some inventory lists that have no equivalent in human bodies in tombs.[44] The inscription on a male wooden figurine further supports such a reading. Apparently, the couple buried in 75TKM99 (dated ca. 517)

at Karakhoja required the services of their "[Male] Slave Bai Tounei" (*nu Bai Tounei*) in the hereafter.[45] Zoomorphic figurines such as horses, camels, and elephants carved from wood expressed a similar mindset. They transformed their signifier's roles as beasts of burden into the afterlife.[46] In addition, Turfan tombs yielded seventy-three wooden duck figurines. They did not fulfil any utilitarian functions but were symbols of Buddhist beliefs that turned the respective tombs into Pure Lands.[47]

Gaochang Kingdom and the Movement of People, Ideas, and Objects

Silk Road studies often may be preoccupied with material culture, but objects were not able to move themselves. Apart from natural wildlife migrations and concomitant transfers of pathogens and genes, humans either consciously or unconsciously were the single most important facilitators of historical movement processes. Events such as the recent COVID-19 pandemic illustrate that people who roam the world might immediately affect societies at waystations and final destinations. Their peregrinations also have mid- to long-term ramifications. As for Gaochang kingdom, there is ample evidence for the impact of moving humans, as the following discussion will reveal.

The original ethnic composition of the Turfan region remains unknown. Nevertheless, it is safe to assume that some Inner Asian people that early Chinese histories address as Jushi/Gushi had settled in and around Jiaohe when the Western Han (206 BCE–9 CE) and the pastoralist Xiongnu confederation began to compete for the Jushi territory in the 1st century BCE. By 60 BCE, Jushi had submitted to the Han Empire, which more or less retained control of the area until the end of the Eastern Han (23–220).[48] Although several dynasties from the territory we now know as China maintained presences in the area, Turfan existed as a largely independent entity until 326. Early that year, Zhang Jun 張駿, the third ruler of the Former Liang dynasty (314–376) in modern-day western Gansu and Ningxia provinces Zhang Jun 張駿 (r. 324–346), seized the Turfan region and established Gaochang commandery (*jun*).[49] Zhang Jun's conquest introduced the use of Chinese writing in state administration.[50] That is to say, military expansion fostered the movement of a quintessential Chinese cultural trait from northern China to Inner Asia where it stayed the official written language well into the 8th century.

The Former Liang's grasp on the Turfan area may have been fleeting, but it opened the gates for an ever-increasing influx of culturally Han people, especially from the Hexi corridor. The brief historical survey earlier in the chapter has shown that members of the Zhang and Qu families had become kings of Gaochang by the turn of the 5th century. Furthermore, they had been vying for power over the Hexi corridor since the early 4th century.[51] Even with the rule of the Qu dynasty (502–640) firmly established, the Turfan epitaphs highlight that members of the Zhang clan continued to be influential officials after Zhang Mengming, the only king from their family, had been killed sometime after 481.[52] More significantly, there still was a strong bond with Zhang Jun and Zhang Mengming's birth family in their native Dunhuang. The epitaphs of five male and two female occupants state that the men interred in the respective tombs belonged to the "Zhang clan of Dunhuang" (*Dunhuang Zhang shi*). They had relocated to Gaochang kingdom, assumed prominent positions in its administration, and died there between 537 and 620.[53] In search of a better future, Zhang men kept moving into the Turfan area from Dunhuang long after Zhang Jun had initially incorporated it into his realm.

Chinese histories and archaeological evidence suggest that the Zhang had been a force to be reckoned with in the Hexi corridor since at least the early 2nd century CE. For instance, Zhang Dang was governor of Dunhuang when he submitted specific measures to deal with the Western Regions (Xiyu; i.e. roughly the Tarim Basin including the Turfan region) to the

Eastern Han throne in 123.[54] Yet, several 2nd- to 5th-century tombs from modern-day Gansu province provide much more pertinent data for our purposes. They help us to establish a direct line of transmission of several burial customs that were common in Gaochang kingdom. For instance, the very design of Turfan tombs with slanted passageways and vaulted ceilings was adapted from similar tombs in the Hexi corridor. Above-ground enclosures as indicators of family compounds started to appear in the Dunhuang area as early as the late 3rd century CE.[55] Inscriptions on ceramic vessels yielded by two out of the three tombs of an early 5th-century compound even identify their occupants as members of the Zhang clan.[56] Additional funerary practices that figure prominently in several Turfan tombs such as depositing inventory lists, handgrips, and images of the mythical deities Fuxi and Nüwa also have precedents further east.[57]

Of course, the movement of people and with them some of their ideas was not restricted to the Zhang family. Epitaph inscriptions reveal that women of the Qu and Zhang clans from Jincheng, west of present-day Lanzhou in Gansu province, married into different families at Gaochang and Jiaohe.[58] The wives of two locals even originated from far-away Jiankang near Nanjing on China's east coast and Wugong near Xi'an in Shaanxi province,[59] while others were born in different cities of the Hexi corridor such as Jinchang, Wuwei, and Zhangye.[60] Obviously, the marital relations of some Turfan clans extended well beyond the limits of Gaochang kingdom. We may only speculate about the reasons for such wide networks. Perhaps the in-laws in remote places were business partners and marriage alliances were supposed to strengthen the bond between both partners?

At first glance, trade involved short-term movement of merchants and their merchandise. Yet, Jonathan Skaff's excellent analysis of excavated Turfan manuscripts not only has shown that Sogdians dominated trade in the region in the 7th and 8th centuries, but also that they intermarried with local women and settled in Gaochang kingdom. Nuptial bonds linked local families with individuals and customs from east *and* west of current Xinjiang. In some parts of the Gaochang realm, Sogdians outnumbered Han populations by nine to one. Naturally, residents moved away as well. Excavated documents hint at the fact that the sons of Sogdian traders might have left Gaochang prior to their 15th birthdays in order to be trained as merchants and never returned. When selling their goods, some traders traveled the entire route from Sogdiana (i.e. roughly the area where modern-day Uzbekistan, Tajikistan, and Kazakhstan intersect) to modern-day central China, whereas others kept to short distances.[61] Then again, merchants were not the only humans that moved in and out of Gaochang kingdom. There is ample evidence that slaves largely of non-Han origin were sought after commodities.[62] As the preceding discussion of miniature figurines has illustrated, their services were crucial to the functioning of local households in life as well as death.

We almost inevitably tie the movement of material culture to trade, but it is important to keep in mind that this might not necessarily have been the case as I have mentioned in the introduction. In theory, coins are by definition a prerequisite for commerce. However, the favored currency in Gaochang kingdom was silk.[63] Thus, numerous Arab and Sasanian silver coins (drachms) as well as Byzantine gold coins (Lat. *solidi*) yielded by Turfan tombs were commodities rather than actual currency. They show the images of various early Byzantine (330–717), Sasanian (224–651), and Arab rulers, but their slightly smaller sizes, lighter weights, and nonsensical inscriptions identify many of them as imitations.[64] Their knowledge and appreciation of culturally alien gold and silver coins clearly inspired some Turfan residents to use emulations in mortuary rites whenever they could not access original pieces. For some reason, the meanings ascribed to the materials and iconographies of *solidi* and drachms outweighed any concerns about authenticity. Whether or not the coins indeed were minted in

the Eastern Roman empire or Persia did not matter. The descendants of certain tomb occupants considered originals and imitations as equally effective when putting them into the mouths of the deceased.[65] It is tempting to view this practice as more than the local adaptation of foreign coin designs. Might the original and imitated items be evidence of the Greco-Roman *obol* (Lat. *obolus*) custom itself? Unfortunately, though, the available data does not suffice to confirm that some Turfan residents actually believed they had to pay the ferryman Charon so that they may cross the river Hades into the netherworld.

Various visual designs in different kinds of media traveled to and through Gaochang kingdom. Popular Sasanian and Sogdian motifs such as ducks, boar's heads, peacocks, and so-called pearl roundels appear on many of the complex polychrome silk weaves from Turfan tombs. It is next to impossible to decide whether the Turfan residents might have appreciated such textiles for their inherent symbolism or aesthetic value. Perhaps it was both. Whatever the precise attraction(s) may have been, Sasanian and Sogdian fabrics deeply affected local society. The desire to incorporate foreign designs into indigenous craft production ultimately led to the adaptation of Western Asian weaving techniques and the mixing of western and eastern iconography. Several silk fabrics yielded by Turfan tombs feature Chinese characters such as *gui* ("costly; noble; precious") and motifs such as ducks, peacocks, and pearl-roundels.[66] It is worth mentioning that the latter often also adorn the surfaces of low-fire pottery plates, bowls, basins, jars, and cups as circles of large red and white dots. The second popular motif on funerary ceramics contrasts as lucidly with the black coating on the surfaces of the grey wares as pearl roundels: white and red petals of lotus flowers were rooted in Buddhist iconography.[67]

It is unclear whether the deceased and their descendants were actually aware or had a deep appreciation of the lotus's meaning as symbols of creation and (re)birth. In some cases, though, the Buddhist proclivities of several tomb occupants are undeniable. By the 5th century, the Turfan area was a stronghold of Buddhist faith as the ruins of stupas and monasteries at Gaochang and Jiaohe demonstrate.[68] In addition, the contemporaneous grottoes at Tuyok (Chin. Tuyugou) near present-day Turfan yielded large numbers of Buddhist murals and manuscripts (mostly *sūtras*).[69] More importantly, local translators converted many Buddhist teachings into Chinese and thus facilitated their transmission to modern-day mainland China.[70] It may exceed the scope of this article to trace the ways in which Buddhism had moved from northern India to Turfan, but we can still analyze its effect on the local populace. For instance, excavated receipts confirm that numerous citizens were avid donors to Buddhist monasteries.[71] Notwithstanding that inhumation was the most common form of disposing human remains in Turfan tombs, rare cases of cremation point to Buddhist practices.[72] When inventory lists address male and female tomb occupants not only by name, but as "disciples of Buddha" (*Fo dizi*), there can be little doubt as to their religious beliefs.[73] The very same manuscripts further mention Classical texts such as *Lunyu* and *Xiaojing* as burial goods and reveal that Buddhist beliefs did not all prevent people from simultaneously appreciating Chinese traditional teachings.[74] Such contents probably took hold of the Turfan area as Zhang Jun implemented Chinese bureaucratic structures in the early 4th century. However, the fact that Gaochang's ruler requested Classicist texts, dynastic histories from the Northern Wei court, and the chance to train their own officials as erudite in the imperial capital in 519 (see section titled History of Gaochang Kingdom earlier in the chapter) shows that the influx of Chinese doctrines never ceased. No wonder, then, that actual fragments of *Lunyu* and *Xiaojing* were among the excavated manuscripts – as was a Daoist talismanic document.[75] Locals actually studied such texts; they were not mere references in inventory lists. Thus, the constant movement of different intellectual traditions to and from the region had a tremendous impact on the people of Gaochang kingdom and the world beyond.

Conclusion

The little we know about indigenous populations of Turfan comes from vague allusions to their ethnic background in Chinese historiography and early mortuary data.[76] In turn, both kinds of sources highlight that starting from the early 4th century people of Han descent started to move into the area in significant numbers in the aftermath of Zhang Jun's establishment of Gaochang commandery. Such immigrants profoundly altered local society and, at the same time, underwent remarkable changes themselves. Today, this is particularly obvious in local burial customs. While many archaeological features and finds such as general tomb design, above-ground enclosures, epitaphs, tomb miniatures, foodstuffs, Fuxi and Nüwa imagery, and Classical Chinese texts represent century-old Chinese traditions, there is irrefutable evidence that numerous of the deceased were devout Buddhists. In fact, many of these in mainland China well-known features and finds were supposed to sustain the dead in perpetuity and, as such, simultaneously created the perfect background to imagine Turfan tombs as Buddhist Pure Lands. Undoubtedly, in this particular case traditional Chinese practices and Buddhist beliefs perfectly complemented rather than contradicted each other.

Focusing on movement processes instead of "cultural exchange" or "cultural influence" allows us to emphasize time as a crucial dimension in Silk Road studies. Scholarship often is preoccupied with moving material culture and, by extension, trade and traders. For lack of evidence, it usually views the latter as fleeting presences in so-called Silk Road communities. Of course, itinerant merchants largely of Sogdian heritage indeed were active in the Turfan area, but many of them eventually settled there. And, occasionally they intermarried with Chinese members of the population. The bilingual inscription on an anthropomorphic wooden tablet of the Chinese phrase "substitute human" (*dai ren*) and its Sogdian translation of the back of the object also reflects the blending of cultures that was caused by moving humans.[77] Some marital bonds might have happened spontaneously when future spouses met by accident, others surely were premeditated. Either way, men and women came to Turfan from places near and far and built families. The fact that these sometimes were intentional, ongoing processes is particularly visible in the cases of several male and female Zhang family members from Dunhuang who married local residents over the course of more than eighty years. Apparently, one of Turfan's two most influential clans felt the need to nurture their ties with Zhang Jun and Zhang Mengming's birthplace roughly 800 km east. With a steady flow of people coming and leaving, culture and society at Gaochang kingdom were never static but permanently in motion.

Notes

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1 E.g. Stauffer 1996. Chinese characters: *qi* 綺; *jin* 錦.
2 E.g. Hansen 2012; Watt 2004a; Whitfield and Sims-Williams 2004. For a notable exception, see Liu 2001.
3 For a wide range of specific questions, see Selbitschka 2018a.
4 Kieschnick 2003, 222–280.
5 Stein, 1928, 587–609, 642–718. Chinese characters: Gaochang 高昌.
6 E.g. Falconer 2004, 324; Watt 2004b, 288–289. Chinese characters: Asitana 阿斯塔納; Halahezhuo 哈喇和卓; Jiaohe 交河; Badamu 巴達木; Muna'er 木納爾.
7 E.g. Skaff 2003; Wang 2013; Bivar 2006; Sheng 1998.
8 Selbitschka 2020; Selbitschka 2021. Much of the research in the present article has been informed by these two studies and it may be viewed as a companion piece to both.

9 See n. 8.
10 On the political history of Gaochang kingdom/Xizhou, see, for instance, Xiong 2009, 175, 590–591; Wang 1998; Zhang and Rong 1998; section 1. Chinese characters: Xizhou 西州.
11 Chinese characters: Qu 麴; Zhang 張.
12 For more details on the excavated manuscripts, see section 2.
13 *Weishu*, 101.2243–2244; *Beishi*, 97.3213; *Zhoushu*, 50.914; *Suishu*, 83.1846. On Tiele, see Xiong 2009, 506. Chinese characters: Rouran 柔然; Ruanruan 蠕蠕; Kan Bozhou 闞伯周; Tiele 鐵勒; Gaoju 高; Zhang Mengming 張孟明; Dunhuang 敦煌; Ma Ru 馬儒; Gong Guli 鞏顧禮; Qu Jia 麴嘉.
14 *Weishu*, 8.207–209, 8.212–213, 9.223, 9.227, 9.232, 10.258, 11.285, 101.2244–2245; *Beishi*, 97.3214; *Zhoushu*, 50.915; also see Selbitschka 2019, 75–76.
15 *Weishu*, 101.2244–2245; *Beishi*, 97.3213–3216; *Zhoushu*, 50.914–915; *Suishu*, 83.184. Chinese characters: Qu Jian 麴堅; Qu Boya 麴伯雅.
16 *Jiu Tangshu*, 198.5294–5297; *Xin Tangshu*, 221A.6220–6223. Chinese characters: Qu Wentai 麴文泰; Qu Zhisheng 麴智盛.
17 *Weishu*, 101.2243; *Beishi*, 97.321; *Zhoushu*, 50.914. However, the *Zhoushu* counts sixteen rather than eight cities. Chinese character: *li* 里.
18 Xiong 2009, 250, 504. Chinese characters: *Jiaohe gong* 交河公; *Tiandi gong* 田地公.
19 *Weishu*, 9.227, 101.2244–2245; *Beishi*, 97.3214; also see Selbitschka 2019, 76; Zhang and Rong 1998, 17–18. Chinese characters: *Ru* 儒; *wu jing* 五經; *boshi* 博士.
20 However, some tombs at Jiaohe date from the late 3rd century BCE to the late 3rd century CE, many of which reveal burial customs common in the mountains and steppes north of the Tarim Basin. Most likely, they belonged to members of the indigenous population. See Lianhe 1998, 71; Xinjiang Wenwu 2001, 43.
21 Stein 1928, 587–609, 642–718; also see Yan 1962.
22 Tulufan 1992; 2006a; Tulufanxue 2014; Xinjiang Bowuguan 1978; 2000a; 2000b; Xinjiang Weiwuer 1960; 1972a; 1972b; 1973; 1975; Xinjiang Wenwu 2000a; 2000b.
23 Jie 1999; Tulufan 2006b; Xinjiang Wenwu 1997a; 1997b; also see n. 20. Chinese characters: Gouxi 溝西; Goubei 溝北.
24 Hou 2001, 129–130. Chinese characters: Huang Wenbi 黃文弼.
25 Tulufan 2006c; 2006d; 2006e; Xinjiang Wenwu 2013.
26 Tulufan 2006b, 12; 2006e, 4; Xinjiang Weiwuer 1960, 20; Xinjiang Wenwu 1997a, 47; 2000a, 84; 2000b, 168.
27 Tulufan 2006e, 14–18, 45–58; Xinjiang Bowuguan 2000a, 1. Muna'er cemetery seems to have been an exception as eighteen out of forty-two tombs were single burials. Moreover, ten tombs yielded joint burials and two tombs triple burials. Given the poor conservation of human remains due to looting, the number of occupants in the remaining tombs remains unclear. See Tulufan 2006c, 33.
28 Xinjiang Weiwuer 1973, 11; Xinjiang Weiwuer 1960, 21; Tulufanxue 2014, 32, 38, 43; Stein 1928, 685.
29 Selbitschka 2020, 168–171.
30 Selbitschka 2020, 164–168. Chinese characters: *qi* 妻; *furen* 夫人; *shi* 氏.
31 On mounds, see Tulufan 2006a, 3; Xinjiang Wenwu 2001, 44.
32 Chinese characters: Zhang 張; Fan 氾; Song 宋; Kang 康.
33 Valerie Hansen (2012: 94) has counted 205 tombs that yielded manuscripts. For more recent finds, see, for instance, Tulufanxue 2014, 37–42, 43–48, 49–51.
34 Guojia, Vol. 2 (1981), 30, 215–218; Vol. 3 (1981), 151–152. Dang and Weng (2001: 80–81) have counted sixty-five inventory lists (*yiwushu* 衣物疏). For an additional find that post-dates the publication of their article, see Tulufan 2006a, 9.
35 Tulufan 1992, 146–147, 148; Xinjiang Wenwu 2000b, 174, 175; Guojia, Vol. 3 (1981), 151–152.
36 Xinjiang Weiwuer 1973, 9, 11; Tulufan 1992, 155; Tulufanxue 2014, 32, 38–42. Chinese character: *wo* 握.
37 On the methodological ramifications of such slight differences in intentions, see Selbitschka 2021, 178–181.
38 Xinjiang Wenwu 2000a, 150–167, provides a comprehensive list of textiles that were uncovered in the 1972–1973 season at Astana cemetery. Chinese character: *juan* 絹 (on *qi* and *jin*, see n. 1).
39 Tulufan 1992, 155; 2006a, 9; Tulufanxue 2014, 42, 52; Xinjiang Weiwuer 1960, 14–17; Xinjiang Weiwuer 1973, 15–19; also see nn. 1 and 7. On face covers, see Riboud 1977.

40 Tulufan 1992, 155; Tulufanxue 2014, 35, 37, 49, 52; Xinjiang Weiwuer 1973, 9; Xinjiang Wenwu 2000a, 97; Xinjiang Weiwuer 1960, 20, 21; Tulufan 2006d, 68, 69, 72.
41 Xinjiang Weiwuer 1973, 11; Xinjiang Wenwu 2000a, 111–117; 2000b, 181–182; Jin and Li 1976.
42 Stein 1928, 685; Tulufan 1992, 156; Tulufan 2006e, 32; Xinjiang Wenwu 2013, 60; Xinjiang Weiwuer 1960, 21; Xinjiang Wenwu 2000a, 97, 172.
43 Xinjiang Bowuguan 1978, 2. Chinese characters: *dai ren* 代人.
44 Tulufan 1992, 148; Tulufan 2006c, 42, fig. 23. Chinese characters: *nu bi shi ju* 奴婢十具.
45 Xinjiang Bowuguan 1978, 7–8. Chinese characters: *nu Bai Tounei* 奴白頭内.
46 Stein 1928, 694; Tulufan 2006a, 7; 2006c, 38; Xinjiang Weiwuer 1973, 9.
47 Selbitschka 2021.
48 *Hanshu*, 94A.3789, 96B.3921; also see Wang 1998, 245–246. On Gushi 姑師 as an alternative name for Jushi 車師, see *Shiji*, 123.3160. Chinese characters: Xiongnu 匈奴.
49 *Jinshu*, 86.2238. Chinese characters: Zhang Jun 張駿; Gaochang *jun* 高昌郡.
50 Xinjiang Weiwuer 1973, 12.
51 *Jinshu*, 86.2223–2229.
52 Selbitschka 2020, 172–175.
53 Hou and Wu 2003, 18, 88, 140, 262, 317, 321, 324. Chinese characters: *Dunhuang Zhang shi* 敦煌張氏.
54 *Hou Hanshu*, 88.2911. Chinese characters: Zhang Dang 張璫; Xiyu 西域.
55 Dunhuang 1974, 191; 2019, 15
56 Gansusheng 1983, 51, 57–58.
57 Jiayuguanshi 1982, 12; Gansusheng 2003, 47, 51; 2017, 22, 27, 34; 2020, 26. On the purported functions of handgrips, see Chen 1956, 71. On the significance of Fuxi 伏羲 and Nüwa 女媧 iconography, see Suhadolnik 2011; Zhang Fan 2019; Zhao Jinchao 2019. On Turfan inventory lists, also see Selbitschka 2021, 181, 191–194.
58 Hou and Wu 2003, 85, 280, 289. On Jincheng 金城, see Xiong 2009, 256. On marriage practices in Gaochang more generally, see Selbitschka 2020, 175–177.
59 Hou and Wu 2003, 158, 160, 183. On Jiankang 建康 and Wugong 武公[功], see Xiong 2009, 246, 556.
60 Hou and Wu 2003, 61, 75, 215, 342. On Jinchang 晉昌, Wuwei 武威, and Zhangye 張掖, see Xiong 2009, 259–260, 559, 670.
61 Skaff 2003, 479, 484, 493, 495, 501, 507. On trade relations between China, Inner Asia, and Western Asia, also see Hansen 1995; 2005.
62 Skaff 2019.
63 Hansen and Rong 2013; Wang 2013.
64 Selbitschka 2018b, esp. tab. 5; Skaff 1998, 69.
65 Valerie Hansen's (2012: 97) claim that many *solidi* yielded by tombs at Astana and Karakhoja had "holes punched in them, an indication that they were sewn onto clothing, most likely for the use as protective talismans" does not accurately reflect archaeological data. Comprehensive analyses of such coin finds have shown that the majority of *solidi* and drachms were discovered in the oral cavities of the deceased. See Selbitschka 2018b, esp. tab. 5; Skaff 1998; also see Gasparini 2020, 49–50.
66 Bivar 2006, 12–17; Gasparini 2020; Otavsky 1998, 161–184; Wu 2006, 211–242. On warp-faced and weft-faced compound weaves, see Zhao Feng 2012, 211–224. On the purported origins of the pearl roundel design, see Gasparini 2020, 49; Sheng 1998, 148. For a discussion of the symbolism of duck and pearl roundel designs, see Selbitschka 2021, 201–209. Chinese character: *gui* 貴.
67 Priewe 2009, 65–72.
68 Lianhe 1998, 75–116; Stein 1928, 591–594; Yan 1962.
69 Zhongguo 2012; Stein 1928, 615. Chinese characters: Tuyugou 吐峪溝.
70 Wang 2010.
71 Xinjiang Bowuguan 1978, 1; Guojia, Vol. 3 (1981), 215. For records of various kinds of businesses with Buddhist clergy, see Guojia, Vol. 2 (1981), 67–139, 219–267; Vol. 3 (1981), 207–213, 215.
72 Tulufanxue 2014, 31; Xinjiang Weiwuer 1973, 11; Xinjiang Wenwu 2000a, 233.
73 Guojia, Vol. 2 (1981), 215, 217; Vol. 3 (1981), 59, 151; Vol. 4 (1983), 149, bu qian 補遺, 4; Tulufan 1992, 148. Chinese characters: *Fo dizi* 佛弟子.
74 Xinjiang wenwu 2000a, 91 and Guojia, Vol. 2 (1981), 268–273, 279; Vol. 3 (1981), 151–152; Xinjiang Weiwuer 1975 and Guojia, Vol. 4 (1983), bu qian 補遺, 4–5. Chinese characters: *Lunyu* 論語; *Xiaojing* 孝經.

75 Guojia, Vol. 2 (1981), 268–273, 279, 354. On the Daoist talisman, see Xinjiang Weiwuer 1960, 17–18; Guojia, Vol. 2 (1981), 33.
76 See nn. 20 and 48.
77 Xinjiang Bowuguan 1978, 2.

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16

TURFAN, THE FRONTIER TRANSMITTING SMALLPOX TO TANG CHINA

Song Xian and Translated by Xinru Liu

In a famous medical treatise compiled in 752 (year 11 of the Tianbo Era of the Tang Dynasty), *Waitai Miyao*, [*Secret Prescriptions of Waitai*, by Wang Tao] recorded:

> Wenzhong Taoshi[1] says: "*tianxing fabanchuan*, or 'pustules came from sky', spread to the entire body in a moment, all emit white pus. This deadly disease poisoned the air of the region. It is said in the fourth year of Yonghui Era (653), this pustulate disease flowed from the Western Region eastwards to the interior of the country. But it could be treated by boiled *Kuicai* leaves and garlic chives. Fresh blood of sheep could also be effective. The patient should be fed immediately as the symptom appears. Take the medicine together with food is fine". This item is in the chapter twenty-five of the book.[2]

This quote from a book composed in the 8th century provided two pieces important information. The first is that smallpox entered China through Turfan region in the year of 653. Second, there were certain remedies developed soon after smallpox claimed lives of the first batch of infected.

The Western Region where the deadly disease came from should mean the area from present Xinjiang and Central Asia, West Asia and further to the west. At that time when the disease came, Turfan [Xizhou] and Kesh [Shule] were in the territory of the Tang Empire, thus was in the "interior of the country". Therefore, the origin of this "pustules came from the sky" should have had been the area west to the governance of Anxi Protectorate all the way to Persia and Arabic country.

It is well known that catastrophic natural disasters such as earthquake, tsunami, flood, and locust swarms, as well as enormous social disturbances such as warfare, ethnic feud, and so on, all severely disrupted ecological environment. Running away from the affected region lest to be killed, people deserted their homes and migrated away, some for long distance. All the drastic changes caused and spread epidemic diseases such as smallpox, which had erupted in the world several times before the Tang Dynasty.[3] Around the year 653, on the lands of Persia and Arabia several natural and socio-political disasters took place.

In 626 the king of Sassanid Persia tore up the letter from Muhammad in front of the Arabian envoy to humiliate the Arabs. The newly born Arabian Islamic regime was determined to wipe

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out the Sassanid kingdom. Arabs started to conquer the Persia Empire in 634 and occupied its capital Ctesiphon in June of 637. The last Sassanid King Yezdjerd fled the capital city along with his imperial guards. Around the first year of the Yonghui Era of Emperor Gaozong of the Tang (649–650), Arabs conquered Persepolis located in the interior of the empire near present Shiraz. In 651, Yezdjerd escaped to Merv (Mari in present Turkmenistan) with a small retinue carrying his crown and treasures. Out of greed, a miller saw the treasures thus killed Yezdjerd in his mill.[4] Prince Peyrooz and the king's grandson Narses and other royal family members happened to be separated on the way thus continued to run eastwards. According to the chapter of "Western Region" of *Jiu Tangshu* [Old Version of Tang History], Prince Peyrooz first reached the Yabghu of Tokharistan (in modern Afghanistan). In the first year of Yuanshuo Era (661), Emperor Gaozong of Tang had the headquarters of Bosi Protectorate built, and named it as Jiling castle at the modern Zahedan, inside the border of modern Iran adjacent to Pakistan. The emperor then assigned Peyrooz as the governor. During the Xianheng Era (670–674), Peyrooz came to the royal court, and Emperor Gaozong received him graciously granting him plenty of gifts and ranked him as the "General of Marshal Guardian on the Right". Then at the beginning of the Jinglong Era (707–710), Narses came to the royal court, and was granted the title of "General of Powerful Guardian on the Left". Eventually, both Peyrooz and Narses died in Tang China as expatriates.[5]

The end of the last king and his offspring in countries far away from their homeland was quite tragic. That was because the Arabs' campaign of conquering Sassanid Persia aimed not only at occupying cities and lands, but also to revenge thoroughly for the humiliation Yezdjerd imposed on their new regime. Therefore, even after the death of Yezdjerd in 651, Arabs marched eastward from Merv. According to the "Western Region" chapter of the *New Version of Tang History*, "Mi, or Mimo, or Mimohe, where the king ruled from the city Boxide, was a state located to the north of Kang about one hundred *li*. It was conquered by the Arabs during the Yonghui Era (650–655)".[6] The Mi state was Maimargh in local language, and the site of its capital Boxide should be Guma-a-Bazar in Uzbekistan. Both the Mi and the Kang that centered on Samarkand were among the "Nine Lineages of Zhaowu States" call by Chinese during the Sui and Tang times, that is, the Sogdian city-states in the present Uzbekistan. During the Yonghui Era, several of the Zhaowu state sent envoys frequently to report that they were attacked by the Arabs and was taxed by the Arabs. All the information testifies that the few years before and after 653 savagery wars were rampaging Persia and Central Asia. This cruel war that destroyed the Persian Empire and decimated its population brought large number of refugees to the frontier of the Tang Empire. Some of them lingered around the Western Region, others migrated into Tang interior regions. The destructions of warfare and refugee floods caused the "pustules came from the sky" referred in the *Secret Prescriptions of Waitai* as an epidemic disease spread from the Western Region to the Tang interior region. The refugees from Persia and Central Asia who ran away from the devastating warfare carried the diseases to the Tang territory.

Now, let us see whether some related events took place in contemporary Turfan, that is, Gaochang and Xizhou as called in the Tang Dynasty.

During October to November of 1959, Eastern Team of Archaeology of the Xinjiang Museum excavated six tombs at Astana in Turfan. In tomb TAM302, an inscribed stele dated the fourth year of the Yonghui Era (653) was discovered. Three bodies, one male and two females, were buried in the tomb. The man's body was laid near the entrance heading east; a woman was laid alongside the body of the man, but her head was toward the west; another woman was laid on the foot of west wall of the tomb heading south. Hair of all three was bundled to a roll over the head. One female corpse was bundled with hemp fabrics, then covered

with plain silk fabric from the head to toe. The body was further dressed in a blouse styled in straight collar and buttoned down to the knees and a skirt, both in purple colored silk. Stitched on the breast of the blouse was a square of silk tapestry with the pattern of "confronting horses". Among the six ancient tombs excavated in Astana by the team, only in the TAM302 tomb two pieces of "confronting horses" silk tapestry had been retrieved. Another piece was on a "face-cover". The color scheme of the tapestried weaves were light blue, light green and pink on an orange ground. The motif was that two leaping forward horses facing each other circled into a roundel of 9 × 8.5cm; each horse was striking out a foreleg vividly. The editor of the report notes that the "this motif is obviously not Han Chinese in style, probably a product influenced by Persian culture". Among the many buried goods from the six tombs, only in TAM302 there were two Persian coins, cast in the reign of Yezdjerd, each in the mouth of the two women.[7]

A Chinese text inscribed in red paint was entered in the TAM302. The text runs eight lines:

> In the fourth year of the Yonghui Era (653), the year of *guichou*, the eleven month, namely the month of *jiyou*, the new moon day of the thirteenth, the moment of *xinyou*, Zhao Songbai, the newly assigned Chief Secretariat, Military Staff, Calvary Marshal Guard, by the Great Tang Emperor to benefit Xizhou (Turfan), just when he received the honor and was getting ready to serve the country, and to bring glory to his family, he unexpectedly passed away suddenly. All his family and relatives cried loudly in grief, and people in the communities shed tears profusely. He was only fifty-nine years old.
>
> . . . Oh, alas!

What the inscription tells us is that the fifty-nine-year-old man who was just assumed the major official position assigned by the Tang imperial court and going to fulfill his job in Xizhou, that is, Turfan, but unfortunately died all the sudden. The inscription also tells us that the two women who buried along with him died suddenly in the same year. As discussed earlier, the "pustules came from the sky" spread from the Western Region to Tang interior in the same "fourth year of the Yonghui Era", according to *Waitai Miyao*. Meanwhile, the two women buried in the same tomb carried several Persian cultural mementos with them to the burial. There is no definite information about the identities of the two women, but the genuine coins of Yazdjerd in their mouth indicate that they very likely were refugees from Persia, even could be from the royal household. All these indicate a strong possibility of Zhao Songbai died from the international epidemic "pustules came from the sky".

This case which took place more than 1300 years ago could not be decided by the literary and archeological information now available. The final diagnose has to wait to be decided by scientific examinations. TAM302 nevertheless could be an evidence that the "pustules came from the sky" spread in the Turfan region in 653, exactly as recorded in Chinese literary sources. Meanwhile, Xizhou of the Tang was a place providing information of the disease for treatment with traditional Chinese medicine.

Zhao Songbai and his consorts died unexpectedly, probably along with many others of less status thus had no extravagant tombs preserve the records. Meanwhile, some herbal medicine soon developed to treat smallpox. *Waitai Miyao* offered two remedies: *Kuicai* leaves and garlic chives. Garlic and similar plant juice had been widely used in Chinese pharmacy to treat various infections, but the specific plant of *Kuicai* needs to be identified. Plants with the name of "Kui" have recorded by many pharmacological texts. *Longkui* [Solanum nigrum L.] contains Solanine, Solasonine, Solamargine etc, as well as several vitamins. Its effect of treating

various pustulate maladies had been recorded in Uighur pharmacology.[8] *Huangshukui* [Abelochus Manihot L.] was another plant has been referred as remedies for smallpox and other pustulate diseases.[9] From the year 653 when smallpox erupted in Turfan region till Wang Tao coded the remedy in 752 in Tang China interior, many people had died from the disease and meanwhile treatments developed using species of plants related to *kui* in Chinese medicine. This line of medicine certainly mediated the virulence of smallpox thus reduced it to a controllable childhood disease, instead of a disease erupted from time to time to onslaught a whole population of a large region.

Notes

* This chapter is an excerpt from the author's essay "Tulufan dui chuantong zhongyiyaoxue de gongxian" [Turfan's contributions to traditional Chinese medicine], in *Journal of the Turfan Studies*. Shanghai: Gujichubanshe, 2010, pp. 509–514. Translator/editor Xinru Liu revised with new information provided by the author.

1 This vague reference could mean Tao Hongjing, a famous Daoist physician lived 456–436. As Tao lived much earlier than the 653 event referred here, when *Waitai Miyao* 《外台秘要》was composed in 752, the author probably tried to quote the well-known authority to strengthen his case. Meanwhile several other late writers gave exact same account but attributed to other authorities. See William McNeill, *Plagues and Peoples*, New York: Anchor Books, 1989, pp. 146–147. The coming of smallpox in 653 thus could be inferred as a well-known event in Tang China. Editor's note.

2 Wang Tao 王焘, *Waitai Miyao*, Beijing: Renmin Weisheng Chubanshe, 2002, Vol. 3, p. 119.

3 According to William McNeill, smallpox could have been originated from India. Several eruptions of plagues in the Mediterranean could be vaguely implicated to measles or smallpox. McNeill, *Plagues and Peoples*, pp. 122, 130–132. Editor's note.

4 That Yezdjerd was not killed by the Arabs but a miller in Merv was noted in Zhang Xinglang, *Zhongxi Jiaotong Shiliao Huibian* 张星烺：《中西交通史料汇编》, Beijing: Zhonghua Shuju, 2001, p. 1061.

5 Liu Xu, *Jiu Tangshu* 劉昫：《舊唐書》, Beijing: Zhonghuashuju, 1975, chapter 198, pp. 5312–5313.

6 Ouyang Xiu, *Xin Tangshu,*歐陽修：《新唐書》， Beijing: Zhonghua Shuju, 1975, chapter 221b, p. 6247.

7 Institute of Archaeology, Xinjiang Academy of Social Sciences, *Xinjiang Kaogu Sanshi Nian* [Archaeological Discoveries in Xinjiang During the Last Thirty Years], Urumqi: Xinjiang Renmin Chubanshe, 1983, pp. 74–78; Xu, Pingfang, *Sichou Zhilu Kaogu Lunji* [A Collection of Essays on Silk Road Archaeology], Shanghai: Guji Chubanshe, 2017, p. 46.

8 Baidiyi Yaoshu 《拜地伊药书》， from *Zhonghua Bencao, Weiwuer Yaojuan* 《中华本草 维吾尔药卷》, Shanghai: Keji Chubanshe, 2005, p. 121–122.

9 *Zhongyao Dacidian*《中药大辞典》, Vol. II, p. 2075.

17

CARAVAN CITIES IN THE ROMAN NEAR EAST

Palmyra and Petra

Hamish Cameron

Introduction

The term "caravan city" is both evocative and, in the scholarship of the Roman Near East, provocative. In 1932, Rostovtzeff's *Caravan Cities* traced the development of the Fertile Crescent in terms of the caravan trade across the Arabian Desert, focused on four cities Petra, Gerasa/Jerash, Palmyra, and Dura Europos, evoking the romantic idea of an oasis city bustling with trade caravans laden with exotic silks and spices from distant lands.[1] While these cities continue to attract such readings, especially in non-scholarly discourse, the view of the social and economic structure of the Roman Near East as powered by "Venices of the Sands"[2] connected to long distance trade caravans from the Far East, has come under scrutiny both in terms of the economic structure it implies and the realities of long-distance trade in the Roman period.[3] As archaeology has revealed the extent of the agricultural hinterlands of the cities of Roman Syria and the nature of their economic base, the degree to which land and agriculture were the dominant factors in local economies has become clear. The romantic image of caravan cities has become discredited, as has the notion of Roman interaction with the Silk Road.[4]

Long-distance trade may not have been an active priority for these cities or represented the bulk of their economic activity; nevertheless, the volume of trade with the East was considerable in the Roman period.[5] Recent work has addressed the nature of this trade, routes of movement, institutions that engage in and supported trade, and the place of trade and movement in local, regional or global conceptions of the world and its connectivity.[6] These approaches have helped nuance our understanding of this factor of ancient life in the Roman Near East.

This chapter will reevaluate the position of two of the most famous "caravan cities" – or rather "cities associated with long distance trade to Asia and India" – in relation to the trade networks of the Roman Near East. I will show how trade reached Rome from the Silk Road by exploring three main literary sources for long-distance trade to the East. These sources are not just important for showing how this happened, but for revealing what the Romans knew about those routes. I will then show how those two cities, Petra and Palmyra, made use of their own regional trade networks to access neighboring regional networks, and ultimately the long distance routes that constituted the Silk Road.

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Long-Distance Trade

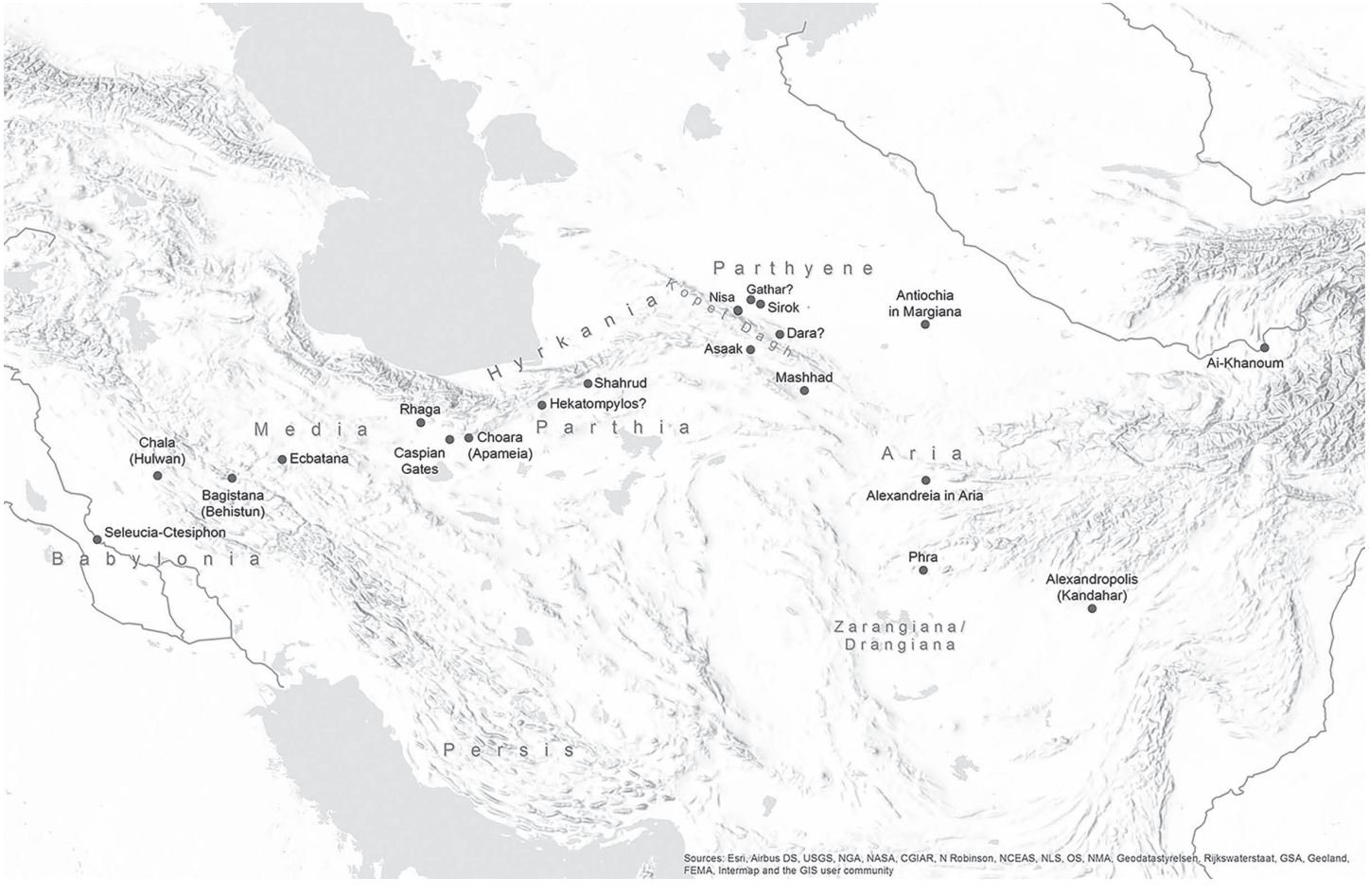
Long-distance trade contacts between the Roman Mediterranean and Central Asia occurred along two general routes: overland through the Parthian empire and by sea through the Indian Ocean to northwest India.[7] It is important to consider each of these general routes as a flexible network comprised of the movement of travelers along multiple paths through space and passing through various sites of settlement, exchange and resupply. Three literary sources survive that seem to describe these routes in detail.

Red Sea

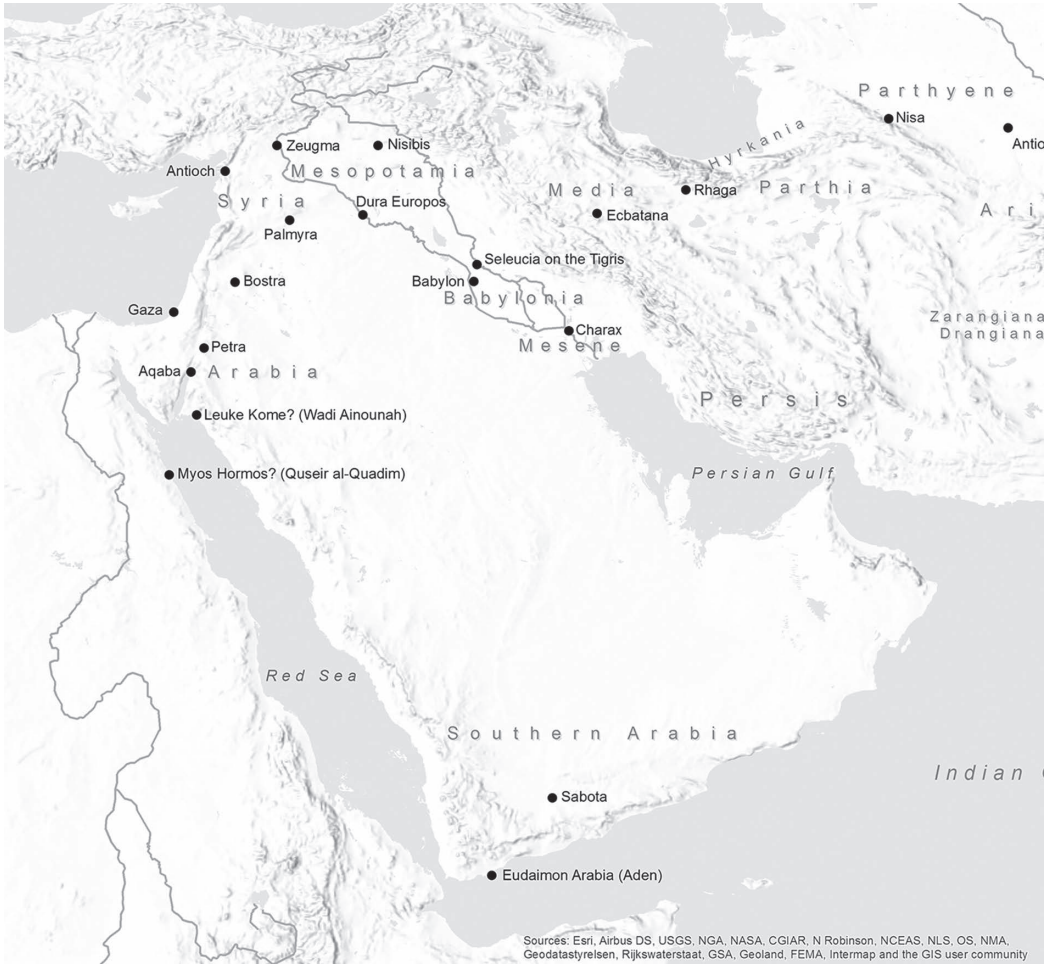
Our most detailed written evidence for long distance trade in the Roman empire comes from the *Periplus Maris Erythaei* (*Periplus of the Red Sea*), a Greek text of the mid-1st century (ca. 40–70 CE) that describes the stops on a sea route between the Egyptian port of Myos Hormos and various cities in India and beyond.[8] The anonymous author compiled his first-hand knowledge of the route to produce a handbook of ports on the route, the political conditions that obtained there, and the goods that could be exchanged in each.[9] Although the *Periplus* records the route taken by an Egyptian merchant, the Nabataean port of Aila at the head of the Gulf of Aqaba allowed Nabataean traders to participate in this route. From Aila (modern ʻAqaba), Mediterranean-bound goods were transported by land up the Wadi ʻArabia to Petra, then northwest across the Negev to Gaza.[10] A major focus of this route was the spice trade with the kingdoms of Southern Arabia (called Arabia Felix by the Romans).[11] In the Hellenistic period, the city of Eudaimon Arabia (modern Aden) was the terminus for ships coming from the west bearing Mediterranean goods and Indian ships from the east and thus was a major transshipment hub.[12] By the time of the *Periplus* in the Early Roman period, expanded geographical knowledge of the Indian Ocean and its winds enabled ships from the Red Sea to sail as far as India.[13] This trade route flourished during the first two centuries of the Imperial period, declined during the unrest of the 3rd century, but recovered when stability returned in the 4th and 5th centuries.[14]

Parthian Stations

Another important text is the *Stathmoi Parthikoi* (*Parthian Stations*) by Isidore of Charax. This Greek text from the late 1st century BCE is usually thought to be an excerpt from a longer work although both the nature of that work and the identity of the author are obscure.[15] This text is not focused on trade, but on the political and military features of the route it describes from Zeugma in Roman Syria down the Euphrates to Seleucia on the Tigris in Babylonia (Southern Mesopotamia) and then across the Zagros mountains into Central Asia.[16] The scope of the text, as well as the features the text focuses on, indicates its political focus: the route described spans the Parthian empire from its west to east.[17] Millar argues that the Parthian Stations does not provide evidence for overland trade, stating that the *Parthian Stations* "is not in any simple sense evidence about trade-routes at all, still less about the legendary Silk Road".[18] The phrase "in any simple sense" bears a heavy burden in this claim.[19] Not only does Isidore's text give valuable information on an overland trade connection between the Roman Near East and Central Asia, but it most likely does trace routes of movement used by traders over a long period, and importantly for our purposes, linking known sites of Palmyrene activity in Babylonia to Central Asian trade routes to China. For this reason, it requires examination in detail.



Map 17.1 Silk Road, Isidore Route.



Map 17.2 Silk Road, Southwest Asia.

Map 17.3 Silk Road, Syria.

While Isidore's text does not focus on trade, the route it describes was and remains widely used for all kinds of movement across the Parthian empire, including by traders.[20] In the case of the first section (Isidore 1), Strabo's *Geography* corroborates this route. Strabo describes how merchants travelling between Roman Syria and Parthian Mesopotamia would travel along the Euphrates between Zeugma and Seleucia on the Tigris.[21] Although Strabo's description is topographically vague, the route he describes most likely corresponds to the first half of Isidore's route to Central Asia.

The next section of Isidore's route conforms to what we would expect from an overland trade route between Babylonia and the Iranian plateau. After reaching Seleucia, Isidore's route passes through Apolloniatis (and the city of Artemita),[22] Chalonitis (and the city of Chala/Ḥulwān),[23] before entering the Zagros Mountains. It then passes through Media, Kambadene (Kampanda),[24] Upper Media, and Rhagiana to the Caspian Gates.[25] Notable locations along the path include Bagistana where he mentions a statue and a stele of Semiramis (a reference to the Persian inscriptions at Behistun),[26] a customs house at Bazigraban,[27] Ecbatana (the primary city of Media), and Rhaga, which he describes as "the greatest of the cities in Media".[28] This route between Seleucia on the Tigris and Ecbatana was longstanding and highly trafficked. Seleucia on the Tigris lay at the heart of Babylonia, the northern end of Southern Mesopotamia, whose heavy irrigation allowed a population to support a dense urban conglomeration that included Seleucia, Babylon and the Parthian capital Ctesiphon. Roads radiating from Ecbatana gave strategic military access to a variety of important centers in all directions, including to the Caspian Gates and Central Asia.[29] Persian kings from the Achaemenids to the Sasanids built monuments at Behistun along this road precisely because of its importance as a connective route. Note also, Isidore's mention of a customs house, a feature of primary interest to traders.

From Rhaga, Isidore's route moves through the Caspian Gates into Parthia itself. The Caspian Gates referred to by Isidore are the Southern Caspian Gates, which run east-west through a low spur of the Alborz Mountains on the modern road between Eyvanekey and Aradan.[30] Beyond the Gates, Isidore's road passes through Choarene and Komisene, both regions that Strabo identifies as parts of Parthyaia (Isidore 8–9; Strabo 11.9.1). Isidore names one city in Choarene: Apameia.[31] This city was probably that named by Pliny as Choara, which Schmitt connects with the modern district of Ḵāvar, centered on Aradan.[32] In Komisene, Isidore mentions no cities, thus omitting the important city of Hekatompylos, an early Parthian capital, which could be identified with Šahr-e Qumis near modern Damghan.[33]

The next region on Isidore's route is Hyrkania (Isidore 10). Strabo (11.7.2) characterizes Hyrkania as a prosperous agricultural region with distinguished cities; Isidore does not mention these. Considering the previous and subsequent locations mentioned by Isidore, it is likely that this section of his route passed too far inland to encounter any of the region's agricultural centers. The route probably continued south of the Alborz Mountains as far as Shahrud before crossing the lower eastern ranges of the Alborz into eastern Hyrcania and then proceeding up the Atrak River to Asaak (or Arsak) where Arsakes I became king (Isidore 11; Pliny *NH* 6.113).[34] The location of Arsak is unknown; it is most likely either in the Atrak river valley or northwest of the Kopet Dagh (the Turkmen-Khorasan Mountain Range).[35] Isidore's route next crosses (or continues around) the Kopet Dagh into Parthyene, in which Isidore names three cities: Parthaunisa (Nisa), Gathar and Sirok (Isidore 12). The site of Nisa at the foot of the Kopet Dagh in modern Turkmenistan is well known; the two Parthian ceremonial centers there have been the subject of a series of excavations.[36]

Apauarktikena is the next region on Isidore's route, with two cities: Apauarktike and Rhagau (Isidore 13). In keeping with Hellenic naming conventions, Apauarktite is most likely the primary city of Apauarktikena, Dara.[37]

Next lies Margiana, centred on the Merv oasis in the Karakum desert. Isidore gives the name of the city there as Antiochia.[38] This oasis was a strategic frontier location for Achaemenid, Seleucid and Bactrian rulers wishing to cross the Karakum desert as well as a key node in networks of movement between Iranian Plateau, Central Asia and China.[39] From here, Isidore's route turns south to Aria, the river valley of the Harī Rūd (called Areios in Greek),[40] to the region of Anauon around Phra (modern Farāh),[41] then Zarangiana/Drangiana around Lake Hamun and the Helmand river,[42] before following that river east to Arachosia and the route's terminus at the Alexandria in that region.[43]

Millar dismisses Isidore's account as evidence for a trade route on two grounds. The first is that Isidore's text is primarily concerned with political and military factors. The second is that Isidore's route cannot represent a route connecting with the Silk Road because the terminus of the route at Alexandria in Arachosia "does not lie on any supposed line of a 'Silk Road' carrying trade between the Mediterranean area and China", and "on any reconstruction such a route would have run well to the north".[44] This argument requires the extraordinary position that traders using such a route could only use it in its entirety. While the narrative of a route presents a hierarchy of its component sites, routes are not defined exclusively by their termini.[45] Mobile actors, be they armies, diplomats, merchants or seasonal workers, can enter and exit a presented route according to their own agency.

Whether or not Isidore intended to present a trade route (and I agree with Millar that he did not), his text certainly provides valuable insight into paths of movement that would have been part of such a route. I traced the section of Isidore's account from Seleucia to Merv in some detail for this very reason. Nathanael Andrade has argued that long-distance trade between the Roman Mediterranean and Central Asia occurred opportunistically through a series of interactions between regional commercial networks within which cultural and linguistic familiarity enabled some degree of verification of trustworthiness.[46] He sees the implication of one such regional network between Seleucia-Ctesiphon and the Caspian Gates in Strabo's location of agency in "those who are travelling from Persis and Babylonia to the Caspian Gates".[47] This regional model fits well with our understanding of how diasporic trading communities provided social links that facilitated trade with a distant homeland, such as in the case of the Palmyrene community at Rome.[48] Andrade's argument derives from a close analysis of our third literary source for long-distance trade routes, Claudius Ptolemy.

Ptolemy

The 2nd century CE geographer Claudius Ptolemy positions his *Geography* as a revision and improvement on the now lost work of Marinos of Tyre.[49] In his methodological introduction, Ptolemy relates that Marinos (improperly) calculated the dimensions of the world based on measured overland distances (*Geog*. 1.11.4). In particular, a route from the Euphrates to the Stone Tower and then to "Sera, the metropolis of the *Seres*", the *Seres*, or "the Silk People", are usually translated as "Chinese", but exactly where and among which people "Sera" was located is unclear. As the labeling of the people based on their most famous product suggests:

> it was because of the opportunity for commerce that the route came to be known. Marinos says that one Maes, also known as Titianos, a Macedonian and a merchant by family profession, recorded the distance measurements, though he did not traverse it himself but arranged for certain others to be sent to the Seres.[50]

This geographical knowledge reached Ptolemy because of the operation of long-distance overland trade networks between the Mediterranean and Central Asia. Ptolemy describes the route as proceeding from the crossing of the Euphrates at Hierapolis, through Mesopotamia to the Tigris (presumably near Seleucia), through Media to Ekbatana and the Caspian Gates, then to Hekatompylos in Parthia, then to Hyrkania, through Aria to Antiochia Margiana, then to Baktra and the Stone Tower (*Geog*. 1.12.5–9). Until Hekatompylos, this is the same route as Isidore. Both routes stop at Antiochia Margiana in the Merv oasis, although while Isidore's route crosses the Kopet Dagh (or takes a northerly route around it) to approach Merv from the west, Ptolemy's route continues to the south of that range to approach Merv from the south through Aria.

A Parthian Monopoly?

The subject of long distance trade between the Romans and the states and peoples to the east has long been the subject of considerable interest to scholars, many of whom searched for evidence Roman imperial policies towards trade.[51] However, as Young has argued, there is no evidence for any overarching official control of or policies towards Rome's eastern trade.[52] Similarly, the idea has arisen that the Parthians restricted trade on the overland silk trade in order to maintain their own monopoly.[53] Raschke suggested that Rome's major source of silk came from India to avoid this monopoly.[54] However, there is no evidence for Parthian interference in trade beyond the usual taxation that one would expect a state to exact.[55] If trade through the core of the Parthian Empire was restricted, it was not because of an overt ban on Roman traders, but because of social factors.[56] To return to Andrade's analysis of regional networks, the cultural and linguistic landscape of the Zagros Mountains and Iranian Plateau was sufficiently different to that of the North Syrian Desert and the lowland Fertile Crescent generally.[57] Familiarity with Greek and Aramaic dialects was a requirement for profitable use of the Euphrates route, and Iranian languages were needed for the overland route through the Parthian Empire. As we will see in the case of Palmyrene traders, the costs of cultivating and operating the social networks that facilitate long distance movement would have been much higher in such a different environment.

So far, the evidence I have presented for trade between the Roman world and Central Asia has not mentioned the most famous trading cities of the Syrian and Jordanian deserts. What of Petra and Palmyra?

Petra

The Nabataeans enter the Greek historical tradition in the late 4th century BCE when they resisted the expansionist ambitions of one of Alexander's successors.[58] The 1st century BCE historian Diodorus Siculus describes the Nabataeans as open-air-dwelling pastoralists who periodically meet at "a certain rock (*petras*)", which is usually thought to refer to the later city of Petra.[59] Diodorus also describes how they bring spices "down to the sea", which they "receive from those who carry it from Arabia Felix".[60] Diodorus' account of the campaigns against the Nabataeans reflects the work of 3rd century BCE historian Hieronymus of Cardia,[61] but the general ethnographies given by Diodorus in these sections are reminiscent of descriptions of pastoralists elsewhere in Greco-Roman literature and may be tinged with literary *topoi* and the late 1st century BCE conditions during which Diodorus wrote.[62] In particular, Graf notes that this account of a nomadic people engaged in a struggle for freedom against an autocratic Hellenistic king could plausibly be a literary construction of either Hieronymous

or Diodorus.[63] Regardless of the accuracy of the overall presentation found in Diodorus' text, the historicity of the campaign against the Nabataeans is not in doubt. It seems clear that by the late 4th century, the Nabataeans were a significant enough group to attract the attention of other regional powers.[64]

The Nabataeans continue to appear in the subsequent centuries. The earliest documented reference to the Nabataeans appears in a papyrus document dated to 259 BCE from an archive belonging to Zenon, an agent of the finance minister of Ptolemaic Egypt. It shows slave traders falling afoul of "Nabataeans" while returning from the Ḥaurān, the area around Bostra.[65] These earlier sources suggest that from their first appearance in the Greek historical record, the Nabataeans occupied the Transjordan from the area around Bostra in the north to Petra and the coast of the Red Sea in the south.[66] The 3rd century BCE also saw a marked increase in occupation and agricultural use of the northern hinterland of Petra.[67] Epigraphic and numismatic evidence allows the reconstruction of a chronology of Nabataean kings from the mid-2nd century until the Roman annexation.[68] During this time, most of our notifications about the Nabataean kingdom come from Josephus' histories of the Jewish kingdoms across the Jordan, until Pompey's campaigns in the Near East brought Roman power to the Southern Levant in the mid-1st century BCE.[69]

By the time the Romans arrived in Syria, the King of the Nabataeans ruled a regionally important kingdom that remained such in the new Roman imperial system.[70] The second major narrative description of the Nabataeans appeared in Strabo's *Geography*, written in the Augustan period and completed under Tiberius. Like Diodorus, Strabo drew on Hellenistic sources, but unlike Diodorus, Strabo's work more certainly reflects his own time.[71] In contrast with Diodorus, Strabo presents a wealthy, well-governed, fertile, cosmopolitan, and settled kingdom centred on the city of Petra, although his source, Athenodorus of Tarsus, misunderstands much about Nabataean government and culture.[72] Strabo reports established trade routes connecting the kingdom to southern Arabia, the Mediterranean, and northern Syria.[73] The central part of Strabo's account of the region is his description of the military expedition against southern Arabia under Aelius Gallus in 26 BCE.[74] Strabo makes clear that the goal of this expedition was direct access to and control of the legendary wealth of those Arabian kingdoms. Strabo blamed the failure of the expedition on the treachery of a Nabataean administrator, Syllaeus. However, as Anderson has argued, this is likely a literary topos of the "treacherous easterner" used to illustrate the nature of the Nabataean kingdom itself.[75]

Until the end of the 20th century, the paucity of ancient literary testimony tended to obscure the diversity of local cultures within the Nabataean kingdom. The kingdom and subsequent Roman province comprised a variety of geographical and cultural landscapes each of which required and produced a variety of local social and economic responses to their local environment.[76] Of particular note here are the agricultural regions in the north around Bostra and to the west in the Negev. Over the 1st century CE, settlement of the Negev increased and the Egyptian Red Sea trade may have overtaken Nabataean land routes to southern Arabia. These factors may have shifted the economic center of the kingdom northward.[77] In 106 CE, Trajan converted the Nabataean kingdom into the Roman province of Arabia. The circumstances and process are murky; there is some local evidence of violence, but any resistance makes no impact on the Roman literary sources.[78] Also murky is the identity of the administrative center of the province. It was previously thought that this was shifted from Petra to Bostra under one of the last kings or under the Romans;[79] however the evidence for a relocation under a Nabataean king is weak, and the evidence for any relocation at all presupposes that the Roman civilian administration should have its headquarters in the same city as a regional legionary base.[80] As Millar noted, "the governor will have given jurisdiction at

either, for Roman governors were peripatetic, and they certainly did give jurisdiction at times at Petra".[81] The movement of an administrative center has been interpreted as reflecting the pre-eminence of Bostra at the expense of Petra and accordingly reflecting the diminished importance of trade in an increasingly agricultural kingdom. However, while the northern cities like Bostra and Gerasa did flourish, so did Petra.[82] Fiema has argued that the intensification of agriculture represents a response to population growth and an increased need for food rather than a substantial reorientation of existing economic patterns.[83] While agriculture intensified, so too did trade.

Nabataean Trade

The evidence for Nabataean trade is overwhelmingly focused on the spice trade in the Arabian Peninsula. Some of the mostly well-studied Nabataean trade routes are those in the Negev and the Transjordan, where a network of routes and stopping points connect Petra to the Mediterranean and to the Red Sea.[84] Archaeological research at Oboda in the Negev shows that the route between Petra and Gaza was in use from the 4th century BCE, with a possible break in occupation at that site in the first half of the 1st century BCE.[85] The appearance of Petra in Hellenistic geographical texts suggests that routes between Egypt and Petra were well known, measured, and collated by geographic scholars from the 3rd century BCE.[86] During the 2nd century BCE, the rise of the Parthian empire and its gradual conquest of the Seleucid Empire may have made the traditional routes through Northern Mesopotamia and along the Euphrates (like that described by Isidore) less attractive to merchants, pushing them south towards those routes through the Ptolemaic and Nabataean kingdoms.[87]

The usual narrative of Nabataean trade has the growth of the Red Sea routes through Egypt in the 1st century CE spell the end of Nabataean trade and ultimately the kingdom.[88] However, there is considerable evidence that the growth of the incense trade was sufficiently strong to support both sea and land routes. Writing in the middle of the 1st century CE, Pliny the Elder describes the transport of Frankincense along this route from Sabota in the Ḥaḍramawt of southwest Arabia to Gaza.[89] Frankincense and Myrrh were the two most important products on this route, but Pliny mentions a wide array of other products from South Arabia.[90] In his discussion of Frankincense, Pliny note that increased demand for incense led to South Arabian producers beginning to harvest twice a year.[91] While the Red Sea trade was a significant vector for the movement of goods between Arabia and the Mediterranean, the seasonal nature of both the harvest and the sea trade meant that a significant proportion of this expanded demand would have been served by land transport.[92] Moreover, there is evidence of a Roman military presence to the in the Ḥijāz, south of Petra on the way to South Arabia;[93] inscriptions and graffiti found at Ruwwāfa and Ḥegrā suggest Roman mounted guards were stationed there to protect caravans.[94] Regardless of the political status of the region relative to Rome, these (along with Aelius Gallus' invasion) suggests a Roman concern with the Nabataeans' traditional land route to South Arabia.

As I discussed earlier, Nabataean merchants also participated in this sea trade. Fiema notes that as long as the trade passed through Roman customs points, there was no incentive for Rome to limit the routes bringing incense into the empire – and tax revenue into their coffers.[95] Both Strabo and the *Periplus of the Red Sea* mention the Nabataean trading port of Leuke Kome.[96] Excavations at Aila (modern 'Aqaba) on the Red Sea coast show a late 1st century BCE Nabataean foundation on a site of long-standing occupation or at least use.[97] Parker has argued that the Nabataean king founded Aila as a reaction to the Roman annexation of Egypt in 30 BCE and the subsequent Roman development of the Red Sea ports and routes.[98] While

settlement in the area declined in the 3rd century CE, it underwent a resurgence in the 4th century when a legionary base was moved there from Jerusalem.[99]

In addition to this increased trade, the Nabataeans became more involved with processing of trade goods.[100] This development from the transportation of high value raw goods to the production of finished higher value goods is evident in Pliny, where a number of goods derived in raw form from South Arabia appear in the Roman market as processed oils identified as Nabataean.[101] An important piece of evidence in this argument is the presence of ceramic oil jars (*unguentaria*) used to store and transport the processed oils; these appear at Petra in significant numbers between the 1st century BCE and the 3rd century CE.[102] The beginning of this process, perhaps contemporaneous with the foundation of Aila, ensured their position in an expanding market and secured the importance of trade at Petra in the Roman period.[103]

While much Nabataean trade focused on South Arabia, there is also evidence for overland trade with the Persian Gulf. Pliny reports the position of Petra at the intersection of roads from Syria and from Gaza and a route across the desert to Charax and specifically notes people from Petra making the journey to the nearby town of Forat, also in Characene/Mesene.[104] Pliny gives a snapshot from the 1st century CE, but archaeological evidence shows commercial links with the Persian Gulf from the 3rd century BCE to the 2nd century CE.[105]

The End of Petra

Petra remained an important and well-connected provincial town in the 2nd and 3rd centuries CE and received imperial honors from Trajan, Hadrian, and Elagabalus that were still in use in the 6th century.[106] Nevertheless, the 3rd century unrest in the Roman Empire disrupted the market for high-value goods from the east. In addition, the increased militarization of the Roman-Sasanian frontier may have reduced Petra's importance as a trade hub and processing center.[107] Red Sea ports, including Aila, providing access to India without Sasanian mediation become more important from the 3rd century, and goods increasingly moved from Aila to the Mediterranean rather than through Petra.[108]

The population of Petra and its hinterland seem to have declined in the 4th century.[109] The city remained important into the Byzantine period. Investigation of a carbonized archive of 152 papyri from the second half of the 6th century CE has revealed a considerable degree of continuity in the agricultural economy of Petra between the late 3rd and late 6th centuries.[110] The documents show a local elite whose wealth and status depended on the exploitation of agricultural land rather than trade.[111]

Palmyra

Like Petra, Palmyra is not well attested in literary sources.[112] Josephus mentions the site in his *Jewish Antiquities*, but only to give the incorrect equation with the biblical city of Tamar.[113] The confusion arises from the original name of the city, Tadmur, which appears in documents as far back as the 3rd millennium BCE.[114] A fragmentary glimpse into the Hellenistic community may be seen in Polybius, who attests that Antiochus' army at Raphia in 217 BCE included a contingent of "Arabs and neighbouring tribes" under the command of a certain Zabdibel, a name that appears later in Palmyra (ZBDBL).[115] Recent investigations into Hellenistic settlement at Palmyra suggests a small community, engaged in trade with the Mediterranean coast.[116]

In his account of the civil wars of the late Republic, Appian describes the first Roman interaction with the site. In 41 BCE, Mark Antony launched a cavalry raid on Palmyra.[117] The

Palmyrene response was to flee with their property to the other side of a river – the response of a community small enough to evacuate their settlement entirely and lacking the ability to defend themselves against such a raid. However, Appian's account of the raid written around 200 years later is heavily influenced by literary *topoi* and the state of Palmyra in his own day, the 2nd century CE.[118]

The most extensive literary notification of Palmyra comes in Pliny the Elder's *Natural History*. In his opening books on geography he says:

> Palmyra is a city famous for its position, the richness of its soil, and the quality of its water, its fields surrounded on all sides by a vast circuit of sand, as if cut off from the world by nature itself, a private lot between two great empires of Rome and Parthia, and at the first sign of discord between them, always a concern to both. It is distant 337 miles from Seleucia of the Parthians, generally known as Seleucia on the Tigris, 203 from the nearest part of the Syrian coast, and twenty-seven less from Damascus.[119]

Aspects of this description suggest the Roman idea of what an oasis city should be like rather than conforming to an accurate picture of the city and its topographical and political position.[120] Nevertheless, that image of Palmyra is one that accentuates its position as a liminal space positioned on networks of movement between the Roman and Parthian empires.

Evidence from boundary stones shows that the Romans incorporated Palmyra into the province of Syria between 12 and 17 CE.[121] By the mid-1st century CE, Palmyrene epigraphy shows political forms of a Greco-Roman *polis* were in place.[122] Between the 1st and the 3rd centuries, official state bodies and local elites of Palmyra produced a considerable quantity of epigraphic evidence, giving us our most important window into the city and its trade relationships.[123] Over that time, emperors visited Palmyra and bestowed honors upon it.[124] The wealth generated by the trade connections operated by the city's mercantile elite allowed the construction of an impressive monumental urban center.[125] The power of Palmyra was such that it has been considered to be semi-autonomous, particularly with regards to the operation of its own military forces far beyond the range of the Roman army.[126]

Palmyrene Trade

The considerable body of extant epigraphic evidence attesting to the importance of long-distance trade in the city makes Palmyra the best example of a caravan city in the Roman Near East.[127] There are thirty-four Palmyrene inscriptions recording what were probably annual caravans of major commercial importance.[128] The two earliest such inscriptions record trade connections with Babylonia: in 19 CE, Palmyrene and Greek merchants from Seleucia contributed to the construction of the Temple of Bel in Palmyra;[129] then in 24 CE, a trade community of Palmyrene merchants at Babylon contributed to the same temple.[130] The rest of the texts refer either to the cities of Vologesias and (Spasinou) Charax or to the region of Skythia, that is, the Saka kingdoms of Northwest India.[131] Charax was the royal capital of Mesene (sometimes called Characene) at the head of the Persian Gulf.[132] Palmyrene contacts with Mesene are first attested in 18/19 CE, when a Palmyrene named Alexandros was sent there by Germanicus, the emperor's representative in the Roman Near East.[133] Vologesias lay southwest of Babylon, but during the 2nd century it was ruled by the king of Mesene until 151/2 CE when the Parthian king Vologaeses IV (147/8–191/2 CE) conquered that state.[134] Bowersock

and Bernard have argued that Vologaeses was motivated to conquer Mesene because it was a Roman client kingdom at the time, possibly as a result of Trajan's ephemeral conquest of the Tigris and Euphrates basin.[135] If so, that would certainly explain the connection between Roman Palmyra and the allied state of Mesene. Nevertheless, Vologaeses' conquest in 151/2 does not seem to have stopped the caravan trade: eight more inscriptions at Palmyra are dated from 156 to 161.[136] What does seem to stop the trade is Lucius Verus' invasion of Mesopotamia. Smith has suggested that the thirty-year gap between the caravans of 161 and 193 could have been a result of the plague Verus' army brought back from Southern Mesopotamia.[137] This plague first appeared at Nisibis and Smyrna in 165, reached Rome in 166, and may have persisted into the 180s.[138] However, the fact that caravan inscriptions resume immediately after the death of Vologaeses IV in 191/2 suggest that Parthian policy towards the Roman aggressor played a part.[139] The last seven inscriptions are dated from 193 to after 260. The importance of the caravan trade to elite status in Palmyra is clear from these inscriptions.[140] Caravan leaders and sponsors received public recognition of their status and achievements in central locations in the city. Trade and its recognition were thoroughly embedded in the political structure.[141]

These inscriptions show that from the perspective of Palmyrene merchants, they were engaging in (and celebrating in stone) trade routes that extended from Palmyra to Babylonia and Mesene, and occasionally, a further sea route to Northwest India. There is no indication of epigraphic celebration of journeys from Palmyra to the Mediterranean coast, presumably because the route was considerably less dangerous and impressive.[142] Travel east across the desert required a significant degree of physical preparation in terms of supplies and camels, the use of social connections to navigate the customary routes and use patterns of the various tribal groups who inhabited the region, and ultimately, a higher degree of risk that something would go wrong.[143] Interpersonal violence, inclement weather, incorrect information about water supplies, or any number of other problems would be exacerbated by the environment and its isolation from sedentary society. Strabo makes clear that this was the choice faced by travelers along the Euphrates when deciding whether to stick to the river and its taxation, or taking the "cheaper" route through the desert.[144]

That route along the Euphrates was the most common trade route between Northern Syria and Babylonia/Southern Mesopotamia for most of antiquity. Young has argued that the desert routes used by Palmyrene merchants were transformed from well-used nomadic circuits into trade routes by the agency of the Palmyrenes.[145] These routes comprised a network of paths between Palmyra and southern Mesopotamia, probably crossing the Syrian desert on a generally east-west axis and meeting the Euphrates at transshipment sites like Dura Europos, Ana or Hīt, then carried down the river on rafts made of animal skins.[146] The return journey could have been made by water as far as Hīt, but may have simply involved deflating the skins and moving by camel.[147] We have evidence that at least some Palmyrenes were involved with the sea route from Charax to northwest India,[148] but if this was a regular part of the route, we might expect a higher proportion of inscriptions to boast of it.

Gawlikowski notes that "there is strictly nothing to suggest that the Palmyrenes were interested in the land route through Iran and Central Asia, the celebrated Silk Road".[149] In light of Andrade's construction of Syrian and Babylonian trade networks, this is exactly what we would expect.[150] Merchants in Palmyra itself collaborated with diasporic Palmyrene communities in southern Mesopotamian cities like Charax and Vologesias to coordinate trade across the desert where they interacted with local markets to pass on and receive goods that were then moved by the local networks in each location. There was no need to Palmyrene merchants to develop the local contacts, linguistic skills, and environmental infrastructure to engage in a

non-desert trade route across the Zagros mountains into the Iranian plateau. Those networks already existed and were happy to receive and dispense goods to and from the Palmyrene network.

The End of Palmyra

The rise of the Sassanid dynasty in Persia brought significant changes to Palmyra. The increased militarization of the frontier in the mid-3rd century disrupted the trade routes that made Palmyra wealthy.[151] After the capture of Valerian, a prominent Palmyrene Septimius Odainathos (whose name indicates that his family were made Roman citizens by Septimius Severus)[152] became the dominant power in the city and campaigned against the Sasanians in Syria, Mesopotamia and Babylonia as a general of Gallienus.[153] After Odainathos and his heir were murdered at Edessa in 267/8, his wife Zenobia took control of his army – essentially the only pro-Roman military force in the region – and assumed power as the regent of their other son. By 270, she ruled from northern Syria to Egypt and her son claimed Roman imperial titles, an indication of Palmyra's wealth and local influence.[154] By 273, Zenobia and her son had been defeated and the central Roman Emperor Aurelian had captured Palmyra.[155] Palmyra survived, occupied by Aurelian and the site of a legionary camp under Diocletian, but its dominant position astride the trade networks of North Arabia died with Zenobia's defeat.[156]

Networks in the Roman Near East

A key development in recent scholarship that contributes immensely to our understanding of how the cities of the Roman Near East participated in the flow of goods, people and ideas along the Silk Road has been the reconceptualizing of social dynamics (including trade as an inherently social activity) in terms of networks.[157] As we have seen, the people of Petra and Palmyra were active participants in regional networks of trade reaching beyond the bounds of the Roman Empire to which they belonged. Where it survives, the evidence we have emphasizes these regional networks rather than long distance trade routes as they have traditionally been conceived of. We should think of the intersection of the Mediterranean and Iranian worlds as a web of overlapping networks operating independently and opportunistically, but in aggregate acting to move goods over long distances to the commercial advantage of the various actors in the chain.[158] This does not require that the actors at one end of the chain be aware of prices or "market conditions" at the other end of the chain, it simply requires that the actors in each network were able to profit from moving goods over their section: a Nabataean merchant need only know that they could sell the goods they purchased in South Arabia for a profit in Gaza. Those goods purchased in South Arabia need not have been locally produced. In his section on section on aromatic woods, Pliny notes several varieties that were imported *into* South Arabia (bratus wood from Khuzistan, to the east of Mesene; stobrus wood from Carmania; styrax from Syria). Pliny's text suggests that Arabia was an intermediate source that at least partially supplied Roman demand for these goods and attests to the role of South Arabia not simply as a producer and exporter but as a node on a network of high value goods linking the Roman and Parthian empires.[159] Pliny also mentions several other goods that were imported from Media and Babylonia. While we do not have precise information for how these goods reached Rome,[160] the interaction between a Median-Babylonian and a North Syrian network is the most likely vector, although specific local conditions may have sometimes made a route through Arabia profitable.[161]

Petra and Palmyra have provided us with such rich information about their history and economic activities in large part because of their environment. The relative isolation of each from the agricultural and industrial cores of their respective countries has protected the evidence they provide in a way that is not true for other important cities of the Roman Near East. Another example from Pliny hints at the complexity of the web of regional trade networks. Pliny mentions that "the Arabians" had "opened" the town of "Carra" as a trade hub for the aromatics trade, a twenty-day journey from Gabba in Syria Palestina, and also connected to Charax. "Arabians" is a vague signifier that could refer to a number of communities between Northern Mesopotamia and South Arabia.[162] Gabba is most likely a town in Galilee not usually included in consideration of long distance trade routes,[163] and Carra perhaps should be Carrhae, which is around twenty days travel from Gaba. This might attest to the importance of that well-known city in Northern Mesopotamia as a hub of an otherwise unmentioned trade network, or it might refer to an otherwise unknown town. In either case, it raises the question of how much remains unknown because of the particularities of our evidence. It is certain that major cities like Antioch, Beroea, Hierapolis, Zeugma, Batnae, Edessa, Nisibis, Baalbek, Gerasa, Damascus, and Emesa participated in these trade networks, but exactly how remains unclear.[164]

Notes

1 Rostovtzeff 1932.
2 Will 1992; Jones 1971: 291.
3 Millar 1998; Freeman 2008: 431; Finley 1973.
4 Andrade 2015: 58; Millar 1998: 137 expresses skepticism on "the idea that there was an established 'silk-road' through Central Asia".
5 Young 2001: 24–26. Note Pliny's complaint about the financial implications for Rome, *NH* 12.84.
6 For an overview, see Morley 2007.
7 Other categorisations or conceptualisations are possible. For a tripartite division, see Zuchowska 2016: 35–36.
8 On the identity of the *Periplus* and its author: Casson 1989; Young 2001: 6. On the eastern ends of the route, see: Young 2001: 28–34. On the Red Sea trade generally, see: Young 2001: 27–89.
9 Casson 1989: 8–9.
10 *Periplus* 19; Bowersock 1983: 70–71. See below on Petra and Aila.
11 The spice trade was the main source of profits for Arabian merchants and those trading with them, Young 2001: 35; Fisher 2011: 70–71. See also the discussion of Petra.
12 *Periplus* 26; Casson 1989: 11; Young 2001: 19.
13 Tchernia 2016: 229–238; Young 2001: 19–20; Casson 1989: 11–12. For Roman archaeological remains from India, see Young 2001: 30–34; Parker 2008; Tomber 2008.
14 Young 2001: 82–88; Parker 2008: 171–183.
15 Muller 1883: 1.244–54; Schoff 1989. For more on the text and author, see Chaumont 1984; Gawlikowski 1988a; Cameron 2019b: 244–247.
16 Kramer 2003; Millar 1998: 120–121; Young 2001: 7; Cameron 2019b: 246–247.
17 Zeugma on the Euphrates in the west: Isidore 1. Alexandria, the metropolis of Arachosia in the east ("as far as this place the land is under the rule of the Parthians"): Isidore 19.
18 Millar 1998: 121.
19 In his conclusion, Millar notes that "it would be absurd to deny that there were a number of land-routes through Central Asia, or that trade travelled along them, in both directions", 1998: 136.
20 Young notes that Isidore's text "provides us with a useful record of the 'natural' route between Roman Syria and the East . . . merchants would have made use of this route", 2001: 7.
21 Strabo, *Geog*. 16.1.27. Cameron 2019b: 236–244.
22 Isidore 2; Pliny *NH* 6.117; Cameron 2019b: 170.
23 Isidore 2, Polyb. 5.54.6–7, Strabo 16.1.1, 11.14.8; Pliny *NH* 6.131, Tac. *Ann*. 6.41 (who calls the town Hala).

24 Isidore 5; Darius' royal inscription at Behistun give the name Kampanda: DB col. II, line 25. For the inscriptions, see Lecoq 1997; Barthold 1984: 201.
25 Isidore 7; Polybius' geographical description of Media (5.44) gives the Caspian Gates and the territory of Apollonia as two of the region's borders.
26 Isidore 5; Briant 2002: 739. For the Greek identification of these carvings and inscriptions as relating to Semiramis, see Cameron 2019a: 131, n.22.
27 Isidore 6. Brunner places Bazigraban near modern Manderābād: C. J. Brunner, "Adrapana," *EncIran*.
28 Ecbatana: Isidore 6; Strabo 11.13.1, 11.13.5; Pliny *NH* 6.43; Briant 2002: 737–741; for the Hellenistic refoundation as Epiphaneia, see Cohen 2013: 206–208. Rhaga: Isidore 7; Strabo 11.13.6–7; Pliny *NH* 6.43; Briant 2002: 739; for the Hellenistic refoundation as Europos, see Cohen 2013: 209–210.
29 Strabo 11.13.7; Briant 2002: 739–740; Andrade 2015: 53–54. For the strategic use of this route, see Quintus Curtius 5.8.5; Arrian 3.19.1–2, 20.2.
30 Hansman, "Caspian Gates" *EncIran*; Jackson 1911: 127–137; Schmidt 1940: 34, pl. 41–42 for photos of the terrain; Bosworth 1980: 333–334. The Northern Caspian Gates run north-south from Rhaga to the coast of the Caspian Sea, Engels 1978: 83, n.61.
31 Perhaps the Apameia mentioned by Strabo as being founded by Macedonians (11.13.6) near Rhaga (11.9.1). Cohen 2013: 204.
32 Pliny (*NH* 6.44) calls Choara "very pleasant". Rüdiger Schmitt, "Choara" *EncIran*.
33 Isidore notes that there were eight villages here and no cities. On Hekatompylos: Polyb. 10.28.7; Strabo 11.9.1; Pliny *NH* 6.44, 113; Ptol. *Geog*. 6.5.2: Cohen 2013: 210–215; Frye 1962: 183; Engels 1978: 83; Kiani 1982: 46; KŪMEŠ *EncIran*. Šahr-e Qumis: Hansman, Stronach, and Bailey 1970; Fraser 1996: 106–109; ŠAHR-E QUMIS *EncIran*.
34 Kiani 1982: 45–46. For the geography, see Ḥabib-Allāh Zanjāni, "Gorgan" *EncIran*, Vol. XI, Fasc. 2, pp. 139–142. Engels reconstructs Alexander's campaign as crossing the mountains through the Shemshir-cur Pass, Engels 1978: 83.
35 Atrak Valley: Schippmann, "ARSACIDS ii. The Arsacid dynasty," *EncIran*. Northwest of the Kopet Dagh: Khlopin 1977: 143–145.
36 Invernizzi, "Nisa" *EncIran*; Cohen 2013: 220–221; Frye 1962: 182–183. Pliny NH 6.113; Strabo 11.7.2, 8.3.
37 Weiskopf. "Dara" *EncIran*; Khlopin 1977: 147–148; Debevoise 1968: 15; Frye 1962: 182. Pliny *NH* 6.46; Justin 41.5.2–4.
38 Isidore 14. Pliny (*NH* 6.46–47) says that a city founded by Alexander and bearing his name was destroyed by barbarians and then refounded by Antiochus I. Strabo (11.10.2) also mentions Antiochus' foundation. Cohen 2013: 245–247; Fraser 1996: 31. Cohen locates this city at Gyaur Kala.
39 Barthold 1984: 41–44; Wang 2007: 96–97; Kaim and Kornacka 2016; Briant 2002: 114–123 discusses the revolts that Darius suppressed on his assumption of the throne, including at Margiana; Xin 2012. For evidence of Babylonian Jews trading at Merv, see Andrade 2015: 67–68.
40 Isidore 15 (names three cities: Candac, Artacauan and Alexandria in Aria; Strabo 11.10.1 (names three cities: Artakaena, Alexandria and Achaia). Schmitt, "Aria," *EncIran*; Vogelsang, "Herat ii. History, Pre-Islamic Period" *EncIran*. On Alexandria, which is thought to lie under modern Herat, see Cohen 2013: 260–261; Fraser 1996: 109–115. On Achaia, the location of which is unknown, see Cohen 2013: 274–276.
41 Isidore 16. Balland, "Farah" *EncIran*; Barthold 1984: 47–50; Fraser 1996: 123–131.
42 Isidore 17. Schmitt, "Drangiana" *EncIran*; Barthold 1984: 64–68.
43 Isidore 18–19. Schmitt, "Arachosa", *EncIran*; Cohen 2013: 255–260; Fraser 1996: 132–140.
44 Millar 1998: 121.
45 Cameron 2019b: 276.
46 Andrade 2015.
47 Strabo 11.13.7; Andrade 2015: 53. For a similar phrasing, note Strabo's construction "those moving as merchants" (16.1.27) when describing the Euphrates leg from Zeugma to Seleucia-Ctesiphon, Cameron 2019b: 237–240.
48 Terpstra 2016.
49 Ptol. *Geog*. 1.4–6; Berggren and Jones 2000: 23–30; Cameron 2019b: 70–75. There is no reliable English translation of Ptolemy's *Geography* in full. For the methodological chapters see Berggren and Jones 2000. For the complete Greek text with facing German translation, see Stückelberger and Grasshoff 2006.

50 Ptol. Geog. 1.11.6–7. Translation Berggren and Jones 2000: 72, lightly amended to incorporate Andrade's reading of διαπεμψάμενον, 2015: 61. For the dating of Maes Titianos to ca. 100 CE, see Andrade 2015: 42–43.
51 See Young 2001: 1–2, esp. n.1 for a bibliography of earlier works.
52 Young 2001: 213–216 for his concluding statements.
53 Young 2001: 195 n.30 gives references.
54 Raschke 1978: 630.
55 Young 2001: 195–198.
56 Andrade 2015: 53–54, 60 argues that Roman and Seleucid merchants were limited to the first section of Isidore's route. This is probably true, but the limits derived from the difficulty of expanding their own social networks, not from official restrictions.
57 Andrade 2015.
58 Diod. Sic. 19.94–100; Bowersock 1983: 12–17. For evidence of a 4th century BCE realignment of trade routes that may involve the Nabataeans, see Wenning 2007: 26. For a survey of the archaeological evidence for the Nabataean Kingdom, see Schmid 2008.
59 Diod. Sic. 19.94–95; 2.48. The rock as a defensive stronghold: Diod. Sic. 19.97. On the nature and settlement of "petra" at this time, see Wenning 2007: 27–30. A brief introduction to Diodorus Siculus: Marincola 2007: 176–178.
60 Diod. Sic. 19.94.5. Young 2001: 90–91.
61 Hornblower 1981: 18–75.
62 Shaw 1995; Cameron 2019b: 203–209; Hekster and Kaizer 2004; Wenning 2007: 29. Hieronymus' account also reflects his own construction of the Nabataean's as a freedom-loving people beset by an imperialist aggressor, Hornblower 1981: 71, 177–179.
63 Graf 1990: 51–53.
64 Alpass 2013: 14.
65 Graf 1990: 53–54; Text, translation and commentary of the text (PSI 406) by Graf and Henry I. MacAdam in 1990: 69–75. Judas and Jonathan Maccabeus encounter the Nabataeans in this area of the Transjordan at I Macc. 5.25.
66 For a consideration of the earlier origins of the Nabataeans, see Graf 1990. But Wenning 2007: 25–26; Graf 2007: 182 caution against the search for *ethnic* origins for a *political* group.
67 Knodell *et al*. 2017: 668–669.
68 Wenning 1993.
69 Cimadomo 2015; Alpass 2013: 15; Bowersock 1983: 18–27.
70 Bowersock 1983: 17–44; Cimadomo 2015: 262–264.
71 Pothecary 1997; Clarke 1997; Dueck 2000; Pothecary 2002; Cameron 2019b: 48–63 with bibliography.
72 Nabataeans: Strabo 16.4.21, 26; Wenning 2007: 34–36; Bowersock 1983: 16–17. Produce of Arabia Felix: Diod. Sic. 2.49; Strabo 16.4.25. On Athenodorus in Petra: Roller 2018: 935.
73 Strabo 16.4.23 (q.v. *Periplus* 19); 16.2.30; 16.2.20; Millar 1998: 124–125.
74 Strabo 16.4.22–24; Roller 2018: 935–939; Anderson 2009; Simon 2002; Sidebotham 1986; Groom 1981: 73–76. The campaign is also mentioned in lesser detail in *Res Gestae Divi Augusti* 26; Pliny *NH* 6.160–161; Josephus *AJ* 15.317; and Cassius Dio 53.29.3–8.
75 Anderson 2009. For another example of Strabo's manipulation of narrative to characterise people and states, see Cameron 2019a.
76 Alpass 2013: 1–13; Millar 1993: 398.
77 On increased urbanization and density of village agriculture in the northern areas of the province, Millar 1993: 414–428, esp. 419–420 on Petra's honored but less-central status; Young 2001: 109–112.
78 Cimadomo 2018; Alpass 2013: 17–18; Graf 2007; Fiema 2003: 43–44; Freeman 1996; Millar 1993: 92–97; Bowersock 1983: 76–89; Joukowsky 2017; MacDonald 2016; Parker 2009b. For a survey of archaeological evidence for Roman Arabia, see Freeman 2008.
79 Bowersock 1983: 72–73, 84; Sartre 2005: 87; Wenning 2007: 40.
80 Millar 1998: 126; Fiema 2003: 44–45.
81 Millar 1993: 95.
82 Knodell *et al*. 2017: 669. Northern growth: Bowersock 1983: 111–112; Fiema 2003: 46–47; Graf and Sidebotham 2003: 68; Dentzer-Feydy and Maqdissi 2007; Browning 1996.
83 Fiema 2003: 43; Wenning 2007: 40.

84 Young 2001: 97–99.
85 Negev 1996.
86 Strabo 16.4.2 quotes Eratosthenes for the distance of 5600 stadia from Petra to Babylon; for a commentary on the text, see Roller 2018: 922–923; for Greco-Roman traditions of spatial measurement, see Cameron 2019b: 75–80.
87 Young 2001: 18.
88 Fiema 2003: 39. Strabo (16.4.24) reports that most of the sea trade through the Red Sea in his day reached the Mediterranean through Egypt.
89 Pliny *NH* 12.63–65; Bowersock 1983: 123–124; Millar 1998: 123–125; Fisher 2011: 70–71. For the history of Gaza as a Mediterranean entry point for high-value goods, see Glucker 1987: 86–93.
90 Frankincense: Pliny *NH* 12.51–65. Myrrh: Pliny *NH* 12.66–71. Pliny *NH* 12 is devoted to the subject of trees and their by-products; many of those he discusses are Arabian: Groom 1981: 77–85 on Pliny and his text; 1981: 96–120 on the trees.
91 Pliny *NH* 12.58, 60.
92 Groom 1981: 144–152.
93 Graf 1988.
94 MacDonald 2011; Healey 1993: 28–31.
95 Fiema 2003: 42.
96 Strabo 16.4.23–24; *Periplus* 19; Graf and Sidebotham 2003: 67–68.
97 Parker and Smith 2014: 363–366; Graf and Sidebotham 2003: 68.
98 Parker 2009a.
99 Eusebius *Onomasticon* 6.17–20; 8.1–3. Parker and Smith 2014: 368–369.
100 Johnson 1987: 36–53; Freeman 2008: 430; Fiema 2003: 40–41.
101 For example, Pliny *NH* 12.73.
102 Johnson 1987: 53–67.
103 Fiema 2003: 49.
104 Pliny *NH* 6.144–146; Millar 1998: 126.
105 Bin Seray 1996; Graf and Sidebotham 2003: 67; Graf 1990: 63–64; Young 2001: 91–94; Fiema 2003: 49–50.
106 Fiema 2003; Bowersock 1983: 85–88, 121; Al-Nasarat 2019: 53; Graf 2007: 174; Wenning 2007: 40.
107 On the militarization of the frontier, see Palermo 2019; Dignas and Winter 2007. For the 3rd century as the end of Petra as a processing center for South Arabian goods, see Fiema 2003: 50.
108 Fiema 2003: 50; 2002: 232–234.
109 Fiema 2002; Knodell *et al*. 2017: 641–643 shows the highest concentration of ceramics in the northern hinterland of Petra date to the first to mid-3rd century, after which there is a steep drop off.
110 Al-Nasarat 2019: 53–54, 57–58, 61; Frösén 2004; Koenen 1996, 2003.
111 Al-Nasarat 2019: 55–56; Koenen 2003. Although Knodell *et al*. 2017: 670–671 notes the sharp decline in material remains from this period in the northern hinterland and offers some explanations in terms of shifting land use patterns and climatic instability of the Late Roman period, McCormick *et al*. 2012; Manning 2013: 135–143. On the impact of the climate on Roman history, see now Harper and McCormick 2018; for a popular audience Harper 2017; and a critique of the latter Haldon *et al*. 2018. On the question of trade Fiema 2002: 225 notes that Petra in not mentioned in the *Expositio Totius Mundi*, a primarily commercial description of the Roman world from the mid-4th century CE; on that text, see Rougé 1966.
112 For a highly readable introduction to Palmyra and its most famous ruler, see Andrade 2018. The most recent detailed monograph on the city as a whole is Sommer 2017.
113 Josephus AJ 8.154; Kaizer 2015: 881–882; 2010: 116; Sommer 2017: 34.
114 Hesse 2016; Sommer 2017: 28–34. Archaeological evidence for Bronze Age use of the site: Maqdissi 2000.
115 Polybius 5.79.8; Hekster and Kaizer 2004: 72; Stark 1971: 17, 85.
116 On the Hellenistic remains at Palmyra, see Sommer 2017: 61–66.
117 Appian, BC 5.38–39.
118 Hekster and Kaizer 2004; Cameron 2019b: 298–300; Isaac 1990: 141–142; Sommer 2017: 76–81. On Appian as a historian, see Bucher 2000.
119 Pliny *NH* 5.88. For analysis of this passage, see Cameron 2019b: 166–168, 260–263, 296–298.

120 Will 1985; Isaac 1990: 143; Frahm 2017. The Palmyrene Tax Law (*PAT* 0259) gives a view into the local economy and agricultural produce of Palmyra, see Matthews 1984; Healey 2009: 164–205.
121 Seyrig 1932: 266–274; Gawlikowski 2003: 7; 2007: 129; Edwell 2008: 36–41.
122 Gawlikowski 2003; Sartre 1996.
123 Smith 2013: 16 briefly outlines the nearly 3000 inscriptions. The main edition is Hillers and Cussini 1995, *Palmyrene Aramaic Texts* (*PAT*). For a selection of translated inscriptions, see Healey 2009: 144–222.
124 Seland 2015: 102; Smith 2013: 24–27; Edwell 2008: 46–50, 60; Millar 1990: 42–43.
125 Gawlikowski 2016; Andrade 2018: 17–32; Browning 1980.
126 Isaac 1990: 141–147; Millar 1993: 133–135; Bowersock 1983: 129–131; Cameron 2019b: 297–298. Regardless of the degree of autonomous operation that Palmyrene military forces enjoyed, it should be remembered that Roman military forces were stationed in Palmyra itself from at least the mid-2nd century, Isaac 1990: 143–144; although see Sommer 2016.
127 Millar 1998: 137. The epigraphic record allows considerable study of Palmyrene society, as seen in Smith 2013; Andrade 2013: 171–210.
128 Gawlikowski has published the list twice: 1996: 142–143; 1994: 32–33.
129 *PAT* 0270; Gregoratti 2010: 23–25. This was probably Seleucia on the Tigris (Cohen 2013: 157–173), but this is not certain: Gawlikowski 1996: 140; 1994: 28. There are several other Seleuciae in the Near East: Cohen's indices contain ten entries to the east of the Euphrates (Cohen 2013: 427) and ten to the west (Cohen 2006: 477), most notably including Seleucia in Pieria, near Antioch, (Cohen 2006: 126–135) and Seleucia on the Euphrates, at Zeugma (Cohen 2006: 190–196).
130 *PAT* 1352; Gawlikowski 1996: 140; 1994: 28.
131 Skythia: *Periplus* 38; Seyrig 1936. Palmyrene trade with Skythia: Bin Seray 1996: 19–21.
132 Bin Seray 1996; Cohen 2013: 109–117; Hansman 1967: 21–27; Young 2001: 140–148; *Periplus* 35.
133 Gregoratti 2010: 25–26; Gawlikowski 1994: 28.
134 Gawlikowski 1994: 29–30; Bernard 1990: 28–52; Young 2001: 145–146.
135 Bowersock 1989; Young 2001: 146–147; Bernard 1990. For Trajan's campaign, see Lightfoot 1990. Cass. Dio 68.28.4.
136 Gawlikowski 1996: 141–143; Young 2001: 147.
137 Smith 2013: 80.
138 Duncan-Jones 1996: 117–118. Duncan-Jones also explores links between the Antonine plague and epidemics recorded in Chinese sources.
139 Gawlikowski 1996: 141; 1994: 31; Young 2001: 147.
140 Smith 2013; Young 2001: 167–172; Millar 1998.
141 Millar 1998: 137; in reference to Finley 1999; recent work has clarified much of the internal operation of the Palmyrene caravan trade, Seland 2014; Young 2001: 149–167; Sommer 2016.
142 Greco-Roman writers do mention banditry "within" the empire in Syria and Arabia, especially in inland mountainous areas (Isaac 1990: 56–68; Grünewald 2004: 14–32). Trajan's construction of a military road, and a chain of forts and outposts, from the Red Sea to the Euphrates probably reduced the dangers of such routes (Isaac 1990: 101–140). However, the words like *latro* (bandit) and its cognates in an ancient (or modern!) context can have a broad political and rhetorical meaning beyond simple robbery, Grünewald 2004; De Souza 1999. The distinction between robbery and local tolls can be a rhetorical and cultural one.
143 Seland 2014: 198–199; 2015: 108–111.
144 Strabo 16.1.27; Cameron 2019b: 239–241.
145 Young 2001: 184–186.
146 Seland 2015: 113–114; Gawlikowski 1983; 1996; Millar 1998: 132. For Palmyrenes at Dura Europos, see Dirven 1996; 1999.
147 Seland 2015: 115; Gawlikowski 1988b: 169.
148 PAT 2763, 1403 and maybe 2763; Seland 2015: 118–119.
149 Gawlikowski 1994: 29.
150 Andrade 2015, and see above.
151 Young 2001: 82–86.
152 Sartre 2005: 351–353.
153 Eutropius 9.10. Andrade 2018: 111–141; de Blois 1975; Gawlikowski 2010; Andrade 2013: 330–333; Smith 2013: 175–178; Hartmann 2001: 162–241.

154 On the Palmyrene "Empire": Hartmann 2001; Sommer 2005: 159–170; Andrade 2018; Stoneman 1992; Southern 2008; Smith 2013: 176–182.
155 Hartmann 2001: 352–394; Andrade 2018: 191–209. For a selection of relevant sources, see Dodgeon and Lieu 1991: 68–110.
156 Andrade 2018: 217–218; Stoneman 1992: 189–193.
157 Seland and Teigen 2017; Malkin 2011; Schor 2011; Collar 2013; Holton 2008.
158 Palmyra may be an exception, but the existence of Palmyrene diasporic trading communities at Rome (Terpstra 2016) and at Coptos in Egypt as part of the Red Sea maritime route (Young 2001: 80–82; Seland 2011) show the potential size of these regional networks.
159 Pliny *NH* 12.78–81.
160 Pliny *NH* 12.35–36 (Bdellium), 12.49 (amomum), 12.50 (cardamom), and probably also 12.16 (citron/Assyrian apple).
161 Andrade 2015.
162 Retsö 2003.
163 Josephus *BJ* 2.459; 3.46 calls it Gaba.
164 Millar 1998: 129, 135.

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18

THE CHITRAL *Yaβγu* 雙靡翕侯 AND A ROUTE SOUTHWARD IN THE 1ST CENTURY BCE

Shoshin Kuwayama

The roughly 4000-year-old site of the Late Harappan culture at Shortugai, 21 km northeast of Khwaja Ghar,[1] reminds us of a very early route between Central Asia and the South Asian Subcontinent. The Indus people penetrated the northern area of the Hindukush. Such a connector between the two sides of the Hindukush-Karakorum, however, had been long lost until eventually Dà Yuèzhī 大月氏 opened traffic to Imperial Han China in the first half of the 1st century BCE. The emergence of a route between the east and west is not simple, but such Central Asian lateral movement helped induce longitudinal commercial activities from Wakhan southwards. The tribute-bringing trade between Hàn 漢 and the Dà Yuèzhī had enormous impact upon the opening of other traffic running southward to the west coast of India through the eastern Hindukush and Gandhara, and even upon the Erythraean commerce. Such traffic might not always be irrelevant to the actual start of monastic activities in Buddhist Gandhara and environs, where rich long-distance traders succeeded in finding their devotional targets.

But before discussing the routes across the Hindukush-Karakorum, we must take up the whereabouts of the five *xīhóu* 翕侯 (*yaβγu*) under the Dà Yuèzhī. The five *yaβγu*s had recently been a focus for some scholars who placed each *xīhóu* over an extensive area, regardless of the textual evidence in the *Hànshū*.[2]

Five *yaβγu*s in the Easternmost Territory of the Dà Yuèzhī in Northeast Afghanistan

According to the *Hànshū*, the region south of the Amu was called Dàxià 大夏which Thomas Kingsmill and Joseph Marquart equated to Tokhara.[3] The *Hànshū* says that the Dà Yuèzhī state geographically consists of two territories – the northern and the southern – in the middle of which the Amu flows mainly westward. The northern territory was located between the Zeravshan range and the Amu, where the King of Dà Yuèzhī resided, as the *Shǐjì* 史記 showed, while the *Hànshū* 漢書 recorded that all of the five *xīhóu*s were in the southern territory or between the Amu and the Hindukush range, which were conquered by the Dà Yuèzhī.

The *Hànshū* begins to describe the state of Dà Yuèzhi with a general outline containing the capital name Jiānshì 監氏城, distances from the Han capital Chang-an and the Protectorate-General of Western Regions at Wūléi 烏壘, their populations, and so forth, all written by the editor himself. The first lines follow a historical outline of the Dà Yuèzhī which is quoted from

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the *Shǐjì* 史記. The history follows a description about Dàxià 大夏 (Tokhāra) which the Dà Yuèzhī had subdued. It begins with a short explanation quoted from the *Shǐjì* which leads to an account of five *xīhóu*s The latter is fresh at the time of editing the *Hànshū*. Such new accounts cannot be found in any other previous and even later sources except for the Western Region Chapter of the *Wèishū* 魏書. The *Hànshu*'s description of Dàxià says:

> Dàxià originally had no great king. Each town often had a lesser king. Inhabitants[4] are weak and scared of battle. Accordingly, when the Dà Yuèzhī migrated there, they carefully stored all of them as subjects. Providing supplies for Han envoys, there are five *xīhóu*s.
>
> The first *xīhóu* is called Xiūmì *xīhóu* 休密翕侯 who resides in the town of Hèmò 和墨城, 2,841 *lǐ* 里 to Protectorate-General 都護 and 7802 *lǐ* to Yángguān 陽関.
>
> The second is called Shuāngmǐ *xīhóu*雙靡翕侯 who resides in the town of Shuāngmǐ 雙靡城, 3,741 *lǐ* to Protectorate-General of the Western Region and 7,782 *lǐ* to Yángguān.
>
> The third is called Guìshuāng *xīhóu* 貴霜翕侯 whose residence is in the town of Hùzǎo 護藻城, 5,940 *lǐ* to the Protectorate-General and 7,982 *lǐ* to Yángguān.
>
> The fourth is called Xīdùn *xīhóu* 肹頓翕侯 whose residence is in the town of Bómáo 薄茅城, 5,962 *lǐ* to the Protectorate-General and 8,202 *lǐ* to Yángguān
>
> The fifth is called Gāofù xīhóu 高附翕侯 whose residence is in the town of Gāofù, 6,041 *lǐ* to the Protectorate-General and 9,283 *lǐ* to Yángguān.
>
> All of the five *xīhóu* are subject to the Dà Yuèzhī.

Here we notice no particular connotations between the subjugation of Dàxià by migrant Dà Yuèzhī and the five *xīhóu*s who provide supplies for Han envoys. The present writer finds no positive significance to divide共稟漢使者有五翕侯 into two phrases, 共稟漢使者 (providing supplies for Han envoys) and 有五翕侯 (there are five *xīhóu*s), and the former cannot follow the previous passage and the latter cannot be taken as being followed by their whereabouts. 共稟漢使者 (providing supplies for Han envoys) is a modifier to 有五翕侯 (there are five *xīhóu*s). The editors of the *Hànshū* had apparently known about the whereabouts of the five *xīhóu*s, that is just within Dàxià – to the south of the Amu Darya.

A. F. P. Fulsewé wrongly interprets the passage in such a way that he gives an English version of the Dàxià section.[5] The sentence under review is underlined, but the present writer does not follows Fulsewé to starting new lines.

> Originally, Dàxià had no major overlord or chief, and a minor chief was often established in the town. The inhabitants were weak and afraid of fighting, so that when the Yuèzhī migrated there, they converted them into their subjects. <u>They provide supplies for Han envoys.</u>
>
> <u>There are five xīhóu</u>.
>
> The first is entitled the Xīhóu of Xiūmìi, and the seat of . . .
>
> (The author has underlined the text).

What does Fulsewé expect from <u>They</u>? His interpretation is obscure.

Yán Shīgǔ顏師古 first understood gòng-lĭn 共稟 of 共稟漢使者有五翕侯 as receiving an imperial order, but no one could have been convinced of such an interpretation. Wàng Xiānqiān 王先謙 published the *Hànshū Bǔzhù* 漢書補注 to first elucidate it with support of Wàng Míngshèng 王鳴盛 (*Shíqīshǐ Shāngquè*十七史商搉**)** that 共 gōng equates to 供

gòng and that lǐn稟is used instead of jǐ 給. So, gōng-lǐn 共稟 means gòng-jǐ 供給, which is usually interpreted as providing supply. His explanation of the phrase 共稟漢使者有五翕侯 sounds reasonable.[6]

The preceding phrase implies that the total number of *xīhóu* was not five. The number of *xīhóu* who provides supplies for Han envoys is limited to the five. Not only Paul Pelliot, but E. Zürcher was also aware of this problem.[7] Pelliot tells about *xīhóu* that "*La Ta-Hia était gouverne par un certain nombre de hi-heou (yaβγu), don't les Chinois ont connu cinq*". The phrase "the five *xīhóu* who provide supply for Han envoys" implies a new historic situation of the time when mutual communications have started between Han and Dà Yuèzhī. Datable evidence for the beginning of such a relation is unavailable in any extant classical sources, but the dated Han wooden strips among the new archaeological finds from Xuánquán-zhì 懸泉置 near Ānxī 安西 are very important for dating from the beginning of Dà Yuèzhī's communication with the Han court to the middle of the 1st century BCE at the latest.[8]

The whereabouts of the five *xīhóu*s was identified by Kurakichi Shiratori 白鳥庫吉 following Marquart.[9] That the five *xīhóu*s were in Dàxià was clear, as discussed elsewhere in this volume. Marquart quotes the Western Region Chapter of the *Wèishū* 魏書西域傳 for his identification, while Edouard Chavannes published a French version of the exact passages of the *Wèishū*.[10] Referring to all of these works, Shiratori could successfully identify each *xīhóu* following locations in the *Wèishū*. His warrantable argument had led to a proper conclusion, while the present writer suggests adding some minor revisions. The original text concerned of the *Wèishū* and his identifications follows.

1. Xiūmì *xīhóu* 休密翕侯 in eastern Wakhan between the Wakhjir pass and Qal'a ye Panjah. 伽倍Qiébèi國。故休密翕侯。都和墨 Hémò 城。在莎車Shāchē西。去代13,000里。人居山谷間。
2. Shuāngmǐ *xīhóu* 雙靡翕侯 in Chitral in the Yarkhun valleys. 折薛 Shéxuē 莫孫 Mòsūn 國。故雙靡翕侯。都雙靡城。在伽倍西。去代13,500里。人居山谷間。
3. Guìshuāng *xīhóu* 貴霜翕侯 at either Khandud or Ishkashim or both in western Wakhan. 鉗敦Qiándūn國。故貴霜翕侯。都護澡 Hùzǎo 城。在折薛莫孫西。去代13,560里。人居山谷間。
4. Xīdùn *xīhóu* 肹頓翕侯 in Badakhshan between Darah-ye Im and Boharak with Faizabad at the center. 弗敵沙 Fúdíshā 國。故肹頓翕侯。都薄茅 Bómáo城。在鉗敦西。居代13,660里。居山谷間。
5. Gāobù *xīhóu* 高附翕侯 in Yamgan from Jorm southward to the fork of the Kokchah. 閻浮謁 Yánfúyè國[11]。故高附國。在弗敵沙國南。居代13,760里。居山谷間。

First, concerning Guìshuāng *xīhóu*, or Kushan *yaβγu*, Shiratori suggested that Qiándūn was an ancient denomination of modern Khandud, so that 護澡 Hùzǎo was also the same as Khandud. Theoretically he is right, but Hùzǎo does not look like Khandud. Therefore, G. Pulleyblank restores Hùzǎo to be Waχš. He might think that Waχš is relevant to the river "flowing southward into the Amu, or modern River Vakhshu".[12] Khandud must have been the same as Hūntuóduō 昏馱多, which the *Dà Táng Xīyùjì* 大唐西域記 records as the central town of Dá Móxītiědì 達摩悉鐵帝 (*Dar-e Maštit, or the Gate of Mastuj) which The *Táng Gāosēng zhuàn* 唐高僧傳 (Book 3) also copies as Dá Móxīxūduō 達摩悉鬚多. Hùkǎn 護侃 in the Western Region Chapter of the *Tángshū* 唐書西域傳 is phonetically very close to Wakhan, where a king's residence is described at Sàijiāshěn 塞迦審 (Ishkashim). Qiébèi 伽倍 in the *Wèishū* is equal to 鉢和 Bōhé in the *Huìshēng xíinqjì* 惠生行紀 of the early 6th

century. All these pronunciations converge to the geographical name Wakhan, where there is a town called Hūntuóduō 昏馱多 in the *Táng* period, and called Qiándūn or Sàijiāshěn in the Northern Wèi time.

Geographically, Wakhan is very long from east to west and narrow from north to south. Even now it encompasses two towns – Ishkashim and Khandud – at the least. Ishkashim is located at the extreme west of Wakhan, on the west bank where Ab-e Panja runs from east to the bend northward toward Shughnan and Roshan, while Khandud is a slightly west of central Wakhan on the south bank of the upper Panja. Hùkǎn, or Dámóxītiědì, had a town called Hūntuóduō 昏馱多in Táng China and Qiándūn 鉗敦 in Northern Wèi time.

According to the *Wèishū*, Qiébèi in the Northern Wèi time corresponds to Xiūmì *xīhóu* in the Han time, which is 13,000 *lǐ* to Dai 代. Qiébèi corresponds to Wakhan. The Western Region Chapter of the *Tángshū* edited on the *Dà Táng Xīyùjì* 大唐西域記 refers to Hùmì 護密, which is otherwise called 達摩悉鐵帝 Dámóxītiědì or Hùkǎn 護侃; it was also named Bōhé 鉢和 in the time of Northern Wèi – or Tuhuoluo in ancient times. The capital of Wèi China is 9000 *lǐ* to the southeast of Bōhé, and the country measures 1600 *lǐ* long with a width of just only four or five *lǐ*. The king's residence is in Sàijiāshěn on the Wūhǔ烏滸. The *Tángshū* says that this district lies at the entrance to the Tuhuǒluǒ Prefecture吐火羅道 (Tokhara) from the Four Garrisons' areas. Huìchāo惠超 describes in the *Wang Wu-Tianzhuguo zhuan*往五天竺國傳 (or *Huichao's Record of Travels in Five Indic Regions*) says that Húmì胡密is located to the west of Yarkand along the gorges in the mountains. Húmì must have been synonymous to Wakhan.[13] Bōhé 鉢和 in the Northern Wèi is found in the travel records of Sòng Yún宋雲, Huìshēng 惠生, and Fǎlì 法力, all of which are identifiable to Wakhan. Therefore, Xiūmì also equates later to Jūmì 俱密, Húmì 胡密, and Hùmiè 胡蔑, all indicating Wakhan.[14]

However, the point of interest is a difference between Hùmì 護密and Hùmìduō 護密多. The latter does not indicate Wakhan but the Darwaz district, which is located to the north of Badakhshan and to the northwest of Wakhan. Hùmìduō appears later in the *Dà Táng Xīyùjì* as Xuanzang is pronouncing it as Jūmíduō 拘謎多. The Geography Chapter of the *Tángshū* says that the Protectorate-General Wūfēi-Province 烏飛州都督府 is established at the town Mókuí 摸逵 in the state of Hùmìduō 護密多. Yet the government of Wūfēi 烏飛州都督府 controls only a province called Bōhé (鉢和州), whose town is set up at Suōlèsèhé 娑勒色河'.[15] Of course, Bōhé is different from Wakhan itself, but the name of a province under the control of the Wūfēi Government-General.

The *Hànshū* lists five *xīhóu*s as they stand from east to west side by side; the distances from Yángguān 陽關 are 7802 *lǐ* to Xiūmì 休密, 7,782 *lǐ* to Shēmǐ 賒犘, 7982 *lǐ* to Guìshuāng, and so forth. Actual distances can hardly be relied on, but Shuāngmǐ *xīhóu* is, as will be mentioned later, identical to the Mastuj-Chitral areas which are along the Yarkhun River. Shuāngmǐ was to the south of Wakhan valleys beyond the eastern Hindukush range. Accordingly, the first two *xīhóu*s – Xiūmì and Guìshuāng – geographically line up in order between Wakhjir Pass to the east and Ishkashim to the west: the two *xīhóu*s divided Wakhan into two halves. The *Wèishū* importantly informs us about the fact that Khandud was in Guìshuāng *xīhóu*'s territory, because the Guìshuāng (Kushans) had occupied the western half.

When the Han envoys tries to enter Wakhan, they must have taken the southern route of the Taklamakan desert, which usually proceeds from Yarkand westward to ascend to Kharbandan (modern Tashkurghan) and descends along with the River Tashkurghan southward. Turning to the west in the Khaqan-e Ujabai Pamir, they cross over the Wakhjir pass and reach Qal'a-ye Panjah, via Buzai Gumbad, Langar, Sarhad-e Wakhan (Sarigh Chopan) along Ab-e Wakhan which flows westward. Qal'a-ye Panjah is located to the west of a place where the Ab-e Wakhan flows into Ab-e Panjah. The Ab-e Panjah runs further to see Khandud on his

south bank and then Ishkashim southwest of it. It bends itself to run northward with Shughnan and Roshan districts to the east, and then turn to the west. Darwaz, which might be identical to Hùmìduō 護密多, is located south of Ab-e Panjah, which is called Darya-ye Panjah hereafter.

Thus, provisionally observing the rivers and towns in Wakhan to set two political districts there, the town Qal'a-ye Panjah divides Wakhan into the east and west halves. The eastern portion was an area from the Wakhjir pass westward and was under the rule of Xiūmì *xīhóu* in the time of Former Han, while the western territory was occupied by Guishang *xīhóu*, or the Kushan *yaβγu*, with the capitals, Ishkashim and Khandud. Waχš and Ishkashim phonetically differ from each other. But we should recall that Darya-e Amu is called Darya-ye Panj or Ab-e Panja in its upstream. It was named Guī 嬀 in Han China and Fuchu 縛蒭 in the *Wèishū* and the *Dà Táng Xīyùjì*. Such Chinese characters representing a river name are supposed to have been phonetically copied in China. A question arises, however, whether Fùchú (縛蒭 or 縛芻) is restorable as **panj*. Hùzào 護燥 is readable as Waχš, but, is Fuchu not restorable to be Waχš?

In either event, when Shuāngmǐ (Chitral or Chitral-Mastuj) was visited from eastern Wakhan – the territory of Xiūmì *xīhóu* – one must have crossed the eastern Hindukush at Barogir pass southward. There seems no other way to cross the mountain barrier to reach Mastuj from eastern Wakhan. The Shuāngmǐ 雙靡 district also appears as Shēmǐ 賒彌 in the travel accounts of Huìshēng 惠生 in the early 6th century and Shāngmǐ 商彌 in the *Tángshū* and the *Dà Táng Xīyùjì*, while Jūwèi 俱位 in the *Tángshū* and Jūwěi 拘緯 in the travel accounts of Huìchōo 惠超 and Wùkōng 悟空 in the 8th century. E. Chavannes and M.A. Stein assign Shuāngmǐ only to Chitral,[16] yet Marquart assigns Mastuj to be Shuāngmǐ xīhóu's territory, which is also on the same Yarkhun gorge, dozens of kilometers to the northeast of Chitral. The present writer simply thinks of Shuāngmǐ to include both Mastuj and Chitral, because Shéxuēmòsūn 折薛莫孫, a denomination of Wakhan of the time of Northern Wei, can be a compound word dividable to Shéxuē and Mòsūn. If the location of Shuāngmǐ in the Yarkhun valley was correct, the eastern Hindukush was only a natural barrier for Kushan *xīhóu* 貴霜翕侯 which was to the north of Shuāngmǐ.[17]

Shuāngmǐ or Mastuj-Chitral valleys apparently give a marvelous natural circumstance that connects via many passes, or by many roads, only to the Kushan *yaβγu*, but the Xiūmì *xīhóu* can only reach the Yarkhun valleys through the Barogir pass. In addition, the route was impossible to navigate in winter. The other three *xīhóu*s had no easier, direct access to Shuāngmǐ. However, the Kushan *yaβγu* must have had more frequent access to the Shuāngmǐ *yaβγu* through several passes. The Shuāngmǐ *yaβγu* could be reachable, ascended by long-distance traders who joined Gandhara and the Punjab plains to the mountaineers like Shuāngmǐ *yaβγu*, who was familiar with east-to-west trade along the southern fringe of the Taklamakan desert. The present writer, therefore, presumes that just the Kushan *yabβγu* held a favourable geographical location among the five, not only to get information from the south before the others, but also to accumulate wealth to influence the other four, so as to achieve independence.

The next issue about the five *xīhóus* is on Xīdùn 肹噸, which Shiratori identifies with Badakhshan. The *Wèishū* tells that the state of Badakhshan is equal to the Xīdùn *xīhóu* in old times. The capital is Bómáo 薄茅, located to the west of Khandud and 13,660 *lǐ* to Dai. It is in between rivers and mountains. Some maps define Badakhshan up to the area just south of Darwaz and to the Kokcha valleys south of Faizabad. Yet, Badakhshan should be supposed here to be a principality of *yaβγu*, whose role is defined in the *Hànshū* as one of the *xīhóu*s "providing supplies for Han envoys". So, the Xīdùn principality should be placed on the traffic route along Darya-ye Panj, probably from Darah-ye Im via Faizabad to Boharak.[18]

The identification of Gāofù with Kabul is too embedded. The *Wèishū* mentions, however, that Yánfúyè 閻浮謁 is Gāofù in old times in the mountain valleys and south of Badakhshan.

Certainly, Kabul is south of Badakhshan, but too far from it to be identical with Kabul, and Kabul does not fit with a country in the mountain valleys. The *Wèishū* also refers to all of the five *xīhóu*s that are in the mountain valleys. No written evidence is extant for any Chinese denomination which is comparable with Kabul. In fact, Xuánzàng 玄奘 made no reference to Kabul in the early 7th century, but mentioned Ghazni which was geographically located south of Kabul. In such an early time as the Han Dynasty, could the town Kabul exist independently? Impassively identifying Gāobù with Kabul does not seem feasible. According to information in the Western Region chapter of the *Wèishū*, *the* location of the five *xīhóu*s proves authentic. The present writer, therefore, accepts the notion by K. Shiratori who identifies Gāofù with Yamgan in the middle valleys of the Kokcha, which the *Dà Táng Xīyùjì* calls Yínbójiàn 淫薄健.

Lateral Trade between the Dà Yuèzhī and Han China

All of the five *xīhóu*s were in the mountain valleys on the south fringe of the Pamirs. According to the *Tangshu*, Wakhan measures between 1400 and 1500 *lǐ* long from east and west. If so, each of the Xiūmì and Guisheng *xīhóu*s measures roughly at least 700 *lǐ* in length. Such size seems to have been shared by every *xīhóu* who borders on one another along the rivers, such as Ab-e Wakhan, Darya-ye Panj, and Ab-e Kokucha, located in between the Wakhjir pass and Dara-ye Im.

At the time of their migration to the area between the mountain ranges Zeravshan and Hindukush, the Dà Yuèzhī conquered Dàxià (Tokhāra) south of the Amu, then established a royal camp around a prominent town north of the Amu Darya. The area on both sides of the river was full of small towns, as the *Tàngshū* and other sources recorded. A number of lesser kings might have resided in towns in Tokhāra. To them, the Dà Yuèzhī King as a nomadic conqueror bestowed the nomadic title "*yaβγu*" called in Han China "*xīhóu*". With the assistance of the *Wèishū*, we are led to an outlook as follows:

At least five local town heads in Tokhāra with the nomadic title *yaβγu* occupied the easternmost territories of Dà Yuèzhī. We have come to understand that only the five *yaβγu* played a political and commercial role of providing supplies for Han envoys, among whom the Kushan *yaβγu* ruled at the first bend of the Darya-ye Panj – a strategic place accessible from the four major directions, such as the eastern Wakhan, Mastuj-Chitral (or the Yarkhun valleys), Yamgan, and Badakhshan, all being the principalities of the other four *yaβγu*.

Attention should be drawn to the fact that a chain of such principalities is exactly comparable to the itinerary in northeast Afghanistan of Xuánzàng on his way back in 643 CE. Examining the *Dà Táng Xīyùjì* and his most extensive biography written by Huìlì 慧立and later by Yancong 彦悰, his route starts at Huó活[19] toward the east to run through Měngjiàn 瞢健 (Khānabād or Tāloqān), Qìlìsèmó 訖栗瑟摩 (>Kishm), Xìmódáluó 呬摩怛羅>Darah-ye Īm), Bōduóchuāngnuó 鉢鐸創那 (>Badakhshān), Yínbójiàn (Yamgān), Qūlàngná屈浪拏 (Kurān wo Munjān), and Dámóxītiědì 達摩悉鐵帝 (Wākhān). Comparing the locations of the five *xīhóu*s with Xuanzang's route, we are now able to recognise that a trade road which pierces through Wakhan, Yamgan, and Badakhshan has not changed for several hundred years since the early 1st century BCE.

In the case of Han envoys, their road might have run from Wakhan to Yamgan, passing Wakhjir, Langar, Sarhad-e Wakhan, Qal'a-ye Panjah, Khandud, Ishkashim, Zebak, Bahrak, and Faizabad. A branch route went for Zebak and Sanglich before crossing low passes to reach Iskan and Jorm. From Faizabad westward the Han envoys always descended toward the plain of Kunduz, which held the big commercial town Lánsh 藍市 in the *Shǐjì* or Jiānshì 監氏 in the *Hànshū*.

Turning to the western border of Han China, there was a Han state station about 60 km to the west of Anxi 安西. This is now ruins named by Chinese archaeologist Xuánquán-zhì 懸泉置. From 1990 to 1992, the Gansu Institute for Research in Cultural Products and Archaeology had taken up this site as a subject for archaeological research excavations and discovered a dimensionally impressive building, measuring 150 × 150 m^2 in size. The remains of a station soon appeared below the ground level together with stratified remains of wooden strips – more than 23,000 in number – mainly from the Han periods.

The towns of five *xīhóu*s were official stations for Han envoys in a sense, whereas the Xuánquán-zhì represented a westernmost station of the Han Empire which received many more missions and envoys from the Western Region which curiously included two of Dà Yuèzhī's *xīhóu*s, Xiūmì 大月氏休密翕侯 and Shuāngmǐ 大月氏雙靡翕侯, which Grenet keenly but simply pointed out. Simultaneously, the Xuánquán-zhì represents the eastern counterpart of the Dà Yuèzhī's *xīhóu*s' role. The main archaeological finds here include dated written documents, both paper and wood, dug out from many pits and soil layers. That the station started with the Yuándǐng 元鼎 era (116–111 BCE) and had been functioning over next hundred years (86 BCE to 29 CE) was the excavators' chronological view to the site.

The 23,000 Han wooden strips were found at three pits H10, 11, and 12. Eighteen thousand strips that were dug out have already been filed, about 360 of them being relevant to the Western Regions. Text was written in ink on the strips, including the names of western countries known and unknown in the Western Region Chapter of the *Hànshū*, the names of ambassadors of Han and from other western countries, official titles of messengers, their personal names, and purpose of visits in Han China – some of them dated in detail. Strips refer to foreign missions who visited Han China by themselves, and also mentions individuals from Han missions who returned to China from Western countries accompanying foreign envoys as return calls. Food provided for missions is described by quantity and variety. Horses and coaches are also important tools which Chinese officials arranged for envoys who arrive at the Xuánquán-zhì station. The dates of their arrival or departure are indispensable for bookkeepers.

The Dà Yuèzhī's *xīhóu* has been known to us only in the *Hànshū*. We considered how important it was that they annotated "Dà Yuèzhī Xiūmì *xīhóu*" 大月氏休密翕侯 or "Dà Yuèzhī Shuāngmǐ *xīhóu*" 大月氏雙靡翕侯 on some strips. Regrettably, Dà Yuèzhī Guìshuāng *xīhóu* 貴霜翕侯 has never been found, insofar as Chinese archaeologists have ever published any findings. These two examples show that the *xīhóu* was officially called "Dà Yuèzhī + [the place-name such as Xiūmì, Shuāngmǐ, or Guìshuāng] + *yaβγu*". Undoubtedly, the *xīhóu* was not from the Dà Yuèzhī people but local town heads, as the present writer discussed in Chapter 10 of this volume. The "Dà Yuèzhī Xiūmì *xīhóu*", or the "Xiūmì xīhóu of Dà Yuèzhī", does not indicate that the *xīhóu* at Xiūmì has a blood relation with Dà Yuèzhī, but that it only politically belongs to Dà Yuèzhī.

Since the Da Yuezhi migrated, Dàxià had been governed by a certain number of *xīhóu*s (*yaβγu*s) – the five of which China only knew about – as Pelliot called attention. Accordingly, the five *xīhóu*s should not be taken as all of the *xīhóu*s under the Dà Yuèzhī. The *Hòu Hànshū*'s claim that Kujula became independent defeating all of the four *xīhóu*s is an illusion which had come from a misunderstanding of the previous sources of the Han Dynasty. We must always draw attention to texts like this of the Western Region Chapters, in particular of the *Hòu Hànshū*. A single instance is an indication of what happens all the time. This passage leads us to a more important understanding that "*xīhóu*" had been local chiefs of towns in Tokhāra. There must have been a number of *xīhóu*s as in the case of Wūsūn 烏孫 and Kāngjū 康居. Neither all of Dàxià nor the whole territory of Dà Yuèzhī is synonymous to the lands of five

xīhóu. The authentic phrases of the Western Region Chapter of the *Wèishū* inform us of the real whereabouts of five *xīhóu*s: in the upper courses of Darya-ye Panj and Darya-ye Kokchah.

The *Hòu Hànshū* says that, in the beginning, the Yuèzhī was defeated by Xiōngnú and eventually they migrated to Dàxià and divided it into Xiūmì 休密, Shuāngmǐ 雙靡, Guìshuāng 貴霜, Xīdùn 肹頓, and Dūmì 都密; all of them are five different *yaβγus*.[20] J. Kuwabara 桑原隲藏 points out that, since the passage is an abridgement of the original *Hànshū* texts, it should not be read as an independent new basic source.[21] So we should not rely on this passage, although some scholars wanted to expand the five *xīhóu*s into the whole territory of Dà Yuèzhī. Such a claim deviates beyond doubt from evidence in the *Hànshū* that locates the five *xīhóu*s within Dàxià.

Going from the five *xīhóu*'s territories westward, one can reach a big town called Lánshì – a commercial center of the Dà Yuèzhī state on the south bank of the Amu – while if one proceeds to the east, Chang'an is reached through Xuánquán-station, the westernmost station of the Han Empire. Looking from the Dà Yuèzhī side, the road runs east through the five *xīhóu*s' districts. From the earlier half of the 1st century BCE (at the earliest), a direct route started running between Dà Yuèzhī and Han Changan 長安. Regarding the Dà Yuèzhī, the place where they finally received Han envoys, there may have been a royal camp north of the Amu, while good business might have been carried out in Lánshì south of that river.

Topographically, the Yarkhun valley is in the other side of the Hindukush, or south of west Wakhan. It looks protruding southwards from long Wakhan. Protrusion does not seem to force the Han envoys to take a detour via Chitral to Yamgan, but it is suggestive to me that a southward route started from Chitral downward for Peshawar, or Gandhara, via the Lawarai pass, Dir, and Lower Swat. On the other hand, the Mastuj-Chitral area can be reached from only the two *xīhóu*s – Xiūmì and the Kushan – across the passes such as Boroghil, Khatinza, Agram, and Dorah. Among these, only the difficult Boroghir pass joined the Xiūmì *xīhóu* (eastern Wakhan) with Shuāngmǐ *xīhóu* (Chitral-Mastuj), while the Kushans (western Wakhan) held three options of crossing the Hindkush that allowed the Kushan yaβγu to get much easier access to the Yarkhun valley. The three options includes three passes like Khatinza, Agram, and Dorah, the last being easily passable in every season.[22] The domain of Shuāngmǐ *xīhóu* looked as if it was located south of the Kushan yaβγu. However, the Han envoys must have gone straight to a central district of Dà Yuèzhī, without dropping in at Shuāngmǐ. From such a viewpoint, the Mastuj-Chitral valley does not seem to have been a usual station for supplies, nor a vital point for supplies. If so, for what reason did the Shuāngmǐ *xīhóu* exist? The Chitral yaβγu might have played another role, perhaps such as for southward trade activity.

Shuāngmǐ *xīhóu* had possibly taken southward steps through the Lawarai pass to the Peshawar basin. Long-distance traders furthermore must have aimed for mainland or peninsular India, and its northwestern coastal harbours on the Maris Erythraei, such as Barygaza, Barbarikon, and Ozênê (Ujjain) as well. Strong preference for silk products in Roman Italy had increased towards the start of Imperial Rome. Silk fabrics, invaluable commodities in the contemporary world, might have been known by this time to the eastern Mediterranean coasts. Dà Yuèzhī's tribute-bringing trades to the Han court helped promote silk products to spread out to peninsular India and beyond to Italy.

As Kuwayama discussed elsewhere,[23] the monk translators from Gandhara and Chinese monks in search of the Buddhist scriptures in Gandhara usually crossed the easternmost Hindukush range via the passes – either Mintaka or Kirik – from the 4th to the mid-6th centuries. Modern Tashkurghan, or ancient x*rβntn* 渴飯檀 (from the *Huichao zhuan* 惠超傳) [Xarbandan] (漢盤陀),[24] was an important station for everybody, either Gandharan or

Chinese. In that case, caravans must have passed the Tagh Dumbash Pamir southward before crossing either Mintaka or Kirik. Hunza, Gilgit, Chilas, and Darel are all usual stations for the caravans to proceed to Uddyana and beyond. A few centuries earlier, as we have seen earlier, another route had connected Central Asia to the South Asian subcontinent via the Yarkhun valley.

The Capital of Dà Yuèzhī in the *Hànshū*

Subtle differences in wording between the *Shǐjì* and the *Hànshū* come from the *Hànshu*'s editorial policy that is manifest with a clear formula. The editor of the latter, Bān Gù 班固 in the main text, treated each country as a state, adding a character國 (guó) to the end of a country's name, whether nomadic or sedentary. Thus, the editorial policy inevitably required every nations, even the nomadic, a fixed capital. Yet, concerning the Dà Yuèzhī, the *Shǐjì* does not indicate both the name and the whereabouts of the capital. Sima Qian 司馬遷 only says that Dà Yuèzhī placed the royal camp north (or on the north bank) of Guīshuǐ 嬀水 (the Amu). As a result Bān Gù could not avoid making a capital on paper—actually on wooden or bomboo strips. Luckily, the Dà Yuèzhī had a flourishing big town called Lánshì in the occupied Dàxià (Tokhara). It was not strange for Bān Gù to set up Lánshì to be the capital of the Dà Yuèzhī. Therefore, this was not an actual capital at all. The present writer doubts about whether Lánshì in the *Shǐjì* and Jiānshì in the *Hànshū* are different. Such town names would have derived from a clerical error. According to some scholars, this kind of change seen in the *Hànshū* is attributable to a historic transfer of their capital from the north of the Amu to the south. Had Dà Yuèzhīs crossed the Amu to Tokhāra to reside in or around Jiānshì? Attention also has to be drawn to Lánshì 藍市, Jiānshì 監氏, and even Lánshì 藍氏 in the *Hòu Hànshū*. Tōru Haneda 羽田 亨 does not exclude the possibility for *Jian* 監 to hold the same phonetical value as *Lan* 藍.[25] However, the possibility of the nomadic migration from the pasture land to the oasis area is not expected at all.

Being related to a town site identifiable with Hu shown in the footnote No. 19, the author identifies Lánshì with an extensive town site called Khisht Tepe on the south bank of the Amu west of a modern big village Qal'a-ye Zal, where a big coin hoard was discovered by the French scholars in 1965.[26] Neither Balkh nor Khulm can be an alternative in my view. Balkh and Khulm are too far from the bank of the Amu, and especially Balk seems to have drastically evolved in or after the middle of the 6th century and onward when Kabul came to be prosperous. Khulm is favored with Pulleyblank.[27] It lies between Kunduz to the east and Mazar-e Sharif to the west. According to the translation of Minorsky, Khulm is not included to Tokharistan in the *Ḥuḍūḍ al 'Ālam*. Everybody should consult the *Ḥuḍūḍ al 'Ālam* for Khulm, where one can find that "Khulm lies between Balkh and Tokharistan in a step at the foot of a mountain".[28] As the *Ḥuḍūḍ* shows, Balkh and Khulm are towns west of Tokharistan. If Tokhar (Dàxià 大夏) of the *Shǐjì* and the *Hànshū* could be equal to later Tokharistan, we evidently conclude that neither Balkh nor Khulm is identical to Lánshì, or Jiānshì. The *Ḥuḍūḍ* further mentions "Valvālij,[29] a flourishing town and the capital (qaṣaba) of Ṭukhāristān". Valvālij was the same as Huo 活 (>**war*, but not **waru* 活路) in the bibliography concerning Xuanzang, where the Ton Yaβγu Khaqan of the West Turks sent his eldest son in 619 CE as Tardu Šad in order to establish a strategic base. Later in 651, the Tang court established the Yuèzhī Prefecture under the Governor-General of the Western Region. The site is thus historically the most essential town in Tokhara, and identification to an extensive ancient mound on the Amu west of Qal'a-ye Zal is all the more acceptable for Lánshì.

From the Chitral-Mastuj *yaβγu* Toward a Route for the Maris Erythraei

Traffic running longitudinally through the eastern Hindukush might have entered into quite a new phase, when Dà Yuèzhī established five yaβγus in Wakhan, Yamgan, and Badakhshan, expecting Han China to do commerce with Dà Yuèzhī in a typical style such as bringing a tribute from the latter. It seems to have already begun in the sixties of the 1st century BCE, as shown by the Xuánquán-zhì 懸泉置 wooden strips. Any concrete evidence for such a tribute-bringing trade is not found in any classical sources. Yet, both specific sites on both borders of Han and Dà Yuèzhī give good ground for discussing a Han-Dà Yuèzhī direct trade in a form of tribute-bringing commerce in the 1st century BCE. Real locations of the five *xīhóu*s give clues to the lateral trade connecting Cháng-ān 長安 in mid-China and Lánshì 藍市 in Tokhāra (Dàxià) via Dūnhuáng, Hotan, Yarkand, Tashkurghan, Wakhan, and Katagan.

There must have been local business before the arrival of Dà Yuèzhī in Tokhara in between 138 and 135 BCE. Even several decades after Zhāng Qiān 張騫 returned to China in early 126 BCE, the trade between the two nations was still vague. Only archaeological finds at Xuánquán-zhì allow us to date it to the mid-1st century BCE. Therefore, presumably in the earlier half of the 1st century, the Han Empire might have sent envoys to Dà Yuèzhī, the latter also bringing tributes to the Han. Silk products, as a return gift from the Han Emperor, must have produced a gross profit in their homeland in the middle of the Amu.

In the latest years BCE and the early years CE, or in the early years of Imperial Rome after the absorption of Egypt, oriental luxury items rapidly streamed into Italy from Alexandria where everything particularly valuable came from the "Orient". Among the commodities, silk products were the most popular that had departed from western Indian ports, as stated in the *Peryplus Maris Erythraei* by an anonymous Greek writer presumably in the middle of the 1st century CE.[30] Silk cloth or yarn stored at every wharf of Barygaza, Barbarikon, or even Ozene (Ujjain), may have come from Dà Yuèzhī to coastal India through the hands of international or local traders. The silk products that Chinese Emperors presented to their Central Asian guests would have become one of the usual goods that had most probably been exchangeable at their homes in Tokhāra with something of foreign precious goods, which Central Asians preferred.

Imperial Romans' demand for *serica* animated commercial activities, first between Alexandria and the coastal ports on the west and south Arabian Peninsula and second to Indian harbours on western India. We are unaware of how far into the mountainous region subcontinental traders went in search of silk. As Casson maintains, silk cloth and yarn are found among luxury exports in the warehouses on the western and southern coasts, such as at Barygaza, Barbarikon, Muzuris, and Nelkynda, while Masalia, Desarene, and Ganges in the northeastern parts of India do not show any silk in their lists of exports.[31] Difference suggests that silk seems to have come down only through the northwestern passages to Gandhara and Takṣaśilā to peninsular India. Neither the Nepal road nor the eastern highland route via Sichuan 四川 is an *entrepôt* for silk from China. Therefore, we can believe that silk products in Indian warehouses for export have mainly been brought from Dà Yuèzhī's trading activities with Han China.

The *Periplus* refers to "Bactrians" who are often regarded as those living in Bactria. Scholars often mistake Bactrians as Kushans, but Bactrians are not necessarily Kushans. The Kushans were local and sedentary under the Kushan *yaβγu*, who was one of the five *yaβγu*s under the Dà Yuèzhī's hegemony. Particularly, the *Shǐjì* mentions that the Dàxià (Tokhāra) people are good at business. In this sense, the silk cloth and yarn must have come from Tokhāra, where Dà Yuèzhī missions brought them as one of the return gifts back from Chángān. Silk was saved up there to be traded in local markets in Tokhāra (at Lánshì for example) and it was transported

by either local or long-distance merchants via the Dorah pass to Chitral (Shuāngmǐ *yaβyu* territory). It further went to cross the Lawarai pass to reach Dir, Uddiyana, and Gandhara. Crossing the Indus southwards, it was divided at Taxila in western Punjab into two loads – one for Barygaza and the other for Barbakikon. The former goes via Mathura and Ujjain to the terminals, whereas the latter heads along the Indus water system to Barbarikon which vividly reminds us of a fortified town site of Banbore near Karachi, Pakistan, although this site cannot necessarily be identified to Barkarikon.

The commerce between India and Rome had absorbed resources from as far as Wakhan and Tokhāra so as to accumulate wealth in the west coast of India. Merchants' Buddhist or Jain faiths supported monks spiritually and their residences architecturally. The remains of merchants' devotions to Buddhism in particular are rock-cut stupas and adjacent monasteries established on the inland side of mountain's breast on the western coast.[32] A little later than the formation of rock-cut monasteries, it was Gandhara and Taxila that attracted long-distance traders and merchants for their stopovers on their ways to the northern mountain areas and back down to the coastal districts. Unlike western Indian towns and ports, Gandhara is a place designated for traders as an entrepôt to load and unload goods in inland transportation. At the foot of the eastern wing of the Hindukush, the trader needed Gandhara to reload firmly in order to climb up and cross the mountains to the northern Da Yuezhi and their *yaβyu*s. The apparently new sculptural and architectural features in Gandharan Buddhist chapels remind us of the very quick formation of unique cultures during a short time in the latest years BCE and earliest years of the 1st century CE, disputing that it is a makeshift collection from every corner in West Asia and the eastern Mediterranean coasts on the foundation of the local sectarian Buddhism. For example, several gateway reliefs between pilasters on the lateral walls at a small Jain or Buddhist stupa at Block 1F of Sirkap city would not exist without contemplating Nabataean spiritual life at Petra. Alexandrian and eastern Mediterranean commodities possibly came up to Gandhara, starting in Alexandria via Koptos on the upstream of the Nile to the ports, Muos Hormos or Bernikē, at the innermost part of the Red Sea, or starting with the eastern coast via Petra to Leukē Kōmē. Coastal navigations might have led to Aden, leaving such three ports.

As soon as the Indian monsoon or periodic wind of the Arabian Sea was found useful for sailing trips bound for India, western sailors could reach the northwest coast near Bombay within a limited timeframe – but it was hazardous if one happened to encounter strong winds accompanied by heavy rain. On their return, one might have expected a reverse wind from the northeast which starts between October and November. It is a journey which takes half a year at the longest.[33]

Notes

1 See Francfort, H.-P., *Fouilles de Shortughaï,* 2 vols. Paris, 1989.
2 Grenet, F., Nouvelles données sur la Localisation des cinq yabghus des Yuezhi, *Journal Asiatique*, t. 294–2, 2006, pp. 325–341. Falk, H., The Five Yabghus of the Yuezhi, *Bulletin of the Asian Institute*, Vol. 28, 2014, pp. 1–43.
3 Kingsmill, T. W., The Migrations and Early History of the White Huns, *JRAS,* 1878, pp. 295–296; Marquart, J., *Ērānšahr nach der Geographie des Ps. Moses Xorena'I*, Berlin, pp. 204–207.
4 'Soldiers'(兵) in the *Shǐjì* is replaced, perhaps by Bān Gù to 'inhabitants (民).'
5 Fulsewé, A. F. P., *China in Central Asia, the Early Stage: 125 B.C.–A.D.23*, Leiden, 1979, p. 121.
6 Wàng Xiānqiān 王先謙, the *Hànshū Bǔzhù* 漢書補注. Wàng Míngshèng 王鳴盛, *Shíqīshǐ Shāngquè*十七史商搉.
7 Pelliot, P., Tokharien et koutchéen, *Journal Asiatique*, Vol. 22, 1934, pp. 38–40. Zürcher, E., The Yuechih and Kaniska in Chinese Sources, *Papers on the Date of Kaniska*, *London, 20–22 April*, *1960*, (ed.) A. L. Basham, Leiden, 1968, pp. 346–390.

8 The following examples are all of the dated strips on which the names of the Da Yuezhi and their *xihou*s are clearly visible. They originate in the materials published in a paper by Zhang Defang entitled 'Some Western Region Sources of the Han Wooden Strips from Xuánquán-zhì' which is included in the *History of Chinese Relations to the Countries Overseas: New Materials and New Problems*, eds. Rong Xinjiang and Li Xiaocong, Beijing, 2004, pp. 129–145.
   (1) Strip No. I91DXT0309③:59 dated BC61 shows on the surface 大月氏烏孫長.
   (2) Strip No. V92DXT1411②:35 dated BC 52 shows 大月氏諸國客.
   (3) Strip No. V92DXT1210③:132 dated BC 47 shows on the reverse 大月氏
   (4) Strip No. V92DXT1210③:132 dated BC 43 shows on the obverse 大月氏副右將軍史柏聖忠, 將大月氏雙靡翕侯使者萬若山, 副使蘇贛, 奉獻言事, 詣在所, 以令為駕一乘傳. 永光元年 . . .
   (5) Strip No. II9-DXT0216②: 702 dated BC 37 writes 大月氏休密翕侯□□□國貴人□□國貴人 . . . 建昭2年3月癸巳朔辛丑 . . .
9 Marquart, *Ērānšahr*, pp. 242–246. Kurakichi, S., *Complete Works,* Vol. 6, Tokyo, 1970, pp. 97–121.
10 Chavannes, É., Les pays d'occident d'après le Heou Han chou, *T'oung Pao*, Serie II, Vol. VIII, 1907, p. 190.
11 *Yè*謁 should be phonetically replaced by 曷*hé*, 褐*hè*.
12 Pulleyblank, G., The Consonantal System . . ., Asia *Major*, New Series, Vol. 9, 1962, Part 1, p. 222.
13 『唐書』西域傳,「護密或曰達摩悉鐵帝國。曰護侃。元魏所謂鉢和者。亦吐火羅故地。東南達京師九千里贏。橫千六百里。縱狹纔四五里。王居塞迦審城。北臨烏滸河。 . . . 顯慶時。以地烏飛州。王沙鉢羅頡利發爲刺史。地當四鎭入吐火羅道。故役屬吐蕃。
14 Kuwayama, S. (ed.), *Huichao's Wang Wu-Tianzhuguo zhuan: Record of Travels in Five Indic Regions: Translation and Commentary*, Kyoto, 1998, p. 176f. Also see 惠琳, 一切經音義: The Sound and the Meaning of the Words in the Whole Buddhist Scriptures, by Huilín.
15 唐書地理志 the *Tangshu*'s Geography Chapter: 烏飛州都督府. 以護密多國摸逵城置. 領鉢和州. 以娑勒色河城置. The Governor-General of the Bird-flying Province is set up at a town Mokui in Kumedha, possessing a fief Bōhé-zhōu at Suolesehe.
16 Chavannes, E., Voyage de Song Yun, dans l'Udyāna et le Gandhara (518–522 p. C.), *Bulletin de l'Ecole française d'Extrême-Orient*, Vol. 3, 1903, p. 406; Stein, M. A., *Innermost Asia: Detailed Report of Explorations in Central Asia, Kan-su and Eastern Īrān*, 4 Vols. Oxford, 1928, I, p. 14.
17 Kuwayama, S., Bamiyan Daibutu Seiritu ni kakawaru Hutatuno Michi (Two Itineraries Concerning the Emergence of the Colossi in Bamiyan), *Tohogakuho*, Kyoto, Vol. 57, 1985, pp. 152–153. Kuwayama, S., *Kāpishī-Gandāra shi Kenkyū* (Studies of History and Archaeology in the Kābul Valley). Kyoto, 1990, p. 102.
18 Nakao, O., Badahushan-ni okeru Genjyō-no Ryokō, *Tohogakuho*, Kyoto, Vol. 37 (1966), pp. 389–411. (In Japanese).
19 活(Hu) is not just modern Kunduz, but this Chinese character may be restituted to be **war*. *War* is quite close to *warwali* in the later Muslim geographers.
20 The original Chinese passage is "初月氏爲匈奴所滅。遂遷於大夏。分其國爲休密雙靡貴霜胊頓都密。凡五部翕侯."
21 Kuwabara, J., *Complete Works* 3, Tokyo, 1968, p. 325, fn. 104.
22 Lazlo Tordy referred to the Dorah pass traversable even in winter. Regrettably the present author has been unable to find the page in question again.
23 Kuwayama, S., Pilgrimage Rout Changes and the Decline of Gandhara, *Gandharan Buddhism: Archaeology, Arts, Texts*, (eds.) Kurt Behrendt and Pia Brancacchio. Vancouver; Toronto, 2006, pp. 107–134.
24 Yoshida, Y., Sogdian Miscerany III, *Nairiku Asia Gengo-no Kenkyu* (Studies of Innermost Asian Languages), No. 5, 1990, pp. 90–93 in particular.
25 Haneda, T., A propos des Ta Yue-tche et des Kouei-chouang, *Recueil des Œuvres posthumes de Tōru Haneda* II, Kyoto, 1975, pp. 31–56. Particularly on p. 41. See also *Bulletin de la Maison franco-japonaise*, t. 4, 1933.
26 Le Berre, M., Prospection a Khisht Tepe. R. Curiel et G. Fussman, *Le Trésor monétaire de Qunduz*. MDAFA, 20. Paris, 1965. pp. 83–88.
27 Pulleyblank, The Consonantal System, p. 122f.
28 Minorsky, V., *Ḥudūd al-'Ālam, 'The Regions of the World': A Persian Geography*, edited by C. E. Bosworth, Second Edition, pp. 108–109.
29 Minorsky, *op. cit*., p. 109, no.73.

30 Casson, L., *The Periplus Maris Erythraei: Text With Introduction, Translation, and Commentary*. Princeton, 1989, pp. 6–7.
31 Casson, *op. cit*., p. 16.
32 Dehejia, V., table II in between pp. 207 and 210.
33 Casson, *op. cit.,* pp. 11–27.

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19

KĀBUL AND THE REGIONAL CENTERS OF EASTERN AFGHANISTAN IN THEIR HISTORICAL PERSPECTIVE

Minoru Inaba

> The ancient history of Cabool itself is unsatisfactory. The people themselves refer you to Noah's two sons, Cakool and Habool, as the founders of their race, who, they say, quarreled about the name of the place, and at length agreed to form it by taking a syllable from each name, hence Ca-bool. The Hindoos assert that the ruler who was overthrown by the Mahomedans, and known by the name of "Urj", was fourth in descent from Vikramjeet, but no history brings Vikram so near our time as this. "Urj" is said by some to have been a Gubr, or fire-worshipper, and to have had two brothers, Silur and Toor: he is also sometimes named Cabool Shah.
>
> *(Burnes 1842: 264–265)*

This is quoted from the memoir of Alexander Burnes, a British officer and diplomat who traveled to Kābul for the second time in 1837. His book titled *Cabool* was published in 1841 posthumously. Several interesting points are observed in this statement. Among them, I will discuss two as main topics in this paper, first examining the ancient history of Kābul which Burnes saw as unsatisfactory, and then trying to describe the relation between its history and geographical features of eastern Afghanistan in pre-modern times. The setting of this paper is chiefly the site of Kābul, the capital of present-day Afghanistan, and the plain to the north of it, or, in other words, the "Kāpiśī/Kābul basin" located to the south of the Hindūkush mountains, at whose southern fringe the city of Kābul lies (Map 19.1). The northern part of this basin is irrigated by two rivers, the Panjshīr and the Ghorband; and the southern part by the Kābul river and the Logar river. It is supposed that the city has been an important politico-economic center of the eastern part of Afghanistan continuously, without interruption, through history. However, the situation was not simply like that. According to the article contributed by Xavier de Planhol in *Encyclopaedia Iranic*a on the historical geography of Kābul, which gives an overview of its history from ancient to present times, the political center of the "Kāpiśī/Kābul basin" gradually shifted from the north to the south, and after the 8th century, Kābul occupied the position as the regional center, though, he continues, it is hardly known when this precisely happened (de Planhol 2009). I think this historical shift of the political center in the region in question is closely connected to the region's role as a frontier between South and Central Asia and as an important trading point for the people moving in between two worlds.

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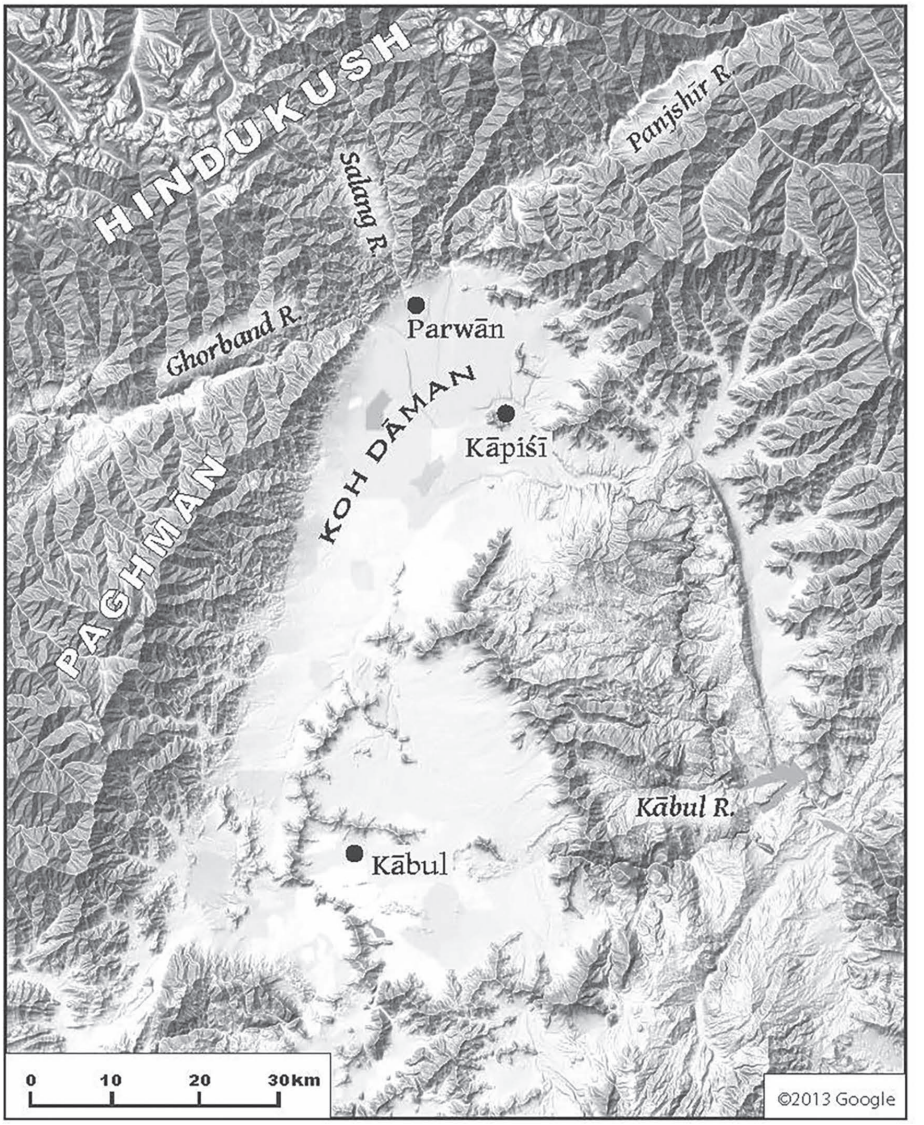


Map 19.1 Map of the Kāpiśī/Kābul basin.

Unfortunately, the excellent view of de Planhol has not been accompanied by a large number of evidences, partly because, as is seen in the statement of Burnes cited earlier, the ancient history of Kābul is unsatisfactorily understood, less well than its medieval history. Thus, I will (re)examine the sources which have been known to, and even scrutinized by, the scholars, and will try to describe the geo-political and geo-economic features of the history of eastern Afghanistan in pre-modern times, as it certainly was a part of the trade network generally described as "Silk Road".

The Early History of Kabul: A Review

Literary Sources

Roughly speaking, the pre-modern history of Kābul has been constructed on literary sources, archaeological findings, and coins. However, the sort of evidence being used differs according to the period under investigation: the Greek and Latin sources, Chinese sources, and coins are used for the ancient period; for the post-Kushan period until the 8th century, the primary materials are archaeological findings and coins; and lastly, after the 8th century, especially after the 11th century, literary sources in Arabic and Persian have been used.

Ancient Period

Some well-known classical sources which have been used for reconstructing the ancient history of Kābul have challenges. The biggest problem is that one cannot be very certain about the identification of the place names found in those classical sources. For instance, the city which is described in Strabo and Pliny as being located in the place where lies the present city of Kābul is Ortospana (cf. Bostock & Riley 1855–57: ii, 41; Jones 1917–32: v, 271). This is a name completely different from Kābul. Nonetheless, because of the short phrase "Kaboura or Ortospana" found in Ptolemy's list of the places in Paropamisadai, Ortospana has often been considered to be another name of Kābul. However, there is a version of the text which has Karoura instead of Kaboura, so it is not very clear if we can understand this Kaboura as being identical with Kābul (cf. Ronca 1971: 69). In addition, in a recently published article, Claude Rapin, pointing out various problems concerning the sources for reconstructing Alexander's itinerary, proposes the identification of Ortospana with Ghazni (Rapin & Grenet 2018).

Similarly, Jibin 罽賓 and Gaofu 高附, which appear in Chinese sources such as *Hanshu* and *Hou Hanshu*, have been identified with Kābul, or at least connected to it. As to the former, the place this toponym really indicates has been variously discussed (cf. Shiratori 1912; Tarn 1922: 471–472). As Edwin G. Pulleyblank has shown, phonetically Jibin must be a transcription of Kashmīr (Pulleyblank 1962), but it appears in various sources ranging from the Han period to the Tang as indicating different regions, such as Gandhāra, Kashmīr, and Kāpiśī/Kābul, according to the context of each source (Kuwayama 1990: 43–59; Enomoto 1994: 357–365). On the other hand, Gaofu (OC **kaw-bjew*) has been considered to be a transcription of Kābul, probably due to the resemblance of the sound (cf. Cunningham 1871: 17 ff.; Narain 1957: 136). Nevertheless, the Gaofu appearing in the descriptions of the rise of the Kushans in *Hanshu* and *Hou Hanshu*, respectively, don't seem to be identical with each other, and accordingly modern studies dealing with related issues have tended to treat the Gaofu appearing in the two sources separately (cf. Shiratori 1912: 24–26; Simonetta 1978:

172; Yu 1990: 22; 2002: 64; Thierry 2005: 469–472). In short, judging from the scholarship so far, there is no obvious information which allows us to identify Jibin or Gaofu strictly with Kābul.

After the 4th Century

This obscurity concerning ancient Kābul may continue even into the later period. Raul Curiel, based on the results of the field researches conducted by Délégation Archéologique Française en Afghanistan, expanded the study of Alexander Cunningham with archaeological data to offer the chronology of the city of Kabul up to the 7th century (Cunningham 1871: 17–39; Curiel 1953).[1] According to him, the name Kābul is mentioned in numbers of Pahlavi texts. Though it is far beyond my ability to investigate the Pahlavi texts thoroughly, I will try to do it partly, by examining the texts which have been compiled by Henrik S. Nyberg's *A Manual of Pahlavi*. Among those texts, *Kārnāmak i Artaxšīr Pāpakān*, *Legend of Keresāspa*, and *Šahrestānīhā ī Ērānšahr* mention "k'pwl/k'wly" (Nyberg 1964: 8, 17, 31, 115). Nyberg annotates this word and explains that it is Kābul (Nyberg 1974: 116). This, together with the content of the Shāpūr Inscription of Persepolis, which is to be examined later, has been understood as directly indicating the existence of the city of Kābul in the Sasanian period. However, special attention should be paid to the fact that many manuscripts of those texts date rather late. A third text, *Šahrestānīhā ī Ērānšahr*, has the following sentence:

> In the south, Ardašīr, son of Spandyād, constructed the city of Kābul.
>
> (Daryaee 2002: 7)

Though it is assumed that the original text could date back to the time of Kawād I, or of Khosro I, the content of the text did likely become as it is in the 8th century, and the extant manuscript itself belongs to the 14th century. It is true that from the 7th century (more precisely, from the 9th century, when most of the extant sources were composed), the name of Kābul appears frequently in Arabic and Persian sources. Nevertheless, it is difficult to know precisely whether the name found in that non-Muslim literature has been effected by the Muslim literature, or if they originally and independently had the name Kābul, as we have no other information contemporary or comparable with those texts.

This is also true with the letter of *mobed* Tansar addressed to the king of Ṭabaristān. In this letter, which was allegedly composed by Zoroastrian *mobed* Tansar, a contemporary of Ardashīr I, Kābul appears as a city on the frontier of the Sasanian realm (cf. Boyce 1968: 35, 63), but the original of the letter has been lost forever, and the extant text is what was retranslated into Persian in the 13th century from the Arabic translation of the Pahlavi by Ibn al-Muqaffā' in the 8th century. James Darmesteter and Arthur Christensen see that the letter was actually written in the 6th century, in the reign of Khosro I. Mary Boyce assumes that the core of the letter should reflect the state of affairs of the 3rd century (Boyce 1968: 19), but at the same time, she is also aware of the possibility that the letter suffered some correction and alteration through the process of multiple translations. Needless to say, one should be careful when dealing with toponyms appearing in texts which have come down through such a complicated process, as there is always the possibility that translators have transformed the toponyms into the form that could be more familiar to contemporaries.

Epigraphy, Numismatics, and Archaeology

Shāpūr Inscription of Persepolis

Being different from those descriptive texts, the data from epigraphic sources, including the Shāpūr Inscription of Persepolis, and numismatic materials, whose research has developed remarkably in these decades, are more authentic. Of the two inscriptions which were inscribed in the reign of Shāpūr II (r. 309–379), there appears twice the word "*k'wly*" in the second inscription. The English translation by Richard N. Frye reads:

> (It is) in the month of Tīr of the year 18 on the day of Ohrmazd, that I Seleucus, the judge of Javedshapur and Kabul have come to Persepolis. This inscription, written above, which Shapur the Saka king ordered engraved, was ordered by me to be examined. Then I gave a blessing, namely, that Shapur, the King of Kings, be the best of men, immortal and with eternal rule. And that Shapur the Saka king live long and always perform acts which seem good to the Gods and to Shapur the King of Kings. That I also (the slave) do that which to the Gods and to His Majesty Shapur the King of Kings may appear pious. And from here may I arrive in safety to the court of His Majesty, and may I see His Majesty Shapur the King of Kings in piety and health. And may I return in piety (and) health to Kabul.
>
> (Frye 1966: 87)

However, Frye himself later changed his opinion and retranslated "*k'wl*y" as "Kavār in Fārs" (Frye 1969: 144, n.1). This new interpretation by Frye is followed by Michael Back (Back 1978: 223, 495). On the other hand, Philippe Gignoux, annotating that the place of the long vowel will not allow its interpretation as Kavār, retains the view that it means Kābul (Gignoux 1972: 25, n.8; cf. Nyberg 1974). Rika Gyselen, in her epoch-making study of Sasanian administrative geography, adopted the interpretation of Nyberg and Gignoux, taking the appearance of the name Kābul (*k'wly*) in the Pahlavi texts mentioned earlier into account. The numismatic evidence, which is to be mentioned next, shows that in the long reign of Shāpūr II in the 4th century, Kābul (or Kābulistān according to the numismatists) was the location of an important mint for the Sasanian Empire. The word *Javedshapur* (*Jāvēdshāpūr*) in the inscription has the very much celebratory meaning "eternal Shāpūr". Thus, if this is a title of a person or name of a place,[2] the word *k'wly* paired with this word couldn't be a small village in Fārs as suggested by Frye. Moreover, the presence of a *dādwar* who could be entrusted with the important task of examining the inscription better fits Kābul than Kavār village (Gyselen 2019: 119).

Numismatic Evidence

A lot of pre-Islamic coins have been found in the area to the south of the Hindūkush. Robert Göbl in his monumental work on the numismatics of this region established that in the late 4th century the coins of the Kidarites appeared in Uḍḍiyāna and Gandhāra, and the coins with the legend *alkhan* appeared in the Kāpiśī/Kābul region in the early 5th century (Göbl 1967: ii, 44 ff.). The Kidarites also issued scyphate gold coins in Bactria, which seems to lend support to the hypothesis that the intrusion of the Kidarites into northwestern India was made through the route crossing the Hindukush at its central part. The Alkhan people (who issued the coins with the legend *alkhan*) may have confiscated the already-existing mint in that region to issue

their own currency,[3] and this mint is believed to have belonged to the Sasanian Empire, chiefly based on the large coin hoards discovered from the wall of Tepe Maranjān I in 1933. Almost 90 percent of them are silver coins of Shāpūr II, and also the coins of Ardashīr II and Shāpūr III are contained among them. Curiel considers that because the number of the coins of Shāpūr III is relatively small, the hoard was buried in the early reign of Shāpūr III, around 385 (Curiel 1953: 119). Alram, however, sees the burial time later than the reign of Shāpūr III (Alram 1996: 521). In any case, the discovery of this amount of Sasanian silver coins from Kābul makes the numismatists consider that the mint of these coins was located close to the point of discovery. However, unfortunately, we don't have a single Sasanian coin which bears the name Kābul (*k'wly* or the like) as its mint. So, a Sasanian mint (and consequently the mints for the *Alkhan* coins) in Kābul still remains hypothetical.

Nevertheless, I also consider that, if there was a mint for the Sasanids in the Kāpiśī/Kābul area, it is very likely to have been at Kābul, because of the existence of large archaeological sites surrounding the present city of Kābul, which I will examine next.

Archaeological Sites Around Kābul

Curiel's chronology of the archaeological sites around Kābul is the following (Curiel 1953):

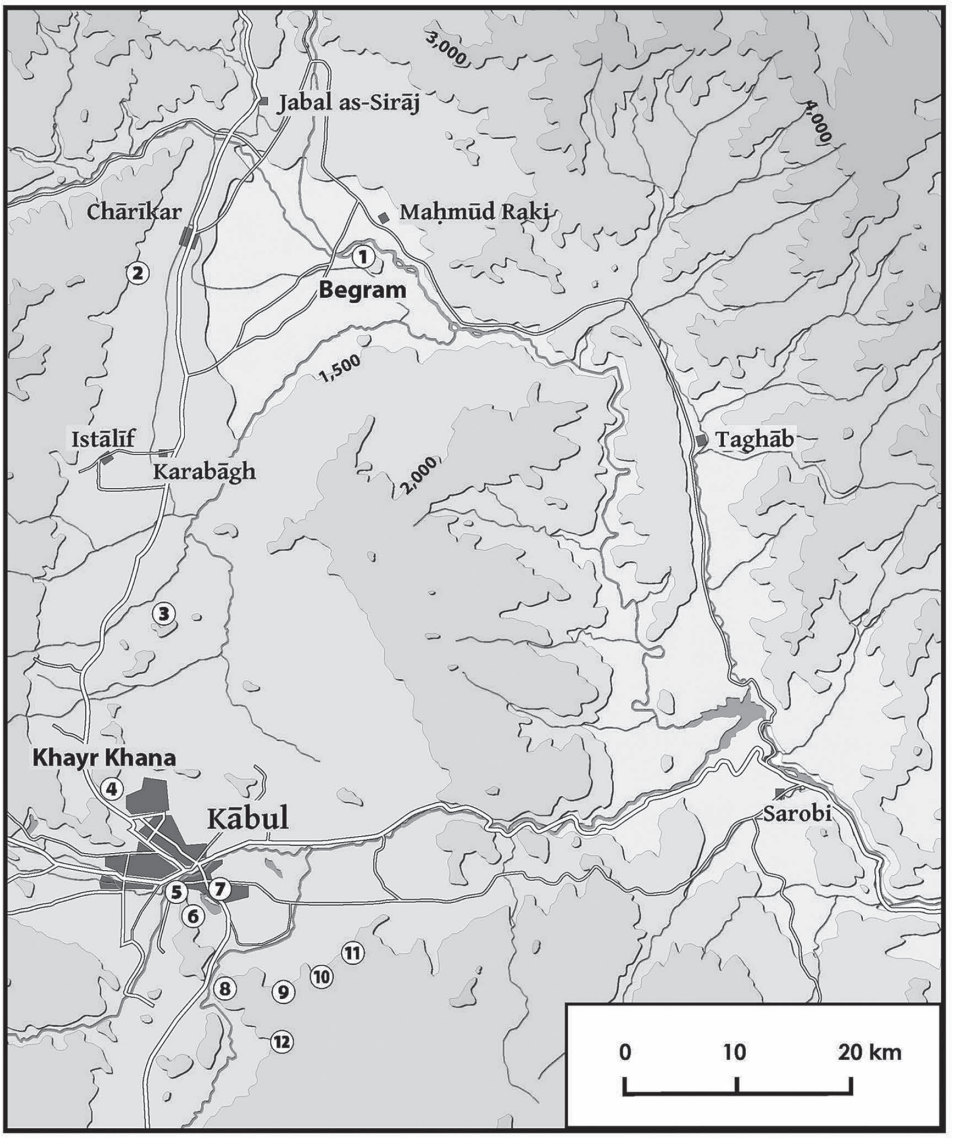
1. According to Alfred Fouchers, Buddhist temples and stūpas around Kābul, such as Shevaki, Kamari, Yakh-dara, Senjed-dara, Seh Topan, and Gul-dara, were constructed in the 2nd century CE.
2. The Saka fort in the vicinity of Kābul is supposed to have been constructed in the Parthian period.
3. The sites of Tepe Maranjān and Khayr Khāna were constructed in the 4th and 5th century, respectively.

It is highly probable that those archaeological sites have been constructed based on the very presence of the city Kābul, judging from the location of each site (see Map 19.2). At least with the case of Buddhism, it is not possible to imagine that those Buddhist temples were independent from the city which would have physically sustained them.

The chronologies of each site which were adopted by Curiel have been revised considerably. Gérard Fussmann in his work on the chronology of the Buddhist temples and others around Kābul, even though tentatively, gives the date to each site, which can be organized as shown in Table 19.1.

Shoshin Kuwayama, based on his typological analysis of the round bastions typically found to the south of the Hindūkush, sees the construction of Tepe Maranjān monastery as no earlier than the early 5th century (Kuwayama 1990: 194–197). He also allots the upper shrine of Khayr Khāna after the 7th century, and the lower shrine before that, and assumes that the construction of Saka Fort was almost contemporary with this lower shrine.

Thus, according to Fussman and Kuwayama, the major archaeological sites around Kābul examined so far were constructed, or most flourished, after the 5th century in general. In addition, the findings related to Buddhism from the site of Ziyārat Khoja Safā' are supposed to belong to the 5th–6th centuries (NRICP 2006). Zafar Paiman puts a date of the construction of the newly excavated Buddhist temple Tepe Narenj in Kābul in the early 5th century (Paiman & Alram 2013). He even suggests that Kābul as a "city" only appeared in that time (Paiman 2018: 119). So, as far as archaeological evidences are concerned, we get an impression that we cannot actually discuss about the history of Kābul until after 400 CE.



1. Begram 2. Top Dara 3. Tapa Skandar 4. Khayr Khana 5. Tepe Khazana
6. Tepe Narenj 7. Tepe Maranjan 8. Saka Fort 9. Shevaki 10. Kamari
11. Seh Topan 12. Gul Dara

Map 19.2 Map of archaeological sites around Kābul.

Table 19.1 Chronologies of archaeological sites.

Sites	*Construction*	*Enlargement*
Shevaki I	5th–7th century	
Shevaki III	300–500	
Kamari	300–500	
Seh Topan IV	300–600	
Gul Dara	350–400/400–600	
Tepe Maranjān	400–700	400–650
Khayr Khāna	before 7th century (lower)	after 7th century (upper)
Saka Fort	before 7th century	

In sum, combining the epigraphical and numismatic sources and the latest scholarship on the archaeology of the region,[4] it is assumed that from the mid-4th century, some significant change occurred to the south of the Hindūkush mountains. Probably most remarkable was that for some reason, Kāpiśī, the capital city of the Kushans, declined, and Kābul became the center of the region. As mentioned earlier, numismatic evidence shows that the Sasanids retreated from the region in the late 4th century, but under the rule of the people who issued coins of Kidāra or *Alkhan*, Kābul must have been a politico-economic center of the region for a while, otherwise, we can't imagine the construction of those great Buddhist temples around the city.[5]

Alkhan-Nezak Crossover

Numismatic evidence also indicates that, in the beginning of the 6th century, new coins with the legends Nezak Shāh started to be issued in "Kābulistān". This type of coins first appeared in the southern part of eastern Afghanistan, namely in Zābulistān, probably around 474 (Vondrovec 2014: 449–477; cf. Alram 2014: 280). The background of the expansion of the Nezak Shāhs to the north is not exactly known, at least from the numismatic evidences. An assumption of what could have happened in the late 5th century arises from the following evidences. The power of the Alkhans finally declined only after Ṭoramāna I and Mihirakula, father and son, had inflicted serious damage to the Gupta Empire in north India. In the mid-6th century, Mihirakula was defeated by the allied army led by Yaśovarman, and fled into Kashmīr with his people. After a while, a group of Alkhans moved from Kashmīr back to Kāpiśī/Kābul led by Ṭoramāna II, son of Mihrakula (Pfisterer 2013: 188–189; cf. Alram 2014: 278, n. 107).

This band seems to have crossed the Khybar Pass and issued a peculiar type of coin in the Kāpiśī/Kābul region. It is the coin of the Alkhans struck over the Nezak Shāh coins, which Klaus Vondrovec calls the Alkhan-Nezak crossover (Vondrovec 2014: 479 ff.). Göbl, who first suggested this hypothesis, considers that it happened in the second half of the 6th century (Göbl 1967: ii, 70–71). Then, a couple of decades later, we know that Xuanzang met with the king of Kāpiśī who was ruling the area from Kāpiśī to Gandhara, along the Kābul river valley (Beal 1906: i, 54–55, 97–98; cf. Kuwayama 2002: 194). So, it is natural to assume that those Alkhans who returned from the east had settled down in Kāpiśī[6] and that this could have been the beginning of the revival of Kāpiśī as the regional capital, a role which is recorded by Xuanzang in the first half of the next century (see also later in the chapter) and continued until the second half of the same century.

From the 7th to the 13th Century

Kābulshāhs

In the 7th century, the Turks, who were to establish the Kābulshāh dynasty, or Turkshāh dynasty, in Kābul, appeared in this region, and finally they took possession of most of the territory from the preceding monarchs. As I have already discussed this subject in detail elsewhere (cf. Inaba 2005), here I will just briefly describe what actually occurred. Coming from the mountains to the west of Kābul, these Turks had served the king of Kāpiśī in the mid-7th century. They fought against the Arabs on behalf of Kāpiśī for a while, and after (re)capturing the city of Kābul from the Arabs in 666, they expanded their power and finally confiscated almost all the territory of the Kāpiśī kingdom, which was approximately the area along the Kābul river (Kuwayama 2002; Inaba 2005). As to this Kābulshāh kingdom, thanks to the excellent works of numismatists, we know now its history to some extent (cf. Inaba 2010). However, for the period after the reign of From Kesar (r. ca. 738–745), there is much to be studied. The Arabic sources tell us that in the end of the same century the Muslims made several attempts to cross the Hindūkush under the command of the ʻAbbasid governors and generals. Al-Yaʻqūbī records, as an event in 792/793, the expedition led by Ibrāhīm b. Jibrīl, who subjugated several small principalities along the Ghorband river (cf. Inaba 2017). Then, in the second decade of the 9th century, in the reign of al-Maʻmūn, a Muslim army reached as far as Kābul, and the throne of the Kābulshāh was sent to Mecca as a token of the subjugation (Ghafur 1965–66; Rahman 1979: 85–86). According to Abdur Rahman, the serious pressure put on the Kābulshāh kingdom by this series of Muslim expeditions resulted in the change of the ruling house from the Turks to the Indians (Hindūshāh) in 822 (Rahman 1993; 2005: 418).

In 861, Yaʻqūb b. al-Layth established a new kingdom in Sīstān. From 864, he started attacking Zābulistān and eventually killed Rutbīl. The son of the latter escaped and went as far as Kābul, but Yaʻqūb chased him and conquered Kābul in 872. However, the city seems to have gone back under the rule of the Hindūshāh shortly after. Again, according to Rahman, around 898, two Indian kings named Āṣata and Toramāṇa attacked Ghazni, which may imply that Kābul, to the north of Ghazni, could have been under the rule of the Hindūshāh by that time (Rahman 1979: 111, 114).

From the Ghaznavids to the Mongols

Kābul finally seems to have been incorporated under the Muslim rule only by the Ghaznavids in the end of the 10th century. Alptegin, who was a former Sāmanid Commander-in-Chief, crossed the Hindūkush around 960. Then, he first fought with the army of the Kābulshāh, before he conquered Ghazni (Inaba 2015: 109–110). After the death of Alptegin, Sebüktegin became the ruler of Ghazni in 977. In his reign, the Ghaznavids remarkably expanded their territory, and when he died in 997, the region to the south of the Hindūkush had already been firmly secured by the Ghaznavids. Sebüktegin won several battles against the Hindūshāhs, and it was as a result of these victories that Muslim rule of Kābul was assured (cf. Nazim 1931: 28–30).

However, in the Ghaznavid period, it was Ghazni which functioned as the capital of the vast empire, and the figure of Kābul became somehow blurred (cf. Inaba 2013). As a matter of fact, the mention of Kābul is rare in the contemporary Persian literature. In the first half of the 13th century, the Mongol army, which was chasing after Khwārazmshāh Jalāl

al-Dīn, appeared in eastern Afghanistan. The remnants of the Khwārazmshāh dynasty and the Ghorid armies, which had gathered at Ghazni, intercepted the Mongols at Parwān to the north of Kābul and defeated them (*Tārīkh-e Jahāngushāy*: ii, 194–195). Here also, the regional center of eastern Afghanistan was still Ghazni, and the name of Kābul is hardly mentioned in historical sources. Muḥammad b. Najīb Bakrān's *Jahān-nāma* was composed just before the great conquest of the Mongols, and the name of Kābul is not mentioned. About a century later, Ḥamdullāh Mustawfī wrote the geography *Nuzhat al-Qulūb*, in which Kābul is not mentioned as a city but as a region, without any description of the city (*Nuzhat al-Qulūb*: 261).

To sum up, after the emergence of the Kābulshāh kingdom, for about 250 years, Kābul was the center of eastern Afghanistan, replacing Kāpiśī which had previously held that position. As the capital of the Kābulshāh kingdom, the city was politically as well as economically highly important. That is the reason why some of the Arabic geographical works call this city "*furḍa* (entrepôt)" of India (cf. Inaba 2015: 116–117). However, the emergence of the Ghaznavids in the 10th century completely changed the state of affairs. Ghazni, in the reigns of Sebüktegin, Maḥmūd, and Mas'ūd, grew marvelously as the center of a mighty empire that ruled from the Iranian Plateau to northwestern India and from Central Asia to the Arabian Sea. Those Ghaznavid rulers held control over the people, merchandise, and information moving between South Asia and West Asia, as well as South Asia and Central Asia. Kābul was overshadowed by this growth of Ghazni and seemed destined to be disappearing from the front stage of history.

This situation, however, once again changed in the Tīmūrid period.

From the 14th to the 18th Century

Ibn Baṭṭūṭa

In 1333, the great traveler Ibn Baṭṭūṭa crossed the Hindūkush toward the south. At that time, the area to the south of the Hindūkush was under the rule of Chaghatāy Khān Tarmashīrīn, and amīr Burunṭayh was stationed at Parwān for the governorship on behalf of Tarmashīrīn. Ibn Baṭṭūṭa relates on Kābul:

> We travelled next to Kābul. This was in former times a great city, and on its site there is now a village inhabited by a tribe of Persian called al-Afghān. They hold mountains and defiles and have powerful forces at their disposal, and the majority of them are brigands. Their principal mountain is called Kūh-i Sulaimān. It is related that the Prophet of God Sulaimān (peace be upon him) climbed this mountain and looked out over the land of India, which was [then] covered with darkness, but returned without entering it, so the mountain was named after him. It is in this mountain that the king of Afghān resides.
>
> (Gibb 1971: 590)

He witnessed Kābul as still being a small village in the first half of the 14th century. However, as for Ghazni, he also writes:

> We then journeyed to the city of Ghazna, the town [associated with] the sultan and warrior for the Faith Maḥmūd b. Sebüktegin,[7] of famous name. He was one of the greatest of rulers, was given the title of Yamīn al-Dawla, and made

> frequent incursion into the land of India, where he captured cities and fortresses. His tomb is in this city, with a hospice around it. The greater part of the town is in ruins, with nothing but a fraction of it still standing, although it was [formerly] a great city.
>
> (Gibb 1971: 589–590)

Thus, not only Kābul but also the whole of eastern Afghanistan to the south of the Hindūkush may have been devastated due to the long-lasting wars.[8]

Tīmūr

Then, at the end of the same century, when Tīmūr acquired a vast territory in Central Asia and West Asia, he turned his attention to India. In 1398, Tīmūr started from Samarqand for the Indian expedition. After passing Termez, Baghlān, and Andarāb, he crossed the Hindūkush. According to Yazdī's *Ẓafar-nāma*, he ordered the construction of canals from the Ghorband river to irrigate the villages to the north of Kābul and to increase their agricultural productivity:

> His Majesty Ṣāḥib Qirān, adorning the orbs of ruling royal family and fortunate ears of the lights[9] with the jewels of advice and counsel, embraced him to bid farewell and entrusted him to the protection and help of God, before the departure. Making his invincible banner start from that place, he moved towards Kābul with the good fortune and auspiciousness. He climbed up the mountains of the Hindūkush through the route passing the Tul[10] route, and crossed the mountains at the pass known as Banjhīr which was well known as Banjshīr. Then dismounted at the plain of Bārān which was five *farsakh* away from Kābul. As the bird of the supreme intention of His Majesty, filled with virtue, flew in the sky of the recovery of the countries and the peacefulness of the servants of God, His Majesty meanwhile ordered to trench canals from the river valley of the running water. Amīrs and all the army shared the work among them, and shortly completed the large canal with the length of five *farsakh* from Ghurbān (<Ghorband) river. It was called Māhīgīr and made several distinguished villages prosper. Eventually, the uncultivated valley was turned to the splendid gardens.
>
> (*Ẓafar-nāma*, i, 877)

As a matter of fact, Tīmūr carried out the same kind of irrigation works in Khurāsān and Mā warā' al-Nahr (cf. Barthold 1958: 41). Thus, the redevelopment of the Kābul region by Tīmūr may indicate that he viewed Kābul as an important base for advancing toward India.

Bābur

The real fruit of this redevelopment could be enjoyed when his descendant, Ẓahīr al-Dīn Muḥammad Bābur, visited this city almost one century later. Bābur acquired the city in 1504, and resided there until 1525. He eventually won the battles with the Indian powers and established the Mughal Empire in northern India, but he himself was buried in Kābul. In his famous Memoirs, he gives detailed descriptions of the city of Kābul, depicting the city as flourishing

as a junction of Indo-Central Asian trade. On the other hand, the once flourishing city of Ghazni is described by him as follows:

> Ghaznī is a very humble place; strange indeed it is that rulers in whose hands were Hindūstān and Khurāsānāt, should have chosen it for their capital.
>
> (*Bābur-nāma*: 214; Beveridge 1922: i, 219)

It seems that Ghazni was more in decline than it had been when Ibn Baṭṭūṭa visited there.

After the time of Bābur, Kābul never lost its position as the regional center of eastern Afghanistan. It was an important trade city during the Mughal period. Abū al-Faẓl, the chief minister of Akbar the Great and the author of *Ā'īn-i Akbarī*, relates:

> The wise of ancient times considered Kābul and Kandahar as the twin gates of Hindustan, the one leading to Turkestan and the other to Persia. The custody of these highways secured India from foreign invaders, and they are likewise the appropriate portals to foreign travel.
>
> (*Ā'īn-e Akbarī*: i, 592; Jarrett 1891: ii, 404)

The Emerging Pattern: One Regional Center at a Time

The Centers of Eastern Afghanistan

Lastly, we may consider what the implications are of the history of Kābul described earlier. Let me repeat: After the emergence of the Kābulshāh kingdom in the mid-7th century, the regional center of the region to the south of the Hindūkush shifted to Kābul from Kāpiśī. The former flourished as an entrepôt for India towards Central Asia, while Kāpiśī declined, and there never again appeared any big city at that location.

However, in the 10th century, the city of Ghazni, some 140 km southwest of Kābul, grew greatly as the capital of the Ghaznavids. Kābul seems to have been overshadowed by Ghazni until Tīmūr made Kābul the bridgehead for invading India and redeveloped the city and the surroundings in the end of the 14th century. Once Kābul again started to grow, the city of Ghazni declined and was described by Bābur as a "very humble place" in the beginning of the 16th century.

To sum up, after the 7th century, the two cities, Kābul and Ghazni, occupied the position of the regional center in eastern Afghanistan in rotation. Conversely speaking, this region didn't have two large cities simultaneously, the reason for which I cannot explain sufficiently at present. However, if we assume that a large city is to be sustained by agricultural productivity above a certain level, as well as human resources above a certain level, it can be supposed that the reasons why this region didn't have two large cities simultaneously may be sought in factors such as a comparatively low upper limit of agricultural productivity and, as the opposite side of the same coin, the significance of foreign trade for the regional economy. For instance, Bābur, while mentioning the vigorous trade activity there, describes:

> It was decided to levy 30,000 ass-loads of grain on Kābul, Ghazni and their dependencies; we knew nothing at that time about the harvests and incomings; the impost was excessive, and under it the country suffered very grievously.
>
> (*Bāburnāma*: 223–224; Beveridge 1922: i, 228)

This may imply that the agricultural productivity of this region was not very high even after the redevelopment by Tīmūr.[11] Relevant here is the illustrious hypothesis of Kuwayama about the rise of Bāmiyān (Kuwayama 2002: 140–155), which suggests the existence of a general pattern that a change or shift of an important trade route influenced significantly on the rise and fall of the related cities functioning as trade centers and on the junctions of roads, especially in this region, and vice versa, that the appearance of a strong political power probably could affect the trade routes.

Then, if this observation is valid to some extent, we may be able to view the pre-7th century history of Kābul in the same way. As seen before, among the sites around Kābul, those which have been given a date, even though provisionally, belong to the period after the 4th century at the earliest, but more probably after the 5th century. Needless to say, it is impossible to discuss the history of the city solely on the basis of those imprecise dates. Still, if a kind of principle that two great cities in proximity are not able to coexist can be observed in the case of Kābul and Ghazni, with more than 100 km distance between them, it may be easier to accept that the same kind of relation had existed between Kābul and Kāpiśī within the same basin. The distance between them is only 50 linear km, and there is no natural barrier which can impede traffic. The control over the people and merchandise coming and going across the Hindūkush was possible from either city.

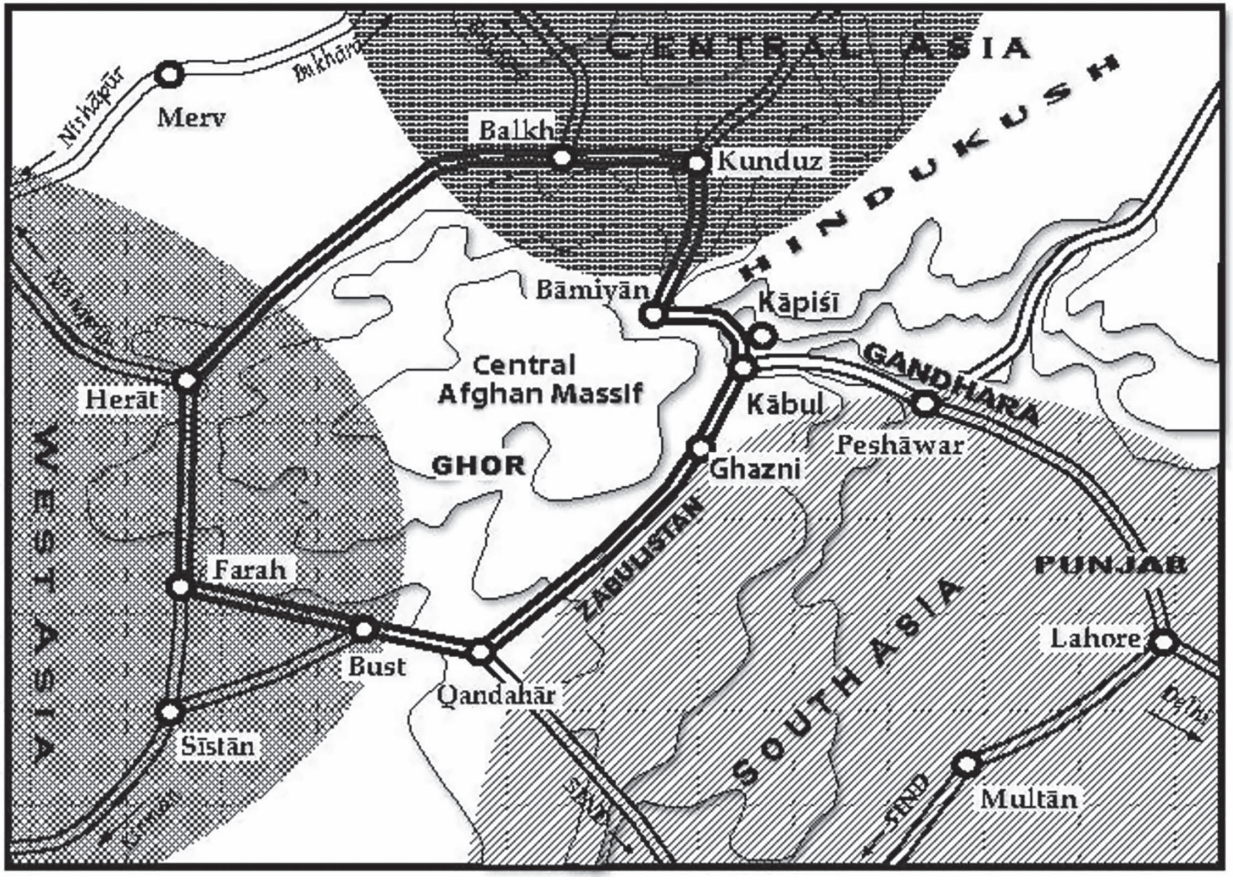
The Chronology of the Begram Site

A clue for the existence of such a relationship may be found in the dates of the Begram site, namely, the site of Kāpiśī. It was excavated, though partly, by DAFA in the first half of the last century, and Roman Ghirshman has presented the chronology of the site in the following way (Ghirshman 1946: 41):

- Begram I belonged to the period from the 1st century BCE to the 1st century CE, namely, from the Indo-Greek period to the early Kushan period;
- Begram II was from the 2nd to the 3rd century;
- Begram III was from the 4th to the 5th century.

However, Kuwayama, by thoroughly analyzing the archaeological material and literary sources, proved that it was Begram III that was witnessed by Xuanzang in the first half of the 7th century, and the chronology of the site has been reinterpreted (Kuwayama 2002: 173–199). Comparing the dates by Ghirshman with those by Kuwayama naturally leads to the deduction that there could be a blank period between Begram II and Begram III. Kuwayama sees that Begram III could start in the 6th century at the earliest.[12] Thus, the blank period was at least two centuries (Kuwayama 2010). Of course, as we only know about Begram II from the excavation by DAFA, which is about a century old and was carried out with rather old methods, we cannot be precise about how long the time gap is between Begram II and III. However, it may be interesting that the dates of the archaeological sites around Kābul roughly fall in this blank period at Begram.

Kāpiśī was a junction of the trunk route connecting South Asia with Central Asia when Xuanzang visited there. However, within a century after that, Kābul had replaced Kāpiśī with that function and continued to have been such until the rise of the Ghaznavids. We may deduce from this that from the 1st century BCE to the 3rd century CE, namely, from the Indo-Greeks to the Kushans, Kāpiśī was the regional center of the Kāpiśī/Kābul region, then Kābul replaced Kāpiśī for a couple of centuries, and in the sixth and seventh centuries, Kāpiśī flourished again.



Map 19.3 Map of important routes and sites in and around the Kāpiśī/Kābul basin.

It is obvious that this kind of conjecture is still to be supported by better evidence. Nevertheless, it can be of some help to understand and describe the pre-Islamic history of this region.[13]

As is obvious from the geographical location (see Map 19.3), Kāpiśī/Kābul has been a meeting spot, not only for the traders from various places, but for the different cultural worlds. Xuanzang as well as Arab geographers describe the vigorous trading activities in this region. Al-Iṣṭakhrī, a geographer of the 10th century, records that there were Muslims and Hindus (Indians) in the city of Kābul. Moreover, as was mentioned, Zafar Paiman sees that the most flourishing period for the Tepe Narenj Buddhist temple came after the conquest of the city by the Ṣaffārids, which implies that even under Muslim and Hindu rulers, a great Buddhist temple was active there. In addition to those various religions, the coins issued on the eve of the Islamic conquest use three different scripts for the inscription, namely, Pahlavi, Bactrian, and Brahmi. This should reflect the linguistic diversity of the reader of those inscriptions. Thus, it may not be inappropriate to consider that it was those activities of various people with different cultural, religious, and linguistic affiliations that have composed, entangled with the ups and downs of political powers, the background of the historical shifts of the regional center in eastern Afghanistan.

Going back to Alexander Burnes, he also relates:

> It is in the mouth of every one, that Cabool is a very ancient city; they call it 6000 years old. It formed once, with Ghuzni, the tributary cities of Bameean. Strange has been the reverse of circumstances; – Ghuzni, under Mahmood, in the eleventh century, became a great capital; and Cabool is now the metropolis both over it and Bameean.
>
> (Burnes 1834: i, 147–148)

If what I have stated so far is valid to some extent, the diplomat, even unintentionally, gained an insight into a historical feature of the city, which possibly leads us to understand certain features of historical frontiers in general.

Notes

1 Curiel actually makes use of five kinds of evidences: (1) classical authors such as Erathosthenes, Pliny, Strabo and Ptolemy; (2) Pahlavi texts including the Letter of Tansar; (3) epigraphic sources; (4) coins found, or allegedly found, in this region, such as the hoards from Chaman-i Haḍūrī and Tepe Maranjān; (5) archaeological data acquired from the surveys and excavations. In the following discussion, those data are to be examined in order.

2 Frye considers the word as a place name paired with Kābul, but annotates that "Nyberg reads 1) stšḫpwḥry, a personal name rather than a place name." Gyselen seems to take the word as a title of a person (cf. Gyselen 2019: 119).

3 As to the sequence of the people who are supposed to have ruled the Kāpiśī/Kābul region successively, I am greatly indebted to Dr. Michael Alram. Needless to say, however, only I am responsible for any possible error.

4 The gap of half a century between the Sasanian mint and the construction of Buddhist temples can not be explained very well at present. The simplest conjecture is that the presence of the Sasanids there in the mid-4th century itself made the appearance of Buddhist temples occur half a century later.

5 Kuwayama proved that there was a great shift of the trunk route between northern India and Central Asia in the mid-6th century. This could have brought about the rise of the economic potentiality of the Kāpiśī-Kābul region, and the most prominent result of this economic growth is the emergence of the Bāmiyān colossal Buddhas and surrounding Buddhist monuments. See Kuwayama 2002: 140–161.

6 If the regional center of the Kāpiśī/Kābul region was in Kābul under the Nezak Shāhs when the Alkhans returned, the occupation of Kāpiśī doesn't mean that the Nezak Shāhs were rooted out. It is even possible to assume that two powers somehow had coexisted before the visit of Xuanzang (he doesn't explicitly mention Kābul in his record; cf. Kuwayama 2002: 198). However, it is still an open question how the shift of the regional center from Kābul to Kāpiśī occurred before the arrival of Xuanzang.
7 Transliteration amended by Inaba.
8 *Nuzhat al-Qulūb*, which is almost contemporary with Ibn Baṭṭūṭa, also mentions "Ghaznīn" as a small town (shahr-e kūchek) (Mustawfī: 146).
9 Namely, Shāh Rukh, the royal prince.
10 Ẓaḥīr al-Dīn Muḥammad Bābur, a descendant of Tīmūr, describes how to cross the Hindūkush mountains in detail in his famous autobiography. He enumerates seven major passes, one of which is called Ṭūl. According to his description, Ṭūl is the name of one of the three passes through which the roads lead out to the Panjshīr river valley. He says that Ṭūl pass is located "below" the Khawāk pass, and the second highest among the three, but easiest to travel. The distance is rather long (ṭūl) (*Bābur nāma:* 201–202; Beveridge 1922: i, 205). The critical text of *Bāburnāma* has been published by Eiji Mano, as well as the Japanese translation of the work based on the new edition of the text. Here I only cite Beveridge's English translation for the sake of convenience, but those who can read Japanese should refer to Mano's translation and annotations (Mano 2014–15).
11 For reference, it is described in Abū al-Faḍl's *'Ā'īn-e Akbarī* that the revenue from the province of Kābul had been 320,000 *rupee*s (=12,800,000 *dām*s) in the time of Bābur, but it increased to 67,306,983 *dām*s at the time of Abū al-Faḍl (the revenue of the city of Kābul alone was 1,275,841 *dām*s). Still it is not very different from that of Kashmīr of the same period which was 62,113,040.5 *dām*s (*'Ā'īn-e Akbarī* @: i, 592; cf. Jarret 1891: ii, 368, 411). Considering that here the province of Kābul is supposed to extend from Attock on the Indus in the east to the Hindūkush mountains, and from Chaghān Ṣarāy (Asadābād) on the Kunar river in the north to Qarabāgh in the south, it is not possible to asses the fertility and productivity of Kābul province as being very high, even if 137,178 *dām*s as *suyūrghāl* is added to the revenue of the province of Kābul.
12 As mentioned earlier, this last phase of Begram site represents the capital of the power which issued the Alkhan-Nezak crossover, whose trace we can follow until the mid-7th century (see Inaba 2015).
13 For instance, the place name Jibin in Chinese history, which has been mentioned in the early part of this paper, seems to change its location according to the time period, from Kashmīr to Gandhāra or Kāpiśī/Kābul. This also can be understood as a reflection of the historical shift of the political center of the region.

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20
ROADS OF SWAT
New Perspectives

Luca M. Olivieri

Introduction

Themes such as ancient demography, agrarian economy and paleoclimate are some of the newest main lines of investigation pursued by researchers affiliated with the Italian Archaeological Mission in Pakistan, following in the footsteps of Giuseppe Tucci's seminal work (1977).[1] These topics are particularly relevant in a frontier-region like Swat (modern Khyber Pakhtunkhwa region of Pakistan) positioned at the foothills of the Hindukush-Karakoram where traditions and know-how coming from outside are reflected back and magnified much like in a concave mirror. Swat is simultaneously center and periphery much like the regions of Bamiyan, Kapisa and Nangarhar in Afghanistan, and the neighboring Kashmir. All these areas share physical, climatic and economic features; they area high altitude plains surrounded by mountains where double-crop agriculture in practiced (Figure 20.1).

Climate is a topic hardly discussed in the scholarship dedicated to these cultural regions. Until now studies focusing on reconstructing the archaeological, historical, and environmental contexts of northern Pakistan and piedmont of the Hindukush-Karakoram have been based solely on visual art, less on material culture, and heavily relying on textual sources. Texts are crucial to understand all religious and cultural phenomena, however material culture and environmental data, including palaeobotany, genetics and climate, are also important as they explain migration movements and settlement patterns of human groups. In particular, changes in climate can explain processes of contraction of economies and settlements in ancient Swat as well as changes the local agricultural production, phenomena which are then reflected in material culture. Environmental and climatic variabilities affect the development and collapse of ancient societies and this line of investigation, still in its infancy today, must be further develeoped using a multifacted approach.

A History of Interphases

Interfaphases or interfacial periods in archaeological excavations are typically represented by phases of human abandonment and are often interpreted as moments when population collapses due to floods, landslides, aridification, or political upheaval. Notwithstanding their ambiguity, such layers have important implications for the periodisation and reconstruction of

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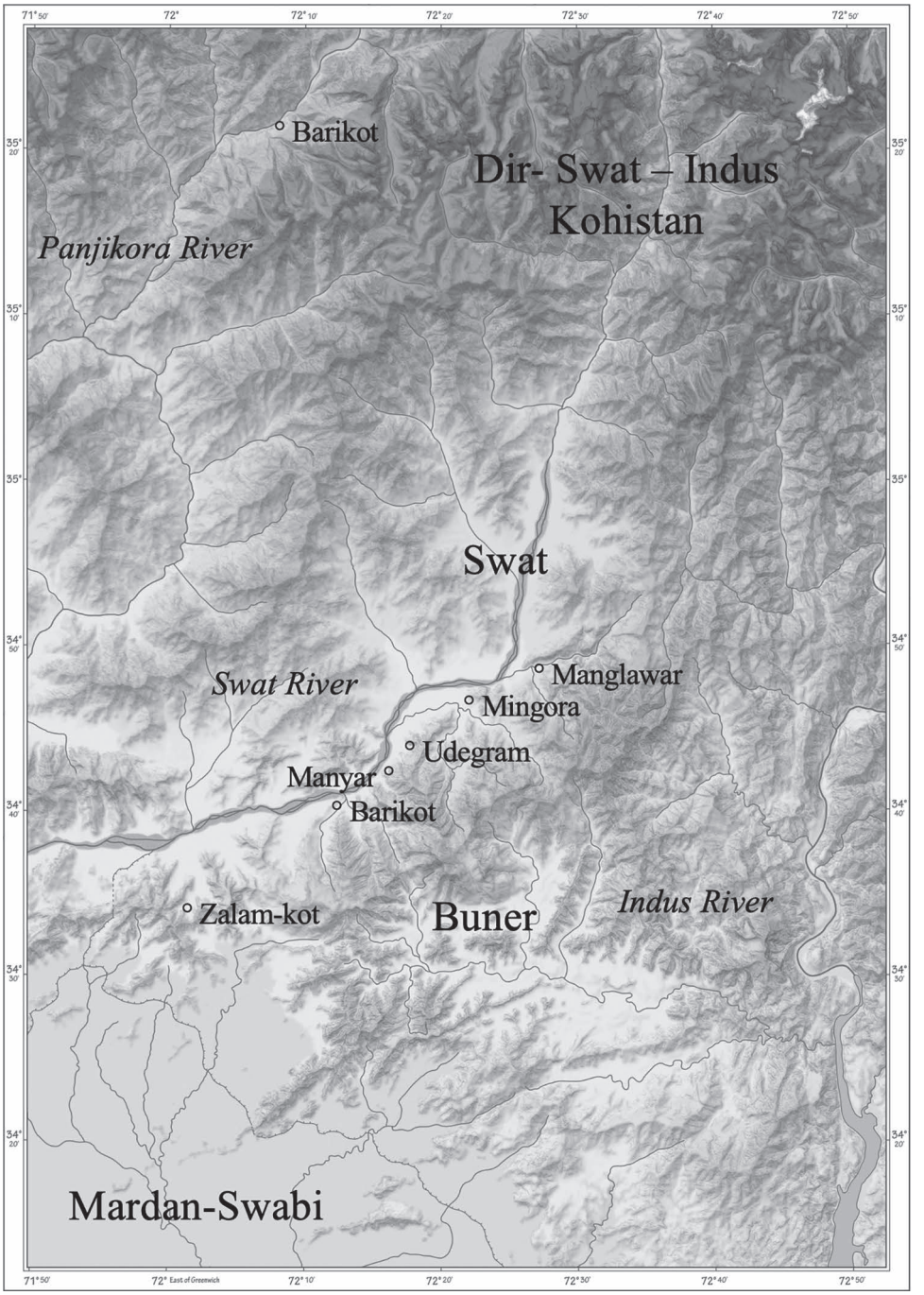

Figure 20.1 Map of Swat (by K. Kritz and D. Nell; elaborated by L.M. Olivieri; MAIP and University of Vienna).

the cultural sequence of archaeological sites. In Swat, where a substantial continuity of human occupation has been registered throughout the centuries, interphases are particularly striking. These periods appear abruptly in the archaeological stratigraphy. They lack of any cultural evidence suggesting thus that such interphases might have been rather triggered by natural factors, such as sudden climate changes and/or monsoonal shifts. Unfortunately, secure data on palaeoclimate are not yet available for the area south of the Hindukush-Karakoram, where Swat is located.[2]

The economic and cultural importance of this region is linked to the local microclimate, which in optimal conditions allows for a double-cropping agricultural system. Double-cropping, which means that two harvest seasons can take place on the same land in the same year, started in Swat and Kashmir during or immediately after the Northern Neolithic (ca. 3000 BCE) when domesticated rice was first imported from the trans-Himalayan area. The favorable geographic position of Swat at the foothills of the Hindukush enabled its ancient inhabitants to develop efficient cultivation systems. Nonetheless, the region was exposed to sudden shifts in weather causing rare major crises in the economic system. Current investigations conducted by the Italian Archaeological Mission in Swat seek to test the hypothesis that expansions and contractions documented in archaeological stratigraphies reflect variations in climatic conditions (see Figure 20.2). Based for the time being only on archaeological data collected in Swat, the earliest interphase ending before the Late Bronze Age (ca. 1400 BCE = interphase A) can be linked to the Early Neo-glacial Anomaly (ENA) phase documented in northern India between 2500 and 1300 BCE.[3] Another period of climatic change might have occurred in Swat between ca. 800 and 500 BCE, when archaeological layers associated with phases of collapse appear again throughout the region (interphase B). In Kashmir, archaeologists argue that the thinness of the archaeological deposits between 700–200 BCE may reflect a parallel economic and/or demographic contraction.[4] A third interphase occurred in Swat between 550 and 650 CE (interphase C).[5] While these interphases caused demographic contractions, they did not result in significant genetic changes as demostrated by previous studies.[6] This factor rules out that the cause for the documented abandonment of settlements or collapse in population in Swat is linked to invasions or social upheaval since no new genetic material is documented from the region.

The Italian Archaeological Mission in Pakistan with the Ca' Foscari University of Venice in 2021 launched a research program on paleoclimatic changes (LaserChip project) which aims at obtaining data from organic and inorganic paleosoils materials in order to better understand processes of cultural crisis and huaman re-adaptation.[7] The analysis of paleoclimatic and palaeoenvironmental records will hopefully enable us to reconstruct the variability of past climates and the environmental conditions at a local and regional scale between the 15th century BCE and the 11th century CE. Palaeoclimatic studies have demonstrated that the organic and inorganic components preserved in natural archives can offer reliable data on past climate variability. For example, organic biomarkers contained in soil and sediment profiles, such as stable carbon isotopes as well as traces of rare earth elements, are strictly linked to local vegetation pattern, to the evaporation/precipitation balance, and to human activities.[8] Hence, the analysis of inorganic elements, organic biomarkers and stable isotopes, when considered in conjunction with the analysis of archaeological material will lead to a new interpretive model for the understanding of the economic processes that took place in Swat during these interphases.

The research regards the three interfacial periods mentioned above, even though it will focus in particular on the phases following the end of the second period of urbanization (400 CE). The following phaenomena have been archaeologically associated in Swat to this period of disruption (from c. 550 CE on): (1) the collapse of the agrarian system, (2) the decline of Buddhist institutions, and (3) the rise of Brahmanical religious centres (interphase C).

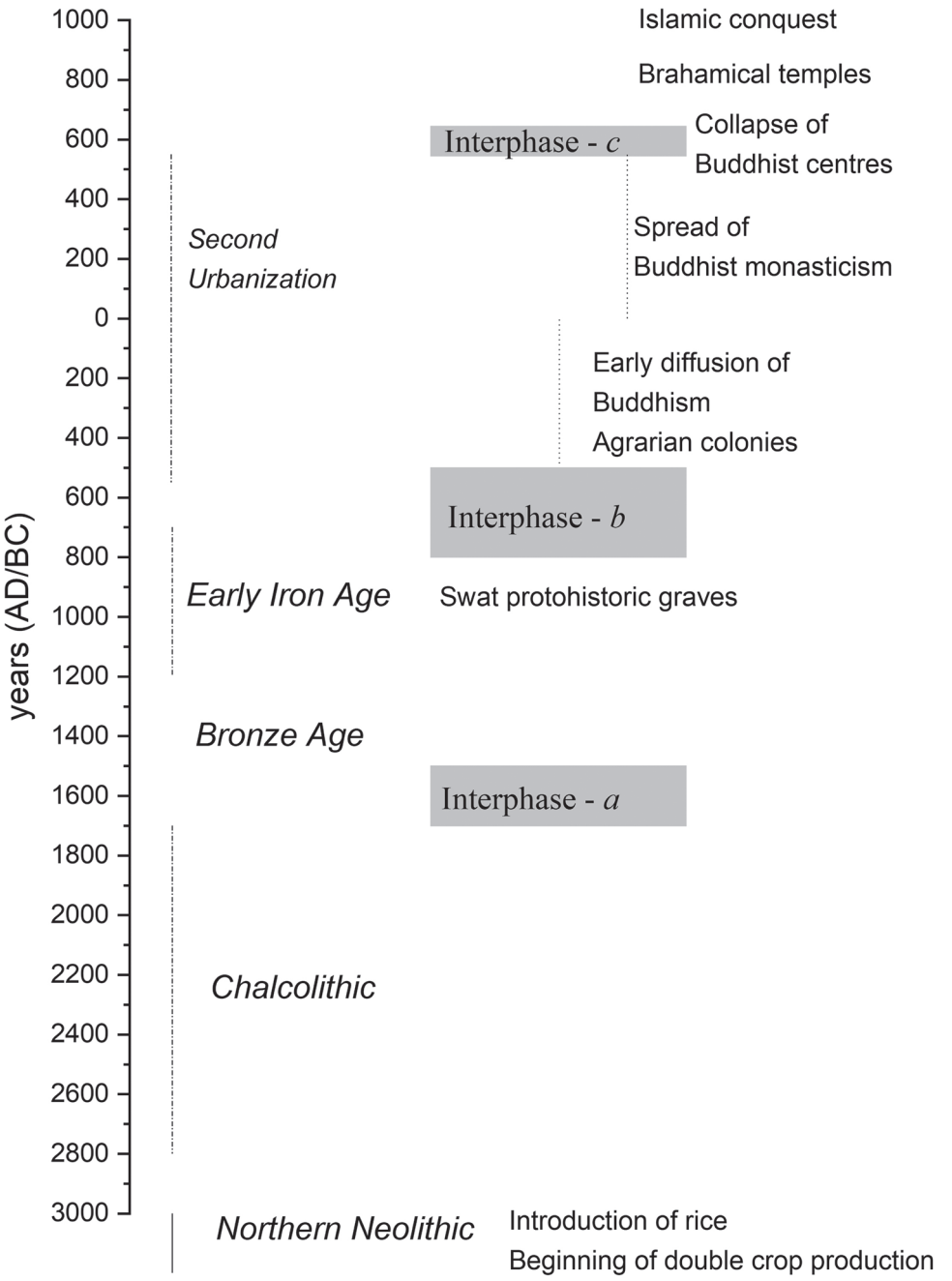

Figure 20.2 Timeline of major interphases in Swat archaeology based on the Barikot sequence.

The Road to India

The extraordinary favorable conditions of Swat due to its microclimatic features, and the presence of double-crop agriculture since protohistoric times, had a significant impact on the demography of the region. Swat history knows a few important phases of immigration which resulted in prolongued phases of settlement. The last and most significant episode is the immigration and settlement of Pashtun clans into Swat since the 16th century onwards. Interestingly, as noted by Frederik Barth,[9] the area where these Pashtun clans settled roughly overlaps with the area where double-crop agriculture is practiced. The earliest documented immigration episode into Swat dates back to the Late Bronze/Early Iron Age, when a wave of immigrants coming from Central Asia took control of the Swat plains and established settlements as well as graveyards. With regards to these early communities and settlements, recent research conducted on the Swat Protohistoric Graves (SPG)[10] produced important results (Figure 20.3). From the chronological standpoint "recent studies and fieldwork [. . .] have changed the SPG chronologies (c. 1200–800 BCE) demonstrating that there are no SPG features posterior to 800 BCE".[11] Therefore, contrary to what previously thought, there appears to be no direct correlation between the end of inhumation burial practices in Swat and the local diffusion of Buddhism, as the two phenomena take place five centuries apart (ibid.: 232). In regards with the ancient population of Swat, previous scholars noted the existence of a "Central Asian connection" of the Swat people in the Late Bronze/Early Iron Age periods.[12] This hypothesis recently gained new strength thanks to the analysis of ancient genetic material carried out by Harvard University and other institutions. This research project reported on the genome-wide DNA of samples from 523 individuals obtained from excavated sites spanning eight millennia from regions in Central Asia, South Asia, the Eurasian steppe, Swat, and Sistan (the closest area to India). The researchers examined DNA samples from 126 individuals from sites of Swat excavated by the Italian Archaeological Mission (25 percent of the total samples analyzed by the Harvard Project), including ninety-nine individuals buried in SPG necropolis, twenty-one from early historic burials, and six from Medieval (Islamic) graves.

The study

> [u]sing data from ancient individuals from the Swat Valley of northernmost South Asia, show[s] that Steppe ancestry integrated further south in the first half of the second millennium BCE, contributing up to 30% of the ancestry of modern groups in South Asia.[13]

The other important piece of evidence highlighted by the study is that

> we can assume that the Central Asian and Iranian pastoralist-related ancestry of the Swat historic population [. . .] predates the SPG phenomenon (c. 1200–800 BCE). This suggests that the date of mixture between the Steppe pastoralists from Central Asia and the local inhabitants of NW South Asia occurred almost one thousand years prior to the sampled SPG populations. For the post-SPG period in Swat, the genetic analyses detect (a) no substantial influx of Steppe pastoralist-related ancestry, and (b) the increase of the South Asian component or *AASI*.[14]

Therefore, in ancient Swat we observe a substantial genetic continuity from the Bronze Age throughout three millennia that can only be explained in light of the exceptional favorable climatic and agrarian conditions of the area.

Figure 20.3 Udegram, the protohistoric graveyard: Grave 3 (photo: MAIP).

Population, Food Export, and the Rural Economy of Swat

The implications of the "substantial genetic continuity" detected in Swat by genomic studies are of great importance when examined jointly with the eco-system of the Swat valley. A region of such a small size was able to develop in antiquity an extremely efficient agriculture with abundant food production when compared to that of neighboring regions, thanks to a unique microclimate and abundance of water guaranteed by seasonal precipitation and glacial melt. These favourable conditions, yielding ample cereal harvests, led to the export of the agricultural production to the main cities situated on the lower semi-arid plains of Gandhara. Archaeological data from the dig at Barikot illustrate these points. Barikot is the longest standing archaeological project in South Asia (1984–) thanks to the close collaboration between Italian archaeologists (IAM – ISMEO/Ca' Foscari Italian Archaeological Mission in Pakistan) and Pakistani authorities. Barikot shows an unprecedented continuity of occupation from the 1400 BCE to medieval times. The ancient site (formerly a Bronze and Iron Age settlement)[15] became an agrarian colony when Gandhara was an Achaemenid satrapy in ca. 500 BCE, and was later fortified by Alexander the Great for its role as a center for food production. Recent studies carried out by the Max Planck Institute in Jena on a set of ca. 5000 carbonized seeds, show cereal from Barikot were mostly wheat and rice (1200 BCE–50 CE) (Figure 20.4).[16]

Both the archaeological evidence and chronology from Barikot[17] confirm that this ancient town can be identified with the city of Bazira (Arrian, *An*. IV 27, 1–3) or Beira (Curtius Rufus, *Hist*. VIII 10,22) mentioned in Greek and Latin literary sources. Barikot (Beira = Pkr. *va*(*y*)*ira*; Bazira = Skr. *vajra*)[18] was at the core of an agrarian colony founded as early as the 6th century BCE[19] when early-historic polities in NW India were developing along with the expanding trading dynamics of the Achaemenians, when Taxila and the cis-Indus became integral part of the Indian heartland. At the time of its foundation, Barikot developed urban specialized industries (pottery, copper and iron-smithing and glass-production)[20] that locally produced ceramics imitating both Iranic and Indo-Gangetic forms (Barikot macrophase 2a) (Figure 20.5)[21].

The foundation of the city of Barikot amidst the Swat mountains might have coincided with the beginning of another period of climatic optimum which lasted for 1000 years with no major documented variations or interphases.[22] During this long period that began during the mid-1st millennium BCE, the agricultural production naturally boomed. Coeval archaeobotanical evidence from the site of Charsadda-Pushkalavati situated down in the Gandharan plain along the Kabul River, reveals instead the existence of a semi-arid environment where cereal was not extensively cultivated, but possibly imported from Swat.[23] Our model foresees regional capitals on the plains like Pushkalavati and Taxila depending for their food supply almost entirely on the double-cropping climate of the highlands (respectively Swat and Kashmir).

It is not coincidence that campaign of conquest conducted by Alexander the Great in Swat (326 BCE) took place at the end of the summer/beginning of autumn, during what must have been the time of the second harvest. Clearly Alexander's plan was to go to Swat, seize food at harvest's time, and then cross the Indus during the late autumn/early winter when the river water level was at its minimum. The plan was certainly developed on the basis of precise intelligence gathered through native informants well before Alexander crossed the Hindukush heading towards India. He did not make the mistake later made by Babur: "It was the end of the year, only a day or two left in Pisces [. . .] if we went now to Swat the soldiers would not find any grain and would suffer. [. . .] Next year we should come earlier, at harvest time [. . .]" (*Bāburnāma* fol. 220–221).[24]

One of the first-hand sources of the historian Curtius Rufus described the city of Bazira/Beira (Barikot) in the same time period as being *opulenta*, a Latin term denoting agricultural

Figure 20.4 Barikot and the Swat valley seen from WSW (photo: MAIP).

wealth that is very rarely used in his *Historiae*.[25] Ptolemy I Soter, whose lost memoires as Alexander's general are utilized by Arrian (*An*. IV 25, 4), talks of "large herds of superior quality" being seized and sent to Macedonia.[26] Clearly, Swat was an important source of food for Alexander on his way to India. The grain seized in Swat was stored at Embolima/Ecbolima, most probably at the hilly station of Ambela located a bit before the Indus.[27]

Arrian refers that Alexander in Swat "built fortresses at Ora and Massaga for the defence of the region, and fortified the city of Bazira".[28] Two centuries later the Indo-Greeks built a new massive stone-masonry defence around the city of Barikot-Bazira.[29] The lower city and the acropolis were protected by an imposing defensive wall with massive rectangular bastions every 28 m, the equivalent of 100 Attic ft. The building of the Indo-Greek fortification at Barikot undoubtedly required a massive financial investment. This must have been part of a major political program developed during or right after the reign of the Indo-greek king Menander, a program that also led to the foundation of the city of Pushkalavati in the plain reliant on the agrarian economy of Swat.[30] On the basis of new archaeological data the Indo-Greek fortification at Barikot can be dated to the second half of the 2nd century BCE (Barikot macrophase 3a), most probably towards the reign of Antiàlkidas.[31] Around the beginning of the common era, the Sakas reinforced the Indo-Greek town until the city (Barikot macrophase 3b) became part of the metropolitan territory of the Kushan Empire (Barikot macrophases 4–5) and was de-militarized.[32]

Addendum

Giovanni Verardi's book entitled *Hardships and Downfall of Buddhism in India* is a seminal work that will be appreciated in the *long durée*[33] and his discussion of Puṣyamitra's tale from the *Divyāvadāna* and cognate sources is very relevant for our argument.[34] Puṣyamitra's defeat

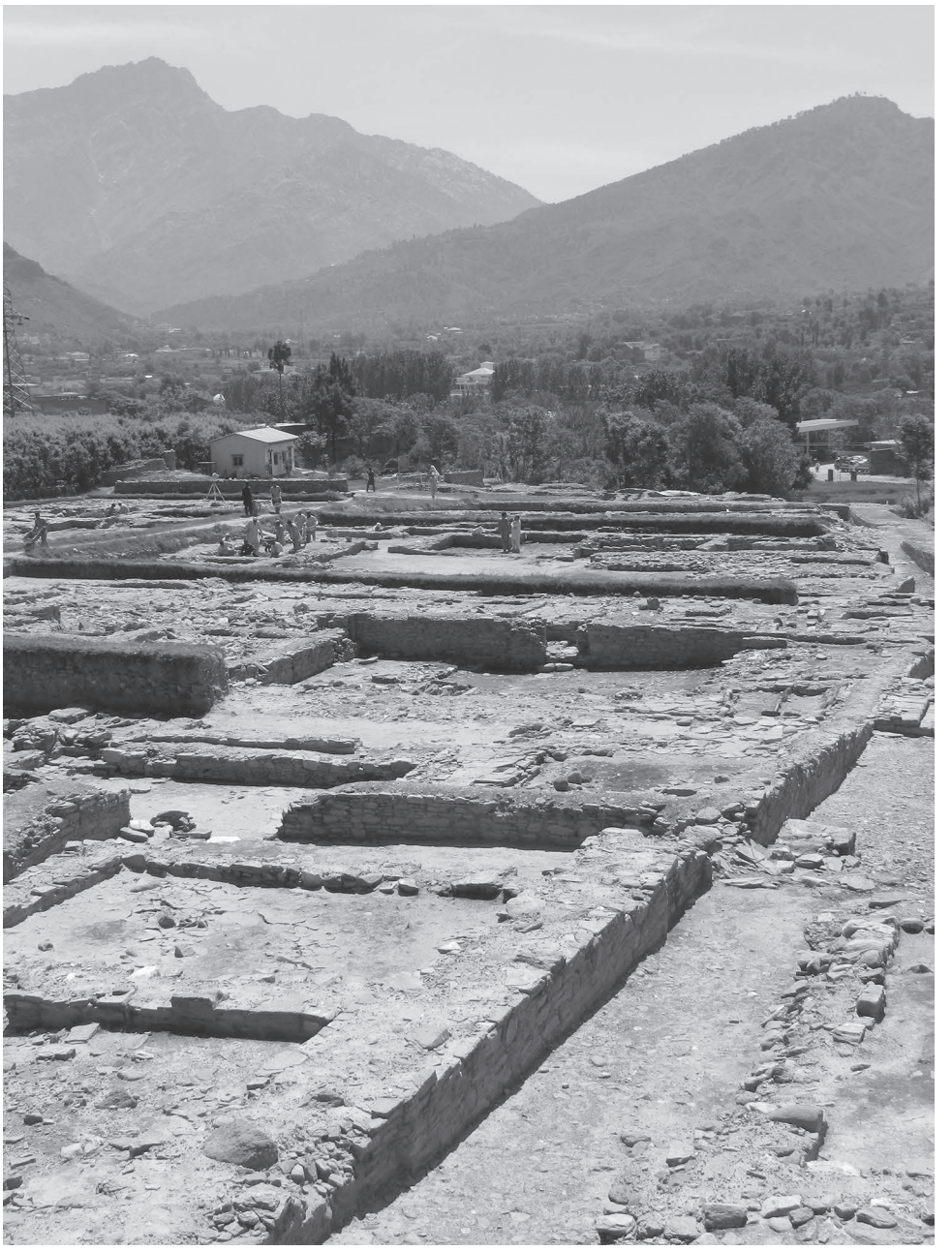

Figure 20.5 Barikot, the site: Mt Ilam (Aornos) in the background (photo: MAIP).

took place in a city located in NW India tentatively identified with Barikot in Swat by P.C. Bagchi in 1946 and on that followed by Verardi. This theme has recently been further elaborated by Omar Coloru.[35] Indian literary sources and their Chinese versions report the name of the city as being Koṣṭhaka/Sthūlakoṣṭha which in in Chinese translates as "the Granary"[36] – a term that convincingly locates the location of Puṣyamitra's defeat in Barikot or its vicinity.[37]

The name Koṣṭhaka is mentioned also in the *Mūlasarvāstivāda-vinaya* as the place where the mother of Uttarasena king of Uḍḍiyāna, that is Swat, converted to Buddhism.[38]

Swat and Apalāla

Under favorable climatic/environmental conditions, ancient agrarian production in Swat possibly exceeded the best crop production anywhere in the Northwest of the Indian subcontinents, with the exception of Kashmir and a few other double-crop pockets. The agrarian production of Swat was based mainly on grain production, such as wheat/barley and rice, a summer cereal.[39] Swat became an important reservoir of food resources for larger polities and empires, as well as military expeditions (from Alexander the Great to Babur, from 4th century BCE to 16th century). Swat was also endowed with large water and forestry resources later exploited by the British.

The projected size of the agrarian production in ancient Swat was huge. The available 1000 km^2 of rural land suitable for double cropping would have produced food enough to support more than half-million people in optimal conditions. According to demographic models and pre-modern textual information,[40] in ancient times the demography of Swat would have not exceeded ca. 250,000 inhabitants in Swat.[41] With these figures it is clear that most of the annual agricultural production was suitable for export (>50 percent in ancient times). Agriculture was an industry in Swat, and the Buddhist monasteries were in charge of it. Archaeological evidence and surveys show that from the 2nd to 3rd centuries CE such an important agricultural enterprise was firmly controlled by Buddhist monasteries.[42] The popularity of the Buddhist tale of the conversion of *nāga* Apalāla (Figure 20.6), a tyrant of waters and creator of famine and distress[43] is emblematic of the role that Buddhism played in Swat.[44] Whenever we see hydraulic infrastructures connected to the Buddhist monasteries in the region (around Barikot there are several examples),[45] we should think of the reiteration of the pact between the Buddhist community and the spirits of the water.

Throughout the centuries the monastic communities of Swat developed the technical expertise to improve agrarian landscape with dams and canals for rice culture, much like it happened, on a different scale, in other south-eastern areas of the Buddhist oecumene. An important information on Swat in late antiquity is handed down in the life story of Padmasambhava, the Guru Rimpoche native of Swat who so greatly contributed to the diffusion of Buddhism in Tibet and Bhutan. A 13th-century version of the fragmentary *Testimony of Ba* which can be considered the earliest extant Tibetan Buddhist history,[46] a copy of which was uncovered in Dunhuang, refers that once Padmasambhava was asked how to deal with a problem of flood and wicked *nāga*s. Padmasambhava's answer was that first these spirits should be bound by an oath, and then water should be controlled through magic actions. As a result, his skillsets were regarded as potential threat to the king authority, and the guru was deported. Interestingly, the story has been interpreted as evidence for "expertise in sophisticated irrigation technologies that were native to the area [Swat]".[47]

The Climatic Conundrum

At the beginning of the 4th century CE the city of Barikot was abandoned after two major earthquake episodes documented in the archaeological stratigraphy (Barikot macrophase 6).[48] The collapse of Barikot was not an isolated phenomenon in the region.[49] The urban center of Udegram/Ora in Swat was also abandoned at the same time, and so was the city of Pushkalavati/Shaikhan-dheri in Gandhara, and probably also Taxila/Sirkap.[50] The crisis of urbanism

Figure 20.6 A *naga* converted by Buddha (from Barikot, now Swat Museum; photo: MAIP).

in the region certainly brought drastic changes, where cities, in particular Barikot, where no longer economic major hubs.[51] The agricultural production, at least from the beginning of the 2nd century CE, was managed by Buddhist monasteries with expert administrators with high ethical standards who were trained in writing and computing skills.

In Swat the consistency of the archaeological deposits diminishes drastically during the phases of occupation dated between ca. 550 and 650 CE. (Barikot macrophase 7) In this period, the archaeological documentation shows the progressive abandonment of Buddhist monasteries and sanctuaries throughout the region. A similar gap between major archaeological phases is recorded at almost all archaeological sites investigated from the area of Kabul to the river Indus.[52] Starting in the mid-6th century, a crisis might have invested the agrarian production as well as Buddhist centres. The effects of such distress were still visible in the first half of the 7th century as reported in accounts found in Chinese sources dated from the 629 to 645 CE which appear quite different from those found in earlier sources from 518 to 523 CE.[53] While direct climatic data are not yet available, the sudden collapse of agrarian production recorded in literary sources suggests that the crisis was generated by a dramatic natural event, possibly resulting from a modification of the Indian monsoonal front. At the moment we seek to confirm through paleoclimatic studies the hypothesis that the crisis of Buddhism and agrarian production were closely linked.

> It is not easy to explain the decrease of monasteries after Fa-hsien [Faxian] (399–414 A.D.) (1,400 monasteries) and the fact that at the times of Hsüan-tsang [Xuanzang] (he travels from 629 to 645) many of them were in ruins [. . .]. Sung Yun [Sung-yun] (he travels from 518 to 523) speaks in high terms of the Buddhist community and does not anticipate the different statements of Hsüan-tsang. 1400 monasteries imply not only a widespread devotion, but also a great wealth necessary for their maintenance.[54]

It is therefore possible that the decline of Buddhist monasticism in the Northwest around the 6th century CE, as well as the gap in archaeological evidence between the late 6th and early 7th century CE, may be due to climatic or natural reasons. In the framework of the Ca' Foscari University of Venice LaserChip project, we are currently analyzing paleosoils in order to test the possibility that the collapse of the agricultural production in Swat during interphase C (Figure 20.2) is linked to the so-called Late Antique Little Ice Age (LALIA), across the northern part of the Northern Hemisphere between 536 and 660 CE.[55]

The decrease in summer (June-July-August; JJA) temperatures mainly documented by tree rings, was also accompanied by a decrease in precipitation as indicated by several hydrological proxies. LALIA was triggered by a series of volcanic eruptions and have been tied to shifts in preciptation due to changing airmasses and late frosts, possibly causing crop failure. Scholars have already connected the LALIA to regional collapses of imperial organizations and major population movements across Eurasia.[56] More recent studies, however, are revealing important variations in the effects of the LALIA especially in the southern regions of Eurasia.[57] In this regard, we expect important new indications from the LaserChip project that has just started in Swat.

Special attention should be paid to the productivity of the double-cropping agricultural system, which would have been sensitive to seasonality as well as hydrology. In our reserach project particular attention will be given to the effects of climatic changes on rice production, a summer cereal that represents more than 50 percent of the ancient crop production in Swat.

The new lines of research on paleoclimate aim to reconstruct the local climate variability in Swat during the LALIA period (chronology-wise overlapping interphase C) through the study of samples collected from climatic archives available in the area (in particular sediments, and plant macroremains). A better understanding of the local climatic variability will allow us to test the possible ties between the collapse of agrarian production, the sudden decline of Buddhism and the demographic collapse in the Northwest.

The study of new paleoclimatic data from Swat opens potentially new lines of research on the impact that climate changes had on the ancient economy of the double crop temperate pocket zones situated in the Himalayan foothills like Swat and Kashmir, where Buddhist monasticism and rural economy collapsed in just a few decades. This important research also sheds light on the economic role played by the semi-arid terrains of Eastern Afghanistan and the Gandharan region (Peshawar plateau) situated to the south of Swat, where the first Brahmanical polities came to be established and monumental Hindu architecture became widespread. At the same time, it also explains the sudden creation of Buddhist princely states in high-altitude mountainous regions of the Hindukush-Karakoram. These kingdoms accumulated great wealth as demonstrated by their engagements in huge artistic enterprises such as the carving of the colossal Bamiyan Buddhas and the majestic Buddhist bronzes as well as illuminated manuscripts commissioned by the Patola Śāhi (Shahi) at Gilgit and Chilas.

The Road to the *Devas*

Long ago Giuseppe Tucci, with his usual infallible intuition, saw traces of a possible "social unrest" behind the Buddhist crisis that took place in Swat after 600 CE.

> The Sasanians had passed there before Sung Yün, and perhaps took control of Swāt for a certain period; the Ephtalites followed and might have caused other damages (91b); Buddhism was still prosperous at the times of Sung Yün; something had, then, happened bet ween the visit of Sung Yün and that of Hsüan-tsang. I suppose the cause may be attributed to natural calamities and social unrest: earthquakes and floods documented by the excavations, at Butkara and elsewhere, greatly impoverished the country, then the decrease of trade with the plains and with Central Asia, via Gilgit, the probable attempts by the Turki Śāhis to control Swāt, a fact which was realized in the year 747, the division of the country among different petty vassals chiefs.[58]

The collapse must have caused a disruption of the status quo and the loss of power by Buddhist elites who functioned as the guardians of the natural order as well exemplified by the story of Apalāla. In the new horizon the agrarian business was not as prosperous as usual: Xuanzang account criticizes the Buddhist monks from Swat for their attitude towards magic and exorcisms. Can we interpret this new attitude of monks in Swat as a form of resilience in light of the changed social and economic order linked to a climate crisis? According to the *Rājatarangiṇī* in Kashmir (a region which share the same features of Swat but at a bigger magnitude) during the post Kushana period "the Brahmans who offered oblations and sacrifices [vis-à-vis the dramatic cooling of the temperatures], escaped destructions, while the Bauddhas perished".[59] This is what led Tucci to label this period as a time of "revival of Hinduism".[60] Archaeological records in Swat show the establishment of new *deva* temples at least from late 7th century CE and Xuanzang speaks of ten of these Brahmanical temples in the areas of Laghman, Nangarhar, Ghazni-Gardez, and Gandhara.[61]

Figure 20.7 Barikot, the acropolis, and the Śāhi temple (photo: MAIP and Malak Abrar Torwali).

In Swat *deva* temples were documented in different areas.[62] The best evidence was discovered at Barikot on the top of the acropolis in 1998.[63] The monumental terracing of the eastern area (eastern terrace) of the acropolis can be dated to the Kushana period and a Buddhist sacred area was situated up there since the 2nd century CE (Barikot macrophases 4–5). The Śāhi reoccupied the acropolis and its southern slopes as demonstrated by earlier excavations conducted below the hill (Barikot macrophase 8).[64] A new fortification of the acropolis took place in the much later Ghaznavid period during the 11th century CE (Barikot macrophase 9a) (Figure 20.7).[65]

At the foot of the hill, below the Barikot acropolis, in 2019 were found few important traces of a later settlement developed in a historical phase associated with "Huna", Kidarites and later dynasties (1σ = 488–533 CE 67 percent, 2σ = 410–536 CE 100 percent = Barikot macrophase 7) which still remains most elusive in the archaeological sequences of Gandhara and eastern Afghanistan. The pottery found shows similar characteristics to ceramics associated with the so-called Begram III horizon of still uncertain date.[66] The pillared temple discovered at the foot of the Barikot hill in 1984,[67] as well the later palace unearthed in 2018–2019 (still unexplored, of which we have exposed a wide bastion façade over 70 m long up to its door) can be dated to the following Hindu Śāhi period based on numismatic findings and radiocarbon data (1σ = 873 CE 100 percent, 2σ = 894 CE 96 percent = Barikot macrophase 8b). The later buildings documented at the site, which incorporated the massive Śāhi remains and included terrace-built residential structures, were in use, in various phases, from the 12th century until the end of the 16th century (1σ = 1300–1330 CE 27.1 percent, 2σ = 1340–1400 CE 41.1 percent = Barikot macrophase 9b; 1σ =1517–1594 80 percent, 2σ = 1484–1644 CE

Figure 20.8 The Panjkora valley seen from the second Barikot (photo: MAIP).

100 percent = Barikot macrophase 9b-10). This last phase of occupation marks the period immediately preceding the arrival of the Yusufzai Pashtuns at Barikot. Local oral sources, including the Yusufzai ones, refer that with the arrival of Pashtuns at the end of the 16th century the village was abandoned and its inhabitants found refuge in the upper reaches of the Panjkora, where they established a new village by the same name (Figure 20.8).[68] These families, who still bear the name of their clan, Beira or Bera, converted to Islam – according to local informants – only a few generations ago.[69]

The excavation on the top of the Barikot hill begun in 1998 and revealed a much more complex situation. The excavation of the western terrace (trenches BKG 7 and BKG 9) brought to light a section and part of the northwest corner of the Indo-Greek defence wall, demonstrating that the acropolis was integral part of the city fortified by the Indo-Greek king Menander's successors after 150 BCE (Barikot macrophase 3a).[70] The stratigraphy beneath the wall revealed levels from the Early Iron age (Barikot macrophase 1) and rock-cut shafts with materials (including painted pottery) from the Early Bronze Age (1700–1400 BCE) (Barikot macrophase 0).

Excavations conducted in 1998–2000 on the eastern part of the acropolis terrace revealed large parts of a podium belonging to a Vaiṣṇava temple (23 × 14.8 m), which was built during the Turki Śāhi time (Barikot macrophase 8a) and enlarged during the following Hindu Śāhi period (Barikot macrophase 8b). The surviving portion of the podium features a torus plinth decorated by pilasters with pseudo-ionic capitals. Less than three quarters of the original height of the podium has been preserved (2 m). Above the podium was a platform accessed from the east through a monumental staircase and a cella with monumental elevation. At least three marble sculptural groups were housed here.[71] By the year 2019, when excavations resumed at the site, new important information had emerged from the study of an inscribed slab found on

the hill before 1898 and handed over to the Lahore Museum by Harold Deane who was at the time the British political agent in Malakand. Oskar von Hinüber in 2020 confirmed the identification, already proposed by Tucci, of the place name Vajrasthāna mentioned in the epigraph with Bazira, the modern Barikot.[72] The slab is inscribed in Brahmi-Śarada scripts and mentions the construction carried out by anonymous dignitaries during the reign of Jayapaladeva, the last Hindu Śāhi ruler.

The 2019 excavation on the eastern terrace confirmed Turki Śāhi chronology of the early construction of the temple (dates 2019: 1σ = 690–750 CE 86 percent, 2σ = 670–778 CE 93 percent; date 1999: 605–685 CE = Barikot macrophase 8a).[73] Excavation helped also to understand not only the various phases of the temple's demolition (post-1000 CE), but also the existence of demolished stupas under the temple's outer floor. The main stairway leading to the eastern terrace was also brought to light. It revealed two superimposed phases: the lower one is contemporary with the earlier Buddhist sacred area, while the upper one is contemporary with the temple.

It is impossible to say if the stupas underlying the eastern terrace were already abandoned at the time of the Turki Śāhi when the Vaiṣṇava temple was built. The finding of two rock reliefs with Buddhist imagery dating to the 7th–8th century right near the beginning of the access routes to the eastern terrace suggest that the stupas where demolished when the Buddhist sanctuary was still in use.[74] However this is a critical point that needs further study. We do not know, for example, whether mixed cults were practised. We must always bear in mind how blurred the boundary in religious practice could be between nominally different practices in these chronological phases. A striking example, perhaps from Barikot, concerns the peculiar dedication of a Śāhi marble statue reflective of a Vaiṣṇava environment which however echoes Buddhist dedicatory expressions. The inscription has been studied by R. Salomon who concluded with these words: "Thus the infiltration of paradigmatically 'Hindu' cults in Buddhism cult practice [or the other way round] appears to have been wider and deeper than usually thought".[75]

However, the temple was demolished at the beginning of the Ghaznavid times, when the area was turned into a fortified garrison (Barikot macrophase 9a). Interestingly no traces of the debris resulting from the collapse of the temple have been found at the feet of the acropolis. The discovery of a limekiln all around the temple partly solved the problem of understanding how the debris of the collapsed temple were re-used: limestone, plaster and stucco decoration of the monument were crushed and fired on site to obtain lime. Several kilograms of charcoal from large wooden elements were also found on the underside of the limekiln mixed with ash. Many nails, staples, pins, hardware elements were also mixed in among these wooden remains. Charcoal samples were analyzed along with a fragment of unburnt wood, providing consistent radiocarbon dates around the 9th–10th century, when we know that the temple was still in use.

The wood was certainly used to build the superstructure of the temple, perhaps the cella. Unfortunatley very little is known about Śāhi wooden architecture and the only surviving examples can be seen in the British Museum. It consists of niche panels, a pseudo-corinthian capital and a large multiple lotus metope (consistent with the lotus metopes from the Barikot acropolis temple) found by Harold Deane at the site of Kashmir Smast, south of Barikot, between Buner and Mardan.[76]

In conclusion, the Vaiṣṇava temple was built towards the end of the 7th century (Turki Śāhi phase = Barikot macrophase 8a) on a preexisting artificial terrace that dominated the entire Swat valley. It was a site probably selected on the basis of its intrinsic sacredness that offered a powerful view of Mt Ilam, the ancient Aornos, also believed to be the "Ram

Figure 20.9 The Buddha near Manglawar (photo: MAIP).

Thakth".[77] Stratigraphically, the temple sits directly upon a ruined Buddhist complex. Considering the overlapping chronology of the temple's foundation and the dates of the late Buddhist rock sculptures, the Buddhist complex might have been demolished when it was still in function.

Apart from the remarks on possible mutual infiltration that we noted above, we should be mindful, however, of what a "functioning Buddhist site" looked like during this last phase of Buddhism activity in the Northwest. Late Buddhism in Swat remains poorly understood.[78] In the 7th–8th century the few documented late Buddhist centers (as Butkara I or Amluk-dara I), although still active, were in disruption.[79] Only the evidence of rock reliefs with Buddhist imagery tells us of a system, which, although outside traditional monasticism, might have still attracted significant funding and investment. Little or nothing though remains in terms of structural evidence, perhaps with the sole exception of Manglawar, the ancient capital of Upper Swat, traditionally associated by Tibetan pilgrims with the semi-mythical figure of king Indrabhūti (Tucci 1940). Manglawar (together with Barikot) was clearly a major Late Buddhist teaching centre, dominated several rock reliefs and rock inscriptions and by a colossal Buddha – the largest of the late Buddhist rock sculptures of Swat (Figure 20.9).[80]

> We do not know whether or not this apparent but convincing, division of the territory after the 7th century CE was the result of a political division [. . .] Tucci underlined that both Tibetan and Chinese source of the 8th century CE describe Swat as split into two political entities: one ruled by the Buddhist king Indrabhūti (protector of the late Buddhist schools), while the other was politically dependant on the Laghman-Kabul area.[81]

A Lesson for the Future

A deeper understanding of the impact of climate changes on human populations and micro-environmental pockets in the past will help inform conservation and political programs in the future. While our main goal is to better understand the development of regional cultures and to study how humans adapted in the Swat Valley, we believe that the results of paleoclimate study will have much broader implications across the sciences and humanities. The expected outcomes of the new research lines include first and foremost the reconstruction of the past microclimate of the Swat region, and how it impacted on the movement of human groups. Swat temperate microclimate is also important because it intercepts three major climatic zones: monsoonal South Asia, subartic Himalayan zone, cold semi-arid central Asia. Environmental conditions have been critical to the flourishing of this region as they support double-cropping agriculture. Our working hypothesis that a climatic crisis led to decline during late antiquity (LALIA), if confirmed, would require a full reconsideration of the causes that triggered the decline of stable religious institutions as well as of the dynamics that led to the development of new religious centers a few centuries later.

Our understanding of how human activities, climate, and environmental responses interacted to drive processes that led to crisis and adaptation of socio-religious communities is currently extremely limited. From an archaeological/historical point of view, we will have the opportunity to reconstruct in detail the breakdown of Buddhist monasticism, which was dominant in the region starting from ca. 50 CE. The abandonment of monasteries had a huge impact on the economy and vice-versa. The decline of Buddhist institutions in the northwestern regions of South Asia is still an unsolved problem. Both the re-adaptation of Buddhism through the less structured forms of Vajrayāna practice featuring wandering masters instead of organized communities, and the land occupation by monumental complexes, by the Brahmanic élites, had tremendous impacts on the later history of South and Central Asia.

It is possible that in such a context of political unrest and changing climatic conditions, human communities were forced to adapt to new conditions, amending their production system as well as their cultural habits. Understanding how climate affected the agricultural production in antiquity will also help archeologists better decode cultural deposits and occupation layers from different time periods. Ultimately, such a study will shed light on sociopolitical changes that took place in antiquity across Europe and Asia. The Swat Valley was a key corridor for communication and connectivity in the ancient world and the prosperity of this region would have directly impacted a vast area of South Asia and beyond.

Notes

1 Tucci 1977.
2 Except for the later period starting ca. 9th century: Treydte et al. 2006; Esper et al. 2006.
3 Giosan et al. 2018; Olivieri 2020a. See also Joshi et al. 2017.
4 Spate 2019; Olivieri 2020a. For Nanga Narbat and Karakoram see also Schlütz 1999: “A further climatic deterioration started at the beginning of the younger Holocene (2700 B.P.)” (p. 124).
5 Olivieri 2020a.
6 Narasinham et al. 2019.
7 In the last few years research dedicated to Indus Civilization (ca 3000–1500 BCE) resilience to climatic change has been carried out through remote sensing such as the ERC project “TwoRains”, 2015–2021, directed by Cameron A. Petrie. The Ca’ Foscari University of Venice project is part of the 2021 SPIN program (Supporting Principal Investigators) named with the acronym “LaserChip” (“Late Antique Swat Ecology and Resilience: Climate and Habitat in Interfacial Periods”, Project 506468). The project started in November 2021 and it is directed by L.M. Olivieri.
8 Callegaro et al. 2018; Argiriadis et al. 2018; Battistel et al. 2017, 2018.

9 Barth 1956.
10 Previously known under the misleading label of "Gandhara Grave Culture" (see Vidale, Micheli and Olivieri 2016).
11 Olivieri 2019a: 231. The new radiocarbon dates (25 new AMS-C14 dates) are published in Vidale, Micheli and Olivieri 2016 and Narasimhan et al. 2019).
12 Silvi Antonini 1969; 1973; Stacul 1970; Jettmar 1995.
13 Narasinham et al. 2018: "Summary".
14 Olivieri 2019a: 252.
15 Stacul 1987.
16 Spengler et al. 2020; Spengler et al. 2021. The project on bio-archaeology of Swat is carried out with the collaboration of R. Spengler, R. Dal Martello and A. Nayak.
17 The new radiocarbon dates (26 new AMS-C14 dates) are published in Olivieri et al. 2019.
18 See Baums 2019.
19 Olivieri and Iori 2022.
20 Ongoing studies by a team directed by Ivana Angelini (University of Padova).
21 Olivieri and Iori 2020, Olivieri and Iori 2022.
22 See data in Olivieri 2020a.
23 Ali and Coningham 2007: 242.
24 Thackston 2002: 268.
25 Only for Tarsos, Babylonia, Persepolis, and Bactra. I owe this information to my colleague Luisa Prandi of the University of Verona.
26 Jettmar 1995: 36.
27 See Olivieri and Iori 2022; Coloru and Olivieri 2019.
28 Arrian, *An*. IV 28, 4: "τὰ μὲν δὴ Ὦρα καὶ τὰ Μάσσαγα φρούρια ἐποίησεν ἐπὶ τῇ χώρᾳ, τὰ Βάζιρα δὲ (τὴν) πόλιν ἐξετείχισε".
29 After the pioneering works by P. Callieri, many recent publications have been devoted to this specific moment of the history of the site: Olivieri et al. 2019; Olivieri and Iori 2019.
30 See Olivieri and Iori 2022 and Olivieri 2020b.
31 Olivieri et al. 2019.
32 Olivieri 1996: 71.
33 The book's second edition (revised) was published with a different title in 2017: *Gods and the Heretics. Crisis and Ruin of Indian Buddhism* (Verardi 2018).
34 Verardi 2011: 101, fn. 257.
35 Bagchi 1946 and Verardi 2011. Omar Coloru is studying the main element of the story, i.e the identification of Kṛmiśa and Daṃṣṭrānivāsin, the two "Buddhist" kings who opposed Puṣyamitra, with real protagonists of the Indo-Greek political history.
36 Bagchi 1946: 83–84.
37 See Coloru 2022. See also Tucci 1958: 286, fn. 24.
38 See Olivieri 2022.
39 Spengler et al. 2020; Spengler et al. 2021.
40 Smith et al. 2016. At the political climax of the Yusufzai State of Swat in 1947–1949, the census of the State was ca. 300,000 (source: Swat State archives). The State included a territory which is nowadays subdivided in three districts: Swat (the proper Swat river valley), and the then sparsely populated Shangla and Buner (to the E and S of Swat).
41 See also Schlingloff 2013.
42 Olivieri, Vidale et al. 2006.
43 Tucci 1958: 282, fn. 18.
44 Salomon 2018a: 33.
45 Olivieri, Vidale et al. 2006.
46 Hirshberg 2016: 11, fn. 27. See Doney ed. 2021.
47 Quoted in Hirschberg 2016: 12, f. 30.
48 Olivieri 2011; 2012.
49 See Verardi 2011: 106; Kennet 2013.
50 Erdosy 1990.
51 Olivieri, Vidale et al. 2006.
52 See refs in Olivieri 2020a.
53 See refs in Olivieri 2020a.

54 Tucci 1977: 67.
55 Büntgen et al. 2016; see also Whittow 2019: 361–363.
56 Büntgen et al. 2016.
57 Peregrine 2020.
58 Tucci 1977: 67–68.
59 Stein 1900 transl.: I, 171.
60 Tucci 1977.
61 Kuwayama 1976: 406–407; Kuwayama 1972, 2006, 2010.
62 At the top of the Shah-kot pass (Zalamkot; Olivieri, Vidale et al. 2006: 119–120), at Manyar (Deane 1896: 660; Filigenzi 2006; 2010; 2011), two in Dir (Abdur Rahman 1979; Meister 2010) and one at Udegram (Bagnera 2015: 40–41). There was possibly another temple at Manglawar, where an important architectural element was documented in the past (Scerrato and Taddei 1995). A reassessment of these evidence can be found in Olivieri, in press.
63 Callieri et al. 1999, Callieri, Colliva, and Nasi 2000–2001.
64 Callieri et al. 1992.
65 Olivieri 2003a, 2003b.
66 Kuwayama 1991.
67 Callieri et al. 1992.
68 Godfrey 1912.
69 Olivieri, Iori 2022.
70 See Olivieri 2020b.
71 Filigenzi 2005; 2022.
72 Hinüber 2021; Tucci 1958: 296, fn. 28. In a 15th-century Tibetan text (*deb-ther sngon-po* better known as *The Blue Annals*) Buddha himself gives a prophecy on king Indrabuthi, whose seat was located "In the northern quarter, in Śrī-Vajrasthāna, Oḍḍīyāna" (Roerich 1949: 361; the place name is not listed in Wylie 1957).
73 In Callieri 2005. The situation recalls very closely what found near Kathmandu at the site now known as Harigaon, where a Buddhist complex was seized, land property transferred, demolished, and covered by the floor of a large Vaiṣṇavite temple complex (post-749 CE; Verardi 1988; see a synthesis in Verardi 2011: 240–242, fig. 8). Another element of similarity is given by the renaming of the site, formerly Andigrāma, in the more meaningful Hindu name of Harigaon (*ibid*.: 242). The process of Sanskritization of placenames is evident also at Barikot where the established (and surviving till now) Prakrit toponym "Va(y)ira" (pronounced something like "Beira", see Baums 2019) was temporarily rebranded with the aulic and somehow redundant Sankrit form "Vajirasthāna" testified by the slightly later inscription at the time of king Jayapaladeva.
74 Filigenzi 2015: 224–225.
75 Salomon 2018b: 15–17, fig. 4. The comment between square brackets is mine. We should also add that even after the demolition of the temple, the Barikot hill continued to be visited for religious reasons by Buddhist pilgrims, as evidenced by the discovery of two clay *tsa tsa* in layers of the Ghaznavid phases.
76 Deane 1896.
77 On the Aornos and its religious backgrounds, see Tucci 1977: 52–58; Olivieri 1996. The mountain is known in Pashto as Jogiano-sar, or "Peak of the Yogins".
78 At Butkara I: Period 5, phases 1–3 (Faccenna 1980–1981); Shnaisha: Period II (see Taddei 1998); Amluk-dara I: Periods VI-VII (C14-dated to 7th–9th century: Olivieri 2019b). Amluk-dara is located 5 km south of Barikot.
79 Verardi 2011: 309.
80 Tucci 1940; Olivieri 2017.
81 Olivieri 2010: 361 (Tucci's quotations are from Tucci 1958: fn. 1, and Tucci 1977: 75).

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21

THE SILK ROAD AND THE "COTTON ROAD"

Buddhist Art and Practice Between Central Asia and the Western Deccan

Pia Brancaccio

The present paper explores how Buddhism and its art tied together two major international exchange systems in antiquity: the Silk Road and the "Cotton Road". As much as the growth of Buddhism on the Silk Road went hand in hand with the development of silk trade, I contend that the flourishing of Buddhism in the Western Deccan (modern region of Maharashtra in India) was closely tied to the production and international trade of cotton textiles – in essence we are looking at an exchange system that could well be referred to as the "Cotton Road". Between the 5th and the 7th centuries, both the Gansu corridor and the Western Deccan experienced an unparalleled flourishing of Buddhism and rock-cut architecture. The goal of the present paper is to show that a direct channel of communication existed across the Buddhist world between sites along the Silk Road and the Western Deccan. The movement of monastic and lay members of the Buddhist community who acted as agents of cultural mediation facilitated the exchange of ideas among distant regions where the phenomenon of Buddhist rock-cut architecture had become so central.

Premises: Early Buddhism, Rock-Cut Monasteries and the Establishment of the "Cotton Road"

Buddhist cave sites flourished along the western edge of the Indian Deccan Plateau between the 1st and the 7th centuries CE. In particular, at the end of the 5th century CE, the Ajanta region became the hub of an unprecedented and cohesive movement of revival of Buddhist activity that included massive expansions and renovations of the caves at Ajanta, Aurangabad, Pitalkhora, Ghatotkacha, and Banoti (Figure 21.1). These Buddhist sites were located at the crossroads of important commercial itineraries linking areas of the Deccan plateau ideal for the production cotton to major distribution centers such as the city of Ujjain to the north and the ports of Sopara, Kalyan and Baruch to the coast. The 5th-century paintings from the caves Ajanta seem to confirm that cotton was an important part of the local material cultural and was also produced in the region. The Ajanta paintings portray a great variety of textiles with careful representations of designs and color schemes (Figure 21.2), and on the left wall of cave 1 is visible an elaborate depiction of women making cotton. Buddhism was historically linked to the cotton industry in ancient India: a passage of the *Bhiksunivinaya* of the *Mahasamghikas*

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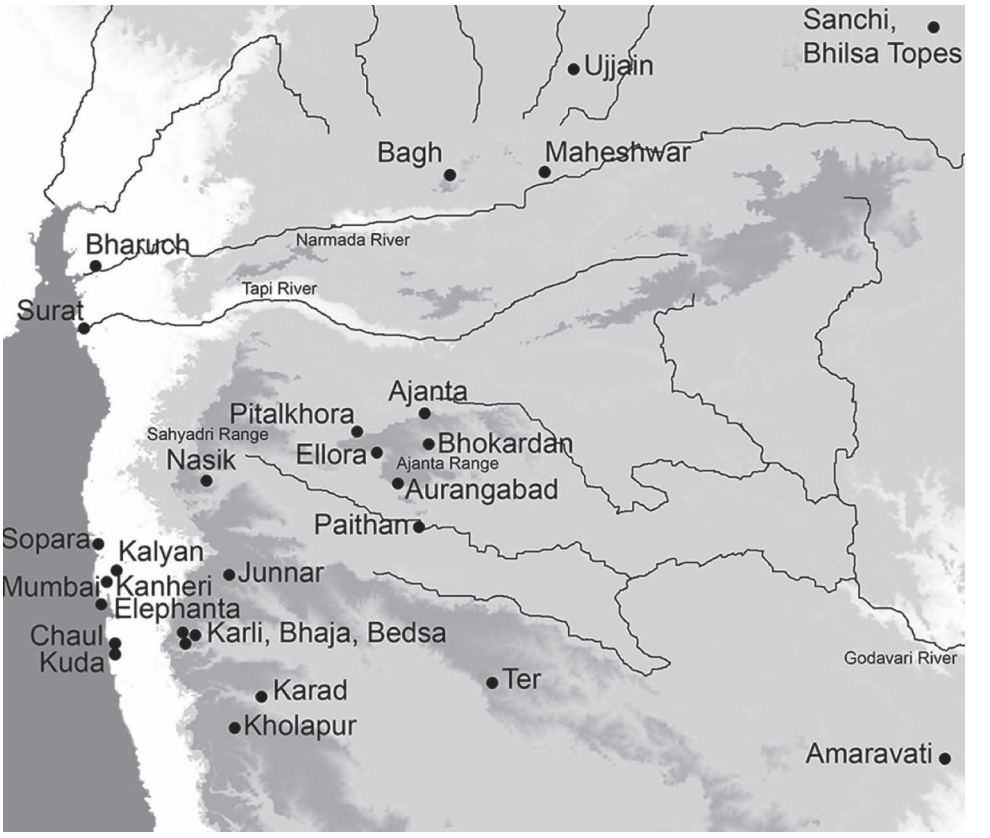

Figure 21.1 Map of Buddhist caves in Western Deccan, India.

redacted by a Buddhist school present in the Western Deccan tells us that nuns were involved in preparing and spinning cotton.[1]

The international reach of the Western Deccan cotton industry seem to have extended from the Indian Ocean to important sites along the Silk Road. Resist-dyes Indian textiles comparable to the ones depicted at Ajanta have been uncovered in the 5th-century occupation levels of the ancient port of Berenike, Egypt, involved in Indian Ocean trade since the Roman period.[2] They have also been found in Xinjiang, at the Buddhist site of Karadong (ancient Keriya) near Niya, along the southern route of the Silk Road, and at the site of Baschu situated to the north-east of Kashgar. This evidence clearly demonstrates that at the beginning of the 5th century a channel of communication existed between the "Cotton Road" and the Silk Road.

Part of the profits from this remunerative cotton trade may have been directly invested in the establishment and maintenance of the Buddhist caves. The Ajanta inscriptions tell us that the patrons of the 5th-century caves were the powerful members of the landowning Vakataka ruling elite such as king Harishena, his minister and his feudatories. Yet the financial investment required to expand and support a Buddhist site of the size of Ajanta with so many new monasteries carved in the living rock must have been enormous. The prominent sculptures of two plump *dvarapala* pouring large quantities of coins from a bag on the façade of Ajanta cave 26, aside from their allusions to auspiciousness, are surely suggestive of the abundant

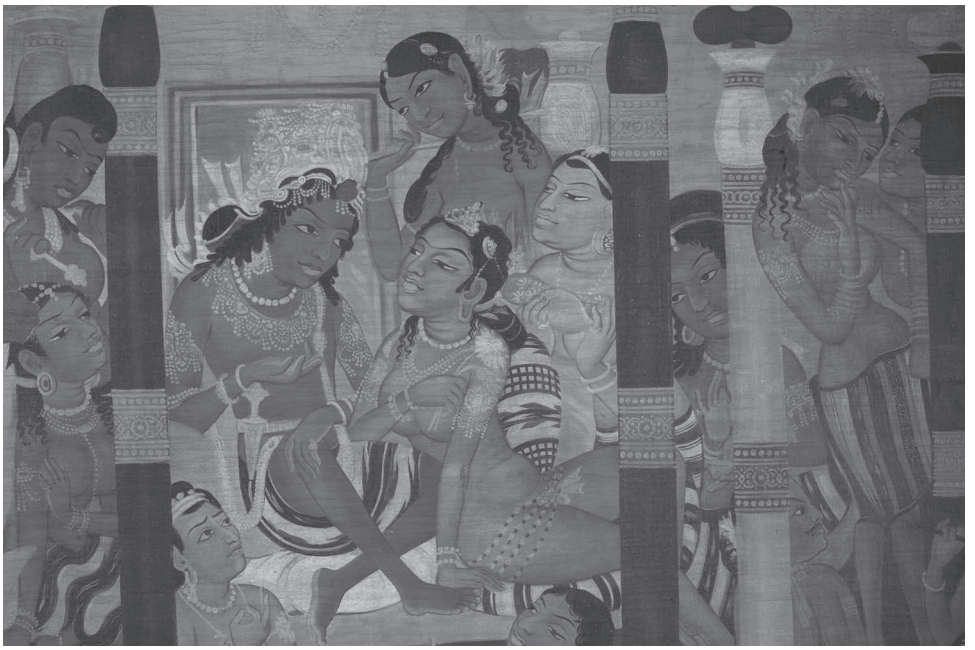

Figure 21.2 Copy of wall painting from the interior of Ajanta cave 1 made by Robert Gil, oil on canvas, 1850–54. Victoria & Albert Museum IS55–1885. @ Victoria and Albert Museum, London.

monetary wealth invested by the patrons at the site (Figure 21.3). This is not a far-fetched interpretation – on the Cantamula I pillar from Nagarjunakonda in Andhra Pradesh (end of the 2nd century CE) the representation of pile of coins is completed by an inscription associating the depiction on the pillar to an actual donation of gold coins in favor of the Buddhist establishment.[3] As coins are a way of depicting the kind of wealth probably accumulated through trade rather than agriculture, it has been proposed that Cantamula's donation in Nagarjunakonda may have actually consisted of Roman gold coins (aurei) obtained through involvement in long- distance trade.[4] Given the poor numismatic visibility of the Vakataka rulers who were among the patrons of the Ajanta caves – it looks like they did not issue a significant coinage – one wonders whether also at Ajanta the large amounts of coins represented on the façade of cave 26 may refer to foreign gold coins.

An interesting archaeological find from Ajanta caves sheds some light on this issue. In 1999–2000, while clearing the banks of the river Waghora at the feet of the caves, the Archaeological Survey of India excavated what appeared to be a built monastery. In the deposit of the last phases of life of this structure a gold coin was found: it was an issue of the emperor Theodosius II ruling the Eastern Roman Empire during the first half of the 5th century (402–450), confirming that in the 5th century long distance exchange contributed directly to the growth of the Buddhist monastery. Remarkably in China, at the complex of Buddhist caves of Xumishan in Guyuan Ningxia, have been reported comparable numismatic finds. The solidi of Theodosius II found at Xumishan seem to suggest that these two distant Buddhist sites may have been part of related long distance exchange systems. Solidi from Theodosius the II have also been found in Sogdia at Panjikent and, in Hebei, China, in a tomb at Zanhuang dated to 544 (tomb of Lixi Zong and his wife). In this particular case a coin of Theodosius II was pierced

Figure 21.3 Sculpture of a yaksha pouring coins from a bag from the façade of Ajanta cave 26.

in exactly the same way as the one found in Ajanta – the holes were pierced so that the coin could have been worn as jewelry, a practice widely established in India. If we rely on the careful numismatic studies by Michael Alram who concluded that Roman and Byzantine gold coins pierced in this particular way may have reached China via India and not directly from the West, we then can trace an important, direct connection between the Ajanta region, the Cotton Road and Chinese sites along the Silk Road and beyond. The existence of such a conduit was instrumental for the movement of monks, Buddhist ideology and artistic traditions between Central Asia and the Western Deccan.

The Cult of *Astamahabhaya* Avalokitesvara, 5th–7th Centuries

The diffusion of images of *Astamahabhaya* Avalokitesvara in Buddhist caves from the Western Deccan India constitutes an important artistic evidence of the connection existing in antiquity between the worlds of the Silk Road and the Cotton Road. The story of Avalokitesvara saving his devotees from the eight great perils is told in a number of Buddhist sources, but is especially developed in formulaic form in the 24th chapter of the *Saddharmapundarikasutra*.[5] Remarkably in India images of Avalokitesvara saving devotees occur only in the Western Deccan caves and are virtually absent from elsewhere in the subcontinent, with the exception of the Swat Valley in Gandhara. In the Western Deccan, at Ajanta alone, seven tableaux of the so-called litany are clearly visible: four are painted in caves 2, 17, 11, and upper 4, and three are sculpted in caves 4, 20, and 26.[6] One painted image of *Astamahabhaya* has been identified in Pitalkhora cave no. 3, while the most complete example is the one carved in cave 7 at Aurangabad (Figure 21.4).[7] A later sculpture of the litany can also be seen at Ellora cave 3 and at Badami. In the region of Konkan, along the coast of Maharashtra, icons of this miraculous bodhisattva are found at the Buddhist site of Kanheri in caves 2, 41, and 90. It seems that this iconographic type received also great attention along the Silk Road especially at the site of Dunhuang where the eight great miracles are painted several times in caves 333, 45, 196, 419, and 420.

The twenty-fourth chapter of the *Saddharmapundarika sutra* entitled "The Exposition of the Miraculous Transformations of Avalokitesvara, the One Who Faces in All Directions" describes the dangerous scenarios illustrated in the beautiful Avalokitesvara image from the porch of cave 7 at Aurangabad.[8] By calling the name of this *bodhisattva*, merchants at sea can be saved from shipwrecks, and those traveling in caravans can be protected from assaults of thieves. Avalokitesvara could save those who are condemned to capital punishment and those threatened by witchcraft, those hit by rocks or by a sword, those who are about to be executed or imprisoned, and those who are surrounded by frightful beasts and snakes. The *Saddharmapundarika sutra* was surely popular in both regions – the Western Deccan and the Silk Road – and it was translated in Chinese many times, the last one at the beginning of the 7th century by an Indian monk originally coming from an area not too far from Ajanta. The *Tang Gaosengzhuan* speaks of the monk Dharmagupta from Lata, a region area comprised between the lower course of the Narmada and Tapi rivers that is closely connected with the Ajanta range, who traveled via Gandhara to China and translated the *Saddharmapundarika sutra*. Buddhist monks moving across distant regions functioned as cultural mediators between the Silk Road and the Western Deccan. Best known are the Chinese monks Fa Xian and Xuan Zang who traveled from China to India respectively in the early 5th and 7th centuries, leaving us extensive and informative travelogues. Yet a great number of lesser known Indian monastics also traveled between western India, the greater Gandhara region, and the Tarim basin acting as important agents of cultural mediations. Based on a the study of the first three chapters of the

Figure 21.4 Sculpture of *Astamahabhaya* Avalokitesvara from the porch of Aurangabad cave 7.

Gaosengzhuan, a Chinese account compiled in 518 of biographies of eminent monks who established Buddhism in China, Shoshin Kuwayama was able to show in the 4th and 5th centuries quite a significant number of Indian monks traveled from India to China via Afghanistan and Khotan, and that this movement continued well into the following centuries is confirmed in the Tang Gaosengzhuan.[9]

Monks traveled along routes well established by merchants, therefore illuminating the diffusion of *Astamahabhaya* icons associated with the protections of merchants and travelers across Western Indian and the Silk Road. From the *Saddharmapundarika* it appears that the cult of the *bodhisattva* Avalokitesvara was especially widespread among merchants and

Figure 21.5 Detail from *Astamahabhaya* Avalokitesvara from the porch of Aurangabad cave 7.

travelers who voyaged by land or sea. The invocations listed in the 24th chapter of this text include a rather long description of a shipwreck in the waters of Sri Lanka. Interestingly some of these precious items described as being transported on the ship that is wrecked in the waters off Sri Lanka, such as gold, lapis lazuli, emeralds, "Musaragalvas", and corals are also enumerated in another passage of the same *Saddharmapundarika sutra* as being the "seven precious treasures" forming a *stupa* that magically appears to the *bodhisattva* Mahapratibhana.[10] As noted by Xinru Liu, the "seven precious treasures" mentioned in *Mahayana* texts consist essentially of precious items traded along the Silk Road or the Indian Ocean. Liu also remarks that the *Saddharmapundarika* contains many references to trade and traders to the point that in this text "the symbolic vehicle which carries the worshipper across to enlightenment is a bullock cart made of the seven jewels with additional silk mattresses to make it comfortable".[11]

If we examine closely the image of *Astamahabhaya* Avalokitesvara in cave 7 at Aurangabad, the scene of a shipwreck in the bottom left part seem to be especially prominent (Figure 21.5). The boat has two masts for ocean sailing and on it stands out a foreigner wearing a pointed cap and a caftan, suggesting that Central Asian merchants must have been major players in these commercial enterprises. Foreign figures appear so frequently in the Ajanta paintings dating to the end of the 5th century that they must have been part of the social scene at the time. An excellent example is the painting depicting the Buddha's descent from Trayastrimsa Heaven from Ajanta cave 17. The ethnically different characters are represented in great detail, suggesting that the painters were not simply presenting generic "foreign" types but that they were actually familiar with real people coming from Central Asia and the Iranian world. Foreign objects, along with people, made their way to the Ajanta region and became an integral part

Figure 21.6 Detail of the Visvantara *jataka* from the porch of Ajanta cave 17.

of the material culture of the ruling elite. For example, in the Visvantara *jataka* painted in the porch of cave 17 a servant from Central Asia holds a metal ewer as he offers wine to a couple; below, an Indian servant hands over a wine cup matching the fancy ewer (Figure 21.6). The artists represented these foreign objects in great detail: the drinking paraphernalia were painted brown, with thin strokes of white pigment to show that their surfaces reflected light, suggesting that the ewer and the cup were made of shiny metal. These ewers and cup, likely of Central Asian – Sogdian manufacture, must have been used by the local elite to consume wine that was also imported from far away.[12]

Among Central Asian traders, the Sogdians were recognized as the merchants *par excellence*; especially involved in silk and textile trade, between the 4th and the 6th centuries they were very active in the upper Indus region, became recognized traders in Xinjiang and the Caucasus, and established direct trade relationships with the Byzantine empire.[13] At the same time, they also became very involved in sea trade and looked with great interest to the Southeast Asian commercial networks. The Chinese pilgrim Fa Xian mentions that in the 5th century Central Asian merchants were established at Anuradhapura in Sri Lanka, and images of Central Asian donors have been found at Buddhist sites in Thailand.[14]

Of special relevance is what Cosmas Indicopleustes, a Nestorian monk, reports in 550 in his *Christian Topography* about trade in Sri Lanka and on the west coast of India: many of the products listed by Cosmas as moving across Indian Ocean commercial circuits were, in fact, those traditionally traded by the Sogdians in China. In letters recovered in 1907 by Sir Aurel Stein near Dunhuang, possibly dating to the 4th century, Sogdian merchants make reference

to handling linens and other unprocessed cloth, musk and pepper.[15] The Sogdians probably played an important role in the long distance trade of cotton textiles, the "Cotton Road". Sogdian inscriptions on the upper course of the Indus indicate that these Central Asian merchants, many of whom supported Buddhism, ventured south toward India in search of great profits, and surely some of them sailed also on the Indian Ocean.

Conclusion

The Buddhist crossover between the Western Deccan and the Silk Road likely happened thanks to the circulation of monks functioning as cultural mediators along routes consolidated by merchants. Among these merchants, Central Asian and possibly Sogdians may have played an important role. The rebirth of Buddhist sites in the Ajanta range in India thus can be reasonably related to the long distance connections built between the Cotton Road and the Silk Road during the 5th and the 6th centuries CE.

Notes

1 D. Schlingloff, "Cotton Manufacture in Ancient India." *Journal of the Economic and Social History of the Orient* 17.1 (1974), 81–90.
2 S. Sidebotham, *Berenike and the Ancient Spice Route* (Berkeley and Los Angeles: University of California Press, 2011), 243. Fragment of Z-span yarn typical of Indian cotton likely used in the manufacturing of sails have also been found at the ports of Berenike and Quseir al Qadim on the Red Sea. M. Van der Veen, *Consumption, Trade and Innovation. Exploring the Botanical Remains from the Roman and Islamic Ports of Quseir-al-Qadim* (Frankfurt am Main: Africa Magna Verlag, 2011), 90.
3 E. Rosen Stone, *The Buddhist Art of Nāgārjunakoṇḍa* (Delhi: Motilal Banarsidass Publishers, 1994), 34.
4 F. De Romanis, "Aurei after the trade: Western taxes and eastern gifts". In *Dal Denarius al Dinar: L'Oriente e la Moneta Romana [From Dinarius to Dinar: The East and Roman Currency]*, edited by F. De Romanis (Rome: Istituto Italiano di Numismatica, 2006), 77.
5 H. Kern, *The Saddharma-pundarika* (Oxford: Clarendon Press, 1884), XXIV, 406–418.
6 In addition, a few minor fragments of the icon have also been recognized by Walter Spink among the paintings in the Ajanta caves. See P. Brancaccio, "Astamahabhaya Avalokitesvara in the Western Deccan: Buddhist Patronage and trade between the 5th and 6th c. CE." In *Changing Forms and Cultural Identity: Religious and Secular Iconographies*, edited by. D. Klimburg Salter and L. Lojda (Tunhout: Brepols, 2014), I, 91–98.
7 P. Brancaccio, *The Buddhist Caves at Aurangabad* (Leiden: Brill, 2011), 160.
8 H. Kern, *The Saddharma-pundarika* (Oxford: Clarendon Press, 1884), XXIV, 406–418. It has been argued that the twenty-fourth chapter of this *sutra* had a life of its own; however, by the time it was illustrated at Ajanta at the end of the 5th century, it was already an integral part of the *Saddharmapuṇḍarīka sūtra*. See G. Schopen, *Figments and Fragments of Mahayana Buddhism: More Collected Papers* (Honolulu: Hawai'i University Press, 2005), 287–291.The twenty-fourth chapter included in the first Chinese translation of the *Saddharmapundarika* in 286 CE consisted only of a narrative describing the miracles. M.T. De Mallmann, *Introduction a l'Etude d'Avalokitesvara* (Paris: Civilizations du Sud, 1948), 93.
9 S. Kuwayama, "Pilgrimage Route Changes and the Decline of Gandhara". In *Gandharan Buddhism: Archaeology, Art and Texts*, edited P. Brancaccio and K. Behrendt (Vancouver: University of British Columbia Press, 2006), 107–134.
10 H. Kern, *The Saddharma-pundarika* (Oxford: Clarendon Press, 1884), XI, 228.
11 Xinru Liu, *Ancient India and Ancient China* (Delhi: Oxford University Press, 1987), 97–102.
12 We know that since the time of the *Periplus* special vessels were imported just for the elite. Speaking of Barygaza, this early text says: "For the king there was imported in those times precious silverware . . . and fine wine." L. Casson¸ *The Periplus Maris Erythraei* (Princeton: Princeton University Press, 1989), 81.

13 J. Lerner, "The merchant empire of the Sogdians." In *Monks and Merchants: Silk Road Treasures from Northwest China*, edited by A. Juliano and J. Lerner (New York: Harry Abrams, 2001), 222.
14 F. Grenet, "Les Marchands Sogdiens dans les Mers du Sud". In *Inde-Asie Centrale: Routes des Commerce et des idees: Cahiers d'Asie centrale* 1–2 (Tashkent and Aix en Provence: Editions Edisud, 1996), 65–85.
15 E. de la Vaissiere, "The rise of Sogdian merchants and the role of the Huns: The historical importance of the Sogdian ancient letters". In *The Silk Road: Trade, Travel, War and Faith*, edited by Susan Whitfield (Chicago: Serindia Publications, 2004), 19–23.

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22

EGYPTIAN TEXTILES AND NETWORKS OF EXCHANGE PRIOR TO AND FOLLOWING THE ARAB-ISLAMIC CONQUEST

Arielle Winnik

While study of cultural exchange along the Silk Roads has been undertaken for decades, it is only recently that scholars have emphasized the role of late antique textiles of Egypt's Byzantine (330–641), Sassanian (619–629), and early Islamic periods (641–969). Indeed, for generations, historians considered much of the rich artistic material from this era unearthed in Egypt's dry deserts to be instead provincial and wholly independent of global systems of commerce and artistic exchange. Early art historians to work on late antique and early medieval Egyptian material proposed that two "streams" of cultural and artistic production characterized the artistic culture of the period: (1) a worldly, Hellenic style of art either imported from Greek-speaking Constantinople, the capital of the Byzantine Empire, or produced in Alexandria, a city on the Mediterranean coast associated with the Hellenistic tradition, and (2) a rustic, degenerate style of art produced everywhere else in Egypt. When analyzing textiles, these scholars generally categorized textiles made of silk in the first class, whereas wool and linen textiles were of the second. New research and discoveries, however, have led to reconsideration of the role of all of Egypt – Upper Egypt in the south as well as the Delta region of Lower Egypt along the Mediterranean Sea in the north – in global artistic production and commerce. This chapter examines textiles associated with a single site, Akhmim (known in the Hellenistic and Roman-Byzantine periods as Panopolis), a city along the Nile River in Upper Egypt. I explore the textile production of Panolpolis/Akhmim to query how material produced in this seemingly remote location engaged with networks of global commerce, both before and after the Arab-Islamic conquest of Egypt in the mid-7th century. Following recent scholarship that emphasizes the dynamic role of late antique Egyptian textiles in global markets, I show that both linen-wool and silk textiles associated with Panolpolis/Akhmim engaged with the nexus of trade routes known as the Silk Roads.[1] Indeed, far from being a remote locale at the periphery of artistic production and innovation, Panolpolis/Akhmim was an artistic center where material was imported, exported, and produced. Panolpolis/Akhmim was deeply engaged with larger world systems of materials, trade, and taste.

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The Historiography of Late Antique Egyptian Textiles

As Thelma K. Thomas has shown in her study of the historiography of late antique Egyptian textiles, from the earliest excavations of these textiles in the late 19th century, distinctions of artistic achievement were based in part on fiber type and techniques of weaving.[2] Thomas demonstrates that in this early period of scholarship, most scholars argued that wool and linen tapestry weaves were of local, isolated Egyptian production, whereas compound weave silks were global products associated with the political and economic centers of the Byzantine Empire (foremost Constantinople, but for the province of Egypt, also Alexandria).[3] Despite the Austrian art historian and curator Alois Riegl's (1858–1905) argument that textiles of all materials and techniques were part of an international market of production and use, the majority of early scholars viewed silk versus linen-wool textiles as inherently different.[4] The Swiss amateur archaeologist and textile collector, Robert Forrer (1866–1947) published his collection of textiles from Panolpolis/Akhmim in two volumes in 1891, one discussing silks, the other linen-wools.[5] Forrer believed that the linen-wool textiles were produced locally in Panolpolis/Akhmim, whereas the silks were imported from cosmopolitan and Hellenic Alexandria. Several decades later, this distinction was still prevalent in the field and can be seen in two articles by the British art historian and curator John Beckwith (1918–1991), again, one on silk and the other on wool and linen.[6] Beckwith associated Egyptian textiles (which he believed were mostly wool and linen) with local production and Byzantine textiles (which in his volume were only silks) with global connections and production. Thomas notes that, "for Beckwith, 'Coptic' described local Egyptian style and implied a stylistic progression from Hellenistic (third-fourth century) to not-so-Hellenistic (sixth-seventh century and later)".[7] Thomas also observes that, in contrast to Beckwith's treatment of Egyptian textiles, he assigns Byzantine textiles, which were all silks, to unspecified Mediterranean production centers, arguing for more dispersed use and attribution.[8]

Thomas shows that it was not until 1982 that James Trilling argued linen-wool tapestry weave textiles also employed pan-Mediterranean systems of production and should be attributed to various Mediterranean centers, not only to Egypt.[9] This approach, which situates Egypt as one participant in a complex system of textile production and distribution, has become prevalent among scholars of late antique Egyptian textiles. Notably, this approach views Egypt as a participant in textile industry and trade, instead of a provincial outlier. Recent work on these objects has employed a socio-cultural approach, viewing textiles as evidence of interaction between Egypt and the rest of the Mediterranean world, both before and after the Arab-Islamic conquest of Egypt.[10]

Textile Types Associated With Panolpolis/Akhmim: *Purpurwirkereien* and Akhmim Silks

The wool and linen tapestry weave textiles known in the Germanophone world as *purpurwirkereien* (purple fabrics) are defined by a color scheme of undyed and dark purple yarns combined with distinctive patterning of interlace motifs in flying shuttle technique. Examples have been carbon-14 dated to the 3rd to 6th centuries, during Egypt's Roman-Byzantine period.[11] The imagery is sometimes combined with other motifs, as in a panel in the Victoria & Albert Museum that features a bust holding a cornucopia and an ear of corn and wearing a mural crown (Figure 22.1). In this example, the Greek word ΠΑΝΟΣ ("Panos", from "Panos polis", that is, "Panopolis" or Akhmim) is inscribed above the head. The figure is a Tyche (personification) of the city of Panolpolis/Akhmim, implying that the textile was produced there. In her

Figure 22.1 Wool and linen textile, 5th century, Victoria & Albert Museum, London. © Victoria and Albert Museum, London.

publication of late antique Egyptian textiles from the Museum Andreasstift der Stadt Worms (Germany), Dorothee Renner-Volbach attributed several subgroups of *purpurwirkereien* textiles to Panolpolis/Akhmim.[12] Because Robert Forrer, who excavated at Panolpolis/Akhmim, donated the textile collection to the museum, the textiles are assumed to have been excavated from the city's cemeteries in the late 19th century. Renner-Volbach has further assigned the textiles to various workshops in and around Panolpolis/Akhmim based on decorative features. Yet the discovery of very similar textiles in sites throughout Egypt (including the town of Karanis in the Fayum region in Middle Egypt), as well as the depiction of similar textiles in late antique Egyptian wall paintings, suggests that material using similar stylistic schemes was either produced or exported far beyond Panolpolis/Akhmim.

The "Akhmim silks", in contrast, have been carbon-14 dated to the 7th to 10th centuries. The textiles are weft-faced compound 1/2 twill silks, a weave structure known as samite. They have two-color decorative schemes. The textiles share similar compositions: large, replicated roundels filled with symmetrical images of warriors, amazons, dancers, horsemen, or plants,

Figure 22.2 Silk textile, 7th to 10th century, Metropolitan Museum of Art, New York.

or smaller roundels of images connoting abundance within ornate lattice grids.[13] Of particular note are the vegetal motifs, often referred to as trees of life, candelabras, or palmettes, which many scholars believe to be a defining feature of this textile group (Figure 22.2).[14] Thousands of these textiles appeared on the art market in the years surrounding the excavations of the necropolises of Panolpolis/Akhmim in the late 19th century. While little of this material is of confirmed provenience, scholars generally assume that the Akhmim silks were excavated at the site.[15] The group is distinct in style and iconography from silks associated with other centers of production. In particular, silks found in the necropolises of the upper Egyptian city Antinoë (also known as Antinoöpolis or el-Sheikh Ibada) strongly differ in iconography, though not in technique.[16] The Antinoë silks, which are also samites, are defined by Persian-style motifs including pearl roundels.[17] The iconographic differences in textiles of roughly the same date suggest that these Egyptian cities utilized textiles produced in different centers or obtained textiles via different trade routes.[18]

The 3rd- to 6th-century linen-wool *purpurwirkereien* and the 7th- to 10th-century Akhmim silks, then, may be associated with decidedly local use and, perhaps, production. For this reason, they provide useful case studies to explore how textiles of this city engaged with international trade. The case studies show that both before and after the Arab-Islamic conquest of Egypt, Panolpolis/Akhmim was deeply integrated with interregional – indeed, global – trade. However, the precise networks with which the city engaged were different. In comparing

Panolpolis/Akhmim silks and *purpurwirkereien* in this chapter, I do not suggest that the textiles are entirely analogous. Indeed, the silks and *purpurwirkereien* are not only from different eras, but also different markets; textiles fabricated from silk were more precious than wool-linen examples. However, analysis of textiles of different materials, techniques, and value offers insight into how different types of textiles engaged in global exchange, both before and after the Arab-Islamic conquest of Egypt.

Panolpolis/Akhmim

In order to understand how connected to interregional exchange the two textile types were, it is important to recognize the worldly nature of the city around which they were found. Panolpolis/Akhmim is located on the banks of the Nile in Upper Egypt. The history of the city is extensive; the site was occupied continuously from Pharaonic times. During the Roman and Byzantine period, the town was part of the Panopolite nome (territorial division) of Egypt. It was a bishopric from the early 4th century, indicating the city's status in the emerging Christian socio-political landscape.[19] In the 4th and 5th centuries, Panolpolis/Akhmim had a rich literary culture.[20] Indeed, several well-known poets of period, including Nonnus of Panopolis (5th century), Cyrus of Panopolis (426–441), and Pamprepius of Panopolis (440–484), lived and worked in the metropolis, and likely received their education there.[21] Panolpolis/Akhmim lay across the Nile from Sohag, the location of the famed monastic federation of St. Shenoute of Atripe (348–465). Shenoute's monastic federation, the White Monastery Federation, collected and produced important literature of religious and secular content that spread across the Mediterranean.

Extant artworks from the White Monastery Federation serve as an example of the interregional nature of artistic production in the environs of Panolpolis/Akhmim during the late antique and medieval periods. The Red Monastery Church, a part of the federation, has a late antique triconch that was painted in four phases over a period of about a hundred years, from the late 5th to the 6th or early 7th centuries.[22] It is the best-preserved example of late antique wall painting anywhere in the Byzantine Empire. Its colorful and highly ornamented style encapsulates the so-called jeweled style, renowned throughout the Byzantine Empire.[23] Close study of the paintings has led Elizabeth S. Bolman to argue that "the people who commissioned and painted this work in Upper Egypt were very much in touch with cultural and artistic trends in the wider early Byzantine world".[24] Paintings from the medieval period in the White Monastery Federation also indicate artistic connections. In 1123/4, an Armenian painter named Theodore composed an image of Christ enthroned in the eastern semidome of the White Monastery.[25] Inscriptions in both Armenian and Coptic flank the image.

The historical and artistic evidence depicts a city and its environs that were a center of artistic, literary, educational, and religious life. Returning to textiles, Panolpolis/Akhmim has been known for its textile workshops since antiquity, a characteristic that remains true to the present day. The Greek geographer Strabo (63 BCE–23 CE) mentions that the city was an important center of production of linen from pharaonic times. By the 4th century CE, extant documents refer to the city as a center of textile production.[26]

In the wake of the Arab-Islamic conquest of Egypt (641), an immediate cultural transformation did not transpire in Upper Egypt. The population stayed largely Christian, with Greek and Coptic as the most common languages. Toward the end of the 1st millennium, Arabic became more prevalent. A rare subset of Akhmim silks with inscriptions attests to this linguistic evolution. An example in the Victoria & Albert Museum, is inscribed with the

Figure 22.3 Silk textile, 7th to 10th century, Victoria & Albert Museum, London. © Victoria and Albert Museum, London.

Greek word, "ZAXAPIOY" (Figure 22.3). A later silk from the Metropolitan Museum of Art includes an Arabic inscription of the *bismillah* (an Arabic phrase that translates to "In the name of God, the Most Gracious, the Most Merciful" and is one of the most important invocations in Islam) (Figure 22.4). The difference in language testifies to the use of these textiles across centuries of linguistic change.

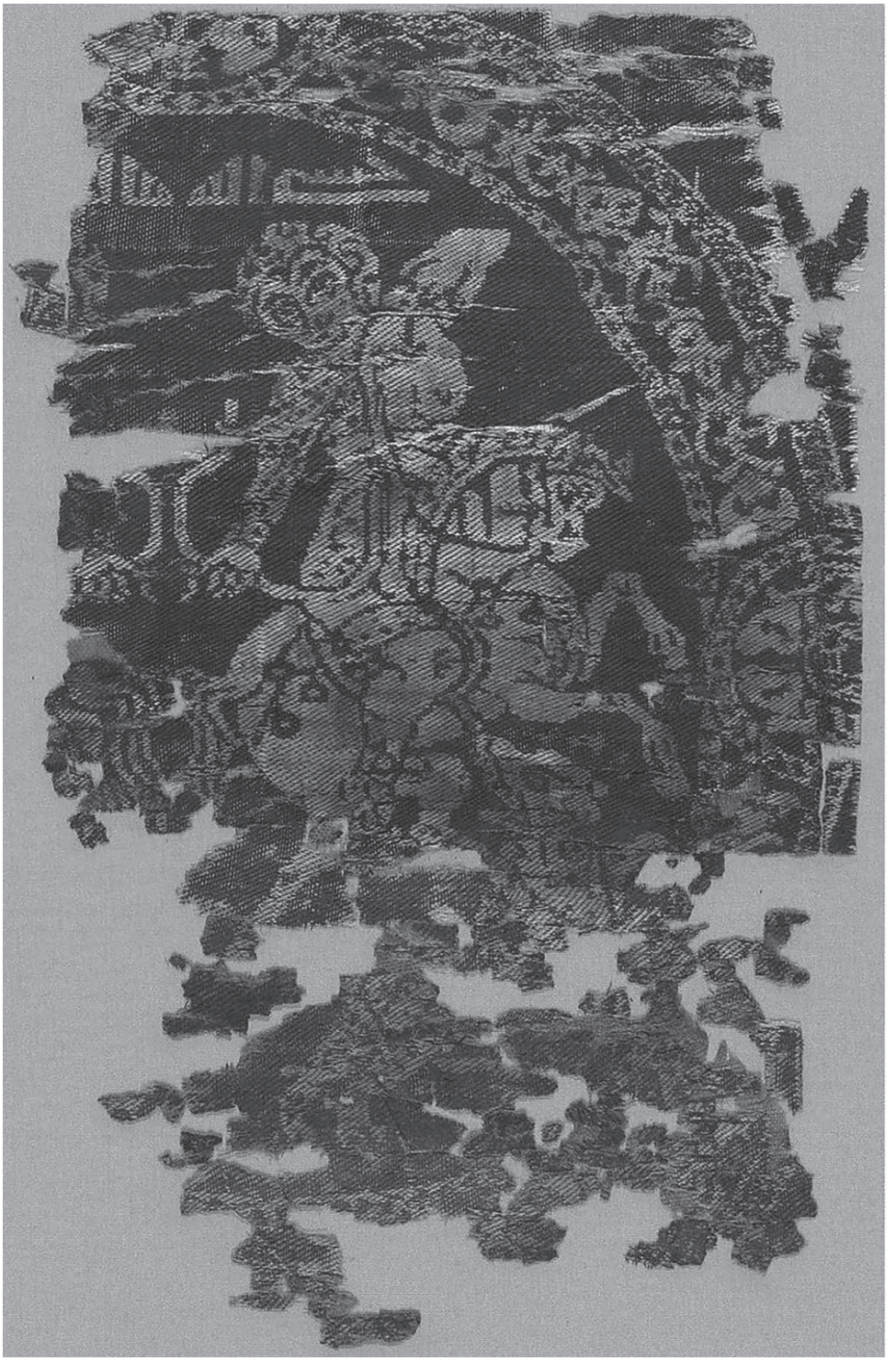

Figure 22.4 Silk textile, 7th to 10th century, Metropolitan Museum of Art, New York.

Local Attribution, Global Routes

The materials and techniques employed in the production of both *purpurwirkereien* and the Akhmim silks linked the textiles to global markets. Wool and linen were locally produced in Egypt. Indeed, both of these materials could be produced and processed on a small scale, even in a private home. Yet wool and linen textiles were also involved in commercial networks and were a core aspect of the economy. Extant papyri show that the most common items requested for making textiles include raw linen and wool to spin, or linen or wool thread to weave.[27] A 3rd-century papyrus from Oxyrhynchus in Upper Egypt demonstrates the international nature of even the local textile industry. Roger S. Bagnall notes that in a five-day period, almost 2000 garments were exported from Oxyrhynchus. Bagnall writes, "Even conservative estimation would lead to a figure of over 80,000 garments per year, representing perhaps 12,000 to 15,000 large pieces of cloth from the loom".[28] These garments may have been produced in small-scale workshops and gathered by merchants, who exported them throughout Egypt and beyond. Various areas of Egypt, including Panolpolis/Akhmim, may have produced textiles in similar quantities.

In the Byzantine period, the most prevalent garment type was a wide, boxy tunic adorned with decorative elements including *clavi* (bands running vertically down the chest from the shoulder to the waist or hem) and *segmenta* (squares and circles positioned at the shoulders or hem). While the ground of the tunics was composed of a simple tabby weave, the decorative elements were usually executed in tapestry technique. In the Byzantine period, *clavi* and *segmenta* were most often woven into the ground of the tunic at the same time as the production of the garment as a whole. Indeed, the V&A *segmentum* (Figure 22.1) is all that remains of what was once a larger textile; the edges of the tapestry woven *segmentum* are integrated into an undyed ground in tabby weave. *Purpurwirkereien* often make use of flying shuttle, a technique in which extra passes of the shuttle produce designs that appear to float over the ground. The large, boxy tunics common in the Byzantine period were woven to shape on the loom, with the arms seamlessly connected to the torso. After production, the sides of the tunic were stitched together. The looms that made these tunics had to be close to 3 m wide, suggesting that production in professional workshops with adequately large equipment was the norm.

The dyes employed in the making of the *purpurwirkereien* were connected to global trade routes. According to Mark Van Strydonck, Antoine De Moor, and Dominique Bénazeth, indigotin and madder were used to produce a rich purple hue.[29] Dyer's madder (*Rubia tinctorum L.*) is a plant that was commonly used in late antiquity to color cloth red. It is native to the Middle East and eastern Mediterranean and was only later cultivated in southern and central Europe, where it eventually became naturalized.[30] It was eventually introduced into East Asia and Africa. Dyer's madder comes from a different plant than wild madder (*rubia peregrina*) (although they are related) and has a slightly different chemical composition. Helmut Schweppe argues that some *purpurwirkereien* were colored with wild madder (in conjunction with indigo) rather than dyer's madder, though other scholars have disagreed.[31] Wild madder is not grown in Egypt and would have been imported. The precise plant source of indigotin, on the other the hand, cannot be identified through chemical analysis, because both the indigo and woad plants produce the same compound. Indigo plants (such as *Indigofera tinctoria L.*) grow in tropical and subtropical regions and beyond. Already by antiquity, indigo dye was imported to Egypt from Rome and India.[32] By the 14th century, indigo was cultivated in Egypt.[33] Woad (from the *Isatis tinctoria L.* plant), on the other hand, had been grown in Egypt beginning at least in the Roman and Byzantine periods, including in the Fayum region where textiles similar in appearance to Panolpolis/Akhmim *purpurwirkereien*

have been found.[34] The combination of these red and purple dyes produced the deep purple of *purpurwirkereien*. This color aimed to imitate Murex, also known as "true" or Tyrian purple, the famed, precious dye produced from sea snails. This luxury dye was largely produced off the coast of the Levant. Rare examples of *purpurwirkereien*, including an example from the Metropolitan Museum of Art, do contain true purple.[35]

The Akhmim silks were inherently international in their production because many of their materials were sourced from abroad. There is no evidence in this period for sericulture (the raising of silkworms for the production of silk) in Egypt. Instead, silk material was likely imported, perhaps from Syria, where silk was cultivated. Prior to the 6th century, the Byzantine Empire did not have the materials or technical knowledge to undertake sericulture. Authors such as Procopius (ca. 500–570) and Theophanes (mid to late 6th century) claimed that the emperor Justinian I (r. 527–565) sent two monks to steal silkworm eggs and smuggle them through the Sassanian Empire into Byzantine territory. While this story rings of legend rather than fact, sericulture was likely introduced to Byzantine territories in that era, and a silk industry was built up and expanded in the regions in the following centuries.[36] In particular, sericulture and moriculture (the cultivation of mulberry plants, the primary food of the silkworm) were established in the Levant. When the Arab-Islamic Umayyad Caliphate (661–750) conquered the region in the 630s, the silk industry fell into their hands. As in the Byzantine period, commerce in Panolpolis/Akhmim was served by ships traveling down the Nile, which during the Abbasid Caliphate (750–969 in Egypt) connected Panolpolis/Akhmim to the regional capital, Fustat (modern-day Cairo). Materials traveled between the Levant and Egypt on both overland and maritime routes, including through the Sinai Peninsula and the Orontes Valley (in the area at the border between modern day Syria, Lebanon, and Turkey).[37] The unprocessed silk material used to make the finished textiles may have been imported to Egypt through these trade networks.

While silk may have been imported via routes to Syria, many of the dyes employed in Egyptian textiles came from the southeast. The dyes employed in the silks included tannin (a polyphenol found in many plant fibers), redwood (a red colorant from the wood of the *caesalpinia sappan* tree, also known as brazilwood), lac (the reddish remnants of crushed *kerria lacca* insects), indigotin (the blue extract of plants of the *inigofera* genus, discussed earlier), and, in rare cases, isparag/isparak (a yellow hue from the *isparag* plant of the *euphorbiaceae* family) and madder (from the roots of *rubia tinctorum*, discussed earlier).

Tracing the prevalently used red colorants employed, redwood and lac, demonstrates the textiles' debt to international exchange. The redwood tree was indigenous to South and Southeast Asia. The species of lac used in the textiles was derived from insects native to the South Asia.[38] Both dyes probably arrived in Egypt through maritime trade across the Red Sea and Indian Ocean, with sites on the coasts of the Arabian Peninsula and the Indian subcontinent. A letter preserved in the Cairo *geniza* (a cache of documents preserved in the Ben Ezra Synagogue in Cairo) discusses the importation to Egypt of pigments to make red dyes through the Red Sea port town of Aydhab (at the border between modern day Egypt and Sudan). A merchant writes, "Please take notice that I acquired 330 pounds of lac out of the pepper, brazilwood, and lac available here in Aydhab".[39] In another document, the same letter writer says that he has secured a shipment "consisting of two bales of brazilwood, weighing two *bahars*", the equivalent of about 600 pounds.[40] Given the location of the stores of materials on the Red Sea coast, along the network of maritime trade routes between Egypt and Asia, it is likely that they had been imported from the Indian subcontinent. Egyptian traders also traveled directly to the subcontinent to bring back dyes. A group of *geniza* documents dated 1097–1098 describes merchants from Egypt and Libya purchasing lac in Nahrawara (Anhilvarah), a town north

of modern-day Mumbai in Gujarat, a coastal region of northwestern Indian along the Arabian Sea.[41] The dyes, then, suggest the use of a rich array of maritime trade routes between Egypt and locations to its south and east, including the Arabian Peninsula and the Indian subcontinent.

Finally, the looms on which the Akhmim silks were woven suggests close connections to the larger world. Samites were woven on a draw-loom (a mechanized, horizontal loom with treadles that allowed for the creation of repeat patterns). Little is known about the development of the loom used in the medieval eastern Mediterranean, but similarly complex looms producing warp-faced compound tabby weaves existed in China since the Han period (206 BCE–220 CE). Scholars have postulated various origins for the eastern Mediterranean draw-loom. John Peter Wild suggests that the horizontal loom which may have preceded it developed in Syria, at the eastern edges of the Roman-Byzantine Empire, where Chinese silks would have arrived through Silk Roads trade.[42] Rudolf Pfister similarly argued for a development of such a loom in western Asia, suggesting the loom aimed to imitate east Asian silks.[43] J.F. Flanagan, on the other hand, believed that the development of looms producing compound weaves in the eastern Mediterranean was independent of traditions originating in Asia.[44]

Networks of Distribution Beyond Panolpolis/Akhmim

While Renner-Volbach associates *purpurwirkereien* with Panolpolis/Akhmim in both production and findspot in the cemeteries of the city, textiles of similar materials, technique, iconography, and style have been excavated throughout Egypt and beyond. For example, a *purpurwirkereien segmentum* from Karanis in the Fayum region of Middle Egypt (Figure 22.5), made and used prior to the abandonment of the city in 460, has a similar knot motif and beaded border to an example in Renner-Volbach's catalog.[45] Indeed, such similarities have also been found beyond Egypt. A textile of *purpurwirkereien* excavated at Palmyra in Syria has an eight-pointed star motif that resembles examples associated with Panolpolis/Akhmim.[46] The Palymra textile has a *terminus ante quem* of 257, when the city was destroyed. Palmyra is known to be an important Silk Roads site, connecting trade routes of the Roman-Byzantine Empire in the west to those of the Sassanian Empire in the east. Material produced in various locales passed through the site en route to faraway places.

Evidence for *purpurwirkereien* is also found in the central Mediterranean region. A 4th-century mosaic in the Villa Romana del Casale near the town of Piazza Armerina in Sicily depicts three supervisors on a ship wearing off-white tunics with *clavi* and *segmenta* that resemble *purpurwirkereien* (Figure 22.6). Several of the *segmenta* contain the eight-pointed star motifs noted earlier. Additionally, in the 6th-century mosaic in Ravenna (Italy) depicting the early Byzantine Empress Theodora and her retinue, a male attendant wears a white tunic decorated with purple and white *segmenta*. The shape of the garment, color scheme, and ornamental design resemble *purpurwirkereien* associated with Panolpolis/Akhmim, though in simpler form. The mosaic, one of the finest of its era, was produced after the Byzantine reconquest of Italy from the Ostrogothic Kingdom. Textiles sharing similar visual styles to *purpurwirkereien* associated with Panolpolis/Akhmim, then, were present in prominent monuments of important centers throughout the Byzantine Empire. Rather than being associated with local and provincial style, *purpurwirkereien* can instead be understood as connected to larger networks of artistic style that intersected with imperial centers.

Figure 22.5 Wool and linen textile, 3rd to 6th century, Kelsey Museum of Archaeology, Ann Arbor.

Indeed, linen-wool tapestry weave textiles produced in Egypt have been found even further afield. The Royal Frankish graves in Cologne Cathedral (Germany) include various precious imported textiles. Along with gilded and silken textiles, the deposits yielded a tapestry-woven wool textile that is similar to late antique Egyptian examples in materials, iconography, and technique.[47] The textile was attached to a metal helmet, indicating that it served as a neck guard.[48] The textile was likely produced in Egypt or another eastern Mediterranean site and traveled to northern Europe via commercial networks. The textile is one of five tapestry weaves found in the Rhineland that appear identical to late antique Egyptian examples.[49] Late antique tapestry weave textiles, then, far from being limited to local use, were traded outside Egypt and even beyond the Mediterranean basin.

Figure 22.6 Mosaic, Villa Romana del Casale, 4th century, Sicily.

Akhmim silks, too, were distributed broadly in the late antique era. While the silks have been found in particularly large quantities in Panolpolis/Akhmim, suggesting a strong local interest or specialized production of the textiles, finds outside of Egypt attest to the material's wider dissemination. A fragment excavated in a commercial building in Avdat (in the Negev desert) is largely consistent with the Akhmim group in its materials, techniques, and imagery.[50] The textile has a *terminus ad quem* of 636, the date of the destruction of Avdat, and therefore dates to the early range of Akhmim silks. Three fragmentary pieces form a thin band, part of an appliqué that likely decorated a garment. Like the Akhmim silks, the textile is bicolor: it has yellow decoration on a red ground and a partial border with red decoration on a yellow ground. The motifs include the same lozenges and floral devices as silks from the Akhmim group. In particular, the Avdat silk preserves the top half of a rosette motif that is characteristic of textiles associated with Panolpolis/Akhmim. The samite structure is identical to Akhmim silks. However, the Avdat example also displays differences from silks attributed to Panolpolis/Akhmim. At the border, the bicolor scheme inverts: the border is of yellow background with red motifs, while the inside of the textile is of red background with yellow motifs. This is not a characteristic feature of silks excavated from Panolpolis/Akhmim. Moreover, the border decoration is in the form of trefoil motifs, which are not typical of Panolpolis/Akhmim silks, but are instead found on examples from *Antinoë*.

The Avdat silk should be considered alongside other silks that share features with the Panolpolis/Akhmim group but have stylistic differences. In her publication of silks associated with Panolpolis/Akhmim in the Musée Historique des Tissus in Lyon, Marielle

Martiniani-Reber includes two examples that are related, but not identical to the Akhmim silks.[51] These textiles have similar decoration, but identical technique to the Akhmim group. Interestingly, these two silks do not have the typical provenance of silks thought to come from Panolpolis/Akhmim; specifically, they were not purchased by collectors in the years around 1885–1886, the time of the unearthing of the necropolises of Panolpolis/Akhmim. Instead, these silks were preserved in French church treasuries, where they probably arrived in the medieval period through trade, plunder, or diplomatic exchange. Taking into account the Avdat and the Lyon silks, we can see that those silks with similar, but somewhat atypical features to the Panolpolis/Akhmim group were not excavated from the burying grounds of Panolpolis/Akhmim. This does not, however, suggest the related finds had no links with the Akhmim silks. Avdat had strong trade links with Egypt. The city served as a caravan stop on a road between Egypt and Syria.[52] The Avdat silks demonstrate that silks from Panolpolis/Akhmim may have been more stylistically similar to silks from other production centers than previously thought. The stylistic similarities show artistic engagement and connections between Panolpolis/Akhmim and other centers of textile production. Silks associated with Panolpolis/Akhmim, then, although perhaps local in production and use, were actually part of a global network of textile production, use, and inspiration.

Conclusion

Textiles with stylistic elements associated with Panolpolis/Akhmim were of different materials, techniques, and varieties of "local" versus "global" production. Yet whether of linen-wool or silk, whether woven on a draw-loom or in tapestry technique, these textiles were products of a wide-reaching economy and interregional system of aesthetic taste and fashion. The case studies associated with Panolpolis/Akhmim show that, even with local production and use, textiles were global in their materials, stylistic schemes, and distribution. This was true both prior to and following the Arab-Islamic conquest of Egypt in 641, and for material produced in both linen-wool and silk. Prior to the Islamic conquest, the textiles of Panolpolis/Akhmim engaged mostly with repertoires in and around the Mediterranean basin, though examples of similar materials and technique were distributed as far as the Rhineland in northern Europe. Following the Arab-Islamic conquest, engagement with Red Sea trade routes expanded.[53] Both prior to and following the Arab-Islamic conquest of Egypt, the evidence indicates connections with northern Europe, whether through diplomatic exchange, trade of ready-made textiles, or plunder.

Notes

1 E.g. Thelma K. Thomas, "Perspectives on the wide world of luxury in later Antiquity: Silk and other exotic textiles found in Syria and Egypt," in *Silk: Trade and Exchange Along the Silk Roads Between Rome and China in Antiquity*, ed. Berit Hildebrandt with Carole Gillis (Oxford: Oxbow, 2017), 51–81, and additional sources cited here.

2 Thelma K. Thomas, "Coptic and Byzantine Textiles Found in Egypt: Corpora, Collections, and Scholarly Perspectives," in *Egypt in the Byzantine World, 300–700*, ed. Roger S. Bagnall (Cambridge; New York: Cambridge University Press, 2007), 137.

3 Tapestry weave is a painterly technique in which the maker weaves weft threads into the desired iconography, using the threads only where they are needed and usually not running them across the entirety of the warp. Compound weave silks of this period are pattern weaves, produced on complex, mechanized looms.

4 Alois Riegl, *Die Ägyptischen Textilfunde Im K. K. Österreich Museum* (Wien: R. v. Waldheim, 1889). Thomas, "Coptic and Byzantine Textiles Found in Egypt," 145.

5 Robert Forrer, *Versuch einer Classification der antik-koptischen Textilfunde* (Strasburg: N. p., 1889); Robert Forrer, *Die Graeber- und Textilfunde von Achim-Panopolis* (Strasburg: E. Birkhäuser, 1891); Robert Forrer, *Römische und byzantinische seiden-textilien aus dem gräberfelde von Achmim-Panopolis* (Strasburg: E. Birkhäuser, 1891); Thomas, "Coptic and Byzantine Textiles Found in Egypt," 144–145.

6 John Beckwith, "Coptic Textiles," in *Studies in Byzantine and Medieval Western Art* (London: Pindar Press, 1989), 1–36. John Beckwith, "Byzantine Tissues," in *Studies in Byzantine and Medieval Western Art* (London: Pindar Press, 1989), 37–70; Thomas, "Coptic and Byzantine Textiles Found in Egypt," 146.

7 Thomas, "Coptic and Byzantine Textiles Found in Egypt," 146.

8 Thomas, "Coptic and Byzantine Textiles Found in Egypt," 146.

9 James Trilling, *The Roman Heritage: Textiles from Egypt and the Eastern Mediterranean, 300–600 A.D.* (Washington, DC: The Textile Museum, 1982). Thomas, "Coptic and Byzantine Textiles Found in Egypt," 149.

10 David Jacoby, "Silk Economies and Cross-Cultural Artistic Interaction: Byzantium, the Muslim World, and the Christian West," *Dumbarton Oaks Papers* 58 (2004): 197–240; Sabine Schrenk and Regina Knaller, *Textilien des Mittelmeerraumes aus spätantiker bis frühislamischer Zeit*, vol. Bd. 4, Textilsammlung Der Abegg-Stiftung (Riggisberg: Abegg-Stiftung, 2004); Thelma K. Thomas, "'Ornaments of Excellence' from 'the Miserable Gains of Commerce' Luxury Art and Byzantine Culture," in *Byzantium and Islam: Age of Transition, 7th–9th Century*, eds. Brandie Ratliff and Helen C. Evans (New York; New Haven: Metropolitan Museum of Art, 2012), 124–134.

11 Mark Van Strydonck, Antoine De Moor, and Dominique Bénazeth, "^{14}C Dating Compared to Art Historical Dating of Roman and Coptic Textiles from Egypt," *Radiocarbon* 46.1 (2004): 238.

12 Dorothee Renner-Volbach, *Die sogenannten koptischen Textilien im Museum Andreasstift der Stadt Worms* (Wiesbaden: Reichert Verlag, 2002).

13 Scholars disagree on the defining features of this group. On this point, see Arielle Winnik, "Toward a Grammar of Textiles: A Reconsideration of Medieval Silk Aesthetics and the Impact of Modern Collecting," *The Textile Museum Journal* 44.1 (2017): 13.

14 Antoine De Moor, Sabine Schrenk, and Chris Verhecken-Lammens, "New Research on the So-Called Panolpolis/Akhmim Silks," in *Textiles in Situ: Their Find Spots in Egypt and Neighbouring Countries in the First Millennium C.E.*, ed. Sabine Schrenk (Riggisberg, Switzerland: Abegg-Stiftung, 2006), 85–94.

15 Cäcilia Fluck, "Akhmim as a Source of Textiles," in *Christianity and Monasticism in Upper Egypt I*, ed. Gabra Takla (Cairo: American University in Cairo Press, 2008), 212–213. See also, Winnik, "Toward a Grammar of Textiles," 13.

16 Thomas, "Ornaments of Excellence," 132.

17 On this material, see Florence Calament and Maximilien Durand, eds., *Antinoé, à la vie, à la mode: visions d'élégance dans les solitudes* [exposition Lyon Musée des tissus du 1er octobre 2013 au 28 février 2014] (Lyon: Fage, 2013).

18 Thomas, "Ornaments of Excellence," 132.

19 Peter Grossman, "Panolpolis/Akhmim," in *Oxford Dictionary of Byzantium*, ed. Alexander P. Kazhdan (Oxford: Oxford University Press, 1991).

20 Grossman, "Panolpolis/Akhmim."

21 Alan Cameron, "Poets and Pagans in Byzantine Egypt," in *Egypt in the Byzantine World*, ed. Roger S. Bagnall (Princeton: Princeton University Press, 1996), 34.

22 Elizabeth S. Bolman, "Figural Styles, Egypt, and the Early Byzantine World," in *The Red Monastery Church: Beauty and Ascetism in Upper* Egypt, ed. Elizabeth S. Bolman (New Haven: Yale University Press, 2016), 163.

23 Elizabeth S. Bolman, "A Staggering Spectacle: Early Byzantine Aesthetics in the Triconch," in *The Red Monastery Church: Beauty and Ascetism in Upper* Egypt, ed. Elizabeth S. Bolman (New Haven: Yale University Press, 2016), 119–128. On this style in Roman-Byzantine literature and art, see Michael Roberts, *The Jeweled Style* (Ithaca: Cornell University Press, 2018).

24 Bolman, "Figural Styles, Egypt, and the Early Byzantine World," 156.

25 Elizabeth S. Bolman, "A Medieval Flourishing at the White Monastery Federation: Material Culture," in *The Red Monastery Church: Beauty and Ascetism in Upper Egypt*, ed. Elizabeth S. Bolman (New Haven: Yale University Press, 2016), 209.

26 Fluck, "Akhmim as a Source of Textiles," 211.

27 Roger S. Bagnall, *Egypt in Late Antiquity* (Princeton: Princeton University Press, 1993), 43.
28 Bagnall, *Egypt in Late Antiquity*, 83.
29 Van Strydonck et al., "^{14}C Dating Compared to Art Historical Dating," 235.
30 Dominique Cardon, *Natural Dyes: Sources, Tradition, Technology and Science* (London: Archetype Publications Ltd, 2007), 108.
31 Cardon, *Natural* Dyes, 123.
32 Antoine de Moor, Chris Verhecken-Lammens, and André Verhecken, *3500 Years of Textile Art* (Tielt: Lanoo, 2008), 89.
33 Harby Ezzeldeen Ahmed, "History of Natural Dyes in North Africa 'Egypt'," in *Handbook of Natural Colorants*, eds. Thomas Bechtold and Rita Mussak (Chichester: John Wiley & Sons Ltd., 2009), 28.
34 Ahmed, "History of Natural Dyes in North Africa 'Egypt,'" 28.
35 MMA 89.18.43.
36 It is probable that Byzantium already manufactured silk textiles through imports of raw materials prior to this period. Jacoby, "Silk Economics and Cross-Cultural Artistic Interaction," 198.
37 Amira K. Bennison, *The Great Caliphs: The Golden Age of the 'Abbasid Empire* (New Haven: Yale University Press, 2010), 142.
38 Cardon, *Natural Dyes*, 657.
39 S.D. Goitein, *Letters of Medieval Jewish Traders* (Princeton: Princeton University Press, 1973), 199.
40 Goitein, *Letters of Medieval Jewish Traders*, 199.
41 Cardon, *Natural Dyes*, 664.
42 John Peter Wild, "The Roman Horizontal Loom," *American Journal of Archaeology* 91.3 (July 1987): 470.
43 Rudolf Pfister, *Textiles de Palmyre* 3 (Paris: les Éditions d'art et d'histoire, 1940), 75–84; Wild, "The Roman Horizontal Loom," 471.
44 J. F. Flanagan, "Review of Textiles de Palmyre: Découverts par le Service des Antiques du HautCommissariat de la République Française dans la Nécropole de Palmyre by R. Pfister," *The Burlington Magazine for Connoisseurs* 67.389 (1939): 92–93; J. F. Flanagan, "Textiles from Palmyra," *The Burlington Magazine for Connoisseurs* 85.496 (1944): 179; Wild, "The Roman Horizontal Loom," 471.
45 Renner-Volbach, *Die sogenannten koptischen Textilien*, cat. no. 7.
46 On the Palmyra textile, see Trilling, *The Roman Heritage*, 105. On the Panolpolis/Akhmim example, see Renner-Volbach, *Die sogenannten koptischen Textilien*, cat. nos. 1, 2, and 5.
47 Lise Bender Jørgensen, "A Coptic Tapestry and Other Textile Remains from the Royal Frankish Graves of Cologne Cathedral," *Acta Archaeologica* 56 (1987): 85–100.
48 Jørgensen, "A Coptic Tapestry and Other Textile Remains from the Royal Frankish Graves of Cologne Cathedral," 87.
49 Jørgensen, "A Coptic Tapestry and Other Textile Remains from the Royal Frankish Graves of Cologne Cathedral," 91.
50 On this textile, see Alisa Baginski and Amely Tidhar, "A Dated Silk Fragment from 'Avdat (Eboda)," *Israel Exploration Journal* 28.1/2 (1978): 113–115.
51 Marielle Martiniani-Reber, *Lyon, musée historique des tissus: Soireries sassanides, coptes et byzantiunes V^{e}-XI^{e} siécles* (Paris: Ministére de la Culture et de la Communication Editions de la Réunion des musés nationaux Paris, 1986), cat. nos. 67 and 69.
52 Baginski and Tidhar, "A Dated Silk Fragment from 'Avdat (Eboda)," 115.
53 This not to say that these trade routes did not exist prior to the Islamic conquest. See, e.g., Grant Parker, "Topographies of Taste: Indian Textiles and Mediterranean Contexts," *Ars Orientalis* 34 (2004): 19–37.

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23

SINO-ARABIAN ECONOMIC AND CULTURAL EXCHANGES FROM THE 8TH TO THE 15TH CENTURIES

Ran Zhang and Lin Meicun

Introduction

The maritime zone between China and the Islamic world, as well as their respected hinterlands at the two ends of Asia, encompasses some of the most crucial archaeological evidence of the economic and cultural exchanges of the early globalization from the 8th to the 15th centuries. It is not by chance that a large number of consistent settlements and a large quantity of archaeological cultural materials were seen in this vast territory. Those remains, in certain cases, were represented and also were characterized by the cultural influences, economic trade and political conflicts between the countries during the centuries.

It is difficult to well-define the Silk Road and Maritime Silk Road. This is because, on the one hand this early globalization stage was involved in a complicated history with the massive exchanging activities via both land routes and sea lanes from the 8th to the 15th centuries; and meanwhile information on the commercial activities has been increasing as the historical and archaeological research outcomes have come out year by year, and are reshaping our understanding toward to the definition of the Silk Road.

By no means has this chapter aimed to an all-inclusive research of the Sino-Arabian exchanging activities from the 8th to the 15th centuries. Mainly based on the historical records and archaeological evidence, the authors suggest a sketched pattern of the development of economic and cultural exchanges between China and the Islamic world. As one of the most ideal archaeological materials in terms of maritime trade studies, Chinese ceramic finds from the western Indian ocean are large in quantity, well-dated and well-identified. As a proxy it can provide us with a comparable and consistent pattern to explore the developments of economic changes. Beyond Chinese ceramics, other archaeological materials, such as incense, ceramic wares and jewelries, are also discussed. Different from ceramic commodities, these luxury items not only can reveal the elite-life trading between China and the Islamic world, but also indicates the cultural exchanges between them. Indeed, the accumulation of archaeological evidence for the Sino-Arabian exchanges has now reached a point where is possible to attempt to sketch the development and change of the exchanging activities between China and the Islamic world from the 8th to 15th centuries CE.

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The Shift From the Silk Road to the Maritime Trading Routes

The archaeological evidence the Silk Road and its trade can go back to and earlier than the Zhang Qian's voyages to the Western Regions in the Western Han dynasty. The Silk Road played an important role in terms of economic and cultural exchanges between China and the Central Asia for many centuries until the 9th century CE.[1] The prosperity of the Silk Road was due to many different reasons. From the standpoint of Chinese economic and political background from the 2nd century BCE to about the 9th century CE, the North China was definitely the core area of the Chinese civilization. In the Han dynasty, the word "south" means nowadays Yangtzu River Valley, and it referred to an undeveloped and barbarous area with poisonous plants and beasts. Till the middle and late of Tang dynasty (8th to 9th centuries), the core area of South China was clearly pushed southwards to the area in nowadays Guangdong and Guangxi provinces. The Yangtzu River Valley became the agricultural base of China with vast tax incomes. As the official and scholar Han Yu mentioned: "Nine-tenth of the tax revenue of China come from the Jiangnan area of the South"[2]. This historical-landscape change tells that the economic center of China was moved southwards, and South China with a prosperity of agriculture and economy provided the maritime trade with a developed hinterland.

The development in south China cannot be the only reason for the shift from the Silk Road to the Maritime Trading Road. The political instability, including the loss of the Talas Battle to the Abbasid Caliphate (751 CE), the rebellions of the north Chinese local authorities and many attacks to the Capital of Tang China, the Chang'an City, by the rebels, were also influential triggers for this shift.

During the reign of Tang Xuanzong (712–756 CE), Tang Chinese territory reached its maximum. Then, just few years before the death of Xuanzong, Chinese armies lost the Battle of Talas, the first war between China and the Islamic empire.[3] Historical records cannot provide a precise number and scale of the losses on the side of China, but it appears that no fundamental harm or destruction was suffered by the Tang military, political and economic power inside China, especially in the North China. This battle also brought about a limited positive impact for the victorious Abbasid Caliphate, where it is simply recorded via the description: "decisive defeat of Tang China".[4] In general the loss of the Talas Battle had a negative impact on the Tang Chinese geopolitical economy, that is to say that Tang military power in Central Asia began to decline gradually.

Losing control of the Silk Road was not simply due to this battle, which has even been described as more of a "skirmish".[5] Another important event, the An Lushan Rebellion, strongly influenced and fundamentally limited Chinese control of the land trade route and also the economic patterns of China. In the middle of the 8th century, the famous An-Shi rebellion greatly weakened the Tang China and its political, economic and agricultural powers in the North China. The Tang Emperor, Xuanzong, fled to Sichuan from the Capital Chang'an when the rebels closed in. Many populations in the North China also had fled at the approach of the rebels since 756 CE. The Chinese military troops who were defending in the Western Regions had to run back to attempt to crush the rebellion. Therefore the Silk Road was abandoned and the Tang Chinese Western Regions were occupied by Tibet.[6] At least from 790 CE, the Tang central court lost most of the control over the Silk Road and the Western Regions.[7]

The geographical features of South China have both advantages and disadvantages for maritime trade. Advantages are that three provinces from Zhejiang to Guangdong encompass over half of the whole Chinese coastal lines, with thousands of natural islands and bays for ship-docking.[8] In particular from the 8th century CE, the natural port cities in southern China grew in size and importance and large-scale maritime trade from China to the Persian Gulf

via the Indian Ocean started in about 800 CE.[9] The disadvantages are also clear. These three provinces mentioned earlier are all in the hilly zone of China, thus the coastal regions have few fine land/river routes of transportations from the littoral areas and port cities to the hinterland and the North of China.[10]

In the 7th century, as a Chinese official Cui Rong described, the Grand Canal built by Emperor Yang of Sui (604–618 CE), linked almost every region of China.[11] It should be noted that the Grand Canal was not always in function, particularly before the middle of the 8th century CE. In the early part of Tang dynasty, north China had a full of the food supply by local agriculture in the Guanzhong Area as well as that of the North China Plain. After the An Lushan rebellion, however, when most of the North Chinese rebels and independent military governors withheld food supply from the capital, the only source of additional grain for the Tang capital was South China. Consequently, the Grand Canal had eventually been a useful supplement and even the national lifeline for the Tang China.[12]

The economy and culture of the Tang rule were partly damaged by the An-Shi Rebellion, the loss of the Talas Battle and the lost-control of the Western Regions. When the industry and economy of northern China were ruined during the rebellion,[13] the economic centre moved to the south, which was the turning point in the development of the Tang exporting trade.[14]

The Shift of Maritime Trading Roads in the Western Indian Ocean

The maritime trade for both China and the Middle Eastern civilizations could trace back to the 2nd century CE at least. Although the maritime trade route from the Gulf to China existed during the Sasanian period,[15] it was not always in prosperity,[16] and meanwhile the landed Silk Road played a more important role in trade between the East and West. This has been suggested by archaeological studies on the distribution of Sasanian silver coins in China, where nearly 2000 Sasanian coins have been found with the majority unearthed in the modern province of Xinjiang and in northern China.[17] In total, 468 coins date to the Peroz period (459–484 CE) and most were unearthed from 18 tombs dating from the 5th to the early 8th centuries in the North China. In contrast, only three tombs dated to the late 5th century, yielding no more than 20 coins, have been found in Guangdong in the South China.[18] This may tell that both land and maritime routes between China and the Near East were established, but the land route obviously played a rather crucial role in exchanging.

From the 7th century and onward, with the rise of the Abbasid Caliphate, the maritime zone between China and the Islamic world was mainly in the hands of Arab merchants. The Islamic expansion of trade in the Indian Ocean involved China from that time and onward, while traditional land route-based trade gradually declined, as it has been mentioned earlier. During the 8th to 10th centuries, the Gulf played a leading position as the trading center that connected China, India, Africa, and the Mediterranean.[19] This was supported by a massive state-sponsored canalization program, which brought the unutilized land into use for the first time.[20] While in the 8th century CE, the newly founded capital of the Abbasid Caliphate, Baghdad, was developed into a true commercial emporium, the port city of Basra linked to port cities, such as Siraf and Sohar.[21] Basra was described by al-Mansur as: "This is the Tigris, there is no obstacle between us and everything on the sea can come to us on it".[22]

Hourani suggests that no Chinese merchant ships traded between China and the Gulf during the 8th and 9th centuries,[23] in spite of the record in *The Accounts of China and India* informs that "Chinese Ships (al-Sufun al-Ṣīnīyah)" were trading in the Gulf.[24] However, the description of the structure of these 'Chinese ships' actually better fits the characteristics of dhows, the indigenous boats that come from Arabia, Persia, and India and which sailed the Indian Ocean,

rather than Chinese built ships.[25] Geographical knowledge of the Tang time was limited to the information from foreign traders. Although the mapping of Indian Ocean trade and travel routes was initially performed by a Tang Chinese minister and geographer, Jia Dan, he collected information based on the descriptions of Arab merchants without actually visiting any foreign countries.[26]

Chinese travelers, monks, and officials all visited India and the Near East via sea-routes during the Tang period. The Tang Chinese monk, I-Ching, visited India boarding on an Arab merchant ship in 671 CE.[27] A Chinese general, Du Huan, taken prisoner in the Battle of Talas, traveled back from *Abbasid Caliphate* to Guangzhou by a merchant ship in 762 CE.[28] In terms of the official visit, the mission of Yang Liangyao, a Tang Chinese ambassador to the Abbasid Caliphate, had been well-recorded on a stone stela unearthed in front of his tomb in Jingchuan County in Shaanxi Province (Figure 23.1). The inscription of this stela provided us with some new archaeological evidence and might be helpful to further understand Chinese official visits to the Gulf.[29]

Limited archaeological evidence partly supports this point through the Belitung shipwreck, which is the earliest archaeological find of a trade ship in the Indian Ocean that dated to the 9th century.[30] This wreck has been confirmed as belonging to Arab merchants (Omani, Yemeni or Iranian),[31] and was probably built in Arabia or in India, but it was full of Chinese cargo. It contained over 67,000 pieces of Tang Chinese artefacts, including about 58,000 pieces of Chinese ceramics and nearly seventy pieces of metalwork and other luxuries (Figure 23.2).[32] Once again there was nothing on the ship to indicate that Tang Chinese merchants participated in the Indian Ocean trade.

This archaeological discovery verifies that the Belitung shipwreck followed the Arab shipbuilding traditions. The Arab people living in the coastal areas of the Indian Ocean had an ingenious invention of sewn up wooden ship for ocean-going voyages. The seams in the hull were filled with a fixture of fibre and oil to ensure water tightness and firmness of the vessel. The famous Arab navigator Sinbad sailed as far as Guangzhou in China with a sewn-up wooden ship (Figure 23.3). The sewn-up wooden ship was pliable, more capable of withstanding impact from reefs than ships of rigid bottom, and easy to repair, so that it was plied far and wide to the Madagascar Island and Sri Lanka on the Indian Ocean and the areas of Southeast Asia, even to the Hainan Island of China, thus rated as one kind of fine ships with unique features in the ancient world.

From the late 9th century, this trading trend sharply changed. In China the Tang dynasty prosperous maritime trade was interrupted by the Huang Chao Rebellion (877–880 CE). Muslim merchants were massacred in Guangzhou following an attack by Huang Chao's armies. No Chinese historical literature records this event but it can be found within Arabic accounts.[33] According to one Arabic writer, "In 877 CE, Huang Chao killed one hundred and twenty thousand people including Muslims, Christians, Jews and Zoroastrians who had sought refuge in the city (Guangzhou)".[34] This led to a decline in the maritime activities of Arab merchants in the late Tang period and subsequently ships from the Islamic world began to meet the Chinese halfway on the Malay Peninsula.[35] In the middle of the 10th century (945 CE) the weakening of the power of the Abbasid Caliphate is manifested through the conquest of Baghdad by the Buyid dynasty. Shortly afterwards a well-documented earthquake in 977 CE badly destroyed Siraf,[36] and it significantly reduced the importance of the city in the Indian Ocean trade from the 11th century CE onward.[37]

It should be noted that the decline of the role of Guangdong and Siraf in the Indian Ocean trade occurred over a long period of time, from the 9th to the 11th century, and could be attributed to a complicated historical process rather than a solo event, such as the Huang Chao

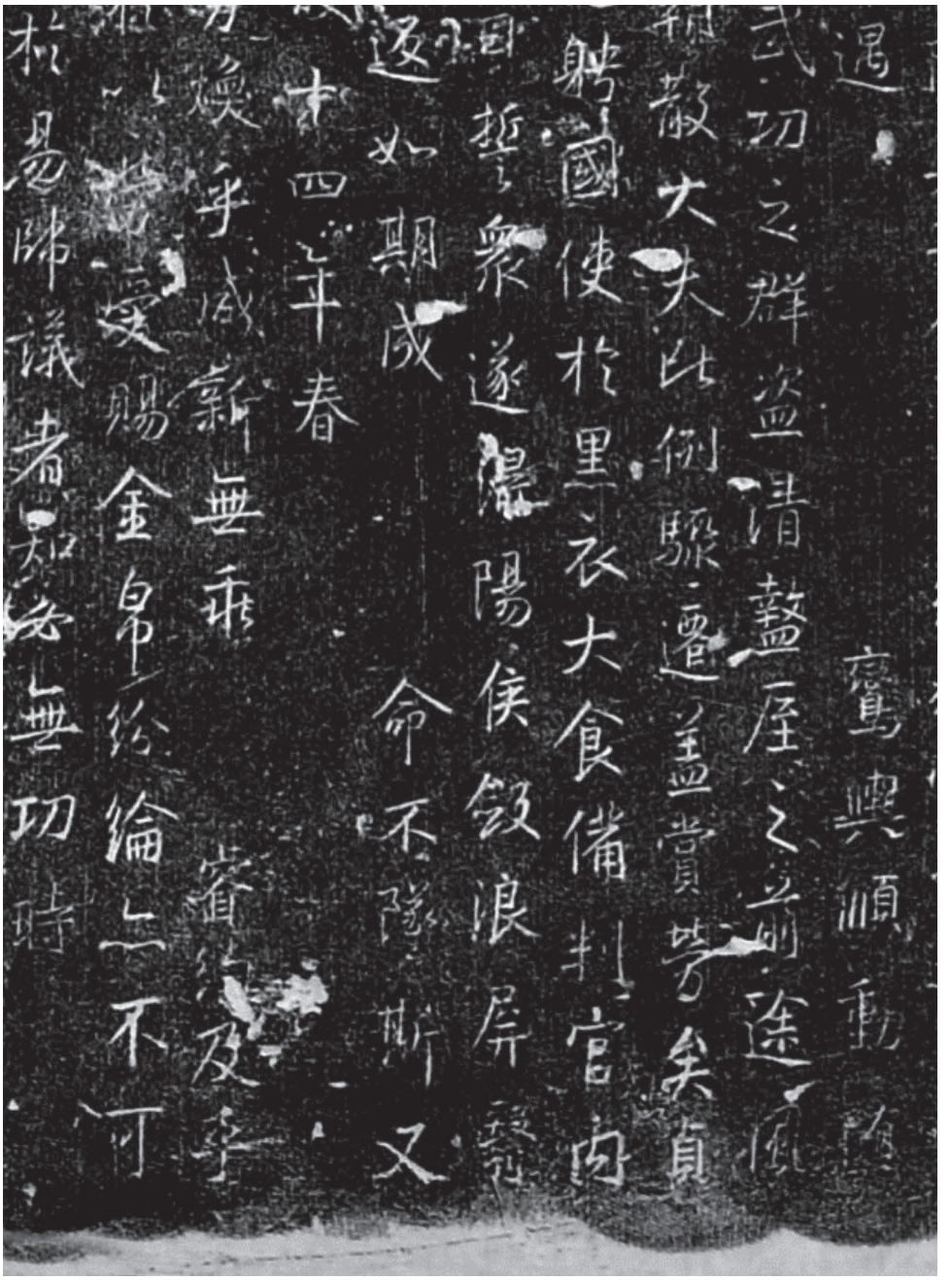

Figure 23.1 Part of the inscription from the Yang Liangyao grave stela (photo courtesy of Zhao Liguang).

Figure 23.2 A blue and white ceramic dish from the Belitung shipwreck (photo by Lin Meicun).

Figure 23.3 A modern replica of the Arabian sewn up wooden ship (photo by Lin Meicun).

Rebellion in China or the earthquake in Siraf. These events could not solely cause such a significant change in the trade between China and western Asia. The political and economic changes in the Abbasid Caliphate played a greater role in changes to maritime trade across the Indian Ocean. The Huang Chao Rebellion, in fact, resulted in the formation of a new networked trade which relied on segmented trade routes which replaced the old form of a single sea passage trade from the Persian Gulf to China.[38]

Although it is been believed that the town centre of Siraf was already declining by the 10th century, it can be seen that there was a gradual decline as it was still involved into the long-distance trade from China to the Gulf all the way to the 13th century. Archaeological excavations revealed that Chinese ceramics, such as Longquan celadon date to the later period of the 14th century.[39] Although the quantity of these goods from the east had decreased, this nevertheless demonstrates that Siraf continued to be involved in Indian Ocean trade.[40] Meanwhile, the great trading city of Sohar, in Oman, also declined during the period of about the 10th century.[41]

Behind this gradual decline at Siraf were changes of traders from the empire of the Abbasid Caliphate as well as states of Oman, Aden and the Fatimids in Egypt.[42] During the period from the late 10th century to the 15th century, the political and religious traditions and Indian Ocean trade routes changed due to the decline of the Abbasid Caliphate and the rise of the Fatimid Caliphate in Egypt.[43]

In the Red Sea, the Cairo Geniza documents support the notion that this newly founded Fatimid Egypt participated in Indian Ocean trade, so do archaeological evidences of large amounts of Chinese ceramics unearthed at Fustat dating around the 11th to 12th centuries.[44] During the 13th to 14th centuries there were further developments in the areas around the Red Sea and Yemen.[45] which played the role of a middleman for China, India, the Gulf, east Africa and the Mediterranean.[46]

Shifting of the trade centres in the Gulf can be seen from the archaeological evidence: the cities of Kish, Minab and Julfar located closer to the entrance to the Gulf played a more important role replacing Siraf during the 11th to the 14th centuries.[47] The moving of the Hormuz Kingdom from Minab to Hormuz Island in 1300 CE facilitated the city to reach its peak in the 14th to 15th centuries.[48] This economic boom is detailed in historical literature.[49] Hormuz Island was considered a world-trading center by the 15th century historian al-Samarkandi (Figure 23.4):

> Hormuz is a port without equal on the face of the earth. The merchants of Egypt, Syria, the lands of Rum, of Azerbaijan, Khorasan, of the Ma wara'al-Nahr and Turkestan direct their paths to this port. The inhabitants of maritime countries arrive from China, Java, Tanasserim, from Bengal, Malabar, Zanzibar, Abyssinia, Aden, Jeddah . . . . With the goods they bring they may buy anything they wish. People of all religions, and even idolaters, meet in this city, and nobody permits any hostile gesture or injustice against them.[50]

Also it is noted that from the 13th century, the Mongol conquests of Asia and Eastern Europe were a watershed in Asian and world history. The connection of commercial and cross-cultural interactions around the Indian Ocean and in the Mediterranean region resulted in the formation of complex political, religious and mercantile networks.[51] The Mongol invasion had partly interrupted Islamic trade, and the Mongol commercial network grew across the Eurasian lands, with the contribution of Jewish, Indian, and Southeast Asian as well as Muslim merchants.[52]

Figure 23.4 Landscape of Hormuz Island (photo by Lin Meicun).

With these commercial networks established between the West and East, rather than Arabs only trading system, a diversity of people including many travelers and envoys could move around and trade. Famous travelers, such as Marco Polo, Yang Tingbi, Wang Dayuan, and Ibn Battuta, have been very well discussed and described in historical and archaeological studies.[53] Pope Clement V also sent a group of missionaries, via India, to Yuan China in 1307 CE, which was well recorded in both historical and archaeological evidence.[54] In 1338 CE a delegation of envoys carrying gifts such as Jingdezhen fired Qingbai porcelain and the so-called Fonthill Vase from the Yuan Imperial went to visit Pope Benedict XII and their visits also included a meeting with Louis the Great of Hungary.[55]

In China from early Ming times, during the late 14th to the early 15th centuries, goods in Chinese foreign trade, such as pepper, sapanwood and other luxuries, were under imperial monopoly, closely guarded to ensure that all the profits went to the Ming court.[56] In terms of the official maritime trade, Emperor Yongle (1360–1424 CE) sponsored maritime expeditions led by Zheng He with the aim of projecting Ming Chinese power as far afield as Java, Sri Lanka and the East African coast.[57] This was a new and significant period of increased Indian Ocean trade, when the two far ends of Asia, the Hormuz Kingdom and Ming China, linked together and reached new limits of discovering each other in terms of culture, commerce and communication. This time can be viewed as a return to the trade between China and Islam, comparable to trade during the 8th to 9th centuries.

In the early 15th century, the Emperor Yongle attempted to monopolise tribute and foreign trade by Zheng He's expeditions (1371–1435 CE).[58] This trade actually had thrived since the earliest years of the Ming Dynasty, but was enhanced enormously through the seven voyages of Zheng He, a Muslim from Yunnan whose Arabian ancestors had migrated to China during the Yuan Dynasty. Zheng He's voyages involved several hundreds of large vessels sailed from

China that four times they traveled as far as the Persian Gulf and East Africa.[59] Zheng He's Expeditions consisted of 27,400 men and sixty-two fleets of treasure ships supported by 190 smaller ships.[60]

Changing Patterns of Chinese Ceramic Trade: From China to the Islamic World

In terms of an archaeological approach, Chinese ceramic finds from the western Indian Ocean can be the most ideal material to investigate the maritime activities between ancient China and the Islamic world from the 9th to the 15th centuries. This is because they had been vastly discovered, as well as can be well identified and dated. The 8th to 16th centuries dated Chinese ceramic finds from over 120 littoral sites in the western Indian Ocean show the changes and development of the trade between China and the Islamic World (Figures 23.5 and 23.6a and b).[61]

From the 9th century CE, large quantities of Chinese ceramic find and frequent occurrences in many sites around the western Indian Ocean are evidence that a sudden rise in Chinese ceramic trade occurred by the middle of the 8th century. Such evidence has not been found

Figure 23.5 A sketch map of the distribution of Chinese trade ceramics from the western Indian Ocean (9th to 15th centuries) (by Ran Zhang).

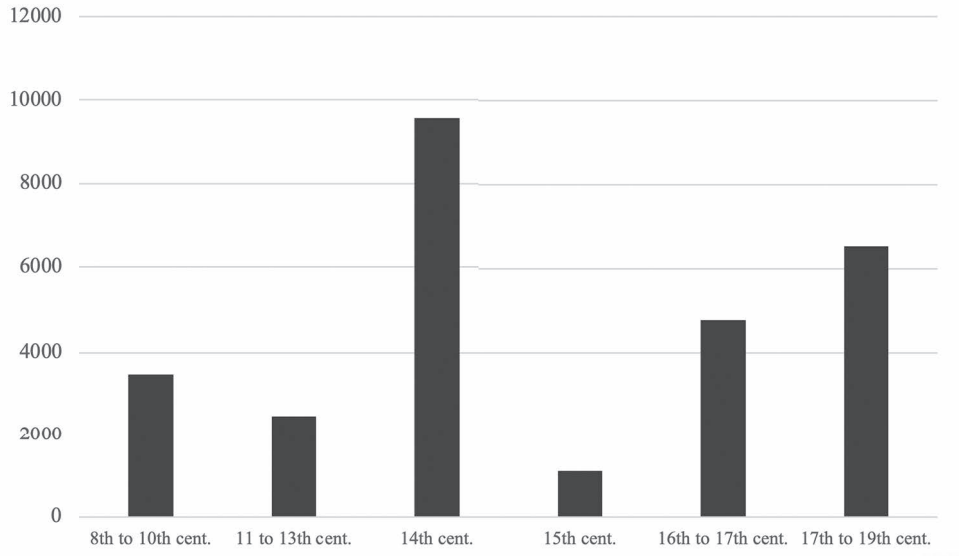

Figure 23.6a Changing quantities of sherds of Chinese ceramic finds from the western Indian Ocean.

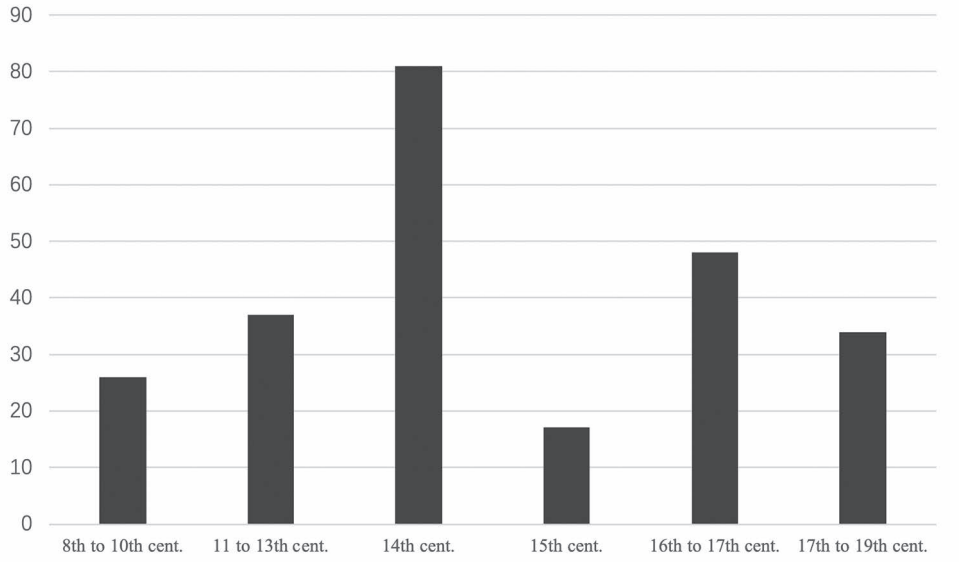

Figure 23.6b Changing quantities of sites of Chinese ceramic finds from the western Indian Ocean.

for previous centuries, although small volumes of Chinese ceramics are known to have been traded to Southeast Asia in the pre-7th century period.[62] This sudden rise was probably due to several reasons: (1) as it has been mentioned earlier, the decline of the land-based Silk Road in the 8th century offered Tang China an incentive to develop maritime trade; this decline was caused mainly by instability and conflicts in central Asia and economic collapse and political chaos in northern China;[63] (2) the gradual improvement in Chinese ceramic manufacturing

techniques in the 8th century meant that Chinese ceramics were more in demand from foreign markets and became one of the common/luxury commodities in long-distance trade;[64] (3) the expansion of seafaring by the Sasanians was unprecedented in Arab maritime travel; they reached South Asia and China by the pre-Islamic period,[65] and after that small quantities of exotic imports first appeared in the Gulf.[66]

From the 11th to the 13th century, a reduced number of finds have been found but at an increased number of sites. This situation might be linked with the unstable political and economic environments in the Gulf: with the gradual and general decline of Siraf and the status of the medieval port cities in the Gulf after the late 10th century,[67] the trading centres started to shift from the Gulf to the Red Sea.[68] Overall, there is a relatively unclear picture of the presence of the Chinese ceramic trade, in comparison with the evident sudden rise in the trade in the earlier period. Ceramic trade patterns became more complicated during this period as well. At the late 13th century, the Western Indian Ocean was marked by widespread changes in the ceramic assemblage in circulation represented by the decline of Iranian Sgraffiato, mainly because of Mongol invasions, and the development of new categories of glazed wares such as Blue Speckled Ware, Yemeni Yellow pottery, Underglaze Painted Wares and Underglaze Painted Fritwares,[69] as well as Chinese Longquan celadon wares.

In contrast, the Chinese ceramic trade reached its peak during the 14th century, with Longquan celadon playing an important role among all traded Chinese ceramics (Figure 23.7). This development at that time seems to be an echo of the so-called "mid-13th to mid-14th century world-system" suggested by Abu-Lughod[70] – which was really a globalizing maritime trade network. The archaeological evidence of this Chinese ceramic trade peak in the 14th century could suggest that there was an economic boom in long-distance trade from the Far East to the Near East.

From the late 14th to early 15th centuries, it can be seen a drop in both sherd and site numbers of Chinese trade ceramics occur in the western Indian Ocean, which could be blamed to the decline of Ming Chinese maritime trade and economy at that time.[71] As it has been introduced earlier, Zheng He's voyages can be fairly considered as a highlight of Chinese maritime activities to the Indian Ocean. On one hand that Zheng He's visits to and trade with Hormuz clearly had been involved in the economic boom in the Indian Ocean including south India, the Gulf, the Red Sea and the East Africa. Chinese historical accounts as recorded in the books of *Xi Yang Fan Guo Zhi*, *Ying Ya Sheng Lan*, and *Xing Cha Sheng Lan* described that Zheng He's first visit to Hormuz was around 1413 CE. It also recorded that, separately, in 1417 CE and 1433 CE, the Hormuz Kingdom had paid tributes and treasures to Ming China, including pearls, gemstones, and animals such as lions, leopard, war horses, and giraffes.[72]

However, one the other hand, by the general view of ceramic evidence from 1368 to 1430 mentioned earlier, there was a clear dip of Chinese ceramic trade. This sharp decline may have been caused by the "sea ban" policy in the early Ming dynasty. Although Zheng He's voyages to the Indian Ocean marked one of the most ambitious displays of Chinese maritime power, they did not result in even minor improvements of trade between Ming China and the Indian Ocean.[73]

Beyond the Chinese Ceramic Finds

On the maritime trade between China and the Islamic world, doubtlessly other types of commodities were playing crucial roles rather than Chinese ceramics, including the Islamic potteries, textiles, incense, glass, jewelry, and luxury metal wares. Although many of them had been

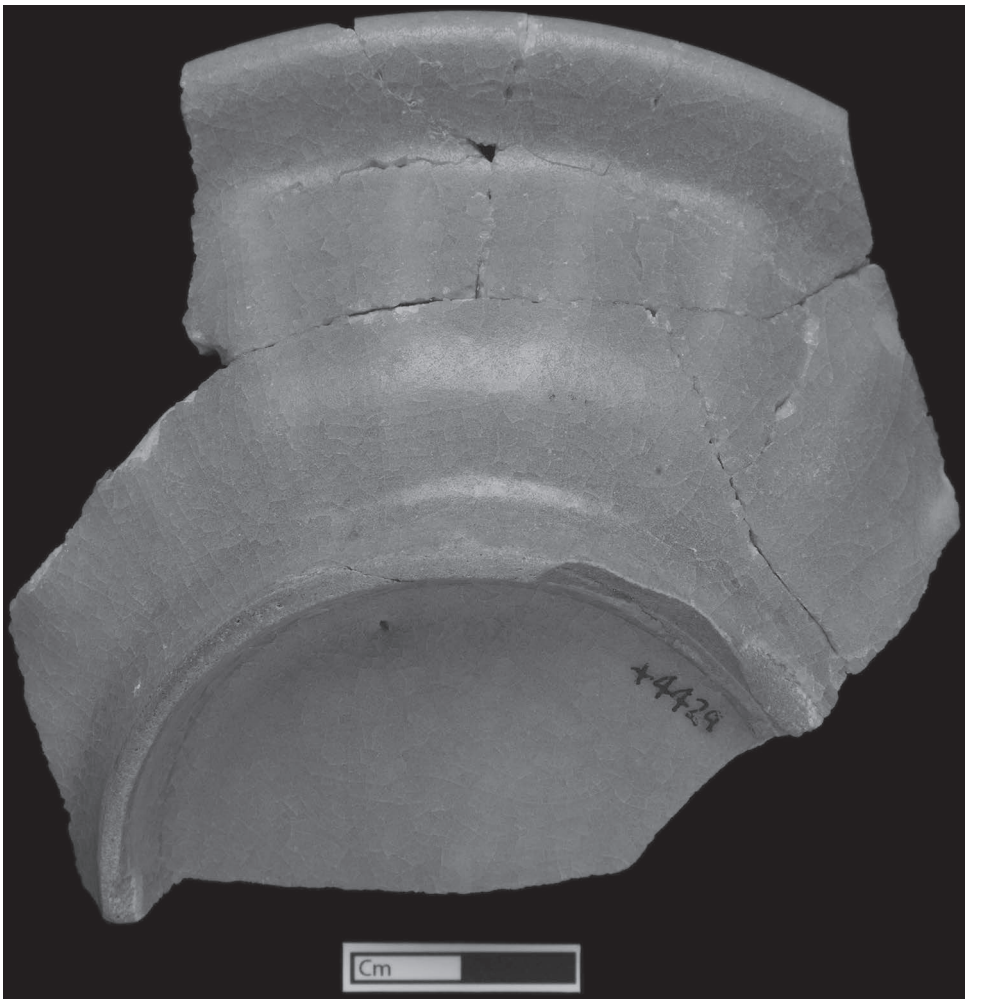

Figure 23.7 A Longquan celadon dish discovered in southern Iran (photo by Ran Zhang).

well stated,[74] this section aims to introduce some other selected trading commodities between China and the Islamic world in the Indian Ocean trade.

Turquoise Pottery

Before the blue and white porcelains gained popularity in Asia, celadon and blue glazed pottery represent two of the most extensively distributed glazed ceramic products in the Indian Ocean. The history of Chinese celadon stoneware can be traced back to at least the 2nd century CE, and as mentioned earlier that in the Indian Ocean trade the Longquan celadon reached its peak during the 14th century. The blue glazed pottery, namely the Turquoise pottery, was also playing an important role in terms of economic and cultural life in Asia.[75]

Manufactured with a long-lived Middle Eastern ceramic technique, the turquoise blue and green coloured alkaline-glazed pottery wares can be dated to the period from the 3rd century

BCE to the 10th century CE.[76] It may highly likely they were produced in the area close to the key port of Basra in southern Iraq.[77] In terms of its archaeological distribution they can be found in both the East Asia and the Middle East. In the western Indian Ocean, the relative archaeological discoveries can be seen from Kush and Jazirat al-Hulaylah of Ras al-Khaimah, Sir Bani Yas of Abu Dhabi, al-Qusur of Kuwait, Siraf of Iran, Manda and Shanga of Kenya, and Unguja Ukuu of Zanzibar.[78] In the western Indian Ocean trade this type of wares was in the low-value/high-bulk commercial exchange.[79]

In the Far East, the earliest evidence could trace back to the 2nd century CE. A turquoise glazed pottery jar produced in modern South Iraq has been found from a tomb at Hepu of Guangxi Province of the South China.[80] This single piece of evidence cannot fully support the direct maritime trade contact between the Han China and the Parthian Empire. However, according to recent research, the tomb owner might be a foreign merchant who settled down in the South China, because not only the burial practice is similar to the tombs of Seleucia on the Tigris, but other burial objects, such as beads and glasses were all exotic imports.[81]

All other evidence of the turquoise potteries from China and Japan, however, are mainly dated to the 7th to 10th centuries. In China around 300 sherds and some complete Turquoise jars are discovered from the port of Yangzhou in Jiangsu Province, and from the two Buddhist monasteries at Yongxian and Guilin from Guangxi Province. In Guangdong, a 9th/10th-century dated palatial sites ten pieces of Turqouise pottery sherds have been found. In Fujian, the 930 CE dated-tomb of Liu Hua, the wife of the local governor of the Min Kingdom, yielded three vessels.[82] This distribution pattern is similar in Japan: a large quantity of the finds come from the foreign guesthouses of the key ports of Japan, particularly in Kyushu, and the other finds are associated with the temples and religious institutions.[83] Both in China and Japan the turquoise jars dated from the 7th to the 10th centuries may represent that they were used by the local natives to serve a local traditional function, and the religious connections attached higher values to them than that in the western Indian Ocean.[84]

From the 11th century, the manufacturing technique of Turqouise glaze started to combine with the fritware, pottery in which ground glass is added to clay with a high quartz and other siliceous materials in the formula. From the 13th to 14th centuries, not only did this improved ceramic technique is applied on the constructions of great mosques and palaces in Iran, but also was introduced to the Chinese ceramic industries. The north Chinese common kiln sites, such as in Pacun Kilns and Dangyanyu Kilns of Hunan Province and Zhangzhi Kilns in Shanxi Province, all had the products of turquoise glazed stoneware. The technique then was further introduced and adopted to the Jingdezhen kilns for glazing porcelains, architectural tiles, and bricks.[85]

Incense and Jewelry

Historically the trade of incense between China and the Gulf, such as Frankincense and myrrh, can be traced back to the Han dynasty (from the 2nd century BCE to the 2nd centuryCE), and lasted to the 9th century and onward.[86] In south Arabia, including Dhofar of Oman and Hadramawt of Yemen, was one of the centres of incense trade.[87] Oman had been known throughout the world for its rich resources of frankincense (Figure 23.8). This perfume looks like a nipple, and one of the earliest records of frankincense from an early Tang dated book called *Guang Yi Ji* described that the name was "the incense in the shape of a nipple".[88] According to Le Maguer over thirteen types of incense were mentioned in the Arabic textual accounts, rather than only Frankincense and myrrh: Frankincense was too common and myrrh was often used

Figure 23.8 Frankincense trees in Oman (photo by Lin Meicun).

in medicine. This tells that a wide range of products because different types of incense were in the production, consumption and trade in the western Indian Ocean.[89]

Archaeological evidence of frankincense in China can be seen in the Mausoleum of the Nanyue kinglet found at the Xianggang Hill near Guangzhou City. The findings include not only elephant teeth from Africa and silver boxes from Persia, but also corals and frankincense from the Red Sea. This mausoleum belongs to Zhao Mei, the second king of the Nanyue kingdom, who was buried in 122 BCE (the first year of the Yuanshou reign of Emperor Wudi of the Western Han Dynasty (206 BCE–24 CE) in China, which indicates that Guangzhou began its communication with the Middle East states through the sea routes earlier than Zhang Qian (?–114 BCE), an envoy from the Han court, went to Central Asia. In the period of the Han and Tang dynasties, frankincense was chiefly used in joss sticks to be burned at Buddhist ceremonies and was burnt at home to improve the air. It was imported in large quantities during the Song Dynasty (960–1279 CE) and the import reached its peak during the Ming Dynasty (1368–1644 CE).

The widespread of burning incense in the Arabian Peninsula is mainly derived from an ancient tradition. The incense burners were mainly made of soapstone, pottery and metal. The variety of incense-burners shows the social context of the use of incense: pottery burners

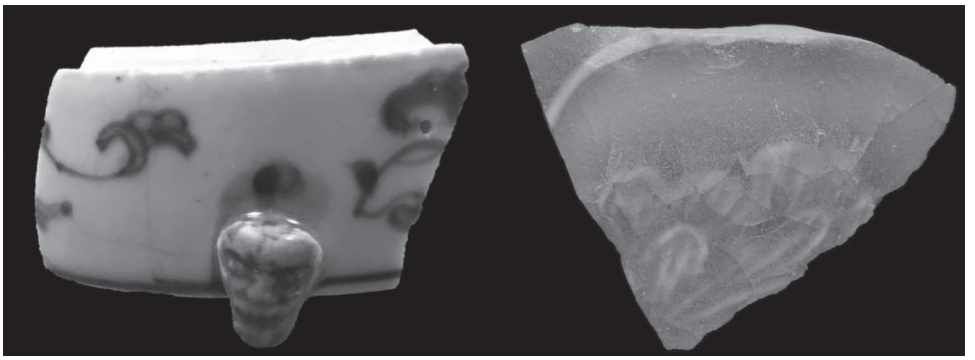

Figure 23.9 A Chinese blue and white porcelain incense burner collected from Ras al-Khaimah, UAE (private collection) (left) and a celadon sherd identified as in the shape of incense-burner, collected from Minab, South Iran (the Williamson Collection) (right) (photo by Ran Zhang).

were simply designed and cheaper. Metal incense-burners were more complex and more expensive.[90] It is very rare to see the use of Chinese porcelain burners in the western Indian Ocean. One example of a 14th-century dated Longquan celadon sherd might be identified as an incense burner and collected in the Surface Survey in Minab of South Iran.[91] Another example came from Ras al-Khaomah of the UAE, a late Ming-dated Chinese blue and white porcelain incense-burner had been collected from the Julfar site (Figure 23.9).

In terms of jewellery imports from the Arabian Gulf to China, a significant part of the finest jewellery and gemstones from the so-called treasures of the vassal states imported from the Gulf to Ming China by Zheng He's voyages were given to a member of Ming royal families, the King of Liang Zhuang (1411–1441 CE) (Figure 23.10). Over 3400 pieces of jewellery and decorated gems were recovered from the excavation of the mausoleum of the King of Liang Zhuang in Hubei province in southern China in 2001. This is the second largest known and excavated mausoleum dated to Ming Dynasty. The King of Liang Zhuang was the ninth son of the Emperor Hongxi (1378–1425 CE), who had become King in 1424 and died in 1443 CE. According to the excavation, the whole pattern of the mausoleum including the outside architecture aboveground is about 250 m long and 70 m wide. The southern part of the outside architecture has been destroyed. The crypt of the mausoleum is built beneath a hill in the shape of "中", which consists of a central hall and corridors. It is about 15.4 m long, 7.88 m wide and 5.3 m high, excluding the corridors. It is a brick structure and has been perfectly preserved.[92]

The treasures of the vassal state unearthed from the mausoleum include 589 pieces of gold works weighting 16 kilograms, 392 pieces of silver works weighting 13 kilograms and jade ornaments weighting 14 kilograms. The treasures consist of 18 kinds of gemstones, such as chrysoberyl, emeralds, sapphires and rubies. Some of the gems were the products from the Gulf. For example, the Nishapur turquoise gems have been confirmed to be originally from Iran.[93] Moreover, a gold ingot was also unearthed, with the carved inscription 永乐十七年四月□日，西洋等处买到 ("on . . . day of April of the Seventeenth Year in Yongle reign, purchased in the Western Oceans"). The 17th year of the Yongle reign can be dated to 1419 CE and *Western Oceans* is an ancient Chinese term for the Persian Gulf, indicating the ingot was imported from the Gulf.

The Red Sea is also rich in corals and China had imported large quantities of Red Sea corals since the Han Dynasty. There is an account in the Han literary writings that in Shanglin

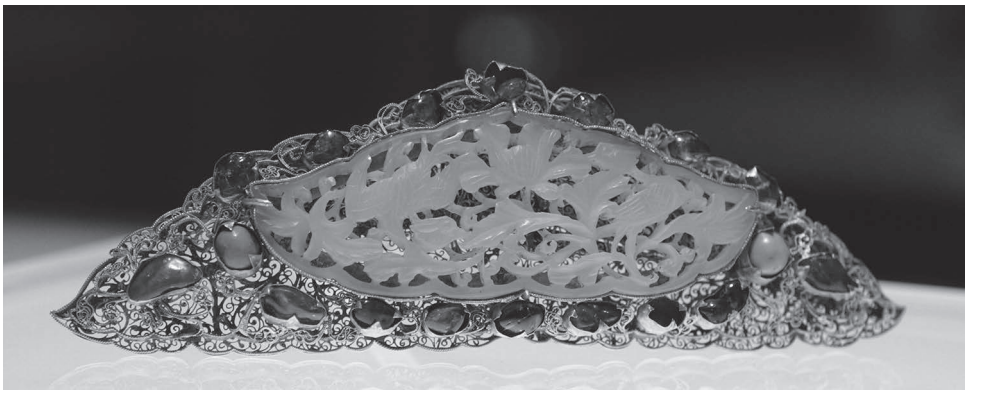

Figure 23.10 A hat top decorated with gold-mounted gemstones (photo by Liang Jian).

Garden, the imperial garden outside the wall of Chang'an, were planted coral trees. According to the *An Overall Survey beyond the Ocean* by Ma Huan, the corals from the Red Sea were very big. In the 19th year of Yongle reign (1421 CE), Zheng He's fleet saw in Aden of present Yemen that "several coral trees are as tall as two *chi* (a traditional Chinese unit of length equivalent to 0.333 m). They bought five boxes of coral branches".

It is clear that the luxury trade from the Arabian Gulf to China was strongly linked to Zheng He's voyages. Beginning from Zheng He's fourth expedition to the western seas, the overseas naval base of the Ming fleet shifted from Calicut on the western coast of India to the Strait of Hormuz in the Persian Gulf. Therefore, during the fourth (the 11th to 13th years of Yongle reign, 1413–1415 CE), the fifth (the 15th to 17th years of Yongle reign, 1417–1419 CE), the sixth (the 19th to 20th years of Yongle reign, 1421–1422 CE), and the seventh (the 6th to 8th year of the Xuande reign, 1431–1433 CE) expeditions, Zheng He set up his headquarters at Hormuz and from there directed the navy of the Ming Dynasty. Although there is no evidence to prove that Zheng He personally came to Oman, the contingent of his fleet visited Oman four times. When the Ming Chinese ships arrived, the envoy read an imperial edict and announced the official offers from the Ming court. Then the Omni king sent out his officials throughout the country to inform the people of the event, and the Omani merchants showed with their frankincense, dragon's blood, barbados aloe, myrrh, benzoin storax and Quercus infectoria to exchange for Chinese ramie, silk and porcelains. As recorded in an Islamic account of the history of *Tarikh-i Ja'far*, it describes the trades as follows:

During his (Saif ad-Din's) reign, many ships (jank) from China (Chĭn), with Chinese products and many silken fabrics, came [to Hormuz] on several occasions. He (again Saif ad-Din) sold countless [normal] pearls and royal pearls to them, and he received many riches in return – gold, silver, silks, and ceramics – filling the treasuries [with them].[94]

Concluding Remarks

Mainly based on archaeological and historical evidence, this short chapter attempt to sketch the development and change of the trade between China and the Islamic World from the 8th to the 15th centuries. It aims to outline an assemblage of the most recent archaeological understanding and illustrate how much information has been accumulated over the past many decades. It is hoped that the *longue durée* and early globalized development of Asia during this significant period:

From the 7th century it was a time of great economic prosperity when the arts flourished and economy boomed, especially in the capitals of Chang'an and Luoyang of China, and in Bagdad and Basra of the Abbasid Caliphate. The trade between the two ends of Asian through the Silk Road established from the era even as early as the prehistory, although never ceased, started to shift to the maritime route in the 8th century, and eventually it directly linked China and the Islamic world.

From the 14th century the expansion of the Mongol Empire played an important role in maritime trade in the Indian Ocean, as well as reconnecting the land-based route from China to West Asia which had been disrupted for over a hundred years during the Chinese Song periods due to the unstable diplomatic relationships between Song China, Liao, Jurchen, and Mongol.[95] With reconnection under the Mongol Empire, travel, trade, and other communications could be dispatched between China and Mesopotamia. A Yuan Chinese geographer, Zhu Siben stated that: "The West Sea is too far away but ambassadors and merchants could reach there occasionally".[96]

The historical records from the 8th to the 15th centuries had already provided us with the extensive narratives to reconstruct the past of the Sino-Arabian economic and cultural exchanges. More importantly, we allow the archaeological evidence to speak out not only as a historical echo but also its own voices, such as economic trading trends and cultural influences from each other between the two ends of Asia. The sketch pattern made by this chapter is just an outline, and there still is a long way from being complete.

Notes

1 Liu, 2010; Lin, 2006, 2011; Waugh, 2007: 4; Hansen, 2012; Wood, 2004.
2 Han, 1958: Vol. 19.
3 Lewis, 2009: 158; Park, 2012: 191–92.
4 Bartol'd and Bosworth, 1988: 195–96; Ge, 2003: 51.
5 McNeill, 1998: 227.
6 Franke and Twitchett, 1994: 5–6, Lewis, 2009: 157–58.
7 Beckwith, 1987: 157.
8 Lo, 1955.
9 Whitehouse and Williamson, 1973.
10 Lo, 1955.
11 Lewis, 2009: 23.
12 Lewis, 2009: 23–24.
13 Wei, 1999: 53; DeBlasi, 2001: 7.
14 Chen, 1981: 96; Lewis, 2009: 2.
15 Whitehouse and Williamson, 1973; Chaudhuri, 1985: 37; Piacentini, 1992: 124–25; Hourani, 1995: 38.
16 E.g. sometimes with regional declines, see Kennet, 2007.
17 Xia, 1974; Sun, 2004.
18 Sun, 2004: 42.
19 Hourani, 1995: Chapter 2.
20 E.g. Adams, 1962; Adams, 1965; Adams, 1981; Neely, 1970; Neely, 1974; Wenke, 1975–76; Christensen, 1993.
21 Chaudhuri, 1985: 46–47.
22 al-Muqaddasi, 1901: 206–7.
23 Hourani, 1995: 75–76.
24 Al-Sirafi, 1733; Hourani, 1995: 75–76.
25 Park, 2012: 65.
26 Li, 1996: 118; Park, 2012: 31.
27 Wang, 1988: 8.
28 Li, 1996: 120; Park, 2012: 29.

29 Rong, 2012; Schottenhammer, 2014.
30 Flecker, 2001; Guy, 2005; Krahl et al., 2010.
31 Flecker, 2001: 345–48, 53; Krahl et al., 2010: 118.
32 Krahl et al., 2010; Flecker, 2001.
33 Twitchett and Fairbank, 2007: 736–40; Lewis, 2009: 161.
34 Al-Sirafi, 1733.
35 Park, 2012: 70.
36 Chaudhuri, 1985: 49.
37 Whitehouse, 1975.
38 Park, 2012: 70–71.
39 Kennet et al., 2011.
40 Rougeulle, 1991: 94; Rougeulle, 1996: 169.
41 Williamson, 1974.
42 Chaudhuri, 1985: 49; Rougeulle, 1996: 167–71.
43 Chaudhuri, 1985: 58.
44 Rougeulle, 1996: 170; Yuba, 2014.
45 Rougeulle, 1996: 171–73.
46 Rougeulle, 1996: 167; Zhao, 2006.
47 Morgan, 1991; Sasaki and Sasaki, 1992; Kennet, 2002; Pirazzoli-T'Serstevens, 2003; Priestman, 2005.
48 Wiesner, 1979.
49 Kauz and Ptak, 2001: 34–39; Lin and Zhang, 2015.
50 Thackston, 2001: 69.
51 Morgan, 1990: 5; Sen, 2006: 299.
52 Abu-Lughod, 1989: 300; Sen, 2006.
53 Ibn Battuta, 1929; Polo, 1938; Wang, 1981; Chaudhuri, 1985; Abu-Lughod, 1989; Sen, 2006: 301–12; Park, 2012; Lin and Zhang, 2017.
54 Moule, 1914: 540; Zhang and Zhu, 1977: 266–67; Lin, 2013: 271–78.
55 Finlay, 2010: 156–57.
56 T'ien, 1981: 188.
57 Dreyer and Stearns, 2005; Chao, 2012.
58 Kerr, 2002: 125; Park, 2012: 169.
59 Lin and Zhang, 2015; Park, 2012; Kauz and Ptak, 2001.
60 Kauz and Ptak, 2001; Dreyer and Stearns, 2005: 122–24; Park, 2012.
61 The data of these two figures is based on Ran Zhang's PhD thesis: Appendix 3, after: Zhang, 2016.
62 Kauz and Ptak, 2001; Dreyer and Stearns, 2005: 122–24; Park, 2012.
63 Wei, 1999: 53; Franke and Twitchett, 1994: 5–6; DeBlasi, 2001: 7; Lewis, 2009: 42–44; 157–58.
64 Chaudhuri, 1985: 39; also see section 2.2.2 in Chapter 2.
65 Whitehouse and Williamson, 1973; Chaudhuri, 1985: 37; Piacentini, 1992: 124–25; Hourani, 1995: 38.
66 Priestman, 2013: 404–6.
67 Whitehouse, 1975.
68 Rougeulle, 1996.
69 Priestman, 2013: 106.
70 Abu-Lughod, 1989.
71 Lo, 1958: 340–41; Abu-Lughod, 1989; Brown, 2009; Zhang, 2018.
72 Chao, 2012: 112–19.
73 Deng, 1995: 19.
74 c.f. Lin and Zhang, 2015; Kadoi, 2009; Priestman, 2013; Priestman, 2016.
75 Zhai, 2018: 18.
76 Kennet, 2004: 29.
77 Mason and Keall, 1991: 52–53; Hill et al., 2004: 597.
78 Kennet, 2004; Sasaki, 1995; Sasaki, 1996; Sasaki, 1998; Carter, 2008; Patitucci and Uggeri, 1984; Whitehouse, 1968; Whitehouse, 1979; Chittick, 1984; Horton et al., 1996; Juma, 2004.
79 Priestman, 2013.
80 GXWWKGYJS et al., 2012.
81 Huang et al., 2013.
82 Wang, 2012; Glover, 2002; Feng, 1986; Ho, 1995.

83 Priestman, 2016.
84 Ho, 1995: 27; Priestman, 2016: 25.
85 Kerr and Wood, 2004: 512.
86 Schottenhammer, 2010: 130.
87 Groom, 1981.
88 Dai, 2000: Chapter of the Monk Zeng Dao Xian.
89 Le Maguer, 2015.
90 Le Maguer, 2011.
91 Zhai and Zhang, 2019: 55 & Figure 18.
92 Liang, 2003.
93 Yang et al., 2004.
94 Kauz and Ptak, 2001: 55.
95 Franke and Twitchett, 1994; Kuhn, 2009.
96 Zhu, 1989: 666.

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PART IV

Empires and Religions

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24

ELEPHANTS, GREEKS, AND GOLD

The Silk Road in the Age of Hellenistic Empires

Benjamin Abbott

The concept of a "Silk Road" for the purposes of this chapter represents a metaphorical idea – an idea of connection, of material and immaterial cultural exchange, between the worlds of the Mediterranean and Western Asia and the worlds of Central and Eastern Asia.[1] Much work on the Silk Roads has put emphasis on the beginning of the idea of a long-distance, east-west trade connection, with recent emphasis on interactions between Rome and East Asia. Increased archaeological work in East Asia and India has increased our knowledge of this connection and has led to an expanding body of scholarship on these connections.[2] At the same time, an increasing body of scholarly work has focused on such long-distance connections thousands of years before Rome, linking a range of civilizations and peoples from lands spanning from East Asia to the Mediterranean. Much work has also been done on the various routes and trade ways that comprised this notion of a Silk Road or Roads, focusing on both land and sea routes. While sea routes were an undeniably important facet of Silk Road trade from an early stage, the position of this chapter is that the true beginning of extensive, systematic long-distance connections recognizable as Silk Road exchange began most prominently through land routes. Accordingly, Silk Roads via land will be the sole focus here.[3]

This chapter will devote its focus to what might be described as the "western" or Mediterranean history of the Silk Roads in the latter half of the 1st millennium BCE. As indicated in its title, the focus here will center around the Hellenistic period, usually defined as the period from the death of Alexander III of Macedon ("the Great") in 323 BCE to the battle of Actium in 31 BCE. The key link to allow for the extensive Silk Road trade that would develop in the Hellenistic period was the region usually referred to as Central Asia, consisting primarily of what are today Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. The mountain, desert, and steppe lands of Central Asia were the core of these Silk Road connections and served as the door through which trade and movement were able to flow. The Hellenistic period was a time in which the worlds of the ancient Mediterranean and Western Asia became more systematically connected with the worlds of Central and Eastern Asia than they had ever previously been before, developed and facilitated in this Central Asian crossroads by large imperial states. In short, this is the story of how the world of the ancient Greeks first thoroughly came into contact with – and thus first truly became a part of – the worlds of Central and Eastern Asia.

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This is not to say that extensive long-distance connections did not exist before Alexander paved the way for the Greeks of the Hellenistic period. It must be said that long-distance trade in the Hellenistic period owed much to and built upon the earlier exchange networks in Western and Central Asia. Too often are Alexander and the Hellenistic Greeks put alone into the spotlight by scholars as the catalysts for this ancient world "globalization". The Achaemenids were the most recent and most successful in a long line of empires to explore and connect these vast areas through imperial organization and facilitation of exchange. The emphasis of this chapter is on the period in which these already very active patterns of exchange were expanded most extensively to include the Mediterranean world as well.

It is perhaps easy to fall under the spell of romanticism when it comes to any discussion of the Silk Roads throughout history. Camel-trodden paths venturing across beautiful and uncharted landscapes. Cosmopolitan utopian cities springing up in oases and jungles, created by the road's capacity for wealth. Many casual readers and scholars alike are first drawn to the topic of the Silk Road because of such romantic ideas. These overblown narratives can lead the reader astray down paths of extravagant exaggeration or misleading simplicity. Yet, falling prey to such romanticism does not necessarily pull one away from historical truth. Many of these ideas and images so easily conjured by a whisper of "Silk Road" do not come from pure fantasy but from a historical reality.

The Hellenistic period and its relevance to the history of the Silk Roads has not been immune to such idealization. And yet, like much of Silk Road romanticism, this allure has sprung from as dramatic a historical reality as one can find. Before the Hellenistic period and before the campaigns of Alexander, the Greeks viewed Central Asia and India as near-mythical lands at the edge of the world, places only trodden by gods and heroes where a vast array of tribes lived alongside fox-sized gold-hoarding ants.[4] In Central Asia, Alexander's soldiers believed they had found the cave in which Prometheus had been chained by Zeus before his release by Heracles.[5] Aristotle himself had argued that one could see the world-encompassing eastern ocean from the Hindu Kush.[6] In other words, to the Greeks, Central Asia and India comprised a mythic region that was the edge of the world. And yet, in the decades after the campaigns of Alexander, we find evidence that this worldview had been drastically altered. We see a Delphic inscription made by a Greek traveler in a Greek city in Afghanistan, treaties made between Macedonian and Indian kings, and public inscriptions in a Central Asian city proclaiming Buddhist worship with the Greek alphabet. The edge of the world had been found to continue on, and the worlds of Central and East Asia would, as a result, become more connected to the Mediterranean and Western Asian worlds than ever before.

While a full historical background of the Silk Road cannot be done here, it will be useful to briefly detail the period immediately preceding the campaigns of Alexander and the dawn of the Hellenistic age. Working in many ways off of the foundations laid by earlier Western Asian empires, the Achaemenid Persian empire (ca. 550–330 BCE) – the largest empire of its time – stretched from Asia Minor and Egypt to India and was the first empire to directly connect Silk Road trade to the Mediterranean to any significant extent.

As with much of the ancient world, our evidence on the Achaemenid empire is limited, most of what we know coming from our surviving Greek sources. As a result, much of the scholarship on the Achaemenids and their empire has perhaps unsurprisingly focused on their activities in relation to the Mediterranean, resulting in a lopsided, western-oriented perspective on Achaemenid imperial priorities and activities. In recent years, however, a reexamination of the eastern regions of the Achaemenid empire in conjunction with a growing body of archaeological evidence has begun to change this narrative, as Central Asia and the larger eastern half of the empire has been seen progressively less as a

peripheral region at the edge of Achaemenid control and more as a central area of imperial focus and activity.

Regions of Central Asia first mentioned under Achaemenid control are found in the writings of the 5th-century BCE Greek historian Herodotus, our most informative surviving source on the Achaemenid empire. In a passage from Herodotus, we are given a rare insight into how economically important the eastern regions of the empire were to the Achaemenids. In his listing of the different provinces of the empire, Herodotus gives us the amounts of tribute received by the Achaemenid king from each province. We are told that the tribute yielded from all provinces in Asia Minor, Cyprus, Phoenicia, Palestinian Syria, and Egypt totaled 2,810 silver talents of the imperial total of 14,560 talents. In comparison, Herodotus tells us that the combined provinces in Central Asia and India yielded a tribute for the Achaemenid king of 6,160 silver talents. In our only extant account of provincial wealth, we see that the tribute garnered from Achaemenid Central Asia and India made up just under half of the entire imperial tribute and was more than double that of the Western provinces of the empire. Thus, from a solely economic perspective, the eastern regions of the Achaemenid empire should be understood as equally – if not more – important and valuable as the western regions of the empire.

Such wealth was not the sole product of the region's ability to serve as a crossroads for trade. Much of Central Asia was indeed well-known in antiquity for its wealth in fertile land and natural resources. However, such valuable exploitation of these regions led to their increased development as essential pieces of the empire, resulting in their emergence as central areas of prosperity and activity from which further wealth could be drawn. The control and tribute exaction from a region also did not by itself necessitate its long-distance connection with other regions under the same mantle of control. The unique development of the Achaemenids was their imperial initiative focused on long-distance integration and connectivity. What primarily facilitated the connection of these areas with the rest of the empire was the famous Achaemenid system of roads and canals.[7] As the largest empire of its time, the Achaemenids controlled a unified area from the eastern Mediterranean to Central Asia that was more politically integrated than ever before, linked by this extensive system of roads and canals. It is here with the Achaemenids that we begin to first see hints of truly extensive, connected systems of trade from Central Asia to Western Asia and the eastern edges of the Mediterranean.[8]

Beyond (though also as a result of) Central Asia's economic importance to the Achaemenids, we also have evidence that these eastern regions were among the most politically important in the empire. Due to their wealth from trade and from the wealth of their own fertile soil, their supply of manpower, and their precious natural resources, the regions of Central Asia were regularly governed by prominent figures who were often kinsmen of the Achaemenid king and who were often considered to be in a position of power only "second-to-the-king" (*mathišta*). Among the convoluted ancient accounts of the succession of the Achaemenid king Darius I, two of the most prominent challengers to the ascension of his son Xerxes both seem to have held prominent positions in Central Asia, variously described as governors of Central Asia or as "second-to-the-king".[9] We see in our scattered evidence that a pattern emerges indicating the importance of the governorship of Central Asia. Cyrus I ("the Great"), the founder of the Achaemenid empire, appointed his younger son Bardiya to a prominent position in the city of Bactra in Central Asia,[10] and Bessus, who claimed the Achaemenid throne after the defeat of Darius III by Alexander, was a governor of Central Asia. We can understand with some confidence that to hold a prominent position or governorship in Achaemenid Central Asia was to be an extremely powerful figure within the empire capable of claiming the throne.

While the unprecedented Achaemenid control of Central Asia was profitable and provided a prestigious position for its officials, other textual and archaeological evidence seems

to indicate that the region was under a relatively looser method of control compared to the periods immediately following the Achaemenid empire's collapse. As a whole, the general Achaemenid policy in Central Asia seems to have been a system where power was exercised with limited seizure of land and people beyond military and tribute dues, the establishment of Achaemenid garrisons, and the presence of a handful of prominent local leaders and Achaemenid administrators.[11] It is with the collapse of the Achaemenid imperial system at the hands of Alexander of Macedon and the subsequent emergence of the Hellenistic period that we begin to see this policy of control intensify.

Having inherited the Macedonian throne from his father Philip II in 336 BCE, Alexander continued his father's plans to unite the Greeks by leading them on an expedition against the Achaemenid empire, ostensibly in an act of revenge for the Achaemenid invasion of Greece roughly 150 years earlier. Following a series of encounters in Asia Minor and the Levant and his annexation of Egypt, Alexander met the Achaemenid king Darius III in a decisive battle at Gaugamela in northern Iraq in 331 BCE, where Alexander was victorious. Upon his defeat, Darius fled east, leaving behind his family as well as the richest and most important cities of the Achaemenid empire, increasing the territory under Alexander's control by about tenfold. If Alexander's only goal had been to avenge the Achaemenid invasion of Greece, it might be reasonable to assume that he ended his campaign here, which he did not. Sometimes described as the second act of his campaigns, Alexander continued on across Iran and Central Asia before turning south through the Indus valley and finally west on his way back to Babylon. This part of Alexander's campaigns has caused much debate and confusion among scholars, sometimes even described as inexplicable or simply "unintelligible".[12] Having decisively defeated the formidable Achaemenid empire and having become the new self-described "king of Asia" Alexander would go on to spend over one third of his entire twelve-year campaign in the regions of eastern Iran, Central Asia, and India.[13] Why? One might argue that Alexander was necessarily finishing up his natural conquest of the Achaemenid empire. Darius had fled east and after his betrayal and murder by his own followers, Alexander, presenting himself as the new legitimate king of Asia, pursued his predecessor's betrayer Bessus to the ends of the earth through Central Asia. Alternatively, one might present Alexander (as some of our ancient sources do) as easily controlled by the whims of his own emotion, often seized by a *pothos*, a sudden yearning or desire, to venture to some location or in some direction on his Homeric, Herculean swashbuckling adventure eastward to expand the known world. A third option would be to present a far more pragmatic, forward-looking Alexander whose actions in these regions that have stymied many scholars and readers of history were in fact practical and ultimately unsurprising policy decisions. Not entirely dismissing his desire to "complete" his conquest of the Achaemenid empire nor the captivating but largely intangible theories based on his emotional character, we most completely understand Alexander's actions in these regions through a combination of these theories, but with emphasis on his intentional pragmatism.

In assuming Alexander's intentions of creating a new quasi-Perso-Macedonian[14] empire at least by the time of this latter phase of his campaigns, we can view many of his most important actions in Central Asia and India as actions carried out with the intention of a new, permanent imperial control of Central Asia and India. Perhaps the first proof of Alexander's intent in the region can be seen after the capture of Bessus in 329. Following his capture, rather that turning back west with the would-be usurper in chains, Alexander continued with his prisoner further east into Central Asia and India, continuing on in a brutal effort to subdue and settle the region. As a claimant to the Achaemenid throne, Bessus had been a necessary acquisition for Alexander as the new king of Asia, but he was evidently not the main prize. As Alexander saw it, the prize was Central Asia.

Most important for our understanding of Alexander's imperial vision for Central Asia and India was his clear aim to establish new cities. In one of many such descriptions from our ancient sources on Alexander's campaigns, we are explicitly told of Alexander's intentions for founding a city with the potential for long-term success on the Jaxartes River (the modern Syr Darya) in Central Asia.[15] Such descriptions of Alexander's actions in Central Asia in our ancient sources give us a sense of intentional and substantial permanence. While arguably his most famous foundation would become the city of Alexandria he had planned in Egypt, Alexander founded numerous large cities and many more "Alexandrias" in Central Asia. This type of urban colonization was something that had never been seen in the region on any such scale, least of all by an empire whose territories stretched back west over 3,000 miles to Greece and the Mediterranean. While the Achaemenids had valued the region and had established a not insignificant level of control in order to maintain their grip and continue receiving tribute and troop levies, Alexander's actions here represent a significant change in imperial vision for the region. Alexander wanted not only control of these regions for their tribute and soldiers but also to have complete and secure control over a newly urbanized and thoroughly connected Central Asia with cities to rival any in his empire.

Perhaps most symbolic of all of Alexander's actions regarding Central Asia was his first choice for a wife. As his first wife, Alexander took Roxana, the daughter of a prominent Central Asian warlord. Similar to Alexander's larger decision to continue eastward, Alexander's marriage selection has stymied ancient and modern authors who have scrambled to either explain or condemn the marriage choice. It has been generally described as an act driven by love-at-first-sight by some, as an act of securing alliances in the region by others. Yet even with this latter explanation, there is often confusion as to why Alexander chose *this* strategic marriage first as opposed to many other potential wives of arguably much greater political and symbolic weight. It is notable that Alexander had chosen not to marry Darius' wife earlier in his campaign and that three years after marrying Roxana he only then chose to marry two daughters of royal Achaemenid blood, including the eldest daughter of Darius III. Any potential children from Alexander's later wives would fuse the bloodlines of the Macedonian and Achaemenid dynasties. No doubt aware of this, Alexander nevertheless took Roxana as his first wife, all but guaranteeing that his eldest children would instead be of both Macedonian and Central Asian lineage. If we look at his decision with our non-Mediterranean oriented lens with Central Asia as central rather than peripheral, Alexander's action is less perplexing. The decision to secure control of the region through an act no smaller than Alexander – arguably the most powerful individual in the world – taking as his first wife a Central Asian woman and daughter of a prominent warlord should only serve to reaffirm the notion of the region's centrality for Alexander's imperial vision. Alexander knew well the difficulty of controlling Central Asia and maintaining this control was evidently at the center of his plans.

As Alexander's campaigns continued, we still see him acting with an eye to future control of the region. In one of the final confrontations of his campaigns, Alexander defeated the Indian king Porus at the Hydaspes River (modern Jhelum) in modern Pakistan. Following his victory, Alexander made Porus his ally, allowing him to retain his power in the region and leaving him to maintain Alexander's control of the area as continued still further eastward. His men, despite their remarkable endurance, did not have the insatiable appetite for conquest that their king did, and Alexander was eventually forced to turn back west to Babylon.

Following Alexander's death in 323 BCE in Babylon not long after his return, his ephemeral empire was divided amongst his generals in a bloody period of conflict. One of the most turbulent and least understood periods in all of world history, this period, usually known as the Wars of the Successors (*Diadochoi* in Greek), is usually understood to represent an erosion

of Greco-Macedonian control in Central Asia and India. Alexander's imperial vision for the region would be put on hold. This apparent interregnum and growth of local independence in Central Asia would last for roughly twenty years following Alexander's death until one of Alexander's former commanders, Seleucus, would enact his own imperial vision in the region.

A former infantry commander under Alexander and an official in Mesopotamia and Iran under the powerful Successor Antigonus after Alexander's death, Seleucus was eventually forced to flee to Egypt by Antigonus. With the help of another Successor, Ptolemy I in Egypt, Seleucus eventually returned to Babylon in 312/311 BCE and gradually began to wrest all of Mesopotamia, Iran, and Central Asia from Antigonus' control. During this time, Seleucus began to establish himself as a Hellenistic king, his power centered in Mesopotamia, Iran, and Central Asia. Following his capture of Babylon and consolidation of Mesopotamia, Seleucus turned to the regions further east which had last been put under imperial control by Alexander. Winning over territories through a combination of diplomacy and military force, from around 308–306 BCE, Seleucus managed to absorb into his fledgling empire all of Iran and Central Asia. By around 306 BCE, Seleucus crossed the Indus into India and entered into conflict with Chandragupta, the king of the similarly new Mauryan empire. Although the details of Seleucus' time in India are obscure, we can reasonably gather from the surviving sources that after one year of conflict Seleucus and Chandragupta reached an agreement in which Seleucus yielded in some capacity all lands roughly east and south of the Hindu Kush to Chandragupta. We are also told that the two kings contracted some sort of marriage relationship (sometimes thought to mean that a daughter of one of the kings was married into the family of the other) and, importantly, Seleucus received approximately 500 Indian war elephants from the Mauryan king.[16] In roughly six years, Seleucus had managed to gain control of an area stretching from Mesopotamia to the Hindu Kush. The exact details of the land agreement between Seleucus and Chandragupta are unknown and the extent to which Seleucus *fully* yielded these lands is debated. It is likely that these Seleucid lands ceded to Mauryan control were in fact still very accessible to Seleucus, a view supported by the apparent friendly relationship with lasting intent between the two empires as indicated by the marriage alliance and the great value of Chandragupta's elephantine gift. Whatever the exact terms, it is likely that this alliance allowed Seleucus to secure his eastern border and allowed both the Seleucids and the Mauryans the ability to essentially keep their respective eastern and western borders open, ushering in a new phase of long-distance connection systematically facilitated by a new pair of Hellenistic empires.

If we can characterize the Wars of the Successors in one way, it would most accurately be summarized as an incessant power struggle, often resulting in coalitions formed to maintain the balance of power. Typically, whenever one Successor was deemed to have become too powerful, the others would ally themselves in order to remove this threat before continuing their own regional conflicts. This pattern came to a head at the Battle of Ipsus in 301 BCE when the Successor kingdoms of Cassander in Macedon and Greece, Lysimachus in Thrace, and Seleucus in Mesopotamia, Iran, and Central Asia joined forces to remove the increasingly powerful Antigonus from the picture. At Ipsus, Antigonus was killed and his army defeated. In the surviving ancient accounts, it is made clear that the Asiatic cavalry of Seleucus and Chandragupta's Indian elephants brought to the battle by Seleucus played a key role in the victory over Antigonus.[17] When the dust had cleared from the battle and its aftermath, Seleucus emerged with control of eastern Asia Minor and northern Syria. Seleucus now controlled a multicultural Hellenistic empire of remarkable diversity stretching from the eastern Mediterranean to Central Asia – no other kingdom formed following the death of Alexander laid claim to so much territory or to such linguistic, cultural, and social variety. When we look at

the scale of these events at the turn of the 3rd century BCE, we can see that the treaty between the Seleucid and Mauryan empires was a treaty of global scale, a product of this increasingly globalized Hellenistic age. Chandragupta's Indian elephants had decided a battle between Macedonian kings that would change the face of the ancient world from the Italian Peninsula and North Africa to Central Asia and the Indus Valley. Interactions between the Seleucids and the Mauryans in India did not cease after their treaty preceding Ipsus either, as we are told that Seleucus later received a gift package from Chandragupta that included Indian aphrodisiacs.[18] It is likely that Seleucus also received a number of other Indian gifts mentioned in our sources possibly, including a tiger which Seleucus then gave as a gift to the Athenians. Under the Seleucids, trade with India expanded, particularly in luxury items like spices, hardwoods, and valuable stones.[19] Seleucus even sent one of his Macedonian commanders, Megasthenes, to report on India, resulting in an important ethnographic work on India that would circulate in the Mediterranean world for centuries.[20] These different worlds had become connected to a more significant and direct extent than ever before.

The early Seleucids and their empire have been often neglected by scholars in favor of the later, better-documented Seleucid kings who had famous encounters with the Romans in the Mediterranean. As a result, the early Seleucid period, particularly under the reigns of Seleucus I and his son Antiochus I (ca. 311–261 BCE), has often been neglected by scholars, despite the fact that it was likely the most dramatic period of systematic development and consolidation of Central Asia by a single imperial state in the ancient world. As with the Achaemenid empire, our written sources on the Seleucids and their empire come primarily from the Mediterranean, again resulting in a Mediterranean-oriented perspective on Seleucid actions and imperial priorities that has long persisted in modern scholarship. This perspective has begun to change in the past few decades as more attention has been given and more evidence has become available for Seleucid activity in the eastern regions of their empire. That being said, evidence for Seleucid activity in Central Asia still remains a rare – though growing – commodity. Increasing archaeological work over the past few decades has confirmed and expanded this picture of intense Seleucid activity at this time in Central Asia at which our written sources hint.[21]

The Seleucids were known as the most prolific city-builders in the Hellenistic period, and no Hellenistic – or Seleucid – duo surpassed Seleucus I and his son Antiochus I in this category. Following his victory at Ipsus, Seleucus spent the latter years of his reign in the western regions of his empire. In the early 3rd century BCE, Seleucus named his son Antiochus as co-king.[22] As crown prince and co-king, Antiochus controlled the entire eastern half of the Seleucid empire in Iran and Central Asia while his father ruled in the west. As what could perhaps be understood as an expansion of the Achaemenid practice, Antiochus, son of and second to the king, was put in control of the east as a king himself, highlighting the increased importance of this region to the Seleucids. Antiochus I was also uniquely suited for this role. In an almost exact imitation of Alexander, Seleucus had married a Central Asian woman named Apama, the daughter of Spitamenes, the most prominent warlord to oppose Alexander during his time in Central Asia. Unlike all of Alexander's other commanders who had also married non-Greco-Macedonian women, Seleucus alone had kept Apama as his wife after Alexander's death. Regardless of any unknowable emotional motive, we can assume that Seleucus saw the same things that Alexander did: the value of Central Asia and the importance of a direct marriage alliance with its local leaders. As a result, Antiochus was born from Seleucus and Apama and was thus at least in part a local Central Asian ruling Central Asia. While the true value of this can be overstated, it should also not be understated that Antiochus could take advantage of his mixed heritage to present himself as a rightful, ethnic king of Mesopotamia, Iran, and Central Asia and specifically not as a foreign Macedonian, like his father. Here now

ruling in the eastern half of the empire was "Antiochus the Great King . . . heir of Seleucus the Macedonian".[23] During the reign of both Seleucus I and Antiochus I, but long under the direct control of Antiochus, Central Asia saw its most dramatic development. Based on the available archaeological evidence, estimates at the turn of our own 21st century put the number of Seleucid settlements in Central Asia at roughly forty.[24] What Alexander had begun, Seleucus and Antiochus continued, but this time with an even stronger focus on permanent and substantial development.

Among the many Seleucid settlements in Central Asia, Antiochus I was responsible for the foundation of several major cities during his time as co-king in the east. Perhaps most famous of these Seleucid foundations in Central Asia is the city of Ai Khanoum. Excavated between roughly 1964 and 1978 in modern northeastern Afghanistan, the city, bearing a fascinating combination of Greek, Iranian, and Central Asian traits, is the most extensively excavated Hellenistic major settlement site in Central Asia.[25] While debate still continues, it has become generally accepted that the city was founded in the early Hellenistic period, likely during Antiochus' tenure as co-king in the east. Ai Khanoum was ideally situated to control the flow of trade and other movement both north and south of the Oxus river, the nearby agriculturally ripe flatlands, and the only exploited source of lapis lazuli in the ancient world in the nearby Badakhshan mountains.[26] The site ideally represents the dramatic change seen under the Seleucids. While such a strategic location was exploited by ancient states as far back as the Indus civilization in the late 3rd to early 2nd millennium BCE down to a relatively modest Achaemenid fort less than 2 km from Ai Khanoum, the Seleucid construction of a major city at the same strategic site is indicative of a new intensified Seleucid imperial approach to Central Asia with the goal of extensive permanence. Where the Achaemenids had exercised relatively indirect control with substantial local autonomy and minimal intervention, the Seleucids sought to impose their imperial will on the landscape of Central Asia, building their own cities where before there had been local forts or smaller settlements, creating an imperial urbanized network of major new Seleucid cities, allowing for integrated passage from the shores of the Mediterranean to Central Asia. The revolutionary opening of such routes across Eurasia is again ideally summed up at Ai Khanoum, where just such a journey by a Greek traveler was made from the Mediterranean to Ai Khanoum, where he left an inscription of famous maxims taught at the Greek sanctuary at Delphi.[27]

Also notable among the foundations of Antiochus was the city of Antioch in Margiana at the site of Gyaur Kala roughly 30 km east of the Merv oasis in modern Turkmenistan. Another example of the new Seleucid imperial approach, the previous site of the relatively modest Achaemenid town became the citadel of a much larger Seleucid city enclosed within a large city wall by Antiochus.[28] The location would continue to be an important site along the trade routes flowing through Central Asia for many subsequent centuries. We also have evidence in our limited sources that Seleucus and Antiochus rebuilt, renamed, and expanded a number of Alexander's original foundations, another example of the more extensive Seleucid policy in Central Asia.

Following the death of Seleucus I in 281 BCE, Antiochus was forced to spend much of his reign in the western regions of the empire, which were plagued by invasion, rebellion, and general turmoil. Seleucid attention in the tumultuous western half of the empire long resulted in the notion among scholars that Seleucid control of the eastern regions of the empire in Iran and Central Asia must have inevitably eroded due to lack of imperial attention. This idea, however, has been challenged and largely superseded by the idea that these eastern regions were in fact much more stable than those in the west, largely as a result of Antiochus' extensive activity in Central Asia, and thus simply required less attention. This

position is strengthened, for example, by evidence that Antiochus received elephants from his governor in Central Asia sometime around 273 BCE[29] and by evidence that Bindusara, the son of the Mauryan king Chandragupta, requested from Antiochus I wine, figs, and a sophist in his court.[30] The friendly relationship established with the Mauryan empire by Seleucus continued under Antiochus. Antiochus' time in the western regions of his empire in the latter years of his reign should not be understood to imply a loss of control in the eastern regions. Where we do have evidence, stability and continued connectivity in these eastern regions seems to have been the norm.

During Antiochus' time in the western half of the empire, his son Seleucus died prematurely while serving as co-king with his father for over a decade.[31] This Seleucus was replaced by his brother Antiochus (II) as the new heir to the throne. Antiochus I died during his time in the western regions of his empire in 261 BCE, and it is during the reigns of his son Antiochus II and his grandson Seleucus II that the more complete erosion of Seleucid direct control in Iran and Central Asia is more obvious. What matters more for our purposes here is not the question of direct Seleucid control over Central Asia as much as it is the continuation of Central Asia's integration in the Seleucid exchange network that stretched to the Mediterranean. It has been argued that around this time in the mid-3rd century BCE, the rise and apparent independence of the kingdoms of Parthia in Iran and Greco-Bactria in Central Asia indicate the complete severing of Seleucid connection to what had been the eastern half of their empire. Like much of scholarship on the eastern regions of the Seleucid empire, this notion has gradually changed. The Parthians, though self-proclaimed kings, still seem to have acknowledged Seleucid authority as late as the 170s BCE.[32] Similarly, the Greco-Bactrians, though also calling themselves kings in the mid- to late 3rd century BCE, seem to have been on at least amicable terms with the Seleucids. The Parthian king Arsaces I is said to have feared the combined forces of the Seleucid king Seleucus II and the Greco-Bactrian king Diodotus I.[33] So, while it seems that the Greco-Bactrian kingdom had formed as a result of the Seleucid governors in Central Asia claiming independence from the empire, there seems to have been no severing of border connections or interactions between the two regions.

With the ascension of Antiochus III, son of Seleucus II, in 223 BCE, we see a continuation of direct Seleucid imperial activity in Central Asia and India. After quelling unrest in the western regions of the empire, Antiochus carried out an eight-year campaign (ca. 212–204 BCE) through the eastern regions of the empire. Forcing the Parthians out of northern Iran, Antiochus then carried out a year-long siege against the Greco-Bactrian king Euthydemus at the Central Asian city of Bactra. Antiochus ultimately recognized the kingship of Euthydemus and they agreed to an alliance in which Antiochus offered one of his daughters in marriage to Euthydemus' son Demetrius.[34] Antiochus then moved on to India, where he met the Indian king Sophagasenus. In a striking reenactment of the treaty made by Seleucus I with Chandragupta, the language we have describing the treaty presents Antiochus as "renewing friendship" with this Indian kingdom and in the process receiving a substantial amount of elephants and money.[35] Whatever the possible array of imperial motivations for Antiochus III to make such agreements with these kingdoms, the implications for the movement of people and goods on the Silk Roads through Central Asia and India is clear. Similar to Alexander's agreement with Porus and Seleucus I's treaty with Chandragupta, Antiochus III also acknowledged – at least ostensibly – the sovereignty of both Euthydemus and Sophagasenus and made efforts to ensure long-term alliances.[36] What is also worth noting here is again the Seleucid acquisition of elephants from their eastern territories. As we know from surviving Seleucid coinage and from other Seleucid imagery, the Seleucids commonly employed the Indian species of elephant as an unofficial emblem of the empire. As these Indian elephants originally came

from Central Asia and India, the selection of this imperial symbol by the Seleucid kings serves as further evidence of the importance and centrality the kings attached to these eastern regions.

What is most important for our purposes is what these treaties meant for the Silk Roads. These types of agreements and ongoing interactions meant uncontested borders and the continuation of the flow of trade and movement through these regions. Diplomatic agreements that gave the Seleucids access to trade from Central Asia and India without direct military control likely were seen as the next best thing after the benefits of direct control. One could argue that the Seleucids, in their loss of direct control and military presence in Central Asia, followed a similar practice of indirect control that had been utilized by their Achaemenid predecessors in order to still reap the benefits of this profitable world crossroads. While the later Seleucids may not have directly controlled the regions of Central Asia and India as they had under Seleucus I and Antiochus I, they still managed to profit from their earlier colonizing labors through their relations with these kingdoms. The Greco-Bactrians, Parthians, and various Indian kingdoms took up the role of utilizing the groundwork laid by the Seleucids who had urbanized and connected the lands of Central Asia and India to the Mediterranean more extensively than ever before.

While the Seleucids by and large successfully maintained their level of influence and control in Central Asia and India for nearly two centuries, dynastic conflict ultimately hampered their ability to effectively facilitate these long-distance connections they had once so dramatically begun. By around the end of the 2nd century BCE, the Seleucids no longer could claim any direct control or meaningful influence in Central Asia and India as they had before. Nevertheless, their initial development of the region opened the door for a handful of other Hellenistic kingdoms to capitalize on the long-distance trade connections that had been transformed by the Seleucids. The effects of the extensive Seleucid development of Central Asia would be felt for centuries after their disappearance from the region. We see the Greco-Bactrian kings, with increasing independence, continuing to prosper in their famously wealthy "land of a thousand cities"[37] well into the 2nd century BCE. Greco-Bactrian expansion seems to have resulted in the creation of another kingdom, usually referred to as the Indo-Greeks, whose territory likely extended into what is today southern Afghanistan, northern Pakistan, and northwestern India. While extremely little is known of the Greco-Bactrians or the Indo-Greeks beyond numismatic evidence, the few pieces of evidence we do have give us a glimpse into the striking conglomeration of cultures in their respective urban centers. Here we see kings with Greek royal titles rendered into Indian alphabets on coins and Greek kings converting to Buddhism and debating Buddhist doctrine with monks.[38] While aspects of Greek culture would survive these Greek kingdoms, any direct control of these last remnants of the Seleucid presence in Central Asia and India seems to have eventually disappeared by the end of the 1st century BCE, likely in part due to nomadic incursions and the rise of other nearby regional states.

With the close of the Hellenistic period and the outset of the Common Era, a handful of disparate, powerful kingdoms (Kushans, Parthians, Romans, among others) laid claim to the lands previously held and developed in Central Asia and India by the Achaemenids, Alexander, the Seleucids, and the Greco-Bactrians and Indo-Greeks. The subsequent centuries would see long-distance Silk Roads trade continue in new forms, characterized by the involvement of many different imperial states. The Hellenistic period had seen an unprecedented moment in Silk Road history. From the eastern shores of the Mediterranean to the Hindu Kush and the steppe lands of Central Asia, a single Seleucid empire, continuing and greatly intensifying the practices of their Achaemenid predecessors, had transformed the landscape with a network of cities and settlements, allowing passage across this politically unified land to a greater extent than had been previously possible. Trade between and beyond the Mediterranean and Central Asia would continue to evolve, but the age of the Silk Road in which a single imperial state facilitated

such long-distance connections had ended. It was the imperial initiative – though frequently oppressive and brutal – of the Seleucids and their immediate predecessors that created the most extensive long-distance connections from the Mediterranean to Central and Eastern Asia yet seen in the ancient world, laying the foundations of what is today known as the Silk Road.

Notes

1 An approach similarly and concisely described by a number of scholars. For example: Christian (2000).” By “Central Asia” I mean primarily the regions the Greeks usually referred to as Arachosia, Sogdiana, and Bactria, roughly equivalent to modern Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkemistan, and Uzbekistan. By “India” in this chapter I refer to the region the Achaemenids and Greeks called India, roughly equivalent to the Indus Valley, primarily in what is now modern Pakistan.
2 For example: Graf (1996); Tomber (2008); Fitzpatrick (2011).
3 For useful work done on Silk Road sea routes see, for example: Ray (2003); Scheidel (2011); Wilson (2011).
4 Herodotus, 3.102.
5 Arrian, *Anabasis,* 5.3.1–3.
6 Aristotle, *Meteorologica,* 1.13, 350a.
7 As famously described by Herodotus (5.52–53).
8 Manning (2014), 7. For more on Achaemenid Central Asia, see, among others: Lhuillier (2018); Wu (2020).
9 It is possible that these two figures mentioned in our ancient accounts were in fact the same person. For the various ancient accounts on this, see: Herodotus (7.4, 9.108–13); Plutarch (*Moralia*, 173b, 488d-f); Justin (2.10.1–11). For a useful modern analysis, see: Briant (2002), 524.
10 Briant (2002), 78.
11 Briant (2002), 752.
12 Millar (1998), 510.
13 For Alexander’s letter to Darius and his self-designated title as “king of Asia” (βασιλέα τῆς Ἀσίας), see: Arrian, *Anabasis*, 2.14.
14 Romm (2010), 380–387.
15 Arrian, 4.1.3–4.
16 Strabo 15.2.5; App. *Syr*. 55; Just. *Epit*. 15.4.21.
17 Plut. *Demetr*. 28–29.
18 Kosmin (2014), 35.
19 Shipley (2000), 285.
20 Shipley (2000), 285.
21 For an extremely useful analysis of Hellenistic activity in Central Asia that engages with this increasing body of archaeological evidence, see: Mairs (2014).
22 The exact date is disputed, but our evidence suggests that Antiochus received this title no later than 294 BCE. For more on this, see: Boiy (2004).
23 BM 36277 (the so-called “Antiochus Cylinder”), col. i.1–5, trans. Stevens (2014).
24 Holt (1999), 26.
25 The excavations were originally published in the series *Fouilles d’Aï Khanoum*, now nine volumes. Although further excavations have not been carried out, some useful recent work has been done on the site. For example: Martinez-Séve (2014); Mairs (2015).
26 Roughly 75 kilograms of unworked lapis lazuli blocks were found in the treasury at Ai Khanoum (Mairs, 2015, 109).
27 For translation, see: Mairs (2015), 112–113.
28 For an overview of the foundation of the site, see: Cohen (2013), 24–31.
29 BCHP 7 (Antiochus, Bactria, and India Chronicle).
30 Kosmin (2014), 35.
31 Our classical literary sources describe Seleucus’ death as an execution ordered by his father on charges of treason. Alternatively, our other surviving evidence suggests stability during the reign of Antiochus and his son Seleucus, complicating the typical classical portrayal of the royal instability within Hellenistic courts. What can only be said with certainty is that this Seleucus died prematurely after ruling as co-king with his father for roughly thirteen years and was replaced by his younger brother Antiochus II. For more on this, see: Holton (2018).

32 Kuhrt & Sherwin-White (1993), 197.
33 Justin, 41.4.
34 Polybius, 11.34.
35 Polybius, 11.34.
36 For a recent analysis of the relationship between the Seleucids and the Greco-Bactrians, see: Wenghofer (2018).
37 Justin, 41.4.5.
38 Shipley (2000), 285.

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25

THE WESTERN LORD OF TREASURES – VIEWING THE BYZANTINE EMPIRE FROM TANG DYNASTY CHANG'AN

Lin Ying and Translated by Xinru Liu

Since the Han Empire reached out westward during the 2nd century BCE, the information about the Mediterranean world infiltrated to China continuously through the Silk Road communications. During the early few centuries CE, the Roman Empire reached its apex then evolved into the Byzantine Empire. About the same time frame the Han Empire gradually declined from its best time and fell to peasant rebellions, followed by invasions of nomads from the steppe to the Central Plain of China. The rulers from the steppe replaced the divided Chinese regimes and established themselves as kings and emperors of China. Eventually China entered another united age under the Sui Dynasty and Tang Dynasty by the end of the 6th century. Rulers of the various dynasties ruled the Central Plain of China always tried to reconnect with the Western Region, that is, Central Asia on both sides of the Pamir Plateau, and even tried to reach further west and south. Meanwhile the new rulers also expanded their horizons to the east and southeast through developing seafaring trade. Chinese historians in the courts of the rulers always refresh their knowledge of the outside world. They therefore had to adjust their view of the Mediterranean world according to the changes of both the objects and the viewers. By the 7th century, the Tang Empire and the Byzantine Empire were the two most consequential regimes and cultural entities of Eurasia, but had not and would not build direct diplomatic relationship and informative communications. It was a time when a geo-political-cultural map of Eurasia was formed by the Tang Empire trying to expand its imperial glory, the Byzantines tried to consolidate its defense of a shrinking but wealthy regime, and the Arabs rose as a great empire riding on Islamic expansion to eliminate the Sassanid Persia and extended its influence to the borders of the Byzantine to the west and Tang China to the east.

In Chang'an, the capital of Tang, Chinese established a cosmology where the Byzantine held a position as the Western Lord of Treasures sitting in the west side of the universe. When Xuanzang came back to the Tang Empire after fourteen years study and travel in India, He presented his memory of this unique trip to a foreign country to the Emperor Taizong in *Da Tang Xiyu Ji* [Travel to the West under the Great Tang Empire] in 646. In order to demonstrate the significance of India and its relative location to the Tang Empire Xuanzang first displayed the general geographical picture of the known world:

> Currently there is no universal king turning the wheel of Dharma, thus the *Jambudvipa* is divided into domains of four lords. The Southern Lord rules the land hot

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> and humid where elephants flourish; the Western Lord of Treasures rules along the seacoast holding abundant treasures; the Northern Lord rules in cold climate where horses are populous; the Eastern Lord rules many people living harmoniously. In the country of the Lord of Elephant people are short tempered but love learning, especially good at unorthodoxy techniques; clothing includes horizontal wrap in the middle of the body and exposing the right shoulder; they make hair bun in the middle of scalp and leave hair surrounding the bun flow on four sides of the head; groups of different status live in different neighborhoods; houses are grand with multiple stories. The land of the Lord of Treasures have no etiquette and rite but revere wealth; people there wear short outfit and cover left side of body; they cut their hair short but retain long moustache; they live in walled cities and pursue profit of commerce. In the region the Lord of Horse people are violent in nature and willing to kill; they live in dome shaped tents made of felt and roam around herding animals. In the land of the Lord of Man, people are wise and smart, whereas virtue and morality are clearly manifested; people wear hats, belts, clothe covering right side of the body; all vehicles and clothes are made according to codes; people live a settled life and hardly move, pursuing various livelihoods. The lands of three Lords all revere the east, thus their house gates face the east so that they face east to perform rituals every morning. In the land of the Lord of Men, south is the supreme direction. This is a general description of all the different customs on the earth.[1]

What Xuanzang presented here is the accumulated knowledge of the world outside China throughout the previous half millennium. The structure of the land under the heaven divided into four parts was no doubt a concept imported from India, but specific designations of the four sections were based on information filtrated in through diplomats, traders, missionaries, and pilgrims, via land routes and by sea. Chinese had long been dealing with the land to the north where horse-riding nomads roamed. Xuanzang himself just came back from the land of elephants, and consider his home land was the superior land, even though India was the land of the Buddha. The preceding descriptions of the three lands were quite accurate. It is interesting to read his description of the land of the Western Lord of Treasures, where he had, at most, indirect knowledge. That there was abundant wealth but lack of "etiquette and rite" indicate Xuanzang had no knowledge of their religious institutions and rituals. But the clothing covering the left side of the body could be attributed to either Roman toga or the cape of Byzantine emperors covering the left should and secured by a fibula on the right. Toga was out of fashion by the time of Xuanzang, but the cape was depicted on Byzantine artworks. Then, who was the Western Lord of Treasures in the mind of Xuanzang?

In the post Han period, Kang Tai, an envoy of the Wu Kingdom, on the lower Yangzi River delta, made a trip to island states of South China Sea. Upon his return, ca. 250, Kang Tai wrote the book "Stories of Foreign Countries" (Wai Guo Zhuan). Though the book is not extant, a passage quoted by a Tang scholar states: "People of foreign countries claim that there are three countries of abundance: Zhongguo (Central Country) is abundant in terms of People; Da Qin is abundant in treasures; Yuezhi is abundant in horses".[2] This information gathered from Southeast Asian islands was made in a time the Roman Empire was still a major power, thus the Western Lord of treasures, Da Qin, should have been the Roman Empire. India the land of elephants had not yet come to the vision field of China.

Even though the Southeast Asian sea world barely fit into the universe of Buddhist cosmology, the concept of four domains of human sphere including the land of elephants came to China by the seafaring networks in Southeast Asia. A Buddhist text *Shier Youjing* 十二游经

or *Sutra of Twelve Travels* was translated to Chinese during the Jin Dynasty (265–420). The extant version by Kālodaka, probably translated in 392, brought out the concept of four domains of the earth:

> In the Jambudvipa there are sixteen great countries, 84000 cities, eight kings, and four sons of heavens. The Son of Heaven of the Jin Empire is in the east, where people are numerous; the Son of Heaven of India is in the south where there many famous elephants; the Son of Heaven of Da Qin country is in the west, where precious things are abundant; the Son of Heaven of Yuezhi is to the northwest, where good horses are plenty.[3]

This version of the four domains of the lands under the heaven brought India into the picture, and framed the territories with the concept of state and kings. The Jin emperor was the east Lord of Men; Yuezhi, not located to the north but northwest, was still the Lord of Horses; even though India was not under one sovereign, there still should be a son of heaven. Da Qin was still called the lord of the west, when the Roman presence was actually weakening.

Buddhist scholar Daoxuan in his summary of the geography of the world in 650 not only reiterate the division of the Jambudvipa, but also pointed out that the concept of center of the world in other countries deviated from the original Chinese concept that China was the center of the world. In Buddhist world, the Dharma Wheel Turning King, the sovereign distributing moral guidance, occupies the center of the world. He specifically named the Turks who ruled the north the country of horses, a real time information of the 7th century. Those to the west were business people interested in wealth and trade thus were *Hu*, distinguished them from bloodthirst barbarian Turks and the civilized countries with learning and ritual such as India and the Jin Empire of China.[4] Here the definition of the rich lord in the west became even murkier. During the early 6th century, both the Byzantine Empire and the Persian Sassanid Empire were famous for their splendid silk textiles and vessels made of silver and gold. Many Persian silver coins and Byzantine gold coins have been located from sites of Central Asia trade routes. But things were changing, as both of them were threatened by the rising Arab powers.

In this universe, Chinese authors were familiar with the east, north and south sections of the world, and meanwhile they had only vague ideas about the Western Lord of Treasures. Who were the Western Lord of the Treasures? During the post-Han period, the Roman Empire, Da Qin, was the source of wealth. The rise of Sassanid Persia (3rd–6th centuries) eclipsed the glory of the declining Roman Empire. The Byzantine Empire inherited and enhanced material wealth from the Rome, but the Persians blocked the view of their glittery wealth to the viewers of eastern Eurasia. The time of Persian glory was coincident with the period when China was divided into several frequently changed regimes. Each of the regimes nevertheless all tried to resume connections to the West Region. The Sassanid Persia kept their trade with whichever the regimes ruling north China at the time. The Northern Wei (420–534) court received several envoys from the Sassanid Persia carrying royal letters, presumably true envoys from the king. The description of geographic features of Persia was roughly correct; the list of many of the treasures from that country probably derived from inventories of traders. The account of Persia showed that the Chinese officials disgusted Zoroastrian religious practices especially funeral rites of exposing corps to vultures or dogs to devour. But the details nevertheless provide a quite accurate information about the Persians of that time.[5] In short, the Northern Wei records showed familiarity of this Lord of Treasures.

Soon after Emperor Yangdi of the Sui Dynasty ascended the throne in 605, he tried to reconnect with the West Region to promote trade. At that time foreign merchants mostly gathered in Zhangye, one of the caravan depots in Hesi Corridor, the land strip between the Qilian Mountain range and the Gobi Desert. Emperor Yangdi assigned an official Pei Ju to supervise the trade. On the position in charge of foreign trade, Pei Ju inquired traders to provide information of their countries and the routes of travel. He then made an atlas of the routes and countries for the court. In this book of maps, the Chinese name for the Byzantine Empire, Fulin, appeared. In this account, Fulin could be reached through steppe route, which was not a well tread commercial channel of that time.[6] The atlas of Pei Ju is lost, but the above account was included in the biography of the official Pei Ju in the *Sui Shu*, the history of the Sui Dynasty. There is however, no item under title of Fulin in the Western Region section of the Sui History, *Suishu*. Instead there was a good description of Sassanid Persia, minus much of fantasy as recorded in the *Wei Shu*.[7] Therefore, by the end of the 6th century, the image of the Western Lord of Treasures was still attached to the Persians.

The Arab conquest of the Sassanid Persia drove its royal court to the east as refugees. The Arabs started to conquer the Persia Empire in 634 and occupied its capital Ctesiphon in 637. The last Sassanid King Yezdjerd fled the capital city along with his imperial guards. Around the 649–650), the Arabs conquered Persepolis. In 651, Yezdjerd escaped to Merv (Mari in present Turkmenistan) with a small retinue carrying his crown and treasures but was killed there.[8] Prince Peyrooz and the king's grandson Narses and other royal family members happened to be separated on the way thus continued to run eastwards. Prince Peyrooz reached the Yabghu of Tokharistan (in modern Afghanistan). In 661, Emperor Gaozong of Tang had the headquarters of Bosi Protectorate built, and named it as Jiling castle at the modern Zahedan. The emperor then assigned Peyrooz as the governor. Narses came to the royal court, and was granted the title of "General of Powerful Guardian on the Left". Eventually, both Peyrooz and Narses died in Tang China.[9] Those events informed the demise of the Persian dynasty to the frontier of the Tang Empire and the royal court. Meanwhile, the Arabs was depicted as a camel nomads yet to learn the way of civilized society. It took another century that the image of a powerful and rich Arab empire reached Tang China.

Meanwhile, Byzantine Empire as the Western Lord of Treasures loomed large on the horizon. "Fulin" appeared in the *Old Version of Tang History* as the name of a rich country in a place far west to the Tang. *Fulin* was a rendition of *From*, which derived from *Rom*, the Roman Empire. The linguistic transition from *Rom* to *From* probably took place in Central Asia, more specifically was in Sogdiana.[10] The knowledge about Fulin in the *Old Version of Tang History*, compiled after the demise of the Tang Empire based on Tang archives, could be considered as a summary of information and imagination of the Tang court during the dynasty. As whole, it was a combination of historical records of previous dynasties about the Roman Empire, new information and legends from travelers along the Silk Road through the almost three hundred years duration of the Tang.

> The country Fulin was also called Da Qin. It is located on the Western Sea, adjacent to Persia on eastern side. Its territory covers more than ten thousand *li*, dotted by four hundred towns and cities where residential houses aligned next to each other. Palaces and temples are often decorated with crystals and glasses. Twelve noble ministers collectively manage state affairs. When the king goes out on a carriage a man carrying a bag goes along to receive petition letters from commoners. Once back in palace the king opens the letters to make decisions on the petitions. There is no permanent

> king, a sage is selected to throne. Whenever there are disasters, drought, or flood, a new king will be enthroned to replace the old one. The king's crown looks like a bird stretching wings; gems decorate the crown and tassels dripping around it. They wear brocade and embroidery silk robes with no front opening; they sit on golden flower throne. A green bird looks like goose often sits beside the king on the cushion. Had the food given to the king is poisonous, the bird would ring alarm.[11]

The *Old Version of Tang History* explained that the country "Fulin" was previous called Da Qin. Some of the information was copied from the previous records of Da Qin in Chinese literature. The crystals and glasses on architectures should be the impression of the widely used mosaic made of glass pieces. The governing arrangement and that the king was not in a permanent position and that a man carrying a bag collecting petition letters are exactly as recorded in the *History of the Later Han*. The Later Han archive referred Da Qin as another name of Lijian, that is, Alexandria. This name recalled Hellenistic legacy of the eastern Mediterranean under the Roman Empire, where the Byzantine was located. The only difference between the *Old Version of Tang History* and the *History of the Later Han* is the number of "noble ministers", whereas the Later Han account gives the account of thirty-six, but the Tang history is twelve.[12] The number twelve is coincident with Muslim geographer Ibn Khordadhbeh in his *Kitab Al-Masalik Wa'l-Mamalik*: "There are exactly 12 Roman administrational officials. Where 6 of them lived in Constantinople to serve beside the tyrant, and another 6 serve in various provinces".[13] While neither account reflects the Byzantine administrative accurately, the Tang history could have quoted the number from Arab sources, as the Arabs had access to the Byzantine domain. The Tang history described the capital city:

> The capital city is built with layers of cut rocks and is extremely high. There are a hundred thousand households living in the city which faces the sea. To the east outside the city there is a great gate as tall as 20 *zhang* (c. 60 m). Gold decorations cover the gate from the top to the bottom that its splendor radiates several *li* afar. From the outside to reach the palace one goes through three gates, all decorated with jewels. In the tower of the second gate a gold balance is hanging there. Twelve gold balls are sitting in the end of weight standards, waiting to mark the 12 hours of the day. A golden man in the stature of a real person stands beside it. Once it reaches a whole hour, a golden ball falls on the ground causing a clash sound, followed by a chanting of the time. The system is very punctual and never misses a beat. The pillars of the palace are made of green stone, the floor is covered with gold, door leaves are made of ivory, ridgepoles and beams are made from fragrant wood. They do not use tiles to cover roofs. Instead, they crunch white stone then sift into fine powder. The coating on the roof with this powder is as hard and polished as jade. During the hottest season when people feel unbearable heat, water was channeled to the roof. The mechanism is so sophisticated and secretive, that no one understand it. Observers only hear sound of fountains over the roof then see water flow down from the eaves like curtains then cool air breezes. This is indeed a wonder.[14]

This description of Constantinople is sharply accurate in certain points, though some places could have integrated fantasies from yarns of travelers. There was indeed a Golden Gate outside the city of Constantinople, where state ceremonies started there to proceed to the city.[15] The golden time machine is intriguing, but could be real given the superb mechanics of Byzantine artifacts. Domes of cathedrals and palaces are covered with bright and polished plates

distinguished from ordinary tiles. Examples of the water curtain cooling system could be found in later circumstances, such as the Mogul marble palaces in South Asia. Though there is no evidence it was constructed in Constantinople during the 7th to 10th centuries when this account could have ascribed, the extensive hydraulic works including aqueducts, cisterns, and numerous water fountains in Constantinople could have had produced this kind of wonder.

> In their custom, men shave their hair, wrap a cape expose their right shoulder. Women wear robes without splits and cover their heads with brocade silk scarves. Those who accumulated wealth of 100 million could be recognized as nobles. . . . The land produced gold and silver vessels and many rare jewels such as jade shining in the night, pearls shine like moon, *haiji* rhinoceros, giant clam, *chequ*, (tridacninae, a kind of giant clam) agate, Kongcui (malachite?), coral, amber. Most of the rare jewels and treasures of the Western Region came from this country.[16]

Comparing the description of clothing with apparels shown on Byzantine mosaics says the account here is quite accurate. That the status of nobility derived from the wealth one owned puzzled the Chinese scholar-officials who wrote this account. They lived in a country where, not wealth, but only successful education marked by passing imperial examination was the base of high status. This confirms Xuanzang's comment of the land of the Western Lord of Treasures that "have no etiquette and rite but revere wealth". The list of the jewels from that country resembles the list of the Severn Treasures frequently appeared in Buddhist texts. Some of the items, such as giant clam, was more like product of South China Sea than from the Mediterranean. The author of the *Old Version of the Tang History* nevertheless blurred the details by attributing most of the rare goods coming through the Western Region to the land of treasures. As a whole, the descriptions of Fulin in the *Old Version of the Tang History* fit the profile of the Western Lord of the Treasures very well. Both accounts should be a summary of stories spread by travelers who could be eye witnesses and could also be those who relayed the stories. The stories naturally to be blended with exaggerations and fantasies.

The splendor of the Abbasid Caliphate reached China through Du Huan, a Tang prisoner of war at the Talas battle in 751. In *Jingxing Ji*, his memory of the journey he was forced to take, Du Huan gave a splendid story of the Arab empire, as well as a brief description of the Fulin:

> Fulin is west to the Zhanguo (Syria). It is located faraway, several thousand *li* across mountains. Complexions of people there are red white. Men wear plain color clothes, women wear pearls and brocade. They love drinking wine, eating bread. They are skillful with various handicrafts and excellent at weaving nets. Those who were taken as prisoners in other countries are persistent in keeping their own tradition till their death. Glassware there is superior to any other places. The capital city is 80 square *li*, the territory extends to several thousand *li* to four directions. The military force is of million strong soldiers, and often conflict with Dashi.
>
> (Abbasid Caliphate)[17]

Du Huan's book is no longer extant, but the fragmentary records still tell that he heard the story of Fulin from the traders of the Abbasid Caliphate, the regime often encountered the Byzantines on the battlefield as well as in market places. The location of Fulin is rather vague, not surprising as Du Huan did not go there himself. That the people of Fulin stubbornly clinging to their customs when exiled in other countries indicates that faithful Christians in Fulin

did not change their religion easily. Du Huan, as a Chinese living in the Islamic empire was probably was amazed by their rituals, including Christian rituals involved wine and bread.

Muslim traders from the Abbasid Caliphate did frequent the market place in Constantinople. In *The Book of the Eparch*, the Ordinances of Leo VI, ca. 895, includes a section about merchants importing goods from Syria and Bagdad to Constantinople. They had to stay in their specific caravanserai and all of their activities in the city was strictly regulated and monitored.[18] Syria was under the Roman and Byzantine control before the Islamic conquest. Therefore Syrian traders just follow their traditional networks to trade in Constantinople albeit they had to follow new rules as they were a kind of foreigners by that time. Same rules also applied to the traders from Bagdad, the core region of the Islamic empire.

Muslim writers had intimate knowledge of the Rum as well as other countries traders treaded. Arabic geographers such as Ibn Khordadhbeh guided Muslim travelers to wherever they went and keep their directions towards Mecca. By the 8th century, Islam already consolidated their footholds in Central Asia. The Sogdians, who had been most frequent merchants to Tang market and also messengers on the Silk Road, now became Muslim traders. An, a Sogdian state based in Bukhara, presented a tribute to Tang court in ca. 734, including two Persian donkeys and one Fulin embroidered woolen rug and ball.[19] It is hard to judge whether the items were genuine Persian and Fulin, or Persian and Fulin style goods reproduced in Central Asia. They nevertheless at least represented Persian and Fulin brands. Sogdian traders, Zoroastrian or Muslim, were the Central Asian agents sending rarities and exotics from the Mediterranean and West Asia to Tang China. The beautiful commodities and legends of Fulin thus created the image of the Western Lord of Treasures in the court of Tang.

The Tang court archives did record envoys from Fulin, but whether those envoys were sent from the Byzantine court in Constantinople is in question. Careful examination of the records reveals flaws. When there were quite a few records of envoys from Fulin in the Tang archives and chronicles, Byzantine documents, which have been scrutinized by numerous scholars, have not shown any royal contacts with the Tang China. Meanwhile, agents from Syria and Bagdad residing in Constantinople must have had been numerous enough that the Book of Eparch devoted a section to regulate this population. In 643, when the Tang Dynasty consolidated the power, the first envoy sent by Fuling King named "Boduoli" reached Chang'an.[20] Byzantine court around 643 was quite chaotic in politics, but none of the short lived kings had a name sound even remotely like Boduoli. One of the scholars debating the real person behind the name, F. Hirth, points out it was not a personal name, but the title Patriarch, the head of Christian church of Syria. Arabic rendering the word is Bathric, sounds close to Boduoli.[21] After the passage of the envoy, the author *The Old Version of the Tang History* lamented that the power of Dashi, that is, the Arabic empire had grown so strong that it invaded many countries and even surrendered the Fulin capital. Fulin thus made a peace treaty with the Dashi by sending gold and silk.[22] This information certainly dimmed the glory of Fulin in the eyes of Tang Court. Records of later envoys from Fulin suggest that they were either religious missionaries from the eastern Christian churches or traders from Syrian territory that the Byzantine lost to the Arabs. In the year 667, a mission from Fulin delivered *Diyejia* 底也伽 to the Tang court.[23] As a single gift to the Chinese emperor this must be some precious stuff. In Chinese pharmacopoeia Diyejia was a drug of complicated ingredients which had opiate effect. It was popular in Islamic countries and those produced in Bagdad were best in quality.[24] No matter how precious this drug was, it could not be state gift from Constantinople. In the year 719, the lord of Fulin sent two lions and two gazelles through the Great Chief of Tokhara to the Tang court. A few months later, he sent a Christian bishop to the Tang court.[25] The series missions from Fulin to the Tang court actually display a process of refugees displaced by Arab

conquest and occupation running from former Byzantine Syria to Western Asia and Central Asia. Many refugees dispelled by Arab conquests of Syria and Asian Minor, be they former Byzantine or Persian, fled to Tochara region in modern Afghanistan. Tokhara became a hub of transition for refugees from occupied Syria. The record about Fulin in the *Old Version of the Tang History* finished with the note that a Christian bishop came to the Tang court, presumably from the Fulin church based in Tokhara.

Those Christian and heretic religious preachers/refugees based in Syria migrated eastward ever since the orthodox Christian church started to establish orthodoxy by chiseling out non-complying sectors in the 5th century. Nestorian church probably was the best established Christian church in Tang China, as memorized in the famous *Da Qin Jingjiao Liuxing Zhongguo Bei* in 781. This was a stele inscribed in both Chinese and Syriac, the language of the eastern Christian Church. Nestorian church split out at the Council of Ephesus in 431, since then expanded eastward from Syria to the core of the Persian Empire. Therefore the Nestorian church was first known as Persian church when Rabban the Nestorian missionary reached Chang'an in 645. On the stele of 781 that inscribed the story of Nestorian in Tang China, the author Jing Jing explained the church was formally called Persian church, but it was a misnomer because its origin was the Roman Empire, Da Qin. Therefore the official name of the Nestorian church in China was Da Qin Jingjiao. We know that the Nestorian was one of the sectors of east Christendom, extended from the church of Antioch. Changing its name to Da Qin was an effort to match Chinese memory of the glory of the Roman Empire. By that time the Nestorian church was well established in Tang China and was patronized by Emperors with purple robes bestowed on their priests.[26] They were, nevertheless, clearly not from Fulin, and thus could not be mistaken as ambassadors from Fulin by Tang court scholars.

Then who were the Christian Bishops pretend to represent kings of Fulin? The Council of Chalcedon in 451 created two major churches of Christian in the East. Both the Chalcedonians, called Melkites later on, and the Monophysites, lived and flourished in Persia. By the time of Arab conquest of the Sassanid Persia and encroached on the Byzantine territory, some of the Syrian Christian church Bishops could have ended up further east, especially in Tokhara. The Persian Prince Peyrooz first reached the Yabghu Khan of Tokharistan after the king Yezdjerd was killed by Arabs in 651 near Merv. The Turkish regime in Tokhara was friendly with the Tang Empire and open to refugees and religious missionaries. Tokhara took in refugees from Arab conquest and enabled them to contact Tang court for helps. Manichaean church which was considered as a Christian heresy also built a strong base there and further propagated to Tarim Basin. The Melkites were Christians loyal to the emperors and followed the rule of the Council of Chalcedon, thus they could have been the bishops who felt entitled to represent the rulers of Fulin or the Byzantium.

The real print of Byzantine presence in Central Asia and China are golden solidus spread along the Silk Road. Byzantine golden coins have been found in tombs along the trade routes. Among the more than forty gold solidus discovered inside China, the genuine Byzantine golden coins were buried between the late 6th to early 7th centuries, or in the period between the Northern Dynasties and early Tang. They are well made coins with fine portraits and clear legends, weighing 4.4–4.54 g. They all came from tombs of eminent officials serving the northern frontiers of the empires. The best example is the gold coins from the tomb Li Xizong buried in 545 and his wife Madam Cui buried in 549. Three golden Byzantine gold coins were issued by Theodosius II (r. 408–450), and two of Justin I (r. 518–527). Li Xizong was related to the Northern Qi royal family and served as the governor of Shangdang, on the northern frontier.[27] In addition to the golden coins there were other fineries include a golden plated silver ring inlaid with lapis lazuli.[28] Those Byzantine gold coins ended in the tombs of the officials

of the period mostly likely came from the Turks, the most prominent power on the steppe between the Mediterranean and the Tang China. While chasing the Avars to the west, the Turks exchanged envoys with the Byzantium by 568. The Byzantines and Turk Qagans exchanged gifts frequently. After the split of Turks into the Eastern and Western Qaganates, the Eastern Turk Qaganate became a vassal of the Tang in 630, and the Western Qaganate subjected to the Tang in 659.[29] The politics on the steppe and the interactions of the horse riding nomads with the Byzantium and Tang coincident with the finds of Byzantine golden coins in the tombs of military commanders of norther frontier before the Tang. That is to suggest, those coins and other fineries could be the gifts the northern dynastic rulers received from the Turks, and then were distributed as royal rewards to the generals. Once the Tang Empire was strong enough to conquer the Turks on their borders, the gifts of Constantinople were no longer available through the Turks. A Byzantine gold coin was discovered in Bikeqi Town, Tumote Left Banner, Inner Mongolia, in a burial without coffin but with rich assembly of goods such as rings of lapis lazuli and high foot silver cups. The golden coin was cast by Leo I (r. 457–474).[30] This could be the last rest place of a merchant on his way to China in route of the steppe.

Most imitated golden Byzantine coins have been found in burials of Sogdians who migrated to China. Sogdians were agents selling silk to the west for the Turks who exacted silks from the Northern Dynasties, and as agents obtaining horses for north China regimes. In a cemetery of Sogdians near Guyan, Yuanzhou of the Northern Dynasties, several Sogdians who in charge of horse management were buried. Shi family were Sogdian immigrants from Kesh (Shi Guo) of Sogdiana. Shi Shewu (d. 609) were buried with a Sassanian silver coin among other foreign treasures. Shi Suoyan (d. 658), Shi Kedan (d. 669), Shi Tiebang (d. 666), Shi Daode (d. 678) were buried with golden Byzantine coins, albert imitated ones.[31] Imitated Byzantine golden coins have been found in tombs of several Sogdian immigrants in other regions.

Many treasures found from sites of the Silk Road and Tang China look like Byzantine in style, but often miss the mark of genuine Byzantine artifacts under careful scrutiny. No silk textiles excavated from burials shows exact characteristics of Byzantine weave similar to silk pieces preserved in European church treasuries. Silver vases and woolen tapestries carrying Hellenistic motifs are quite different from the Christian themes in Byzantine art. Turks who galloped on the steppe expanded and split their military powers reached both China to their south and the Byzantine to the west. The Turkish nomads thence carried truly Byzantine golden coins and artifacts to royal courts in north China which eventually landed in tombs of military officials they dealt with. After the Tang Empire consolidated its frontier, Central Asians, Sogdians in Transoxiana the best traders on the Silk Road, brought their recreated Byzantine flavored artifacts to Tang China. Even though many envoys came to the Tang court under the name of Fulin, direct information and intimate understanding of the Byzantine Empire did not reach the court officials whose writings preserved in Tang archives. The admiration of the Western Lord of Treasures from Chang'an was based on a beautiful mirage.

Notes

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6 Wei Zheng, *Sui Shu* 隋書, Beijing: Zhonghuashuju, 1973, 67/1578–80.

7 Wei Zheng, *Sui Shu*, 83/1856–57.
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SOGDIAN RELIGION ALONG THE SILK ROAD

Variations of Zoroastrianism in Medieval China

Zhang Xiaogui

For a long time Sogdian culture and religion remained Iranian and closely related to its imperial Iranian neighbors. Although plenty of inscriptional, textual, and illustrative sources from Sogdiana support abundant evidence for the popularity of Buddhism, Manichaeism, Nestorianism, and more, the most important religion there is undoubtedly Xian Religion（祆教）, a kind of Zoroastrianism. It is well known that the people of Sogdiana were the main caravan merchants of Central Asia from the 5th to the 8th century. Sogdians had played such an important role in trade along "The Silk Road" that Sogdian merchants and missionaries traveled vast distances and thus brought their religion to the east, especially in China. It is the archaeological finds in Sogdiana (mostly southern Uzbekistan and western Tajikistan) that provide us with the most fascinating picture of the beliefs and practices of the Sogdians in the region. Xian Religion was once popular in the Tang Dynasty, together with Manichaeism and Nestorianism. As a kind of foreign religion, its propagation in China was bound to be subject to the local socio-political, economic and cultural circumstances. Zoroastrianism was also banned during the Emperor Tang Wuzong's (r. 814–846) suppression of Buddhism. However, there was still not any shortage of literature on the Xian Religion during the Song period. Is it exactly the same as Tang's Xian Religion or Persian Zoroastrianism? What was its ultimate form and direction after the Song Dynasty? To clarify this question, we should observe and study the nature of Zoroastrianism first of all.

Chinese Zoroastrianism: Religion or Folk Rituals?

As it is aforementioned, Xian Religion spreading in medieval China originated from ancient Persian Zoroastrianism. However, there had been not any Chinese translation of Zoroastrian scriptures till the Tang Dynasty, unlike Chinese Manichaeism and Nestorianism propagated during the same period. Therefore, we have to get more information about this foreign religion only according to the records outside the religious community. Although Chinese Zoroastrianism did not have a complete religious system, it was, after all, an independent belief in the Tang Dynasty, and mainly believed by the aliens from the west. In the fifth year of Zhenguan Reign (631), Helu, the magus of Sogdian Zoroastrianism, brought the teachings to the court. Chinese Buddhist Zan Ning (919–1001) recorded the event in his *Dasong Seng Shilüe* (A Brief of Chinese Buddhist History in the Song Period):

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> The teachings of Huoxian Religion was originally from the Great Persian Empire. The Name of the Father is *Suluzhi*. He has one student whose name is Xuanzhen. He had learnt his teacher's doctrine and was the chief lord of Persia. He went to the Fire Mountain and then propagated the religion to China. In the fifth year of Zhenguan Reign, the Magus Helu brought the teachings to the court.[1]

In this text, Zan Ning called the prophet Zoroaster of ancient Iran as *Suluzhi* (苏鲁支). There are various spellings in different languages about this Persian Prophet, transcriptions of which are following: Zaraθuštrā in Avestan (both Old Avestan and Young Avestan),[2] Zarduxšt in Pahlavi,[3] Zarhušt in Manichaean Parthian,[4] Zrušč in Sogdian and Uighur,[5] Zōroastrēs (Zathraustēs, Zōroastēr, Zaratas and Zarades) in Greek.[6] It is obviously that Sogdian Zrušč is nearly the same as the reading of Chinese *Suluzhi*. It is also said that the information about Zoroastrian Prophet in Chinese should be from Sogdian sources. According to *Seng Shilue*, it was Helu who firstly and officially came to the Tang court to introduce Zoroastrian matters. Helu was a Sogdian and a professional Zoroastrian priest. He must have had undergone the rigorous priestly training and knew very well about his religion. It is well known that Zoroastrians were not keen to translate their classics into other languages and carry out missionary works. Even if Helu did not carry the religious doctrine, he could have succeeded in introducing to Chinese Emperor about Zoroastrianism by virtue of his excellent language skill and professional accomplishment. This is helpful to promote the speculation that Chinese *Suluzhi* was transliterated from Sogdian Zrušč. Helu came from Sogdian Kushanika (state: He何国).[7] Neither he presented any sutra and image, nor he declared to preach his religion to Chinese. However, that the court decreed to establish one Zoroastrian temple at the Chonghua Lane (崇化坊) of the capital was related clearly to Helu's propaganda.[8] This Temple and others built at Chang'an were also concentrated in the area of foreign barbarians, the purpose of which was obviously to meet their Zoroastrian faith in China.

According to some historical documents, there were some subtle varieties of rituals performed at Zoroastrian temples in Liangzhou（凉州）, Yiwu（伊吾）, Luoyang（洛阳） although they all came from the west. After the Tang conquest of Yizhou in 630, and following a brief period of interim rule by the Sogdians at the end of the Sui, the Tang incorporated the city. According to *Gazetteer of Shazhou and Yizhou*， Dunhuang manuscript: S.367, there was a remarkably unusual cultural feature at one Zoroastrian temple：

> In the Zoroastrian temple there are countless images. Before the defeat of Gaochang by the Tang, the Zoroastrian chief priest Zhai Pantuo staged a séance of the gods because he had been summoned to Chang'an for an audience with the emperor. He took a sharp sword and plunged it right through his abdomen from left to right and it emerged from the other side, and he left it skewered through him. He then tied his hair to the end of the sword in a circular motion. He proclaimed that as in all matters of life the will of heaven will prevail and so the gods would help him as they were his witnesses. After the gods had departed, he collapsed in an unconscious state with very labored breathing, but after seven days he was fully recovered. A local official sent a memorandum to the emperor informing him of this incidence, and the emperor thus conferred the title Mobile Corps Commander （*youji-jiangjun*）on the priest.[9]

The aforementioned ritual was similar with the one at the Xian temple in Liangzhou according to one literary sketches by Zhang Zhuo, a writer in the Tang Period.[10] Zhang Zhuo also recorded the ritual at the Xian temple in Luoyang:

> There were Xian temples at Lide Fang and the West Fang of the Southern Town in Henan State. Every year foreign traders offer prayers, cook pigs and sheep, play the *pipa*, drum and flute, and sing and dance drunkenly. After worshipping the God, they recruited a foreigner as Xian priest; the audiences donated money and gave them to him. The priest took a *hengdao* [sword] which was as sharp as frosted snow and could cut hair very easily. The priest stabbed the sword into his abdomen, the blade emerged from his back, rupturing the intestines and belly and making them bleed. After a while, the priest sprinkled water and prayed for it, and he then totally recovered. This was a kind of magic practiced in the Western Regions.[11]

According to this paragraph, the priest was recruited although there was not any further hint where he came from. The priest of Yiwu's temple whose name was Zhai Pantuo (翟槃陁) was professional. Pantuo (槃陁) was the transliteration of Sogdian *Bntk*, meaning "slave", "servant".[12] His surname Zhai showed that he was a Gaoche Sogdian.[13] Zhai was granted as "guerrilla general" (Mobile Corps Commander?) because of his magic and efficacious ability, different from others' recruitment. He was awarded the official title because of performing Zoroastrian yasna ritual, which was similar with Xianzheng (祆正) and Xianzhu (祆祝) of the *Sabao* Office (萨宝府) in the Tang Dynasty. It is well known that Xianzheng and Xianzhu under the *Sabao* office were in charge of Zoroastrian affairs in Sogdian colonies and were subject to the central government's bureaucratic system during the Tang Dynasty. Zoroastrians had to recruit the priest in order to meet their religious need in Luoyang, which was different from Yiwu's priest appointed by the government.

Whether the priest was appointed by the court, or recruited from public, the ritual was full of foreign exotic at Zoroastrian temple in the Tang Dynasty. However, by the late Tang and Five Dynasties, especially after the Song Dynasty, the foreign magic character of Zoroastrian rituals gradually faded. Zhang Bangji, a writer of the Song time, described the hereditary arrangement of Chinese Zoroastrian priests in his *Mozhuang manlu*《墨庄漫录》:

> In the north of the city there is a Zoroastrian temple. Xian God originally came from the Western Regions and was a foreign God. It entered into China as the same time as Daqin (Nestorianism) and Muhu (name for Zoroastrianism in Tang), which local people worshiped as fire God. The head of the temple Shi Shishuang claims that for generations his family has served as the priests of the temple. There are three official letters entrusted to his ancestors by government officials: The first ancestor was called Shi Huai'en and a letter was presented in the 3rd year [862] of the Xiantong reign of the Tang dynasty by the Xuanwu Military Commissioner (*jiedushi*) Linghu Tao, Vice-Director of the Department of State Affairs. The second ancestor to receive a letter patent was Shi Wen in the 3rd year [956] of the Xiande reign of the Later Zhou dynasty, and it was issued by Wang, Scholar of Duanming Hall with the authority of the Magistrate of Kaifeng-fu [then the capital]. The third was Shi Gui in the 5th year [958] of the Xiande reign issued by Wang the Commissioner of State Affairs, also invested with the authority of the Magistrate of Kaifeng-fu. From the Tang period onwards the god Ahura Mazda was also worshipped in Kaifeng and the priest who presided over his worship was a hereditary title which was unusual in that it had been passed on for more than two centuries.[14]

The shift of the patronage of the Zoroastrian official between Tang and Song just showed how this foreign religion was gradually absorbed into Chinese indigenous society. After An

Lushan Rebellion (755–763) and Huichang period (841–846), the ordaining of the priest of Zoroastrian temple was transferred to the local government, which indicated that these Zoroastrian officials were losing their specific religious features little by little. This undoubtedly showed that the priest of Zoroastrian temple was very similar with the one at the traditional Chinese temple at that time. The records of Zoroastrian temple showed an authentic Chinese belief which was completely different from fire-worship by westerners in the Tang Dynasty. We could not find any Zoroastrian magical ritual from the description of the Zoroastrian Temple in the Song Dynasty. The priest had not the slightest "barbarian" color in the Song period.

In addition, the function of Zoroastrian temples had also changed, from which we could get a glimpse of the process of this foreign religion's gradual sinisization. The temples of Zoroastrianism had been established in order to meet Zoroastrians' religious need where the westerners could worship their fire and make sacrifice in the early Tang Dynasty. In the late Tang and early Song Dynasties, the temple presided by Shi family of Kaifeng was still known by its worshiping Zoroastrian god, but it was not to meet the belief of the "barbarians". Considering the experience of Fan Lugong in the temple of Kaifang, as well as the Chang Yanfu's praying for the healing in it, "There is a Zoroastrian temple in the north of Kaifang City . . . people fear its great majestic and efficacious, then take it seriously", Zoroastrianism had become a kind of folk belief for ordinary people's bless.[15] In particular, the records of *Songshi* and *Songhuiyao* showed that Zoroastrian gods had been approved by Chinese Court, and the same as protectors of Chinese villages and cities worshiped for necessary rain. It was recorded in the "Treatise on Rites" (*Lizhi*) of *Songshi*:

> In the first year [960] of the Jianlong reign-period, after Emperor Taizu conquered the prefectures of Ze and Lu, he prayed to the Xian Deity, the God of Taishan, and Lord Chenghuang (City-god). He also prayed to them after conquering Yangzhou and Hedong Prefecture . . . the offerings for shrines such as Tianqi and the Five Dragon Hall shall follow [the secondary level of] medium shrines, while for the Xian Temple and the City-god Temple, one sheep and eight bamboo wares and bowls can be used.[16]

It was recorded in the item treating "Prayers for Rain" in the "Rites" section of *Song Huiyao Jigao*:

> Whenever the nation suffers flood and drought, wine and processed meats shall be offered in sacrifice . . . in the capital . . . the five Dragon Hall, the City-god Temple and the Xian Temple . . . certain officials are appointed. . . . In the second month of the second year [1009] of the Dazhong-Xiangfu reign-period, it was ordered that when officials pray for rain, . . . the offerings for shrines such as Tianqi and the Five Dragon Hall shall follow the secondary level, while for the Xian Temple and the City-god Temple, one sheep and eight bamboo wares and bowls can be used. However, the food of the imperial kitchen, wine for the Hanlin Academy, and joss paper, camels, and horses can no longer be used.[17]

By the end of the Southern Song Dynasty, the local officials also prayed at one Zoroastrian temple in order to prevent the mutiny in the town of Zhenjiang, and eventually received the blessing. This practice was much in line with popular praying for good fortune. It was recorded in fasc. 8 of *Zhishun zhenjiang zhi*:

> Huoxian (Chinese Zoroastrian) Temple, situated on the hillock within the gate of Zhufang. It was recorded in Zhang Shunmin's collected works: "There is one Xian temple in the north of Capital. The god came out from the Western Regions, and entered China in the Qin period. It had been worshiped as the fire God by local people. It had enjoyed rigorous and exalted sacrifice in the Tang Dynasty". The abovementioned district gazetteer was cited in *Xiangfu TuJing* of the Song period: Yang Maoshi, who is the son-in-law of Zhou Bao, the general of Run prefecture, was a provincial governor of Suzhou. He built the temple in the south of the city because Run also had this temple. In the Jiading Reign (1208–1224), the temple was moved to the foot of the mountain. Zhao Shanxiang, the county's governor, thought that the temple was high on the hill and inconvenient to the county, then he ordered to move it to the foot of the hill. The gate of the temple faced to the east, and the county's governor managed the prayer. So that it was called "Xian god cannot cause Xian". In the Duanping Reign (1234–1236), the temple was destroyed. In the Yiwei of Duanpingyi (1235), the officer prayed to God to prevent the rebellion of Jiangzhai's army, and the God blessed it. The governor Wuyuan destructed the temple after the rebellion was pacified.[18]

This shows that the Zoroastrian temple was assimilated into the ritual ceremony of the dynasty of Chinese mainland during the Song Period and became a sterling Chinese belief.

On the back of an Dunhuang's manuscript No. P. 2814 collected at Paris which was written in the Period of Tiancheng Reign in the Houtang Dynasty （926–930), it was recorded that some temples had been destroyed for so many years that Anyi, the governor, ordered to worship the gods with painted statues, which included God of the Gate, Goddess A'niang, Goddess Zhangnvlang, Xian Temple (Zoroastrian temple), Goddess Nine sons' Mother, General Antlers, General Zhongjiedan, Jade Lady, General Zhazhong, General Battle, God of the Road, God of Grain, God of Lord (Land) Association, God of Waterweeds, Lang Jun. The main purpose of worshiping these gods was to protect the city against any attack.[19] Zoroastrian temple of Dunhuang had also become the stage of popular entertainment, where Zoroastrian divine became one of the gods prayed by the folk, the same as Chinese local gods due to the integration of foreign and Chinese cultures in the late Tang and Five Dynasties.

Iconoclasm and Idolatry

It is generally believed that Zoroastrians had accepted the fire cult of the temple till the 4th century BCE.[20] The ancient Iranians first worshipped the god to oppose idolatry such as the Anāhīd's cult, and gradually developed an orthodox ritual of the religion.[21] Thus, the fire gradually became the sole object to be worshiped by Zoroastrians. An iconoclastic movement appeared to have gathered force in the late Parthian period, and won a complete victory by the Sassanians. During the reign of Valakhš (Vologeses I, CE 51–78), the fire altar was printed on the back of the coins he had issued to replace the Greek-style statues used by previous kings. The local noblemen from Persian Sassanian family who were the protectors of the Anāhīd temple removed the statue from the holy shrine, replacing with the fire altar.[22] In the Sassanian period, the court issued the law to prohibit worshiping of any icon. Ardashir I (224–240 CE) was a vehement iconoclast and passed the law to oppose the icon as a worship object when he came into power. Sassanian kings, together with the priests and the nobles, actively established the sacred fires and their temples instead of the icons. When the icon was removed from the holy temple, they placed a fire altar in it to expel the potential evil of the icon.

Dunhuang Manuscript S.367 records that there were many "Sushu" sacrificed at the Zoroastrian temple in Yiwu county of Yizhou during the Tang period:

> There is a Zoroastrian temple in the Yiwu County . . . there are Sushu 素书 with innumerable images in it.[23]

Some scholars take the Sushu for colorful painted statue.[24] This writer studies the context of Sushu in ancient prose and believes that the Sushu is not statue but charcoal drawing image of Sogdian Zoroastrian gods.[25] The existence of images among the Sogdian Zoroastrians means that they inherited the practice of Achaemenid Zoroastrians, instead of that of Sassanian. Undoubtedly, in Sogdian Zoroastrianism, there were other modes of worship different from those in Sassanian orthodoxy Zoroastrianism. Chinese Zoroastrians worshiped the icons of their deities in the form of representations which accorded with the custom of Sogdian Zoroastrians. However, a long time ago these Zoroastrian images were used by local Chinese as their own folk custom during the period of the Five Dynasties. It is inevitably that Chinese Zoroastrians finally worshiped the icons of their deities in the form of idols in the historical surroundings of idol-worshiping prevailing ancient China.

In the Song Dynasty, Maheśvara was worshiped as a Zoroastrian god at the Zoroastrian Temple, which was recorded in *The postscripts of paintings at Guangchuan* written by Dongyou：

> In July of the 8th year of Yuanyou Reign (1093), Chang Yanfu went to the Wenshu Monastery of Kaibao Temple. Some day he suddenly got a disease of chills and fever, and was terribly scared. In the night, he went to the Xian temple and prayed to the God. By the next day, he became so well that he made sacrifice at the court yard. Then he took back the image of the God and served it. He enjoined someone to record this experience so that the mighty of the god could be known by all. At Zoroastrian temple, the foreign idol had been worshiped for many generations. Its image was so odd and called Maheśvara as in some Buddhist sutra. The God had the great divinity, could save all miserable ones and pacify all the four directions to defend the Dharma. At the beginning of the Sui Dynasty, the religion was taken into China and a temple was ordered to be built at Banzheng Lane. Some westerners often offered sacrifices and prayed by worshiping fires, which were very strange and magic. There were also miraculous performance of punching the belly and swallowing the fire. Therefore the common people came to swear by oath faithfully. The chief officer of the Sabao mansion managed the affairs and the priest took charge of the ceremony according to the decrees of the Ministry of Rites in the Tang period. The institution was highly solemn and the rite was eminent at that time. This time, Mr. Chang gained efficacious response through his prayers, and then worshiped and recorded it, which could be called as the highest respect.[26]

From the context of this section, Zoroastrian Temple should be attached to the Wenshu temple, a Buddhist monastery where the statue was generally worshiped. Therefore, the god of this Zoroastrian Temple should be worshiped in the form of idol. However, it was attached to the Wenshu temple because local people took the god as the Indian Maheśvara. The God had "the great divinity, could save all miserable ones and pacify all the four directions to defend the Dharma", so that he should belong to the category of Buddhist gods. "At Zoroastrian temple, the foreign idol had been worshiped for many generations. Its image was so odd and called

Maheśvara in Buddhist sutra", indicating the concept that both different gods were thought as the same in the Song period. As the image drawn by Chang has been no longer exist, we could not study whether there was any difference between the image and Maheśvara. But in any case, this record no doubt hinted that Zoroastrians had begun to worship the idol of the god in the Song Dynasty.

Wenying, a famous monk of the Song Period, had mentioned in his *Jade Pot's Concise Story* (also known as *Jade Pot's Wild History*) that Duke Fanzhi, namely Duke Lu, saw a "short earthen ghost" at the back door of the Zoroastrian temple in the Fengqiu lane of Kaifeng City.[27] The same story was also found in Shao Bowen's *Records of Shaw's hearing and watching* (also known as *First Part of Records of Shaw's hearing and watching*).[28] Although the two paragraphs of the text were slightly different, but the records on the Zoroastrian temple in Fengqiu lane 封丘巷 of Kaifeng City 开封 were consistent.[29] The text recorded especially that Fanzhi, namely Duke Lu, saw a "short earthen ghost" at the back door of the Zoroastrian temple, which could be a statue of Zoroastrian god. There are some gods whose images are very singular in Chinese traditional pantheon, but few are described as ugly. So the short earthen ghost could be Sinicized Zoroastrian god, another evidence to support the idolization of Zoroastrian worship in the Song Dynasty. This is different from the portrait of Zoroastrianism when it came to China in the early days, and also from the Persian Orthodox Zoroastrian worship. Although these idols were regarded as Zoroastrian gods, they did not belong to the Orthodox Zoroastrian pantheon, indicating that the true face of Zoroastrianism as a foreign religion is increasingly blurred. Chinese people took them as Zoroastrian gods to worship, which reflected the increasingly localized form of Zoroastrianism.

Although Zoroastrianism had not been an independent religion in the Song Dynasty, people remembered Zoroastrian god's efficacy and the so-called Zoroastrian idol was also imported into traditional Chinese folk beliefs. The reason for this situation was closely related with Chinese traditional cultural environment. Chinese had worshiped various idols since ancient times, the national ideology of Confucianism, various kinds of vocational groups, many ethnic groups, the mainstream religions of Buddhism and Taoism and a variety of folk beliefs have their own idol worship. Ancient Chinese people worshiped many gods, the popular did not specifically believe certain god and religion, and did not care about any strict religious doctrine, dogma and discipline, but worship various gods as long as they were efficacious. It is under this historical and traditional background that Zoroastrianism had been passively transformed by Chinese, and many kinds of Zoroastrian images evolved according to Chinese custom and need. Of course, this kind of divine category had nothing to do with original Zoroastrianism. Therefore, we may take the idol as another manifestation of Sinicized Zoroastrianism.

Khvaētuadatha and Chinese Traditional Commandment on Marriage

"Khvaetvadatha", that is next-of-kin marriage, was highly meritorious, and never more so than when it took place within the close family circle, that is, father with daughter, brother with sister, even mother with son according to Zoroastrian history.[30] This marriage custom was in line with the teachings of Zoroastrianism, as described in Y.12.9:

> I pledge myself to the Mazdā-worshipping religion, which throws off attacks, which causes weapons to be laid down, which upholds Khvaētvadatha, which is righteous, which of all (faiths) which are and shall be is the greatest, the best, the most beautiful, which is Ahuric, Zoroastrian. To Ahura Mazdā I ascribe all good.[31]

However in ancient Chinese documents, this form of marriage was considered to be extremely nasty and risky in light of Chinese mundane ethics and cultural backgrounds. The marriage alliance was forbidden between people of the same surname according to relevant laws during the Tang Dynasty. Therefore it was very difficult for most Zoroastrians to devoutly keep the orthodox tradition of marriage in ancient China. In the Yuan Period (1271–1368), some Chinese writers used "The Zoroastrian temple is on fire" as a literary allusion representing amorous trysts in some literature such as the intermezzos of plays.[32] This phenomenon was likely to be influenced by Zoroastrian marriage and indicated that this foreign religion was gradually integrated with Chinese indigenous society.

Zoroastrian next-of-kin marriage was also recorded in Chinese historical documents, *Zhoushu*:

> Local people worshipped Huoxian God in Persia. Marriages also did not follow the etiquette order, which was the most nasty and risky among all of the barbarians. When a female citizen was more than ten years old, she was adopted by the King and awarded to someone who gained meritorious deeds.[33]

Fasc. 120 of *Weishu* and fasc. 97 of *Northern History* contained similar records with *Zhoushu*'s.[34] *Sui Shu* also recorded that "Persian men usually married with their sisters".[35] There was also this kind of marriage custom in Central Asia. Huichao, a Korean monk who made pilgrimage to India in the Kaiyuan reign (723–727), recorded in his *Travels to five Indian countries*:

> The nations from the east of Arab were barbarian ones including An Guo, Cao Guo, Shi Guo, Shiluo Guo, Mi Guo and Kang Guo, etc. . . . and these six countries did not know Buddhism, but always believed Zoroastrianism. Kang Guo had a monastery temple and a monk who did not understand Buddhist teachings. People in these nations all cut their hair and loved the white textile hat. There was a kind of very evil custom which people married their mothers and sisters, which was extremely nasty and risky. Persians also married their mothers as wives.[36]

Aforementioned records mainly described Sogdian Zoroastrian marriage in the Central Asia. However, according to these historical records, next-of-kin marriage did not exist in Samarkand but in Bukhara, indicating that the marriage was mainly not popular in the Eastern Sogdiana but Western Sogdiana. The details are worth exploring further. It is noteworthy that the marriage is an extreme example of the patriarchal system, that is, the father and daughter, the mother and son, the brother and sister are married. It can be said that the next-of-kin marriage is the unique marriage custom of Persian Zoroastrianism, but it cannot summarize the whole picture of Zoroastrian marriage. This may also be seen as an obvious difference between Persian and Central Asian Zoroastrians.

Although Chinese historical documents recorded this marriage as "the most ugly among the barbarians", orthodox Zoroastrianism thought it as a kind of merit and devout good deeds. This divergence was derived from the different tradition of the two cultures. It had been prohibited that the couple from the same surname might get married with each other since ancient time in China, in which one of the most important considerations was to prohibit the blood family marriage. The law stipulated in the Tang Dynasty that "Those who married with each other with the same surname should be exiled for two years. The couple whose relationship was closer than Cima 缌麻 should be punished for the reason of adultery".[37] The so-called

Cima was one of the farthest relatives within five generations, which showed that the intermarriage within a clan also committed incestuous crime in the Tang Dynasty. Li Hui, the provincial governor of Jianzhou in the Tang Dynasty, was demoted to the position of Sima of Fuzhou because of marrying the woman with the same surname, which was charged by some enemy, and eventually died in office.[38] This was very famous case of "the same surname does not marry" in the Tang Dynasty, which showed the prevalent of this concept among local people.

The provisions of the Song Dynasty were the same as Tang's law, the injunction that the same surname might not marry with each other was extremely strict.[39] There were the same regulations of prohibiting marriage between the same surname couple in the later dynasties, of which the details were slightly different. At the same time, other prohibitions of marriage between the same clan, the cousins and other relatives were also extremely strict because of Chinese ethical code.[40] Although the same surname does not always mean the same bloodline, the prohibition of the marriage between the same surname couple was to avoid the marriage with the same clan. Considering this strict marriage taboo, Persian and Sogdian marrying with mothers and sisters was naturally easy to be seen as "the ugliest among barbarians".[41]

Zoroastrian Funerary Practices and Chinese Inhumation

The unique funerary rite of Zoroastrianism was the exposure and disposal of the departed men. At the beginning of the 7th century, the Emperor Yang of the Sui Dynasty sent the envoy Wei Jie to the Western Regions, who recorded Zoroastrian funerary customs in Samarkand of Sogdiana in his *Xifanji*. The paragraph was cited in *Tongdian* written by Duyou in 801 as follows:

> There were more than two hundred families, probably corpse-bearers, who lived outside of the capital and took care of funerals by placing dead bodies into an enclosure to be devoured by dogs, and then gathered and buried the bones. There were not any coffins.[42]

The practices that ossuaries, but not coffins, were used to hold the bones, has been confirmed by the archaeological discoveries in Central Asia.[43]

Ancient Chinese funeral concept is clearly contradictory to the Persian and Central Asian Zoroastrians. *Explanation of Names* written by Liu Xi in the Han Dynasty recorded some Chinese traditional funerary concept:

> Funeral was called as burial if it did not abide by the rite. The burial was namely Yi, which meant to make the corpse decay quickly. It was called discard if it could not be buried, which meant to discard the corpse to the wilderness. It was called donation if the corpse could not be found, which meant to donate the corpse to other place.[44]

Chuxue Ji compiled by the Tang's Court during Xuanzong reign cited this paragraph, which reflected the persistence of this concept for so many generations.[45]

The most common and durable funerary custom was burial in Chinese history, which was inseparable from traditional ethics of ancient China.[46] Chinese Confucianism had always emphasized that the corpse should be buried carefully in order to protect the body of the dead including their hair and skin, which was also thought as a kind of immortal filial piety. The concept of Confucian "returning to the earth after one's death" concept of funeral had always been taking a leading role in traditional funerary beliefs before the introduction of Buddhism into China. Although this traditional belief and practice had been impacted by Buddhism, the

burial was still the dominant form of funeral. The government still advocated burial in the Tang Dynasty. In March of Tianbao's first year, an edict was issued as follows:

> The change of the existing habits and customs is the essential principle of the King's administering a country. Collecting and burying the bones and corpses is the common function of a season. It is said that the dead because of disease and plague were abandoned in the wild and could not be buried normally in the east of Changjiang River. It is so unexpectedly unimaginable that the reason is missing. It had become a matter of common practice to cause a lot of disadvantages. Since then, the officials of the government should be authorized to warn and ban these practices so that people learned the regulations and did not violate them again. The family was ordered to inhume their unburied relatives. It was hoped that the neighbors in the village could bury those who had no relatives and died when traveling elsewhere, so that the dead could not be exposed in the wild, according with the rite. The similar ones in other prefectures should also be arranged in this way.[47]

The cremation began to prevail after the Song Dynasty when, however, the crude custom such as "discarding the corpse to the wilderness" was still prosecuted by the government:

> Fan Duke Zhongxuan governed the Taiyuan city, when the area in the east of Huanghe river was so narrow that people did not bury their dead relatives in order to cherish their earth. The Duke ordered his followers to collect ownerless burnt bones and bury them separately according to their sexual distinction. He then made an official denunciation to other prefectures to imitate this practice. However, there were more than ten thousand dead men whose bones could not be collected. Therefore, he still recorded several words to express his aspiration indirectly that the vulgar custom should be reformed. The time is the sixth year of Yuanyou reign (1091). During the Chunxi reign (1174–1189), some officials also suggested: the government should bury some ownerless coffins which were deposited at some temples for a long time. Unfortunately, the policy was so ineffective that many ownerless coffins were still deposited at temples as ever.[48]

The aforementioned example demonstrated that the dominant form of the funeral had been still burial till the Tang Dynasty. Therefore we must consider the traditional concept of funeral when studying Chinese Zoroastrian funerary rites. The tombs of some immigrant Sogdians had been discovered since 1999 in Taiyuan and Xi'an. Although they used traditional Chinese sarcophagus or stone bed, the corpse or the bones were directly kept on the stone-bed. The practice undoubtedly conformed to Zoroastrian teachings according to which the earth is good creation and might not be contaminated by the corpse.[49] There were no inner or outer coffins in these stone-beds: just the base, platform for the body and upright panels enclosing the bed on three sides, which suggests that they functioned like an ossuary. Maybe this change was restricted by traditional Chinese funerary beliefs and practices.

In Conclusion

We have studied several aspects of Chinese Zoroastrianism including the rituals, the objects to be worshiped, wedding and funeral beliefs and practices. There is no lack of missing parts because any Chinese Avestan texts and certain archaeological relics have not been found. We

should study the rituals and practices so as to get the comprehensive and in-depth understanding of Zoroastrianism in medieval China. Mary Boyce comments on some Western scholars who examining Zoroastrian texts in the tranquility of their studies：

> Saw Zoroastrianism in the light of a forerunner of Christianity, whose significance ended when it transmitted its chief doctrines to the younger faith. So they were indifferent to its living forms, and also to those of its teachings which are unique and set it apart.
>
> It has been a weakness in the Western study of Zoroastrianism that it has concentrated largely on texts. . . . In a purely academic study of religion it is possible to make a subjective choice of what seems significant, whereas encounters with a living faith force one to accept its adherents' own understanding of its essentials, which are likely, moreover, to be embodied in its main observances.[50]

It is perhaps more likely for us to be close to the truth of this ancient religion from the view of rituals and practices which are more persistent than the boring creeds.

It is well known that Zoroastrianism has only developed into the religion of various Iranian nationalities rather than into a worldwide multiethnic one in the long history. As a branch of Iranian nation, Sogdians traveled east along the Silk Road, however did not propagate their religion to other people in the form of the whole system. Sogdian immigrants in the Tang period were, after all, were the minority, and their Zoroastrianism did not spread among Chinese people. With the passage of time, the Sogdian settlements gradually dispersed, and the Sogdian descendants became more and more Sinicized. During the Tang period, even some devout believers who maintained this religious tradition were unable to hold this religious ceremony on a large scale. Because many Sogdian immigrants in the Tang Dynasty were Zoroastrians and often held ritual activities of praying, they must have had an influence on Chinese People. However, influenced by the social and historical environment of medieval China, the manifestation of this foreign religion is bound to change to some extent.

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27

BUDDHIST PROPAGATION AND LANGUAGE BARRIERS[1]

Xinru Liu

It took almost a thousand years for Buddhism from its origin in Magadha in Lower Ganges Plain to reach and flourished in the Central Plain of China. The propagation passed through Gandhara on upper Indus valley, Bactria in Afghanistan, Sogdiana and Tarim Basin in Central Asia. The disciples of the Buddha encountered numerous languages and passed through many cultural domains when preaching in the land outside of their homeland. To make people understand the teachings of the Buddha, they had to teach their language and writing to their audiences, or they had to learn the languages of their audience. As translation is a long and arduous process, Buddhists from early time used artistic images to illustrate the stories and doctrines to get their messages cross.

Shakya Muni Buddha cultivated his ideas and organized his sangha while roaming around the "Great Magadha" area, that is, the lower Ganges plain that touching the foothills of the Himalayas to the north and forests of Deccan Plateau to the south. Although we cannot be sure what exact language Buddha spoke, the assumption could be that the language was the vernacular Prakrit of the Magadha region, that is, Magadhi. The compiler of Pali Buddhist canon Buddhagosha in the 5th century claims that the Magadhi, equals Pali, was the authentic language of the Buddha thus Pali text is the most authentic canon.[2] The written Pali Buddhist texts survived in Buddhist institutions in Sri Lanka and Southeast Asia. Whether Pali Buddhist text was the most and the only authentic texts of the voice of the Buddha is a matter of discussion. Vocabulary and syntax of Pali in Buddhist texts, however, correspond roughly to Magadhi inscriptions of Ashoka's time and Buddhist inscriptions after Ashoka in Magadha region, that is, on Sanchi and Bharhut stupas. Those inscriptions were carved in Brahmi script of Magadhi or Pali language. In other words, Pali was probably the language most close to that spoken in Magadha at the time of the Buddha. The geographical and ecological contexts and economic conditions shown in Pali Buddhist texts reflect Magadha region of the middle 1st millennium BCE. With archaeological data as background, Pali texts look much more like the real scene than any other Buddhist texts. In short, the language of early Buddhist sangha should be the Pali without later hybrid, that is, the Madadhi.

Buddhism as a faith and an institution started to spread out of the Great Magadha after the passing of the Buddha. That is to say, followers of the Buddha had to overcome language barriers to recruit new followers and to spread their messages. Buddha spoke a local vernacular of Sanskrit, thus he could directly communicate with the common people of the region to reveal

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the Noble Truths. In his lifetime, Buddha gained many followers in various social circles, but mostly in the Magadha region where his teaching could be understood. As Buddhist sangha opened to individuals and communities at the edge of the developing urban – agricultural society, Buddha had to address to those who were not in the Indo-European language domain thus could not perfectly understand the even the vernacular in Magadha. Those non-Magadhi speakers who joined the sangha surely had learned the language of the Buddha before their induction ceremony. The religious practice of monks and nuns begging for daily food from lay followers was important channel of communication. Once they accepted the promise that the reward of feeding the sangha would be a better afterlife, those who wanted join the community of lay followers could express their devotion by the action of supplying food, even if they could not express it by words. After the passing of Buddha, the sangha elders gathered to collect the teachings of the Buddha and codified them into the canon, first by reciting, then sometime later the memorized words were canonized in written form. Without the charismatic Buddha in person looming behind them, Buddhist sangha had to communicate with its supporting society via languages as well as imagery expressions comprehensible to new audiences to sustain and expand the sangha.

In the early days Buddhist rich patrons in cities held big vegetarian feasts for the sangha which was also major occasions Buddha gave sermons to lay followers and to recruit new members. The daily routine of taking food from patrons who provided several meals regularly gave the monks and nuns the opportunities to teach. This exchange between the monks/nuns and the patrons was more than rudimental expression of appreciation. The patrons, no matter what their status in the society, felt they gained merits towards progressing of the spiritual hierarchy of Buddhist cosmology. The teachers also gained merits of promoting the doctrines of their faith. These transactions, however, were conducted with a mutual understandable language. Thus, it could be the opportunities for the patrons came from outside to learn the language of the Sangha.

During the life time of the Buddha, Buddhists in Magadha already had contacts with other language speakers. In one of the early Pali texts *Vinaya* (Disciplinary Rules), the name of the city Takshashila (Taxila in Greek) in Gandhara appeared as the center of intellects and education. Gandhara at that time was one of the satrapies of the Achaemenid Persian Empire. The famous physician Jivaka went to Takshashila to study medicine and returned to the city of Rajagaha in Magadha to serve the kings, householders, and Buddhist Sangha.[3] In the *Jatakas*, a collection of didactic stories in the name of the Buddha's life and former lives, Takshashila was the place for education of Vedas, Sanskrit, and all kinds of Brahmanical and non-religious learning. Panini the first Sanskrit grammarian, a late contemporary of the Buddha, hailed from Gandhara.[4] In short, Buddhists as residents of the great Magadha region had information or even direct contacts with speakers of Gandharan Prakrit and various Persian languages, including Persian or Aryan, Elamite, Aramaic. Meanwhile, in Gandhara Panini compiled his Sanskrit grammar *Ashtadhyyi* therefore started the codifying of classical Sanskrit. Young people from Magadha traveled to Takshashila to study Vedas and Sanskrit including the Panini style Sanskrit, and returned to the Lower and Middle Ganges to pursue their Brahman missions. Though Buddha never taught in Sanskrit, a number of his outstanding disciples were born as Brahmans thus could be well versed in Vedic Sanskrit and probably were also familiar with the Sanskrit of Panini. That is to say, Sanskrit was the language that Brahmanically educated could communicate verbally even if their native languages varied. However, Gandhara and Magadha were far apart, thus communication needed to be in written form. It was the time when scribes appeared in cities of north India as a new profession. Aramaic language and script were introduced by Persian administration and traders to Gandhara. Meanwhile Brahmi

and Kharoshthi were created on the base of Aramaic, probably was also influenced by Greek script.[5] When the elders of the sangha compiling the teachings of the Buddha after his passing, they should have used the coded Magadhi language, and sometimes later written in Brahmi script. After Buddhist messages reached Gandhara, probably soon after Buddha's passing, and flourished under the Mauryan King Ashoka (r. 268–231), the earliest known written form of Buddhist texts – Gandhari in Kharoshthi script appeared in the beginning of the Common Era.[6]

Even under their greatest royal patron Ashoka, Sanskrit was neither the official language of the empire nor that of the Buddhist sangha. Inspired by the trilingual edicts inscribed on monuments by Persian kings, and for the purpose of communication with Persian and Greek speaking population in Kandahar, Ashoka issued edicts in the regions in bilingual inscriptions.[7] One was inscribed with Greek and Aramaic, another was in Aramaic transliteration of Ashoka Magadhi along with Aramaic translation of an edict.[8] In addition of carving his edicts on rocks and pillars, another way that Ashoka implemented his policy to the vast as well as diverse empire was to have stupas built to set up the stations that Buddhist sangha could gather for their *uposatha* meetings to review Buddha's teachings and discussing theological questions and disciplinary issues.[9] At that time, the Ashoka edicts in Great Magadha, for example, edict at the Sanchi Stupa, were using language similar to the Pali language in Buddhist texts. Sanchi was located at the border of settled communities of residents obedient to the king and the forest region where tribes were often restless. The forest people supplied the agricultural societies with forest products such as trained elephants and timber, but they themselves were not in the mainstream cultural domain. Therefore, they were not fluent in Magadhi vernacular. With all his intention to bring peace all over his territory, Ashoka faced the untamed population of forest people. In his famous edict after the conquest of Kalinga, Ashoka states:

> And *Devanampriya* thinks that even who should wrong (him), what can be forgiven is to be forgiven. And even (**t**he inhabitants of) the forests which are (included) in the dominions of *Devanampriya*, even those he pacifies (and) converts. And they are told of the power (to punish them) which *Devanampriya* (possesses) in spite of (his) repentance, in order that they may be ashamed (of their crimes) and may not be killed.[10]

Apparently, the forest people were conducting some unforgivable crimes that the king even though wanted to rule peacefully had to punish them. The best policy to make them obedient, for Ashoka, was to send Buddhist missionaries to convert them. On the edict pillar of Ashoka at Sanchi, only one edict is partially extant. This edict is about the unity of the sangha:

> The monk or nun who shall break up the Samgha, must be caused to put on white robes and to reside in a non-residence.[11]

The stupa that Ashoka had it built was probably just a bare dome. But the purpose was clear. Monks and nuns had already gathered around and had some residence, as those who split from the sangha not only had to wear white robes to identify themselves but also lost their residence. It seemed Ashoka was cared about the missionary works around the Sanchi Stupa and did not hesitate to discipline the monks and nuns. The earliest missionaries were likely from the areas Buddhist sangha language was well known. But soon more who came from the forest presented themselves with donations and their original cults such as nagas and *yakhas*. Ashoka could not have seen the artworks covering the railings and arches of the first stupa at Sanchi, but the people who adorned the stupa remembered him. On the middle beam on the

arch of the southern gate, the main gate, a relief panel displays a scene of a royal figure with a large retinue worshipping a stupa, and a king wearing a hood of five cobra heads with a large naga retinue worshipping the same stupa from another direction. The image of a king could not have represented anyone else but Ashoka, appeared here long after he and his kingdom were no more. If we try to read the story of the author of this artwork, in the shoes of the spectators of the post Mauryan time, we should be confident that those who created the art were declaring they follow both Ashoka and the local naga chief to worship the Buddha.

For the next few centuries till the time of the Kushans, Sanchi Buddhist site expanded to three stupas and developed into a monastery. On the railings of the three stupas, donors, lay worshippers, monks and nuns had numerous relief sculptures carved to express their devotion and to record their own identity thus also the merits. The relief panels were scenes of *Jataka* stories, life stories of the Buddha, and the scenes of Ashoka making pilgrimage to the sites of the Buddha, as well as images of local cults such as Nagas and Yakhas. The conspicuously missing is the image of the Buddha. The faithful then still believed that Buddha was the teacher who went to nirvana, not a god to answer their daily prayers. The inscriptions recorded the names of donors reveal that some of the patrons came from nearby communities and their acts of donations were inscribed in Brahmi script of Magadhi. The Yakhas and Yakhis were forest people, the Nagas and Nagins worshipped cobra cult. Those people were major donors who facilitated the construction of the monuments. They could have spoken various languages and managed to communicate verbally, but they probably could not read the written Magadhi on the monument and Buddhist texts. They could, however, listen to learned monks and nuns explaining the teachings of Buddha in front the sculptures displaying the stories which embodied the Noble Truths.

To address the faithful who came from the margins of the main stream, mainly women, one of the latest appeared Pali texts provided a narrative telling life stories of the many beautiful musicians and dancers in the heaven and what merits they earned in the world uplifted them to the heaven. Many of the women did not have known family background, thus most likely they came from forests and marshland community but migrated to the cities. Some were born in decent households but suffering for infertility after marriage. Some gained fame as artists or courtesans, some toiled as domestic servants. They diligently provided alms to monks and nuns to wish a better life after death. This book *Vimānavatthu*, or *Stories of the Mansions*, was one of the collection called "minor text" (Khuddaka-nikāya), which could be handbooks for monks to carry about for teaching by telling stories.[12] Maha-Moggallana, one of the most dedicated disciples of the Buddha, traveled to the sphere of devas or gods, a heaven called the "Realm of Thirty-Three", to see how the residents in there doing.[13] The Realm of Thirty-Three is one of the destinations that human beings will end up after death, according to the scheme of rebirth of Buddhist cosmology. When the realm of nirvana is the ultimate relief of suffering, reborn to the Realm of Thirty-Three is the next best path, above all other paths including the realms of human, *asura*, animals, and the hell. In the deva heaven that Maha-Moggallana visited, women who gave alms to Buddha and sangha when living in the world of human now reside in big mansions in the heaven. Many of the women reached there were downtrodden maids and mistreated daughters-in-law, and several of them were famous dancers and singers when they lived in the world. Here in the heaven they gained the status of *devata*, or secondary deva.

The scene of musicians and dancers playing on the stage of the heaven appeared vividly on the Bharhut Stupa, another monument using visual arts and writing to convey the messages of Buddhist teachings thus enacting dialogues between the sangha and lay followers. Bharhut stupa was erected after the Mauryan Dynasty transitioned to the Sunga Dynasty, which shift

the capital of the empire from the Mauryan Pataliputra to Vedisa, a former frontier town into the Deccan forests, not far from Sanchi Stupa. Many donors to Sanchi stupa lived in Vedisa according to their inscriptions of donations, which were inscribed besides artistic reliefs carved on pillars and beams of the railings surrounding the stupa. A group of finely executed relief panels on Ashoka's pilgrimage to a stupa were donations from a guild of ivory artisans.[14] Ivory carving was a profession using resources from forest to supply the new urban elite. A reassessment of the site of Bharhur Stupa reveals that it was not an isolated monument either, but were associated with residential caves for Buddhist sangha. Stone reliefs on the railing surrounding the stupa show even more deities and symbols of folk religions.[15] Bharhut Stupa was located half way between Sanchi and the Ganges plain and was built when the Sunga was in power which was not a Buddhist patron. Without current royal patronage, the influence of Ashoka was quite obvious. The first pillar on the left of the gate of the railing is a deep relief of a king holding a relic box, majestic and pious. A man on his left side and a woman on the right both ride on a horse holding an insignia. This image could not be anyone but Ashoka. The donor of the first pillar had her name and status carved clearly on the pillar:

> The first pillar is the gift of Chapadeva, the wife of Revatimita from Vedisa.[16]

This inscription tells us that she was no more than a housewife, yet she made such a significant donation under her name, and she could well be the sponsor or organizer of the entire project of the stupa. And the artwork declares that she follows the steps of Ashoka to promote the teachings of the Buddha.

On Bharhut stupa (Figure 27.1), many donors whose names were associated with cults outside the pale of dominant culture of the Ganges Plain expressed their devotion to Buddha. Names such as Yakha, Yakhi of forest people, naga and nagi for cobra cult, reveal their religious background.[17] Images larger than human size of Devatas, as well as Yakhas and Nagas converted by Buddha, were sculptured on pillars that forming the rail surrounding the stupa. Srima Devata the beautiful courtesan and famous dancer from Rajagaha of the time of the Buddha is seen leading her followers to worship Buddha (Figure 27.2). Meanwhile, in the *Stories of the Mansions*, chapter 16, there is a description of Srima's mansion in the heaven and a praise of her devotion to the Buddhist sangha by feeding the best food to monks. After leaving her dead body in the human world, she led an even better existence in the gods' heaven.[18] Here Srima was a cult herself, worshipping and being worshipped by the people of similar status in human circumstance. The *Stories of the Mansions* was recording the developments of Buddhist propagation to communities outside the core region where Buddha himself preached.

In a heavenly scene carved on Bharhut stupa, an orchestra of musicians playing for a dancing troupe of four women and a little child (Figure 27.3). The performance was not purely entertaining, but also didactic. Of the four female dancers, the one on the lower left is wearing a man's headgear. A little child is jumping between the dancers. There is obviously a theme of the performance, which could be related to the story of Buddha as an infant. The theme is not clear to us as modern viewers, but could have been obvious to the brothers and sisters who were there to tell the stories to those who were faithful but could not read. Names of the musicians and dancers are inscribed around the stage. At least three of them were listed in the *Stories of the Mansions*.

> *Alambusā Accharā*
> *Misakesi Accharā*
> *Sabhādā Accharā*[19]

Figure 27.1 The first pillar of Bharhut stupa (AIIS Neg. no. 243.40, courtesy of the library of the University of Pennsylvania).

Figure 27.2 Srima Devata, Indian Museum catalog 141, American Institute of Indian Studies photo negative no. 23.71, courtesy of the Library of the University of Pennsylvania.

Figure 27.3 Orchestra and dancing in the heaven, Indian Museum catalog 273, American Institute of Indian Studies photo negative no. 484.58, courtesy of the Library of the University of Pennsylvania.

Accharā here stands for *apsaras*, the Sanskrit form of nymph, or goddess in water. In chapter 18, "Slave-women's Mansion" (Dāsīvimāna), of *the Stories of the Mansions*, there was a slave-woman of a householder in the city of Savatthi. The householder was devoted to the Buddha and dedicated four meals for the sangha every day. He ordered the slave women to prepared food for the sangha. She got up early every morning diligently cooked the food, spread perfume on the floor to waiting for the brothers to come, and requested them to teach her after eating. This woman worked on behalf of her master and was not even given a name but arrived at the heaven after death. As an attendant of Sakka, or Indra in Brahmanism, the woman enjoyed performances of numerous musicians and dancers. The three *āccharā*s are named among the long list of players in the orchestra and dancing troop, but here they are called devatās.[20] The similar list of musicians and dancers appeared in the story of another mansion where Rajjumala a former slave-girl of a Brahman household now dwelled. Rajjumala was a slave girl in a small village near Gaya, the very place Buddha attained enlightenment. In that household the daughter-in-law, a daughter of a Brahman, tortured her by pulling her hair to drag her around. She had her hair cut to avoid the torture, but only made her mistress even angrier thus tying a rope on her neck to drag her. She was thus called Rajjumala, meaning a rope garland, as she wore the rope on her neck all the time. When Rajjumala could not bear this torture she went out the house carrying a jar telling she was getting water for the household. She tried to hang herself in a woods where Buddha happened to meditate. After enlightened by the Buddha she went back to the household in high spirit. Surprised by her new state her master asked her what happened. Rajjumala told the master about her encounter with the Buddha. The householder realized that there is the bad karma of torturing Rajjumala thus disciplined his daughter-in-law and became a follower of the Buddha himself. Rajjumala ascended to the heaven after death enjoying the heavenly mansion named after her, wearing a true garland befitting a devata, dancing along with many of the heavenly musicians and dancers.[21]

Being a dancer in Sakka's palace was a great achievement that only those who gained merits in human world were qualified for it. The relief panel on Bharhut stupa shown in Figure 27.4 shows a scene of devas celebrating the enlightenment of the Buddha in the heavenly palace. A dancing troop and an orchestra perform in front of devas led by Sakka. Four of the seven musicians are men, but all the four dancers are women. The inscriptions on the stone panel do not provide the names of the artists, but the *Stories of the Mansions* tells life stories of the women who became the celebrated artists in the Sakka's palace. A young woman Lata from Savatthi was a good daughter of a household and an obedient daughter-in-law and good wife after marriage. She died young, probably did not give birth of children. Her merits in life as a good daughter and daughter-in-law were sufficient to provide the best skill of dancing among five dancers in the heavenly troupe.[22]

The Pali Buddhist text actually was recording the stories circulated among the faithful, especially the women suffering most in the world. The visual illustrations were memorizing the stories in the past and informing those who shared similar experiences living in the human world. Art works on stupas at Sanchi and Bharhut illustrated the deified characters in the *Khuddaka-nikāya*, such as the women in the *Vimānavattu* and stories of animals in the *Jataka*. If the minor story books were indeed handbooks for preaching, those reliefs presented visual scenes to verify the stories to the pilgrims who had heard about them.

The Buddhist missionaries arrived at Gandhara probably also during the reign of Ashoka. They faced a new language landscape to propagate their ideas. The Prakrit in Gandhara was quite different from that of Magadha. Gandhari in Kharoshthi was the language of Buddhist monasteries there. The Kushan rule in northwest Indian subcontinent during first couple of

Figure 27.4 Celebration of the enlightenment of the Buddha in Deva Sabha, Bharhut Stupa. Calcutta, Indian Museum no. 182, American Institute of Indian Studies photo, neg. No. 484.76. Curtesy of the Library of the University of Pennsylvania. edict at the Sanchi Stupa

centuries CE was the time of the rise of Mahayana Buddhism, which used Gandhari as well as Sanskrit to compose. Though Sanskrit was the language of Brahmans for religious studies, they did not compose literature in Sanskrit. Therefore Buddhist scholars became the first Sanskrit writers. Sanskrit helped Buddhist preachers to reach an audience of a large area in South Asia, but this audience was limited to those who could understand and read Sanskrit. That is to say, only a number of Brahmanical educated readers could have had access to the Sanskrit Buddhist texts, meanwhile orthodox Brahmans still held the oral transmission of knowledge thus not yet committed to the written form of communication. Besides, local communities and traders coming in and going out the region could not have comprehended Sanskrit. To overcome the multiple language barriers, Buddhists who had established the tradition of using artworks to tell stories embodying teachings of the Buddha further developed the artworks when they encountered the Hellenistic artistic tradition in Gandhara and Bactria.

After the Mauryan power receded from the northwest of the Indian subcontinent, Hellenistic polities in Bactria and Gandhara survived till the coming of the nomads from Central Asia, including the Kushans who came from the steppe and established a sedentary regime across Central Asia and South Asia. The crossroad of Central Asia and South Asia was a region of many languages. Since the Achaemenid Persia included Bactria and Gandhara into its empire in the 6th century BCE, several languages and writings used in Persian Empire entered the region. The Aramaic and Greek writing could be the inspiration of earliest Indian scripts, the Kharoshthi and Brahmi. As rulers from the steppe who had not created their own written language, the Kushans had to rely on scholars among their subjects to help them inscribing their messages on monuments and coins. Like the Greeks, Sakas and Parthians who came to India through Bactria before them, the Kushan kings in Bactria used bilingual legends, Greek and a local Prakrit to mark the coins issued under their name. Discovered coins of Kushan kings Kujula Kadaphises (ca. 40–95 or 40–90 CE) and Vima Kadphises (ca. 100–127 or 105–127) show Greek language written in Greek letters, and local Prakrit in Kharoshthi script. King Kanishka (ca. 127–150 CE) left coins inscribed in Greek letters of Prakrit language. On the edict inscribed on the Robataka inscription, Kanishka stated that the edict was originally issued in Greek, then translated into Aryan language, that is, the Bactrian dialect of Persian.[23] Communities of various languages under the Kushan Empire were integrated in to a special cultural domain where several languages and writing systems coexisted and mingled.

Buddhist scholars arrived and flourished in the multicultural environment of Kushan Empire. Monasteries in the great Gandhara used Kharoshthi script to write local Gandharian Prakrit language to copy Buddhist texts on birch bark. A number of them were preserved in jars, dated to the 1st century CE. The effort of copying Buddhist texts and preserving the copies meant copying texts was an action of meritorious for Buddhist followers. The manuscripts contain many texts known in Pali Buddhist texts, but also some compositions unknown in large corps of Buddhist canon but including some local stories.[24] Meanwhile, Sanskrit was the vehicle of communication for newly developed Mahayana Buddhism which could reach a large geographic scope. The major themes of the Mahayana Sanskrit texts were to divinize the Buddha and introduce the many bodhisattvas who set up their own heavens or delayed their own nirvana by staying in the world to help all the creatures. *Saddharmapundarika* introduces the Bodhisattva Avalokiteshvara who vowed to stay in the world to help all the creatures to cross the ocean of suffering before he crosses the threshold into nirvana. *Sukhavativyuha* tells that Bodhisattva Amitabha created a heaven for those who were not ready to go to nirvana when dying to have the option of taking a sojourn in this land of bliss before reborn into the world. The *Jatakamala* is a collection of 36 stories in Sanskrit selected from the large corpus of Pali *Jataka* stories. The *Ashokavadana is* a legendary account of the Mauryan king of

Ashoka in Sanskrit. This Sanskrit text derived information from Ashoka's edicts, but also added many new details of his deeds of karma in the Buddhist context. The *Ashokavadana* thus makes it a hagiography of the Buddhist king.[25] The *Lalitavistara* created magic details of Buddha's life since his birth, such as the infant jumping out from his mother's right side to strike seven steps. This version of Buddha's life stories promoted the Buddha as god and could had been developed from lore of earlier Buddhist community.

Buddhist scholar Ashvaghosha was the first Sanskrit writer who pinned his name on literary works he wrote for the cause of Buddhism. The author of Sanskrit dramas and stories in Kushan India, where many different languages were spoken, reinvented the life story of Buddha in *Budhacarita*. This biography of Buddha added many magical details and extravagant exaggerations of urban life enriched by the Silk Road trade passing through the Kushan Empire into the life stories of the Buddha. From his birth to enlightenment and departure from home to his preaching, the stories were the source materials for propagation of Mahayana to Central Asia and China. The *Mahavastu*, or the Great Event, further divinizing the Buddha into an eternal existence forever transcendental. All his actions in the human world were performances of the divine being for the purpose of teaching. Divinization of the Buddha got rid of the social context of Buddha's enlightenment of the Noble Truths. *Devas*, instead of his own life experience, revealed the eternal suffering of all creatures to the young Shakyan.

The Sanskrit literature of Buddhist themes thus provided the scripts for the artistic expressions of Gandharan Buddhist art. Here the images of Buddha appeared, which was a total break from the taboo of showing the human form of Buddha in earlier Buddhist art. The iconography of the Buddha as the supreme divine being emerged as a center figure, sitting or standing with either two disciples or two bodhisattvas on his sides. Events in his life have been displayed on panels of reliefs like snapshots of actions in drama. Dionysian legacy including dramatic performance propelled viniculture and theater in Hellenistic Bactria to the Kushan domain. Even though no theater had been discovered in Gandhara, the relief panels showing the stage of performance on Buddhist stupas in Monastic settings suggest the courtyards of the monasteries could be the locations where the drama was staged.[26] The sculptures on stair risers of a stupa in Gandharan region show Dionysian performances on stages that marked by Corinthian columns. Actors and actresses in steppe dresses, Creek styles, and those barely garbed play lira, drums, xylophone, and horn, and they dance, drink or serve grape wine. These three panels likely present the prelude of a drama (Figure 27.5). Stories from *Lalitavistra* and *Buddhacarita* displayed on relief sculptures like snapshots of drama or illustrations of texts for guides to explain the stories to an audience.

Focusing on Buddha's life stories and the role of bodhisattvas, the musicians and dancers recorded in Pali texts and portrayed on early Buddhist art were almost lost in Buddhist Gandharan art. The newly composed Sanskrit texts, though, did not eliminate those *apsarases*, or the *accharas* in Magadhi. In Ashvaghosha's *Buddhacarita*, at the birth of the Shakya prince, the festive scene in the city of Kapilavastu mimic the heaven of Kuvera celebrating the birth of the son of the god of wealth that apsarases danced around.[27] When the young prince of the Shakya kingdom took his first trip outside the palace, women in the city Kapilavastu rushed to watch:

> With its mansions bursting with young ladies,
> Throwing open the windows in their excitement,
> The city sparkled on all sides with splendor,
> Like heaven with mansions filled with apsarases;[28]

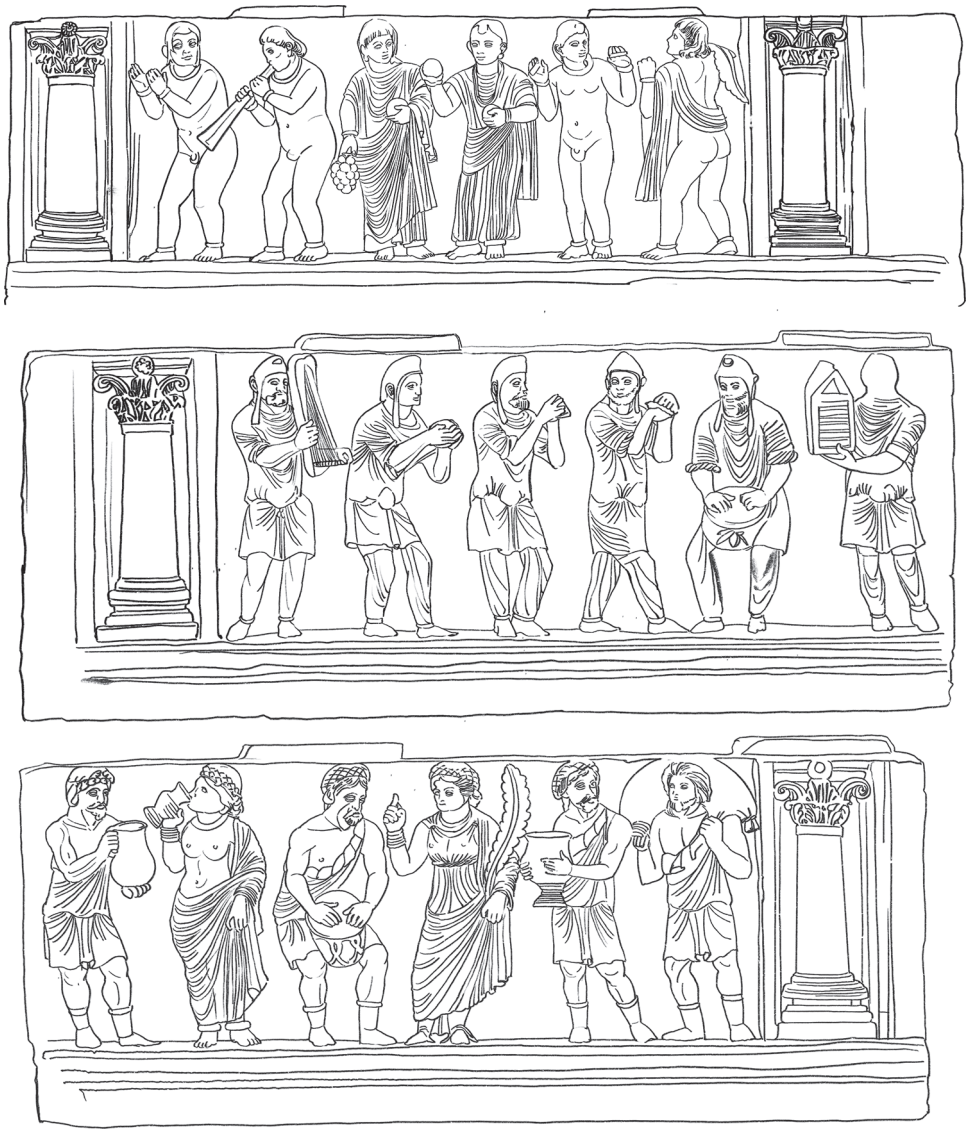

Figure 27.5 Stair risers of a stupa in Gandhara (drawing by Qiu Shiyun, based on the Cleveland Museum of Art, Dudley P. Allen Fund 30.328–30.330).

For Ashvaghosa, apsarases were the beautiful women in the sphere of devas. Meanwhile, there were Buddhist heavenly places in the Sanskrit Buddhist world. In the land of bliss of Amitabha, those who gained a palace there: "they dwell, play sport, walk about, being honored and surrounded by seven times seven thousands of *Apsarases*".[29] In the Sanskritized story of the King of the Sibis, *apsarases* cheer and applaud when the king gained back his eye sight with blessings of Sakra, or Sakka in Pali, Indra in Brahmanical way of saying.[30] In short, the Sanskrit texts such as *Buddhacarita*, the *Sukhavativyuha*, and the *Jatakamala* set a role for apsarases on the stage displaying stories of Buddhist teaching. But those beautiful women

Figure 27.6 Musicians in a Buddhist shrine of Termez, on the bank of Amu Darya, Archaeological Museum of Termez, Uzbekistan.

played a side show. The story of Rajjumala' encounter with the Buddha around Gaya, the very place he achieved enlightenment, tells us that Buddha did observed and experienced the suffering of human beings at his time. But if he is a transcendental god, he did not need the life experience to reveal the Truth of Suffering.

When celebrating the theme of the center the apsarases were deprived their own life stories. In spite of all the descriptions of the heavenly musicians and dancers in Buddhist Sanskrit text, only on the edge of the orbit of the Gandharan Buddhist domain, archaeological researches of Buddhist shrines in Termez on the bank of Amu River reveal musicians playing musical instruments above the stage (Figure 27.6). They appeared in very different garbs and playing different kind of instruments than those seen in Bharhut Buddhist stupa.

Buddhism spread to China through Central Asia following the trade on the Silk Road.

Sogdiana, the land between the Syr and Amu rivers, bred many traders who reached India, Persia, the steppe, and China. Though Zoroastrianism was the dominant religion in Sogdiana, the Sogdians were among the first batch of Buddhist missionaries-cum-merchants brought Buddhist rituals and texts to China. However, Buddhist practices remained mostly within diaspora of foreign traders in China till the 4th century when nomads on the steppe flooded north China forcing structural changes of Chinese Society. Meanwhile, the collapse of the Kushan Empire in the 3rd century sent refugees including Buddhist followers to Central Asia east to the Pamir Plateau, that is, oases surrounding the Takla Makan Desert. Kucha, the first oasis state east to the Pamir, developed into a Buddhist center. By the mid-4th century, when Kumarajiva the first scholar and translator who brought Mahayana Sanskrit literature to China was born in Kucha, Buddhism there was a well-established institution and enjoyed patronage from the strong and stable royal family. Buddhist institution in Kucha developed its unique form, fitting the oasis environment that is, pastoralism and agriculture created wealth to provide sufficient livelihood for cultural pursuits. Communities continued to perform rituals to their local cults; immigrants came to Kucha from the other side of the Pamir Plateau were not only Buddhist of various sects, but also Zoroastrians, Brahmans, and so on. Various religious and ethnic groups brought several languages into the community. Buddhist missionaries were particularly active in creating artworks – sculptures, wall painting, stucco figurines, silk paintings – in and around stupas and temple caves. The themes of the art works were stories of the lives of the Buddha and Buddhist saints, and the deified Buddha. Learned scholars mastered Indic languages including Gandhari and Iranian language such as Bactrian, and Sanskrit of

Mahayana Buddhism and Vedas. Sanskrit Buddhist texts such as *Buddhacarita*, *Saddharmapundarika*, *Jatakamala* should have been the scripts for the artists in Kucha.

Kumarajiva immersed in the intellectual and cultural environment of Kucha, and learned from the Buddhist teachers and scholars of other religions along the Central Asian Silk Road, and participated studying, discussing, and debating of various fields of knowledge. In Kashgar, Kumarajiva studied the *Four Vedas* with their commentaries, and other knowledge such as astrology. The study of Brahmanical literature should have taught him Sanskrit, which is quite different in grammar and pronunciation from earlier Buddhist texts he had studied so far. Around that time, two princes, namely Shache Prince and Canjun Prince, appeared in the scene as outstanding Buddhist teachers. There is no indication where the princes were from. Kumarajiva, probably already fluent in Sanskrit, learned Mahayana Buddhism from them and since geared his study to Mahayana.[31] It is likely that the two princely Buddhist teachers came from the former Kushan territory where Mahayana theology in Sanskrit matured and Mahayana institution took shape and prospered. Kumarajiva made a successful career of translating Sanskrit Mahayana text in China. His mastering of Sanskrit made his translations exceeded earlier translators. A detailed comparison of the translation of the Sadharamapundarika by Dharmaraksa in 286 CE and that of Kumarajiva (d. 412) demonstrated the superiority of the version translated by Kumarajiva.[32] Consequently Kumarajiv's *Miaofalianhuajing* 妙法莲华经 has been much more read than the *Zhengfahuajing* by Dharmaraksa 正法华经.

Kumarajiva was among a handful of Buddhist scholars who mastered Sanskrit language in their study of Buddhism and Indian culture at that time in Central Asia. Kucha was then a center of Buddhist studies attracting novices from all over the Tarim Basin. Royal women from oases east to the Pamir thronged to the three major nunneries in Kucha.[33] The oasis states around the Takla Makan shared ecological features but not necessary the same language. Buddhist art, especially mural paintings, in cave monasteries around oasis cities were the platforms of displaying the stories of the Buddha and the sangha. On the murals in Kezil cave monasteries outside the Kucha city, the characteristic Central Asian apsarases filled many spaces of the outliers of main didactic scenes (Figure 27.7). Those musical playing apsarases were musicians flying in the sky to celebrate certain events, as described in *Buddhacarita*, *Sukhavativyuha*, and *Jatakamala* (Figure 27.8). The main themes of the Buddhist arts now were the divinized Buddha, the heavens created by the bodhisattvas such as Amitabha, illustrations of stories of Buddha in his life and former lives based on the Mahayana texts. Musicians and dancers were playing a side show to the major event, there their own stories of life and paths to the heaven became oblivious to the viewers. This composition of Buddhist cave arts started from Kucha spread to the Tarim oases and all the way to the Hexi Corridor, notably the murals of the Dunhuang grottoes art. The flying apsarases fill the space of mural painting without providing messages of Buddha's teachings.

Divinized Buddha and semi-divinized bodhisattvas arrived China as the iconography of Buddhist art. The apsarases, more musicians than dancers, followed the main icons on the edge of the composition of sculptures and murals. A rare discovery of a horde of more than four hundred sculptures buried in an underground storage of Longxinsi monastery, Qingzhou, Shandong Province, in 1996, provides examples of the early Buddhist iconography in China. The sculptures were made during the 6th century when the Northern Dynasties built by the Toba clan of nomads transferred themselves into Chinese rulers claiming their legitimacy from Buddhism. Most of the sculptures were free standing figures of Buddha and bodhisattvas, and a number of them were reliefs on a water drop shaped panels. Analyses of the style of the sculptures show strong affinity with those of Mathura, Gandhara, and Kucha.[34] The Buddha with bodhisattvas on his sides were the major motif of the scene. Apsaras musicians are flying

Figure 27.7 Apsaras in a Kezil cave, Kucha. Drawing by Qiu Shiyun, based on Kezil caves, Kucha, www.silkroadtourcn.com/attractions/Kizil-Caves.html.

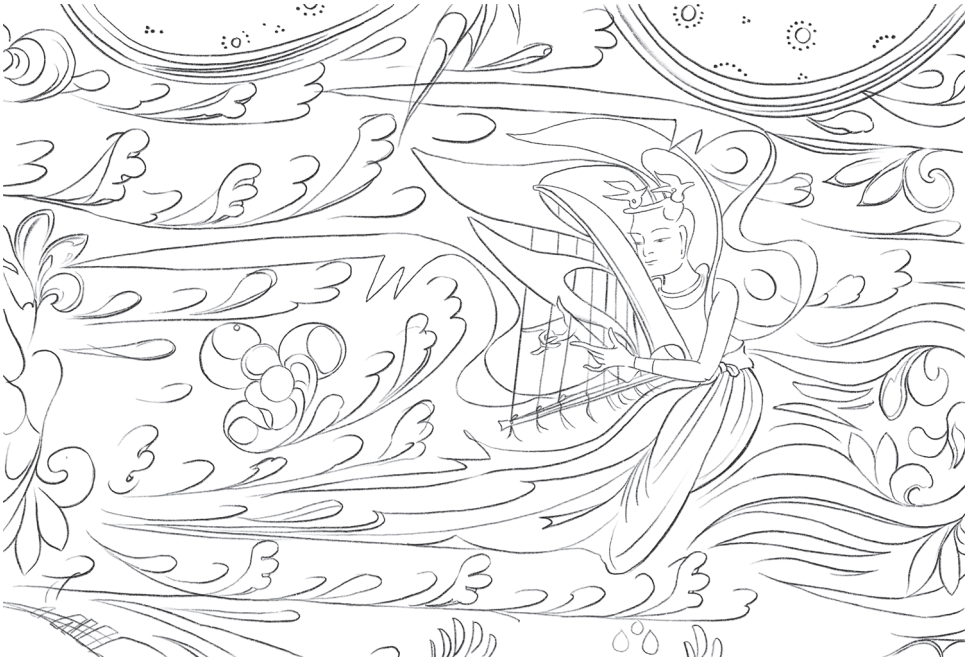

Figure 27.8 Flying apsaras in Dunhuang (ca. 535–557) cave no. 285, drawing by Qiu Shiyun.

above carrying their instruments escorting a stupa[35] (Figure 27.9). Here the theme is the divine power of the Buddha and the helpful bodhisattvas. The musicians are beautiful but do not convey important messages.

Buddhist iconography in China developed by and large under the guide of Buddhist art of Central Asian caves and sculptural works from Gandhara and Mathura. Chinese translations of Buddhist texts before the 4th century CE were from Gandhari or other Prakrit. However, the translators in the early stage did not master Chinese, and Chinese Buddhist scholars were not mature enough to master Buddhist ideas, thus the influence on Chinese audience was limited. Kumarajiva was the most influential translator of Mahayana Sanskrit texts, who made Sanskrit the major language vehicle transmitting Buddhism to China. Since then, Chinese translations of Buddhist knowledge mostly based on Sanskrit Mahayana texts were the most influential Buddhist canon, and the themes of the presentations were prescribed by Sanskrit Buddhist texts with Mahayana cosmology as background. Chinese Buddhist pilgrims traveled to Central Asian sites and India to obtain statues and copies of paintings of Buddha and bodhisattvas, and Buddhist preachers also brought models from Central Asia and India to China. By the time of the Tang the pilgrimage became an industry, that all pilgrims carried statues or paintings in addition to texts to their homeland. The list of statues brought by Xuanzang to the Tang court includes one from Mathura, one from Sarnath, one from the Vulture's Peak near Rajagaha in Magadha, and so on.[36] The sacred images from India were all about the Buddha and bodhisattvas as described in Mahayana texts.

From the time of Ashoka the king of Mauryan who tried to spread the teachings of Buddha to his empire and beyond, Buddhist teachers broke through language barriers to enlighten people outside the mainstream by adding artworks illustrating stories of salvation of down trodden people especially women. Pali texts and the stories expressed on the early stupas provided a parallel channel to get the teachings to the people who could not comprehend the language and the script. The messages brought from the Greater Magadha region westward to the entire Ganges plain and Gandhara, and southward to Sri Lanka, inevitably encountered language barriers. The Pali tradition was established and flourished in Sri Lanka Buddhist monasteries and from there to Southeast Asian Buddhist Institutions. In Gandhara, Buddhist teachers rendered the messages in both local Prakrit dialect and Sanskrit. The Hellenistic cultural residue and steppe culture under the Kushan Empire provided the environment to dramatize stories embodying the wisdom of Buddha. The development in Gandhara created the iconography of Buddha, whose image till then was absent in early Buddhist art. This transition to Sanskrit language and artistic expressions facilitated Buddhism spreading out from India. When basic doctrine of the Buddhism, the Four Noble Truths and the Eight Right Paths, transcended all the different languages to the faithful, certain messages from early Buddhist communities could not reach the new audience. The stories of salvation of the women who suffered miserably in human world but ascended to the heaven to play music and dance through their own efforts had lost much, though not totally, in the transitions. Sanskrit and Chinese Buddhist texts shifted the focus on the Buddha the god and numerous bodhisattvas who could help all the creatures who are willing to cross the ocean of suffering. The beautiful apsarase musicians retreated to the edge of the stage. The loss of information was due to many factors. Changes of languages that carrying the messages of the Buddha, theological developments that changed the theme of narrative and artistic expression, are apparent reasons for the loss and gain of information throughout the transmission. Fundamentally, however, all the texts and arts did not and could not transplant the social context of the early Buddhist sangha, therefore some of the stories were destined to get lost.

Figure 27.9 Flying apsarases above the Buddha Longxingsi Monastery (drawn by Qiu Shiyun).

Notes

1 This chapter is based on a presentation the author gave at the conference sponsored by the Banaras Hindu University, "India-China Dialogues, Language, Literature, Culture and Beyond", held on November 18–20, 2020; an earlier version will be published by the Springer.
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28

SILK-HORSE TRADE BETWEEN THE TANG EMPIRE AND THE XIAGASI (KYRGYZ)

Li Jinxiu and Translated by Xinru Liu

Silk-horse trade was the major channel of economical exchanges between nomads and sedentary communities, as well as one of the most enduring commercial activities on the Silk Road. Due to the necessity of nomadic economy, geopolitically caused demand, and unavoidable material exchanges, the trade of silk for horses persisted many centuries. Scholars from China and other countries have made many contributions to the study of silk-horse trade, focusing mostly on the exchanges between the Tang and the nomads, mostly the Turks and Uyghurs.[1] Meanwhile, the transactions between the Tang Empire and the Xiagasi or Kyrgyz were barely researched. The author here, therefore, offers certain opinions on the silk-horse trade between the Tang and the Xiagasi/Kyrgyz.

The Terminal of the Steppe Silk Road Commercial Chain

Xiagasi was located in the catchment of the Yenisei River. According to the entry of "Xiagasi" in chapter 199 of the *Taiping Huanyuji*,

> To the south of the country, there is the Tanmanshan Mountain. . . . A river runs north from the land of Uyghur through the mountain. It is said there is the Golden Sea to the west of the country on the foothills of Qingshan Mountain. The water then branches into two rivers, one is called Muhe, another Jiancehe.[2]

One opinion assigns Tanmanshan as present day Tangnuwulashan Mountain,[3] another one is that it is the current Sanyanling.[4] The Qingshan could be the Kara Tengri to the north of the mountain that called Tangnuwuliangshan Mountain today.[5] The Golden Sea is Altïn Lake, or Golden Lake, not far from the source of the Kemčik River and Abaqan River.[6] The Jiancehe River, or Khemchik, is a tributary of the Yenisei. The Mu River, should be the transliteration of A-bu,[7] near present day Abaqan.[8] Xiagasi was "located to the northwest of the Uyghurs three thousand *li*".[9] After defeating the Uyghurs in the fifth year of the Kaicheng (840), Xiagasi moved their tent capital to the south. By then, it took fifteen days of horse ride to cover the distance from their tent capital to the old Uyghur tent capital (modern Qaraqorum-Qarabalegasi).[10] As Xiagasi was far from the political center of the region to the north of the Gobi Desert, historical documents often designate it as "a desert country of northwest".[11] Even though, the

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question is, did the Xiagasi participate the silk-horse trade, the most important commercial activities on the steppe Silk Road? First, let us look at the records in *Tang Huiyao*:

> In the twenty-first year of the Zhenguan Era (647), on the 9th day of the first month, due to thirteen tribes including the Tiele and Uyghur surrendered to the Tang, six governorships (the Uyghur in Hanhai Prefecture . . . the Pugu tribe in Jinwei Prefecture . . .) and seven prefectures (the Hun Tribe in Gaolan Prefecture . . . the Baixi Tribe in Tianyan Prefecture) were established. The chief of each tribe was designated as the governor and commandant and received an insignia in the shape of a dark golden fish inlaid with gold characters. Then the Uyghur and other tribes appealed to the court for installing 66 postal stations connecting the area south to the Uyghur and north to the Turk to facilitate the communication of the Northern Wildness. This route was called "Tribute to Heavenly Kehan Road", for paying sables to the Tang court.[12]

After the Tang Empire suppressed the Turks (Tujue) during the Zhenguan Era (627–649), several Tiele tribes including the Uyghurs and Pugus all submitted to the Tang suzerainty. The Tang Empire designated protectorates across the vast steppe north to the Gobi Desert and installed postal stations along the Tribute to Heavenly Kehan Road. Thus, the route between the Tang and the Uyghur had been unblocked. Here one needs to note two points: first, the Tribute to Heavenly Kehan Road ended at the Uyghurs, but the Xiagasi was "located to the northwest of the Uyghurs three thousand *li*".[13] Therefore the Xiagasi was not included in the system. Secondly, the thirteen Tiele tribes tributed sable furs as tariff.

The Uyghurs, Pugu and all the thirteen tribes under Tiele roamed around the steppe north to the Gobi Desert thus they did not control the sources of sable fur. According to the entry of the "Uyghur" in the *New Version of the Tang History*, to the north of the thirteen Tiela tribes, forest tribes such as the Dubo, Yuzhe, Boma, Dahan and the Xiagasi were the producers of sable fur.[14] The Xiagasi was the tribe that people were "wearing precious sable and *na* 貊, the chief was wearing sable hat in the winter." It paid sable fur and *Qingshu* 青鼠[皮] as taxes."[15] "In the 17th year of the Zhenguan Era (643), Jiankun (another name of Xiagasi) sent an envoy to the Tang court to tribute sable fur and sable leather".[16] It is obvious that the Xiagasi was abundant in sable, thus they paid sable and Qingshu skin as taxes. Their first tributes to the Tang were sable fur and leather. Therefore, the source of the sable that the thirteen Tiele tribes was the Xiagasi.

The Xiagasi was not under the Tiela federacy during the Zhenguan Era, thus the sable fur of the Tieles were not the tributes from the Xiagasi, but were traded commodity. But what were the materials that the Tielas traded for the sable from the Xiagasi? They were silk damask and brocade (compound woven silk textile). The Xiagasi people appreciated silk damask and brocade, that "women wore woolen clothes, but the rich women also wore silk damask and brocade".[17] Silk damask and brocade were clothing of affluent women. Meanwhile, Xiagasi did not produce silk textile during the Zhenguan Era. Thus, the silks had to be obtained through trading sables with the Tielas who were to the south of their territory.

The Tielas, however, did not produce silk textiles either. Their silks came from the horse-silk trade with the Tang Empire. In the fourth year of the Zhenguan Era (630), the Tang Empire suppressed the Eastern Turk and established the direct contact with the Tielas to the north of the Gobi Desert through building the Tribute to Heavenly Kehan Road. Envoys and traders led hordes of horses, cattle, sheep coming back and forth on the road. The Tiele tribes mostly traded in horses to obtain silk damask and brocade as well as plain silk textiles from the Tang.

Then the Uyghurs, Pugus, and other Tiele tribes sold the silks to the Xiagas with hefty prices for precious sable goods. Judging from the fact that all the thirteen Tiele tribes paid the tributes to the Tang in the form of sable furs and leathers, the quantity of transactions between the Xiagasi and the thirteen Tiele tribes was quite large. The Tielas who obtained so much sables must have had charged the Xiagasi with a very high price for the silks.

Above analysis shows that the Xiagasi participated the Steppe Silk Road commercial networks during the early Tang Dynasty. However, Xiagasi did not have direct connection with the Tang, thus ended as one of the terminals of the networks. The Xiagasi was in a disadvantage position as it delivered large number of sables, but profited little from the transactions.

The Xiagasi Established Direct Horse-Silk Trade With the Tang Empire

The Xiagasi primarily engaged in nomadic pastoralism and thus the tribe was rich in horse, cattle and sheep. "Among the domestic animals, their horses were very strong and the most combative ones were chosen as head horses. Others were camels, cattle, and sheep, and cattle were the most numerous. A rich herder could have several thousand cattle". "Sheep and horse were used for betroth of marriage, the number could be as many as hundreds and thousands".[18] Meanwhile, the Xiagasi horses were better than those of the Turks and most of the thirteen tribes of Tiele. During the Tang times, the most famous horses were those of Quriqan/Qoriqan, which was in the Tiele federacy. "On the 17th day of the Eighth month of the 21st year of the Zhenguan Era, Quriqan sent an envoy with a hundred good horses. Ten of them were outstanding. Emperor Taizong was amazed that he designated names to each of them".[19] The horses from the Xiagasi were only a little less in quality than the Quriqan ones, and in the second place among the imported horses. Xiagasi horses had been famous in China since the Han times, and were marked with Tamγa looked like the character 出.[20]

Tiele tribes and the Turks who controlled the Silk Road before 630 had no need for horses, cattle and sheep. The only commodity that Xiagasi could have sold to them were sables. When the Turks and Tiele controlled the price of silks on the Steppe Silk Road, Xiagasi could not sell their excellent horses but to sell their sables cheaply. Aware the disadvantage, the chief of the Xiagasi made the trip to the Tang court in the 22nd year of the Zhenguan Era (648). According to the records in chapter 198 of *Zizhi Tongjian*:

The Xiagasi had never communicated with China since ancient times. When hearing that Tiele tribes all submitted to the suzerainity of China, its chief Qilifa Shiboquazhan came to the Tang court in the second month. The emperor entertained him in the Hall of Dachengdian . . . Shiboquazhan appeal to the emperor for an official position, saying "It will be a hundred generations of fortune if I can carry an official title back to my homeland". By the year of Xuwu (658), the Jiegu (Xiagasi) was designated as the Jiankun (Xiagasi) Governorship, Shiboquazhan as the Right Camp Great General, Governor of Jiankun, under the Protectorate of Yanran.[21]

The chief of Xiagasi Qilifa Shiboquazhan once sent an envoy to the Tang court in the 17th year of the Zhenguan Era (643) with sable fur and leather as the tribute, unaware that Tang was urgently in need of good horses.[22] But meanwhile, when received damask, brocade and plain silk textiles as return, they also learned about the prices of silks in the Tang. They therefore were eager to join the silk-horse trade of the region to the north of the Gobi Desert. This event heralded the chief Shiboquazhan came to the Tang court in person appealing to subject to the Tang. Once Tang established Jiankun Governorship to include Xiagasi into the suzerainty, the Heavenly Kehan Road extended northwest all the way to the Yenisei catchment. More important, the Xiagasi and the Tang set up a direct silk-horse trade.

Table 28.1 Records of Xiagasi horse tributes.

Years	*Horse tributes*	*Sources of information*
Emperor Gaozong (675)	Jiankun made tribute of reputable horse	*Cefuyuangui* vol. 970
Emperor Gaozong (676)	Jiankun made tribute of reputable horse	*Jiu Tangshu*, vol. 5
Emperor Xuangzong (724)	Jiankun sent envoy to make tribute of horses	*Cefuyuangui* vol. 971
Emperor Xuanzong (747)	Jiankun made tribute of 98 horses	*Cefuyuangui* vol. 971
Emperor Xuanzong (747)	Nine tribes of Jianku and Shiwei Tribe made a tribute of 60 horses	*Cefuyuangui* vol. 971
Emperor Wuzong (843)	Zhuwuhesuo and others (7 people) came to tribute 2 reputable horses	*Tang Huiyao* vol. 100 *Zizhi Tongjian* vol. 247
Emperor Wuzong (843)	General Wewuhe made tribute of 100 horses, 10 falcons	*Zizhi Tongjian* vol. 247 Li Deyu, "Letter to Xiagasi Kehan" in *Li Deyu Wenji Zhanzhu*, vol. 6
Emperor Wuzong (844)	General Dideyisinanzhu made tribute of 2 white horses	*Zizhi Tongjian* vol. 247 *Cefuyuangui* vol. 972

One type of the silk-horse trade between the Tang and the Xiagasi was that Xiagasi making horse tribute. Records of Xiagasi horse tributes are shown in Table 28.1.[23]

The Tang court paid all the tributes, according to their values, with brocade, damask, and plain silk. The Tang court categorized silks in units. The unit of "Ten multiple silks" includes two bolts of fine silk cloth, two bolts of woven silk cloth, two bolts of damask, and two bolts of plain silk. For paying foreign guests, the ten silks include one piece of brocade, two bolts of damask, three bolts of plain silk, and four *tun* of silk floss.[24] The Tang court obviously paid the horses with various kinds of silk products.

The envoys of Xiagasi traveled ten thousands *li* bringing excellent horses to the Tang court. Though the horses were high quality, but not large in quantity. More transactions were carried out through the border fair. The most important form of horse-silk trade between Chinese dynasties and nomadic tribes was exchange and batter at border fairs. The transactions between the Tang and the Turks illustrate the scale of this form of trade. In the year of 727, Turkish Kehan Pijia, nick name Xiaosha, sent his great minister Meiluchuo with thirty horses to the Tang court. At that time the Tibetan chief tried to conspire with Xiaosha to invade the Tang border. Xiaosha instead sent the letter from the Tibetan with Meiluchuo to the Tang Emperor Xuanzong. The emperor appreciated the loyalty of Xiaosha and entertained Meiluchuo in Zichendian Hall and reworded him with much gifts. In addition, the emperor granted permission for the Turkish tribe to trade their horses in the border fair at the West Shouxiangcheng (The city receiving submission) in Shuofangjun Prefecture, where several hundred thousand bolts of silks were assigned to the border fair annually.[25]

According to the letter from Emperor Xuanzong to Dengli Kehan the Turk in 736, Tang gave the Turk 500,000 bolts of allotment for their horses.[26] The allotment for Xiagasi was much less, and often was included in the allotment for the Turks. In order to get the good horses of the Xiagasi, 20,000 bolts of silks were designated for the Jiankun/Xiagasi horses.[27] Annually the Tang government dispatched a certain number of silks for the border fair exchanges for horses. The nomadic tribes offer their prices of the horses they were selling and decide how

many horses they could trade in. The price of all the horses they sold could not exceed the silk bolts allotted by the Tang court. This was a fixed budget. However, when the nomads needed more silks for some reason, they could appeal to the Tang court for more allotment, as happened in 736 for Dengli Kehan. As there were many nomadic tribes on the steppe, how did they divide the allotment of silks for their shares? In literature on the silk-horse trade of the 9th century, *benfenma* or horses for border fair trade, and *benfenmajuanjia*, or price for the horses in terms of silk traded in the border fairs, shed some details that how the nomadic tribes negotiated among themselves for the share of silk-horse trade.

In the year of 840 Xiagasi defeated the Uyghur. The collapse of the Uyghur state ensued a period of power re-alliance in the region north to the Gobi Desert. In 841, the thirteen tribes there elected Wujie Tegin as their Kehan and moved southward to the border of the Tang. Wamosi the Uyghur Kehan surrendered to the Tang, and offered that he gave up his share of the silk-horse trade, which enjoyed the privilege of a high price for his horses, in border fair. In a court documents dated to 842, Emperor Wuzong decided that he appreciated the sincerity of Wamosi, but considering the tension between Wujie Kehan and Wamosi, the share of silk-horse border fair trade should be transferred to Wujie Tegin Kehan to promote the peace of the region.[28] Before Wamosi surrendered to the Tang, his tribe participated the Uygur–Tang silk-horse border fair. The redistribution of the privilege of border fair trade among various tribes was based on distribution of each tribe's political and military power. Each tribe got its share according to its influence. The number of horses of each tribe allotted was called *benfenma*, and the silks paid by the Tang for those horses were called *benfenmajia*. In this way, the tribes of the north redistributed the share of silk-horse border fair trade, therefore shared the profit of the trade and meanwhile maintained power balance of the region. However, the redistribution of the benefit of the border fair trade was also a cause of military conflicts among the tribes. As a whole, the distribution of silk-horse shares reflected relative power and status of the tribes.

Xiagasi was incorporated into the Tang border fair system after the establishment of Jiankun Governorship. Thus, Xiagasi also enjoyed a share of the border fair trade. The war between the Xiagasi and the Second Turkic Khaganate (682–745) was probably mainly caused by the dispute about the share of border fair trade. As mentioned earlier, in 735–736 Xiagasi joined the Turks in the border fair trade. In the share for the Turks, the Xiagas had only a share of *benfenmajiajuan* of 20,000 bolts of silk, 4 percent of the Turk's 500,000 bolts. As the 20,000 bolts were added on the share of the Turks, the proportion of Xiagasi share was slightly lower than 4 percent.

Commodity prices fluctuated from the Era of Zhenguan (627–649) to the Eras of Kaiyuan and Tianbao (713–755). During the Wu Zetian times (ca. 690–704) the government cast too many coins thus caused inflation. But price fell back during the Kaiyuan and Tianbao eras.[29] As a whole, commodity prices including that of horses went up gradually during the Tang Dynasty.[30] The price tags of horses in the Turfan region could demonstrate the changes of horse prices. A document excavated from Turfan dated to 707 recorded that a castrated horse, seven years old, cost thirteen bolts of heavy boiled silk cloth.[31] Some twenty years later, in 733, a man named Shi Randian bought a castrated horse, six years old, from a Sogdian trader Kang Sili with eighteen bolts of heavy boiled silk cloth.[32] Ten years later, in 743, in the market of Jiaohejun Prefecture, the estimated prices for a high quality castrated horse from the Turks was twenty bolts of heavy boiled silk cloth; a medium quality castrated horse was worth eighteen bolts of heavy boiled silk cloth.[33] In Comparison, the prices that the Tang government paid for horses at the border fair were much higher than the real market prices. In 736 the Turks brought in 14,000 horse for 500,000 bolts of silk cloth, thus the average price for a horse was 35.7 bolts of silk cloth. This price was almost doubled the price of eighteen bolts in 733 at the market of Turfan and that of a medium quality horse in the market of Jiaohejun Prefecture.

The catch here is that the Tang paid the Turks in various silk cloth, not all the heavy boiled silk cloth. Let us calculate how the silk bolts paid by the tang government were converted to heavy boiled silk cloth, using information from Dunhuang documents.

In the year of 745, the Tang court issued a permission of collecting a special tax from the Wuweijun Prefecture. The inventory of this special tax, P. 3348V, lists the estimated prices of the silks collected:

Heavy raw silk cloth: 1 bolt was worth 460 copper coins, 5600 bolts;
Rough silk cloth from Henan Prefecture: 1 bolt was worth 620 coins, 550 bolts;
Pink color silk cloth: 1 bolt was worth 550 coins, 270 bolts;
Green color silk cloth: 1 bolt was worth 460 coins, 270 bolts;
Silk floss: 1 *zhun* was worth 150 coins, 1727 *zhun* and 10 *zhu*;
Rough silk cloth from Shan Jun: 1 bolt was worth 600 coins, 1700 bolts;
Heavy boiled silk cloth: 1 bolt was worth 460 coins, 4371.88 bolts.

The sum of this inventory is 14,678 bolts plus three *zhang*, four *chi*, four *cun,* and ten *zhu* silk and floss, converted in coins should be 6448 strings and 868 coins.[34]

$5600 \times 460 + 550 \times 620 + 270 \times 550 + 270 \times 460 + 1727.023$[35] $\times 150 + 1700 \times 600$
$+ 4371.88$[36] $\times 460 \sim 14106$ (bolts of heavy boiled silk cloth)

Under this estimation, 500,000 *zhun*/bolts silk cloth paid to the Turks in the year of 736 should be around 352,650 bolts of heavy boiled silk cloth. Paying 14,000 horses with this amount would be 25.2 bolts of heavy boiled silk cloth for a horse. Comparing with the eighteen bolts per horse price at the Turfan market during the same Kaiyuan and Tianbao eras, the price paid by the Tang government was 40 percent higher than the market price. Furthermore, the rules of border fair silk trade exclude silk floss, as its price was much lower than the woven cloths. In the border market, both official and private traders could only sell silk, boiled silk, miscellaneous colored silk cloths. The official traders could sell two portions silk and boiled silk cloth, and one portion of miscellaneous colored silk cloths.[37] Therefore, if one calculates the price by converting the floss to heavy coiled silk cloth, the 20,000 units of the special tax would be worth 6984 strings and 245 coins, converted to heavy boiled silk would be 15,183 bolts; 10,000 units would be 7591.5 bolts of heavy boiled silk cloth. Then the 500,000 bolts of silks of all kinds paid to the Turks equal to 379,580 bolts of heavy boiled silk cloth. Paying 14,000 horses, the price should be 27.11 bolts of heavy boiled silk cloth per horse, which was 51 percent higher than contemporary market price per a medium quality Turkish horse. These numbers demonstrated that in order to maintain the peace of its northern border, the Tang government paid 50 percent higher prices to engage various tribes in the northern steppe in border fair silk-horse trade. As the horses from the Xiagasi were higher in quality than those of the Turks, the price was also higher. Through the border fair trade, the Xiagasi obtained tens and thousands bolts of silk textiles. Only after understanding this price arrangement of the border fair trade one can grasp the essence of this trade.

The third format of silk-horse trade was transactions carried out by private traders. Xiagasi traders followed envoys to come to the Tang Empire were engaged in trade themselves. The envoys came with their families and assistants, as well as a number of traders. Statistics of this group of traders are not available, but those people were certainly there. An edict issued in the year of 749 dictated that those traders from the Nine Tribes of the Uyghurs and the Xiagasi who died when coming to trade in the Tang should be granted one hundred strings of coins for

each burial. His wife and assistant each should get thirty strings less in case of death.[38] Private traders from Xiagasi no doubt carried a number of horses to China.

These three forms of horse-silk trade between the Xiagasi and the Tang had been going on from the Zhenguan Era (627–649) to the time of An-Shi Rebellion (755–763). There are two pieces of evidence of horses from the Xiagasi contributed the successful pacification of the rebels. On the tomb stele of General Yang Yu, his father Yang Yan, once a prime minister of the Tang, wrote about Yang Yu helping to suppress the An-Shi Rebellion. Yang Yu went to Lingwu (modern Ningxia) to see Emperor Suzong who just ascended the throng in exile. There he made a trip to the north to get the Xiagasi horses.[39] A record in *Tang Huiyao* tells more details. In the year 756, the sixth month, the prince apparent (Suzong) arrived at Pingliangjun Prefecture (in Gansu province) to collect several ten thousand horses from both official stables and private hordes on pastures. Those horses mobilized military prowess greatly.[40] The region where the Suzhong got the horses, Longyou, was where the Tang grazed the excellent Xiagasi horses for warfare, thus became the major supply of war horses for fighting off the An-Shi Rebellion. The Xiagasi horses facilitated the cavalry power of the Tang court in the crucial time. But this event marked the end of the first period of the silk-horse trade between the Xiagasi and the Tang. Almost a hundred years later, another period of the silk-horse trade between the two sides started.

Silk-Horse Trade Between the Xiagasi and the Tang in Later Tang Period

After the An-Shi Rebellion receded, the Uyghurs sent their army to aid the Tang government to suppress the chaos, including the campaigns of regaining the two capitals, Chang'an and Luoyang. To reward their contributions, the Tang government granted them large amount of gold, silver, and silks, in addition to large allotment of border fair silk-horse trade. This trade, however, changed continuously following the power dynamics between the Tang and the Uyghurs.[41] According to the *Jiu Tangshu*, since the year of 758, the Uyghurs came to the border fair every year, traded in their several tens of thousands of horses at the price of forty bolts of silk cloth per horse.[42] The forty bolts of silk cloth, translated into the price of heavy boiled silk cloth, based on the rate calculated earlier, should be 30.37（40×0.75915）bolts of heavy boiled silk cloth. This was higher than the 27.11 bolts of heavy boiled silk cloth per horse of the Turks in the Kaiyuan Era, but not very much considering the inflation. In other words, the horse price of post rebellion was consistent with the Tang policy of paying high price for border fair silk-horse trade. A passage of the trade section of the *Xin Tangshu* says that the (Uyghurs) send 100,000 horses annually in exchange of one million and more bolts of silk cloth. This amount exhausted the treasury thus the country ran a deficit of horse payment every year.[43] However, 100,000 paid by some one million bolts equals about ten bolts for a horse. This record in the *Xin Tangshu* could have been an error by replacing "several million bolts" with "one million and more bolts".

Deteriorated fiscal situation and fluctuation of silk prices during later Tang made the high price for Uyghur horses a heavy burden of national treasury. Table 28.2 lists the recorded events of silks paid for the horses from the Uyghurs.[44]

Through silk-horse border fair, the Uyghurs obtained large quantity of silks, far more than what they could consumed themselves. They then sold the silks they obtained from the Tang to the west through the Sogdians. Through the transactions the Uyghurs accumulated a much wealth which enabled them to build cities.[46] Meanwhile, the silk-horse trade sustained the Steppe Silk Road that connected China with the Mediterranean world.

Table 28.2 Silks paid for horses from the Uyghurs.

Time period	*Silk-horse border fair trade events*	*Sources of information*
765 Autumn	Uyghurs tributed horses for colored silks 100,000 bolts	Jiu Tangshu, vol. 195
773	The Uyghurs sent 10,000 to sell, Emperor Daizong ordered the office to buy 6000 of them	Cefuyuangui, vol. 999, Jiu Tangshu, vol. 195
783, 8th Month	Using 50,000 bolts of silk out of the silk-horse border fair allotment to pay the prices of Uyghur horses	Cefuyuangui, vol. 979
790, 6th Month	Granting 300,000 bolts of silk to Yizhidagan the Uyghur envoy on returning to his country	Cefuyuangui, vol. 999
792, 7th Month	Using 70,000 bolts of silk with the price of silk-horse border fair to pay the prices of Uyghur horses	*Cefuyuangui*, vol. 999; *Jiu Tangshu*, vol. 195
807	Paid horse prices with gold and silk from court treasury	Bai Juyi Ji, vol. 4[45]
815, 8th Month	Using 100,000 bolts of silk to pay the prices of Uyghur horses	Cefuyuangui, vol. 999
815, 12th Month	Using 97,000 bolts of silk to pay the prices of Uyghur horses	Cefuyuangui, vol. 999
816, 2nd Month	Using 60,000 bolts of silk from the court treasury to pay the prices of Uyghur horses	
816, 4th Month	Using 25,000 bolts of silk to pay the prices of Uyghur horses	
822, 2nd Month	Using 50,000 bolts of silk to pay the prices of Uyghur horses	
822, 4th Month	Granting another batch of 70,000 bolts of silk to pay for Uyghur horse prices	
822, 12th Month	Using 80,000 bolts of silk to pay the prices of Uyghur horses	
827, 3rd Month	Using 260,000 bolts of silk from the court treasury to pay the prices of Uyghur horses	
827, 6th Month	Ordering the court office to grant 200,000 bolts of silk to the Department of Foreign Affair in order to pay horses from the Uyghur	
829, 1st Month	Using 230,000 bolts of silk to pay the prices of Uyghur horses	Jiu Tangshu, vol. 195
ca. 830s	Granting 500,000 bolts of silk to pay the Uyghur horses	Xin Tangshu vol. 217b

In order to get more silks, the Uyghur controlled not only the silk-horse trade allotment with the Tang, but also monopolized the silk-horse trade allotment of the region north to the Gobi Desert. Previously the tribe of the region north to the Gobi squarely divided the allotments, but now the distribution of allotments was restricted within the Uyghur tribes. Other tribes could only purchase silks with low horse price from the Uyghurs. In his report on the problem of the silk-horse border trade around Taiyuan (now Shanxi province), Li Deyu (787–850), a prominent officer of the late Tang Dynasty, expressed his concern that the northern tribes fiercely competed to trade their horses and camels with the Uyghurs for silks thus caused disturbances on border security.[47] As the mediator between the Tang and other tribes, the Uyghurs made large profit. Due to the tension between the Xiagasi and the Uyghurs, the Xiagasi could get neither the Tang allotment, nor the direct trade with the Uyghurs.[48]

In historical documents, "during the Qianyuan Era (758–760) the Xiagasi was defeated by the Uyghurs, and since then their connection with China has been disrupted".[49] This disruption of connection means that the Xiagasi lost contact with the Tang court, that no envoys from the Xiagasi made it to the Tang court for almost a hundred years; that the Uyghurs monopolized the silk-horse border fair exchange thus the Xiagasi could not trade with the Tang. During the period of separation from the Tang, the Xiagas found other channels including the Arabs and the Tibet who control Anxi and Beiting areas to trade in pastoral products and silks. It is said that Xiagasi "women wore rough woolen blouse, but the rich ones also wore damask and brocade which they purchased from Anxi, Beiting, and from the Arabs".[50] Here the "Anxi, Beiting" meant the Tibet, as the Tibetans occupied the two previous Tang garrison towns.

More details of the trade between the Xiagasi, the Tibet and the Arabs could be found in the entry of the Xiagasi in the *New Version of the Tang History*. The Xiagasi

> often allied with the Arabs, the Tibet and the Geluolu (a Turkic tribe) to deal with the Uyghurs. Afraid of Uyghur robbers those coming and going through the Tibet always stayed at Geluolu to wait for be escorted by the Xiagasi. The Arabs produced a kind of heavy brocade which was so heavy that it needs twenty camels to carry. As it is impossible to transport the whole piece, the brocade had been cut into twenty pieces. The Xiagasi received the gift every three years from the Arabs.[51]

This "heavy brocade" here is more likely fine woolen tapestry carpet, instead of silk textiles. The Xiagasi should have been paying for the silk and woolen textiles from the Tibet and the Arabs with sable furs and horses, cattle, and sheep.

Used to relying on the silks from the Tang thus also the silk-horse trade, the Xiagasi had to explore the trade with the Tibet and the Arabs when deprived the source of Tang silks. From this perspective, one of the purposes that the Xiagasi conquering the Khanate of the Uyghurs in the year of 840 was to overtake the monopoly of the silk-horse trade. In the year of 843, the Xiagasi sent an envoy Zhuwuhesuo to the Tang court to request to be granted the title of Kehan. The emperors and his courtiers held a discussion of the issue, as they were concerned that granting the Kehan title would follow the bad example of the Uyghurs who forcefully sold too many horses to the Tang year by year. Li Deyu presented his opinion,

> The Uyghurs contributed to the pacification of the An-Shi Rebellion, thus they were rewarded with the annual grant of 20,000 bolts of silks plus the border fair trade allotment. The Xiagasi never made such kind contribution to our country, why should we make the special treatment to them.

The emperor accepted his advice.[52]

When the Xiagasi requested the title of Kehan, they must have had also requested to sell horses to the Tang. The emperor was worried because the Uyghurs had forced Tang to buy many mediocre horses, more than the Tang needed, at the cost of the treasury. Li Deyu here convinced the emperor with the good reason that the Tang and the Xiagasi should engage regular market silk-horse trade. Since then, the Xiagasi replaced the Uyghur as the major agent of the silk-horse trade to carry out large scale of trade every year. This is the second phase of the silk-horse trade between the Xiagasi and the Tang. Due to the paucity of historical records of the last few decades of the Tang Dynasty, one can only speculate that this silk-horse trade continued at least to the Xiantong Era (860–874).[53]

Silk-horse trade was the mutual supplemental economic relationship between the nomadic pastoral groups and agricultural communities. The Tang Empire needed horses from the nomads to improve the quality and to replenish cavalry horses. The transactions between the Tang and the Uyghurs, however, had been problematic.

According to *Tang Huiyao*, "in the 8th month of 772, the envoy of the Uyghur returned home, with gifts carried by more than a thousand vehicles". Yet the Uyghurs' insatiate demand of silk-horse exchanges caused fiscal difficulties for the Tang. Meanwhile, in order to improve the quality of the horses, the government had to purchase 30,000 mares from the Guanfu, the area surrounding Changan city, to supplement the royal stables.[54] That the government had to purchase mares from the region near its capital means that the horses in the royal stables needed to be mated with new sources, as the poor-quality Uyghur breed had been there for too long a time. It also means that the Tang government depended on other nomadic groups to supply new breeds of horses. The scrambles for "silk-horse border fair allotment" among the tribes of the region to the north of the Gobi Desert and the northwest region demonstrated their desire to participate the trade.

After the Second Turkish Khanate established as the hegemon of the region north to the Gobi Desert, the Tang engaged trade with it. In an edict issued to the Turkish Khanate by Emperor Xuanzong in year 721,

> During the previous years when my country and the Turkish Khanate were in good relationship, both sides were very happy. Soldiers had rest, trade and communications were going. My country bought horses and sheep from the Turks, and the Turks bought our silks. Both sides were satisfied and benefitted.[55]

The silk-horse trade between the Xiagasi and the Tang was exactly this kind of exchanges, where each side offered what they had and bought what they needed. The results were both the Tang and the Xiagasi were "very happy". Through this trade, "both sides were satisfied and benefitted". Therefore, this was a win-win partnership for economic developments in both sides, and sustained the prosperity of the Silk Road.

Notes

1 A few publications on the silk-horse trade in recent decades include: Yanbo Guan, "The Exchanges and Tributes Between the Tang Inland and the Frontiers," *Heilongjiang Minzu Congkan*, 管彦波：《论唐代内地与边疆的"互市"和"朝贡"贸易》，《黑龙江民族丛刊》, 2007, no. 4，pp. 84–88；Wei Jianglin, "An Analysis of Ancient Agrarianism and Nomadism," *Keji he Chanye*, 2012, no. 7, pp. 40–43; 魏江林：《解析古代农耕经济产业与游牧经济产业》，《科技和产业》; Christopher I. Beckwith, "The Impact of the Horse and Silk Trade on the Economies of T'ang China and the Uighur Empire: On the Importance of International Commerce in the Early Middle Ages", *Journal of the Economic and Social History of the Orient*, 1991, vol. 34, no. 3, pp. 183–198; Tan Mei Ah, "Exonerating the Horse Trade for the Shortage of Silk: Yuan Zhen's 'Yin Mountain Route'", *Zhongguo Wewenhua Yanjiusuo Xuebao*, 《中国文化研究所学报》, 2003, vol. 57, pp. 49–95; Yang Fuxue & An Yufan, "Explanation of the Nature of the Silk-Horse Trade Between the Tang Empire and the Uyghurs, 杨富学、安语梵：《唐与回鹘绢马互市实质解诂》，《石河子大学学报》, 2020, no. 4, pp. 89–102.

2 Yue Shi (Song Dynasty), eds. Wang Wenchu et al., *Taiping Huanyu Ji,* 太平寰宇記, Beijing: Zhonghua Shuju, 2007, pp. 3820–3823.

3 Uchida Ginpu内田吟风 et al., Yu Dajun trans., *Beifang Minzu Shi yu Monggushi yiwenji,* 北方民族史与蒙古史译文集, Kunming: Yunnan Renmin Chubanshe, 2003, pp. 175–177. Liu Meisong considersTanmansha was the southeast peak of Tangnuwulashan Mountain. See Liu Meisong, *Liang*

Tangshu Huihezhuan Huihuzhuan Shuzheng 两唐书回纥传回鹘传疏证, Beijing: Zhongyangminzudaxue Chubanshe, 1989, p. 163.

4 Tan Qixiang 谭其骧ed., *Zhongguo Lishditu Ji* 中国历史地图集, vol. 5, Beijing: Zhongguo Ditu Chumangshe, 1982, pp. 42–43.

5 Uchida Ginpu et al., *Beifang Minzu Shi yu Monggushi yiwenji*, p. 177.

6 Louis Hambis, Trans to Chinese by Geng Sheng, *Study of the Qian River*《谦河考》， *in the Faguo Xiyu Shixue Jingcui*, ed. Zheng Binglin, 法国西域史学精萃,（2）, Lanzhou: Gansu Renmin Chubanshe, 2011, p. 484.

7 Louis Hambis, *Study of the Qian River*, pp. 483, 458.

8 For verifying the location of Xiagasi, see Jia Yiken: "Literary records about Jiegu 结骨 (Xiagasi) in *Tong Dian*, *Tang Huiyao*, *Taiping Huanyu Ji*, *Xing Tang Shu*," 通典, 唐会要, 太平寰宇记, 新唐书," in *Eurasian Studies*, new series vol. 9, Beijing: Commercial Press, 2019, pp. 221–241.

9 Du You (Tang Dynasty), *Tong Dian* 通典 *Chapter 200: Entry 16 of Border Defense, "Jiegu"*, Beijing: Zhonghuashuju, 1988, p. 5492. Ouyang Xiu & Song Qi (Song Dynasty), *Xin Tang Shu*, chapter 217b "Xiajiasi was three thousands *li* directly northwest of the Uyghur." Beijing: Zhonghua Shuju, 1975, p. 6146.

10 Ouyang Xiu & Song Qi, *Xin Tang Shu*, chapter 217b, "Xiagasi", p. 6150.

11 Yue Shi, *Taiping Huanyu Ji*, p. 3820.

12 Wang Pu (Song Dynasty), *Tang Huiyao*, Beijing: Zhonghuashuju, 1955, p. 1314.

13 Ouyang Xiu & Song Qi, *Xin Tang Shu*, chapter 217b, p. 6147.

14 Ouyang Xiu & Song Qi, *Xin Tang Shu*, chapter 217b, pp. 6144, 6146–6148.

15 Ouyang Xiu & Song Qi, *Xin Tang Shu*, chapter 217b, pp. 6147–6148.

16 Yue Shi, *Taiping Huanyu Ji*, p. 821.

17 Yue Shi, *Taiping Huanyu Ji*, p. 822.

18 Ouyang Xiu & Song Qi, *Xin Tang Shu*, pp. 6147，6148.

19 Wang Pu, *Tang Huiya,* chapter 72, p. 1302. See Liu Xu et al., *Jiu Tangshu* 旧唐书 [The Old Version of Tang History], vol. 199b, Beijing: Zhonghuashuju, 1975, p. 5349; Ouyang Xiu & Song Qi, *Xin Tang Shu,* vol. 217b, p. 6144.

20 Wang Pu, *Tang Huiyao,* chapter 72, p. 1305.

21 Sima Guang, *Zizhi Tongjian*,资治通鉴, Beijing: Zhonghuashuju, 1956, pp. 6252–6253. Also see Ouyang Xiu & Song Qi, *Xin Tang Shu*, vol. 217b, p. 6149; Wang Qinruo et al. eds., *Cefu Yuangui* 册府元龟, Nanjing: Fenghuang chubanshe, 2006, vol. 999, p. 11555.

22 Yue Shi, *Taiping Huanyu Ji*, p. 3820.

23 Zhu Sujing 朱萧静： "A Study of the 'Tributes' from the Xiagas,"《黠戛斯"朝貢"考》， *Eurasian Studie*s, new series vol. 9, Beijing: Commercial Press, 2019, pp. 71–84.

24 Li Linfu et al. (Tang Dynasty), *Tang Liudian*, 唐六典, vol. 3, Beijing: Zhonghua Shuju, 2014, p. 82.

25 Liu Xu et al., *Jiu Tangshu*, p. 5177.

26 Zhang Jiuling (Tang Dynasty), annotated by Xiong Fei, *Zhang Jiuling Ji Jiaozhu,* 张九龄集校注，Beijing: Zhonghua Shuju, 2008, pp. 643–644.

27 Zhang Jiuling (Tang Dynasty), *Zhang Jiuling Ji Jiaozhu,* pp. 641–642.

28 Li Deyu (Tang Dynasty), annotated by Fu Xuancong & Zhou Jianguo, *Li Deyu Wenji Jiaozhan* 李德裕文集校笺 Beijing: Zhonghuashuju, 2018, pp. 291–292.

29 Quan Hansheng, "Tangdai Wujia de Biandong," in his book *Zhongguo Jingjishi Yanjiu, I* 中国经济史研究（一）, Beijing: Zhonghuashuju, 2011, pp. 115–168, esp. 121–128.

30 Meng Xianshi, "Tang Xizhou Majia Kao," 唐西州马价考 *Xingjiang Shifandaxue Xuebao*, 新疆师范大学学报, 2016, no. 3, pp. 117–126.

31 Guojia Wenwuju Wenxianyanjiushi, *Tulufan Chutuwensh* 吐鲁番出土文书, vol. 8, Beijing: Wenwu Chubanshe, 1987, pp. 67–68.

32 Guojia Wenwuju Wenxianyanjiushi, *Tulufan Chutuwensh*, vol. 9, 1990, p. 48.

33 Otani 3087、3075，see Ikeda On, 中国古代籍帐研究 [Study of Accounting Books of Ancient China], Tokyo: Institute of Oriental Culture, Tokyo University, 东洋文化研究所，1979, p. 453; Oda Hirano 小田義久：大谷文书集成, 贰，[Collection of Otani Documents, II], Kyoto：Ryukoku University, 1990, pp. 20, 17, Plates 22, 21.

34 Tang Gengou & Lu Hongji, *Duhuang Shehui Jingji Wenxian Shilu*, vol. I. 敦煌社会经济文献真迹释录, Shumuchubanshe, 1986, pp. 429–434. Ikeda On: 中国古代籍帐研究 [Study of Accounting Books of Ancient China], pp. 463–466.

35 According to the formula of counting floss weight units in Li Linfu et al., *Tang Liudian*, pp. 81, 82, the number does not match the sum in the lines 25–26. Apparently, the author round up the number by omitting the 10 *zhu* at the end.

36 The formula in Li Linfu et al., *Tang Liudian*, vol. III, pp. 81, 82, was slightly different in calculation of the length therefore also the worth of the silks than those in the lines 53–57 in the document.
37 Li Linfu et al., *Tang Liudian*, p. 82.
38 Li Linfu et al. *Tang Liudian*, p. 1151.
39 Li Feng et al. (Song Dynasty), *Wenyuan Jinghua*, 文苑英华, chapter 917, Beijing: Zhonghuashuju, 1966, p. 4829.
40 Wang Pu, *Tang Huiyao,* p. 1303.
41 There have been many studies on the silk-horse trade between the Tang and the Uyghurs. A summary could be seen in Ding Juntao, "Jin Sanshi Nian Tang Wudai Mapi Yanjiu Zongshu," [A Review of Studies on Horse Trade of the Tang and Wudai Periods in the Last Three Decades], *Shanxi Ligong Daxue Xuebao*, 2019, no. 2, pp. 40–46.
42 *Jiu Tangshu*, vol. 195, p. 5207.
43 *Xin Tangshu,* vol. 51, p. 1348.
44 See the details in my book, *Li Jinxiu, Tangdai Caizheng Shigao*, vol. B唐代财政史稿, Beijing: Beijing Daxue Chubanshe, 2001, p. 791.
45 Ba Juyi, *Bai Juyi Ji*, 白居易集, annotated by Gu Xuejie, Beijing: Zhonghuashuju, 1979, p. 81.
46 Hayashi Toshio， "Uigur Policies toward Tang China"， *The Memoirs of the Toyo Bunko*, 2002, vol. 60, pp. 87–116.
47 Fu Xuancong & Zhou Jianguo, *Li Deyu Wenji Jiaozhan*, pp. 290–291.
48 About the relationship between the Uyghur and the Xiagasi, see Yang Shengmin, *Huihe Shi*, 回纥史, Changchun: Jilin Jiaoyuchubanshe, 2001, pp. 175–177; Cheng Shuluo, *Tang Song Huigu Shi Lunji*, 唐宋回鹘史论集, Beijing: Renmin Chubanshe, 1993, pp. 102–114. 》
49 Sima Guang, *Zizhi Tongjian*, vol. 246 (Year 840), p. 7946; also *Xin Tangshu*, vol. 217b, p. 6149.
50 *Taiping Huanyu Ji*, vol. 199. P. 3822; *Xin Tangshu*, vol 217b. p. 6148.
51 *Xin Tangshu*, vol 217b. p. 6149.
52 Sima Guang, *Zizhi Tongjian*, vol. 247, dated year 843, the second month.
53 In the Museum of Kazakh Gazetteer in Respublika Hakassia, Russia, no. 6640/1–5 is the remanent of a piece of Tang jade enfeoffment certificate to the Xiagasi in the 7th year of the Xiantong Era (866). See 枡本哲：南シベリアアバカン近郊発見の玉冊片について, [On the jade enfeoffment piece discovered at the suburb of Abakan] 《大阪府藏文化財協会研究紀要》3，pp. 343–362；Liu Fengzhu, "Eguo Abakan Bowuguan suocun de Tangdai Yucecanjian," in *Sui Tang Liao Song Jin Yuan Shi Luncong*, vol. 1, Beijing: Zijinchengchubanshe, 2011, pp. 11–12. This is the evidence that during the Xiantong Era, the Xiagasi was the hegemon in the region north to the Gobi Desert, thus received the title of Kehan from the Tang. Meanwhile, the silk-horse trade between them were going on.
54 Wang Pu, *Tang Huiyao*, p. 1303.
55 *Cefu yuangui*, vol. 980, p. 11345; also see Sima Guang, *Zizhi Tongjian*, vol. 212, p. 6744.

29

ROMAN SILK TRADE AND MARKETS

Berit Hildebrandt

Introduction

This contribution will deal with the evidence for Roman silk trade and markets from the 1st century BCE to the 5th century CE, with a focus on the written sources. While earlier studies often focused on the terminology of silk in Ancient Greek and Latin and the use of silk in Antiquity, especially in the context of luxury discourses and sumptuary legislation, more recent research has drawn attention to the maritime and overland trade routes along the so-called Silk Roads and the traders of silk. This shift is partly due to the large increase of our knowledge about the sea and land routes of the Silk Roads as well as new insights into the organization of textile production and the long distance trade.[1] Moreover, the information gathered from ancient texts is increasingly complemented by technical and scientific analyses of archaeological textiles in the Mediterranean regions that shed new light on the origin of raw materials and the places of production.[2] This study aims to bring these recent studies together in order to give an overview over the kinds of silks that were traded in Antiquity, their origins, traders and trade routes as well as their places of production and consumption.

Terminology

Silk is a textile material that is produced by silk worms. These animals have glands to the left and right of their mouths that produce silk threads. They use these threads to build a cocoon that protects them while they undergo their different stages of development until they hatch as silk moths. Usually, silk fibers are divided into two categories: wild and cultivated silk. Cultivated silk refers to the white and even silk threads produced by the Chinese *bombyx mori* silkworm that feeds exclusively on white mulberry leaves. The animal is killed before it can hatch from the cocoon and destroy the thread that is wound around it. After millennia of breeding, *bombyx mori* silk moths are unable to survive in nature on their own and are highly sensitive to smell, light and noise. They also need a lot of care in order not to fall ill. That means that silk cultivation required a lot of expert knowledge.[3] On the other hand, wild silk moths can be found all over the world and feed on many different plants.[4] Their silk comes in a variety of natural colors, from yellowish to brownish. Under the microscope, wild silk threads are uneven in comparison with those of cultivated silk.[5]

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In ancient Greek and Latin texts, we find different terms for silk. The earliest term seems to be *bombycinum*. It relates to the silk worm, *bombyx*, and might originally have denoted wild silk. It was followed by *sericum*, a word that seems to derive from the Chinese word for silk.[6] It is also related to the term *Seres* that is often translated as "Chinese". However, it literally means the "silk people" and was used for different kinds of peoples involved in the production and trade of silk along the Silk Roads in the East about whom Western authors often had no first-hand knowledge. As a consequence, descriptions of the *Seres* varied and they often served as a projection surface for Western authors who described them as "the Other".[7] For example, while the poet Ovid characterized the *Seres* as "dark", the elder Pliny referred to reports that described them as light-haired and blue-eyed people who never traded directly with others.[8]

Finally, we have the word *metaxa* that is sometimes translated as "raw silk" or "wild silk", but seems rather to have denoted silk skeins that were convenient to transport over long distances.[9]

The Provenance of Silk in Antiquity

It is still not clear when silk first arrived and when it was first cultivated in the Mediterranean. According to our present knowledge, the earliest archaeological silk finds have been discovered in China and South Asia. The Chinese finds are dated to the middle of the 3rd millennium BCE (some researchers claim even earlier finds) and are roughly contemporaneous to silk finds from the Harappa culture. The Chinese finds are probably related to cultivated *bombyx mori* silk and the South Asian finds to wild silks.[10] These findings match Greek and Latin texts that frequently attribute the provenance of silks to *India* and the *Seres*.[11] Also analyses of archaeological silk finds from the oasis city of Palmyra in modern-day Syria, dated to the 1st century BCE to the 2nd century CE, have identified cultivated Chinese silk and Indian wild silk.[12] There is thus a strong probability that different kinds of silks were available in Antiquity, even though we cannot be sure which kind was referred to by the ancient authors respectively.[13]

The rapid development of scientific textile analyses also casts doubt on earlier research: Finds from the Mediterranean that had previously been identified as silks and been used to argue for an indigenous silk production in the Mediterranean are now questioned.[14] The arguably earliest find among them is a silk cocoon from the Greek island of Thera that has been attributed to the wild silk moth species *Pachypasa otus*. It was found in a disturbed layer related to a building and can probably be dated to the middle of the 2nd millennium BCE.[15] It has been taken as evidence that silk production was already known in the Greek Bronze Age. However, the discovery of one cocoon is not sufficient proof for the existence of sericulture, especially since none of the early Greek texts, like the Mycenean Linear B tablets, the epics of Homer and other archaic texts, mention a term that can be related to silk.[16] The purportedly earliest Greek text about silk is dated to the 4th century BCE and handed down in writings about the nature of animals that are attributed to Aristotle.[17] It describes the life cycle of the silk worm and claims that silk production had been invented on the Greek island of Cos by a woman named Pamphile. However, this passage lacks parallels in contemporary texts, which raises the question of its textual tradition. While Aristotle might very well have described the life cycle of an indigenous silk worm, the knowledge about silk production seems anachronistic for his time, which could point to a later addition to his entomological observations.[18] The (so far) only non-literary early text that mentions silk is an inscription with an inventory of dedications from the temple of the goddess Artemis in ancient Miletus in modern-day Turkey. It can probably be dated to the late 2nd century BCE. Among the listed items are *bombykina*

face-veils and old *bombykina* headbands that were out of use.[19] Here, we have an indication that *bombykina* silks were known in Asia Minor in late Hellenistic times. The question is where they were produced, and when silks first became known in the Mediterranean. So far, our other information for silks in Hellenistic times comes from later Roman authors.[20] However, it is difficult to determine whether they based their statements on historical facts, or whether they projected luxury discourses of their own time into the past in order to contrast an allegedly simple Roman lifestyle with purported Eastern luxury, indulgence and moral weakness.[21] A final argument against an indigenous silk production in the Mediterranean at an early time is the fact that Roman authors tend to confuse *serica* with plant fibers that they often call "tree wool", like a kind of cotton.[22] If there already was a silk cultivation in the Mediterranean for centuries, one wonders why no ancient author should ever have made the connection between the *serica*-silks and indigenous species. Summing up, it remains plausible to credit the author Procopius with telling the truth when he claims that the cultivation of silk was introduced in the Mediterranean in the 6th century CE purportedly by monks from the East who promised the emperor Justinian that he would not need to rely on silk trade with the Persians any more.[23] In reverse, this would mean that the Mediterranean regions were dependent on silk trade from the East throughout Antiquity.

The Desire for Silk in the West

We have better proof for the point in time when the desire for silk increased in the West. The material became very popular in Rome from the last third of the 1st century on, which coincides with the beginning of the reign of the first *princeps* Augustus and Rome's annexation of Egypt that allowed direct access to the Red Sea trade and thus the sea routes to India.[24] The introduction of silk in Rome was accompanied by morally connoted criticism that was also aimed at other exotic and precious goods. Silk is characterized as luxurious, very expensive, foreign, effeminate, revealing and immodest and therefore a sign of female weakness that violates the purportedly austere Roman clothing traditions and morals and shows the unfitness of a (male) silk wearer to assume leading political positions.[25] The high number of these moralizing discourses gives the impression that the critics of silk were far more numerous than those who desired the material. However, it needs to be kept in mind that ancient texts were often copied in Christian monasteries where the copied material was selected.[26] Moreover, the enduring criticism can be interpreted as a sign that the use of silk was popular and far more widespread than the critics appreciated. In fact, our earliest texts regarding the use of silks do not only mention women among the admirers of the material, but also men: Tacitus describes a discussion in the Roman senate under the reign of the emperor Tiberius that was aimed at curbing the worst excesses of luxury. The senators agreed on two topics: no tableware was to be made of massive gold, and no "disgracing" silk clothing was to be worn by men.[27] Not only does the text show how deeply divided the Roman elite was regarding the conspicuous consumption of luxury goods, it also shows that the use of silk clothing was not limited to allegedly weak women, prostitutes and men of questionable morals. All to the contrary, even senators seem to have been very fond of the material.[28] The desire for silk was even strong among the emperors. Although at the beginning of the principate the use of silk clothing would characterize a "bad", luxury-loving emperor like Caligula, and later Elagabalus, sumptuary legislation shows how the emperors sought increasingly to monopolize the use of silk and especially purple-dyed silk garments that came to represent their own power as well as that of their family and their court.[29] The discourses around silk thus also mirror the transition from the *princeps* as a "first among equals" who needed to avoid any comparison with sole rulers –

that were for historical reasons extremely negatively connoted during the principate – to the monarch of Late Antiquity who was expected to show his power through precious clothing. This observation is further corroborated by court poets like Martial, Statius and Claudian who write about silk in imperial contexts without critical connotations.[30] In addition, inscriptions regarding silk weavers and traders from the 1st century CE onward show how much the material was desired, not only in Rome but also in the provinces.[31]

The Prices of Silk

In contrast to the frequent literary mentions of silk as a very costly and luxurious material, the texts rarely give actual prices.[32] Rather, they stress the very high value of silk, especially when it was purple-dyed. An anecdote in the *Historia Augusta* claims that the emperor Aurelian denied the request of his wife to use a purple silk mantle because the price of a pound of silk equaled that of a pound of gold.[33] The elder Pliny counted silk among the most expensive goods of the earth.[34] He also complained of the large amounts of Roman money that went to the East, which he numbers with fifty million sesterces in the trade with India and one hundred million sesterces in the trade with India, Arabia, and the *Seres* altogether.[35] Seneca lets the cynical philosopher Demetrius criticize the enormous sums of money that were paid to people who were "unknown even to trade", which confirms that Roman merchants at his time usually had no direct contact with the "silk people" at the Eastern ends of the Silk Roads.[36] The *topos* is much repeated. Also the emperor Tiberius purportedly complained about the large amounts of money that went to foreign people in order to import luxurious jewels for Roman women.[37]

It can be argued that these numbers are to be read as rhetorical exaggerations in the context of moralizing discourses about luxury. This assumption is, however, to be weighed against the contents of a papyrus from the middle of the 2nd century CE, the so-called Muziris papyrus.[38] The text deals with a loan for a Roman entrepreneur who was involved in the import of luxury goods by sea from Muziris in southern India to Alexandria in Egypt. It does not mention silk, but other costly goods like ivory and also pepper. The text is fragmentary, but even though the interpretation of the extant text and numbers vary, it is clear that the freight had an enormous volume and an even greater value. A more recent estimate puts the volume at 150 to 180 tonnes before taxes, with a collective value of 2.3 million *denarii* before taxes (that made 25 percent of the sum). After taxes, the value of the goods might have been as high as 6.911.852 *drachmai*, which according to Kasper Grønlund Evers amounted to the value of "one per cent of the total cost of the Roman army".[39]

Actual numbers for silk products as well as salaries related to silk production and weaving are given in the emperor Diocletian's Edict on Maximum Prices from 301 CE. The purpose of this text – that was distributed in the form of Greek and Latin inscriptions all over the Empire – is usually interpreted as an attempt to curb the high prices of goods and services that were caused by the inflation of the time. Accordingly, the numbers in the Edict refer to maximum prices.[40] It is difficult to say how close these maximum prices came to the actual prices in the different parts of the empire. They do however give relative values of services and goods. The maximum price for a pound of purple-dyed silk is – next to that of a male lion – the highest of all goods that are named in the Edict, at 150,000 *denarii*, while a pound of undyed silk was to cost maximum 12,000 *denarii*. We also learn of silk workers who were probably reeling silk and silk weavers who were paid according to their expertise – those who were able to produce silk damasks were higher paid than those who were weaving simple tabby fabrics: 40 *denarii* versus 25 *denarii* (each maximum) per day plus keep.[41] Also, a half-silken garment that could be interwoven with linen, wool or cotton, only cost a fraction of a wholly silken garment. An

example from the Edict is a white *dalmaticomafortium*, a kind of hooded garment with long sleeves. Such a garment made of half-silk with *hypoblatta*-purple stripes (a costly purple quality) was not to cost more than 44,000 *denarii*. However, the maximum price of the same garment made of pure silk with stripes that were dyed with two pounds of purple was 135,000 *denarii*, nearly thrice as much.[42]

The Edict implies that the price of a garment consisted of the costs for the raw materials and the pay of the involved (craft) persons, with silk yarn and skeins being sold according to their weight.[43] It can be assumed that this practice lent itself to attempted fraud, and a law issued by Arcadius, Honorius and Theodosius in 406 CE might be an example for that. The law states that all silks, both those purple dyed and those in the form of (possibly undyed) skeins (*metaxa*) must not be delivered unwashed to the imperial treasury, the *aerarium*.[44] This order might have been connected to attempts to make the very fine and light silk yarn heavier, either by not removing the sericin, a kind of natural glue that the silkworm produces together with the threads, or by soaking the yarn in solutions.[45]

Trade, Traders, Trade Routes, and Markets

While the Eastern ends of the Silk Roads were still largely unknown in Roman times, much more information was available about the routes to India. Egypt played an important role in trade transactions with India that included silk. An important source is the *Periplus Maris Erythraei*, the "Circumnavigation of the Red Sea". This text was written in the 1st century CE about seafaring and trade in what is nowadays called the Red Sea, the Persian Gulf and the Indian Ocean. The author is unknown, but seems to have been a trader from Alexandria in Egypt who knew the trade routes to India both from his own experience and from the reports of others. Most notably, he lists the Western goods that were in demand in the cities and ports of trade along these routes, and the goods that they offered in return.[46] The text mentions different harbors in India where silk could be bought in the form of yarns, skeins, or fabrics. They were mostly located along the West coast of the Indian subcontinent. Pelts, cloth and yarn from the *Seres* were available at Barbarikon, a port in the Indus Delta.[47] Silk cloth and yarn were available in the port of trade of Barygaza that was the main hub for the textile trade on the Indian side and is probably to be identified with modern Bharuch/Broach at the Gulf of Cambay in Gujarat.[48] In the south, the settlements of Muziris and Nelkynda, both lying on a river, and Bakare, on the mouth of the river, exported silk.[49] Moreover, the text informs us that silk in the form of floss, yarn and cloth arrived in India from the big inland city of Thina that lay beyond the Ganges river "at the northernmost point, where the sea ends somewhere on the outer fringe". This silk reached India both on land routes that led through Bactria to the port of Barygaza and via the Ganges River from where they were shipped along the east coast of India all the way down to Limyrike, a region along the southwestern coast of the subcontinent. The ancient author comments that it was "not easy" to get to Thina, and that only rarely did people come from there, and even then only a few.[50] The name Thina probably refers to ancient China, but to the author of the text it was a largely unknown region without regular trade connections to the south and west.[51] Lionel Casson believed that all the silk that was traded in India originated in China, but as already mentioned, we now have evidence that already the Harappa culture used silk, which makes it possible that the silks traded in India were both imported from the East and indigenous.[52]

It seems plausible that India both produced and traded indigenous wild silks and that it served at least as a transshipment center for cultivated and maybe even wild silks from China. Due to the climatic conditions on the Indian subcontinent, there are no archaeological silk finds that could

shed light on the kinds of silk that were traded, although other finds including ceramic, metal, glass, coins, and even pepper corroborate the vivid exchanges attested to in the written sources.[53]

The situation is different in the Syrian oasis city Palmyra where the desert climate has excellently preserved textile fragments in the city's tower tombs. Analyses of these textile finds show that both wild silk, probably from India, and cultivated Chinese silk reached the West.[54] Some of the silk fabrics have typical Chinese patterns, some are damask twills woven in a Western style, and some seem to have been embroidered somewhere in Middle Asia before they reached Syria, which corroborates the information in the texts that silk was exported from the East both in the form of yarns and fabrics.[55] However, the notion that Chinese silks were unraveled in the Roman Empire is not supported by the Greek and Latin texts. Rather, the "unravelling" of silks may have related to the unreeling of cocoons, the unwinding of skeins and/or the transfer of the yarn to a kind of spool (or similar tools).[56]

Different steps in the production and embellishment of silk fabrics are also found in Latin and Greek inscriptions that mention *sericarii* or *seirikarioi*. These were persons who specialized in silk, probably as weavers or servants in rich households who were responsible for the maintenance of silk clothing and textiles.[57] Egyptian papyri show that garments were often made on demand, which was probably also true for silk clothes. The customer provided the raw materials for the weaver who produced the fabric after their wishes. The process often involved several persons in different locations, some of which procured yarn and/or dyestuffs for the weaver, while others took care of the transport of raw materials and the finished product.[58] However, silk could also be bought on the market. The author Martial writes that first-quality silk was available in the *vicus Tuscus* in Rome, a shopping street leading off the *Forum Romanum*.[59] Martial does not explain how the different silk qualities were distinguished, but he might have referred to the evenness of the threads, the luster and the color.[60]

Since silk was a very much sought-after good in the West, silk traders could become very rich. The silk trader Marcus Aurelius Flavius, characterized as *negotians siricarius*, was wealthy enough to afford a marble tombstone in the early 3rd century CE.[61] He might have acted on behalf of rich investors who were the financial forces behind caravans or ships that carried precious goods from the East, as mentioned in the Muziris papyrus.[62] Those who financed these journeys could become enormously rich if they were successful,[63] since their profit compensated for the high risks like shipwreck and robbery that they incurred with their investment in the long-distance trade. As an example, the author Heliodorus writes in his novel about the plundering of a ship laden with precious goods like silk, gold, silver and precious stones while it was anchoring at the mouth of the Nile.[64]

One of the traders who seems to have made a fortune with silk was the *negotiator sericarius* Aulus Plutius Epaphroditus who is mentioned in a large inscription that is dated to the year 168 CE.[65] The inscriptions details that he donated a temple to the goddess Venus in the city of Gabii near Rome. The donation included precious equipment, among others bronze doors and statues and a bronze altar. Also, he provided the funds for an annual banquet in honor of his late daughter, and had handed out money to local dignitaries and shopkeepers at the inauguration of his temple.[66] He might have been a freedman, a former slave, although this is not explicitly stated in the text. His networks are further highlighted through an inscription that belonged to a statue that his freedmen, who may have supported him in his trade, had erected for him.[67] Moreover, a tombstone in Rome mentions one Telesphorianus, son of Aulus Plutius Epaphroditus, who was probably identical with the aforementioned silk merchant.[68] Another indication for his wide-reaching connections is the high number of epigraphically attested persons, probably mainly freedmen, who belonged to the families of the *Auli Plutii* and *Lucii Plutii*. They seem to have lived predominantly in the regions around Rome and Gabii and Tusculum

in Latium.[69] Two of these freedmen in Rome were explicitly connected to textile production, one as a *plumarius*, a tapestry weaver, and one as a *purpurarius*, a purple dyer, who was active in the already mentioned *vicus Tuscus* where one could buy best quality silk.[70] The purple-dyer was also mentioned in an inscription at Marino, which was just a few kilometers away from Tusculum that in turn was located in the neighborhood of Gabii. It would make sense for networks specialized in the production and trade of luxury goods to exist around large centers of consumption like Rome.[71] The connections of Aulus Plutius Epaphroditus are also typical for the Roman trade with the East that was often carried out by freedmen and slaves who acted as agents for their (former) masters.[72]

Recent research about the Roman long-distance trade in luxury goods has increasingly asked how this trade was organized, which is related to the question to which degree markets in different parts of the ancient world were integrated.[73] Bottom-up-approaches focus on the personal connections of the different groups involved in the trade between the West and East. It has been argued by Kasper Grønlund Evers that the organization of the silk trade between Rome and India was probably based on such personal connections: Roman and Indian texts regarding associations of craftspeople and especially silk weavers suggest that moral and religious standards were shared within the different groups respectively and that their interests in maintaining a positive professional reputation facilitated binding trading transactions. As a second factor, *Yavana*, "Westerners" living in India who are attested in Indian texts, may also have facilitated the trade with the West, although the term is difficult to interpret and was used over time for different people, from Greeks and Romans to Arab.[74]

On the Roman side, we have an inscription from the city of Rome that mentions silk weavers, *sericarii*, who jointly made a donation.[75] It is possible that these *sericarii*, like other groups involved in the work and trade with imported goods from the East, were either part of a formally organized association, a *collegium*, or a "professional group and network with a public profile", as Evers suggests.[76]

A formalized group of silk weavers is also attested to on the Indian subcontinent.[77] An inscription from the 5th century CE mentions an association, a *shreni*, of silk weavers that had commissioned a local Brahman poet to write about their history and achievements. The text highlights their expertise as craftspeople, but also in Evers' words "their exceptionally high moral and religious standards", which he stresses is comparable to the self-praise of Greek and Roman associations.[78] These Indian silk weavers had immigrated to the kingdom of Dashapura from the region of Lata, which was located to the East of Barygaza, the ancient textile and silk trading hub mentioned in the *Periplus Maris Erythraei*. The occasion of the poem was the restoration of a temple for the divine Sun in 473 CE that the silk weavers had erected in 436 CE.[79] The silk trader Aulus Plautius Epaphroditus' donation of a Venus temple in the 3rd century CE comes to mind.

We do not know which kinds of silk this Indian weavers' association used. They might have been indigenous wild silks from the Indian subcontinent, but also imported *bombyx mori* silks from China.[80] The export of these silks could have been in the hands of (probably multilingual) traders with connections to the West, like the *Yavana*, who Evers suggests were "the central mediators in the sea-going trade" and may have acted on behalf of "Indian families or mercantile organisations".[81] Moreover, Roman and Indian texts suggest that sea-going merchants and skippers on both ends of the trade routes were organized in professional groups who shared similarities, like the management of endowments.[82] Evers concludes that these similarities between Roman and Indian professional organizations of craftsmen and the persons involved in the long-distance trade, especially regarding formal and informal rules, economic strategies and religious ideals, facilitated long-distance trade.[83]

It is probable that personal connections also played a role in the trade with silk along other sections of the Silk Roads. We know that Nabatean traders played an important role as middlemen in the trade with luxury goods between India, Arabia, China and Rome. They served the maritime trade routes that led from India through the Persian Gulf on to land routes through the Nabatean empire in the southern Levant to the Syrian trading cities. Inscriptions in the town of Puteoli in modern-day Italy attest a Nabatean community that might have served as a contact point and a source of information for traders from the Levant. It is probable that Nabatean traders were also involved in the silk trade, although so far we do not have texts or archaeological silk finds to prove it.[84]

On the other hand, the already mentioned silk finds from Palmyra show that the Palmyrenes had access to silks from India and China. Palmyrene merchants left epigraphic evidence of their presence in several important places along the trade routes to the East, from Seleukia at the Tigris to Roman Egypt. Although their inscriptions do not explicitly mention silk, the silk finds of Palmyra suggest that they transported the precious good along the Syrian caravan routes, probably to the city of Hit at the Euphrates, and used river navigation in Mesopotamia to reach the Persian Gulf, and sailed from there onwards to the Indian harbors.[85] It is at present unclear whether Palmyrene traders entertained direct connections with Italy and Rome where silk was very much sought after, or whether they collaborated with other traders who did.[86]

Written sources attest that also other cities in Syria and the Levant were famous for their silk production and trade. A silk weaver, *sirekarios*, named Samuel had lived in the big trading city of Berytus/Beirut.[87] The tomb stone of a *sirikopoios* ("silk maker") by the name of Heliodoros, from Antiochia, was found in Naples.[88] In his novel, Heliodorus describes a trader from Tyrus who talks about his noble family and his fortune that includes the ship he is sailing on and the major part of the goods that it carries, including gold, precious stones and silk.[89] In the 6th century CE, the author Procopius writes that the cities of Berytus and Tyrus were famous centers of silk weaving, with many craftspeople and traders, since "times of old", and that they exported silks to the whole world.[90]

In addition, we know that Jewish traders were involved in the silk trade that went along the caravan routes in Syria, and in Mesopotamia by ship on the Euphrates river to the Persian Gulf.[91] A commentary from the Talmud, that gives the middle of the 2nd century CE as a date for the anecdote, mentions a silk trader named Abba ben Abba who received a silk order from the Rabbi Judah ben Beteirah. The trader lived in Nehardea on the middle Euphrates, a city known for its weavers, and the rabbi in Nisibis, a town that later became important in the border trade with Persia. The trader reserved the fabric as requested. However, only after a long time was the rabbi able to pick up his order. When the rabbi inquired why the trader had reserved the fabric for such a long time, even though he had not received a deposit, the trader answered that the rabbi's word weighed more than money. To judge from this story, ordering a precious good like silk usually involved making a deposit, but personal relations based on trust could count as much.[92] A parallel to these practices can be found in the writings of the church father John Chrysostom in the 4th century CE who spent most of his life at Antioch. He might therefore have referred to silk traders who used the "Northern Mesopotamian route" via Nisibis.[93] Chrysostom admonishes his readers that prosperity was based on one's own possessions, and that those who were in possession of goods that belonged to someone else could therefore not be rich.[94] He uses the example of a silk trader who had his merchandise sent to him by another person and could therefore not be among the richest men, because he was only for a short period of time in the possession of the silk that did not belong to him. In other words, Chrysostom's silk traders are apparently agents who are acting on behalf of wealthy entrepreneurs and received a commission in return.[95] The author Ammianus Marcellinus gives an indication where silk markets at the Western ends of the

Silk Roads in the second half of the 4th century CE could be located.[96] He writes about the city of Batne that was founded in Anthemusia close to the river Euphrates. Ammianus says that the city was home to many rich traders and that it hosted an annual large fair with goods from the *Indes* and *Seres* that were transported to it by land and water.

However, in Late Antiquity, the attempts of the emperors to monopolize the acquisition, production and use of silk intensified.[97] Valentinianus, Theodosius and Arcadius issued a law at the end of the 4th century CE that requested that the acquisition of silk from the "barbarians" should be the privilege of the *comes commerciorum*, an official entrusted with external trade.[98] In the 6th century CE, the emperor Justinian purportedly still tried to negotiate exclusive trade contracts for silk. Procopius mentions that the silk trade was the reason for Justinian to make treaties with the south Arabic Himyarites against the Persians, who were important actors in the silk trade, and negotiate trade monopolies with the Ethiopians (Axumites) who were supposed to sell the silk (*metaxa*) that they got from the Indians exclusively to the Romans. The offer is pictured as a win-win situation where the Ethiopians become rich while the Romans are not forced any more to buy silk from their Persian enemies.[99] However, both partners were unable to abide by these agreements. Procopius comments that the Persian traders arrived faster than the Ethiopians in the harbors where the Indian ships anchored because they were closer to India and usually bought all the merchandise before the Ethiopians were even able to get their hands on the silks.[100] Justinian's struggles with the acquisition of silk are described even more vividly in another passage where Procopius talks about the monopolies that the emperors sought to establish. He mentions the old silk producing and trading cities Berytus and Tyrus that were threatened in their existence when the silk manufacturers in Byzantium and in other places started to sell silks at higher prices. Their argument was that the prices that needed to be paid to the Persians were higher than previously, and that the Roman customs stations had become more numerous. This purportedly infuriated the emperor who decreed a maximum price for a pound of silk. However, this measure fueled the black-market trade with silk. These developments were followed by fraud committed by the officials of the emperor who, instead of controlling the market, enriched the emperor and themselves, and finally ruined the established silk traders and weavers who were forced to emigrate to Persia.[101]

These anecdotes show that not even the emperors were able to control the volatility of the silk markets. At the same time, the attempts to get exclusive access to silk show how important the material had become in the imperial representation. This explains why Justinian finally resorted to "industrial espionage": According to Procopius, he enlisted the help of two monks from *Serinda* (probably a region in the north of India) who smuggled silk worm eggs into Byzantium and taught the West how to cultivate silk worms. Finally, the West had become independent from the silk trade with the East.[102]

Notes

1 The literature is too numerous to be listed in detail. For more recent overviews, see, e.g., Hildebrandt 2017; Evers 2017; Seland 2016; De Romanis 2020; McLaughlin 2010; Liu 2010; Hansen 2012; Mair–Hickman (eds.) 2014 as well as the references given below. Important impulses for the study of the silk trade have been set by Thorley 1971 and 1998 and Raschke 1978.
2 Schmidt-Colinet and Stauffer with Al-Asʿad 2000; Jørgensen 2013; Ströbele and Boner 2015.
3 Muthesius 1997, 5–13.
4 Peigler 1993.
5 Schmidt-Colinet and Stauffer with Al-Asʿad 2000, pl. 102 g and h.
6 Pausanias 6,26,6. The term *Coae vestes* seems to have been rather short-lived and was mainly used by poets. Hildebrandt 2017, 34–37 and Hildebrandt 2021.

7 Both Romans and Chinese texts display patchy knowledge about the people at the other end of the Silk Roads, often in the form of depictions that stress differentness (in the Roman sources) or claim sameness (in the case of the Chinese sources), which confirms that direct contacts must have been the exception rather than the rule: see Bueno 2016; Liu 2017; Graf 2017, esp. 12–13, with further literature.
8 Ovidius, *Amores* 1,14,5–8; Plinius, *Naturalis Historia* 6,24,88.
9 Hildebrandt 2020.
10 For the Chinese finds see Hao 2012, esp. 71–73, for the South Asian finds Kenoyer 2017.
11 On Indian harbors where silk was traded, see below. On Indian silk, see also Mierse 2013.
12 Schmidt-Colinet and Stauffer with Al-Asʿad 2000, esp. 8, 12–13.
13 There was no standardized textile terminology. We do not even know according to which criteria traders distinguished between different textile materials.
14 See Jørgensen 2013 for a reassessment of possible early silk finds in the Mediterranean that Good 1995 had compiled.
15 Panagiotakopoulou 2000 a, esp. 69–94; Panagiotakopoulou 2000 b.
16 Panagiotakopoulou 2000 a, 77–79; Hildebrandt 2017, 34.
17 Aristoteles, *Historia Animalium* 5,19 (551b 10–15).
18 Hildebrandt 2017, 35–36. Pliny the Elder describes silk worms that feed on ash, cypress and oak: Plinius, *Naturalis Historia* 11,27,77. These plants are part of the diet of wild silk worms like *Pachypasa otus* (cypress and oak) and *Saturnia pyri* (ash), as observed by Forbes 1930, 25. It is thus very much possible that knowledge about the insects existed, but as will be argued here, the evidence is not sufficient to assume a silk cultivation in the Mediterranean before Late Antiquity. Also the fine and clinging garments of late 5th and early 4th century BCE Greek statues that Richter 1929 discusses could have been made of other fine textile materials like linen or wool instead of silk.
19 Herrmann, Günther and Ehrhardt 2006, 213–215 no. 1357.
20 E.g. *Strabon* 15, 1, 20; Florus, *Epitoma de Tito Livio* 1,24,9 [II 8]; 1,46,8 [III, 11].
21 For these discourses, see Edwards 1993.
22 *Strabon* 15,1,20; see also Vergilius, *Georgica* 2,121 and Servius, *Commentarius in Vergilii Georgica* 2,121. See also Hildebrandt 2017, 35.
23 Procopius, *De Bellis*, 8,17,1–8.
24 MacLaughlin 2010, 1.
25 Hildebrandt 2012a; Kádár 1967; Kádár 1968. On the political meaning of moral discourses, see Edwards 1993.
26 Edwards 1993, 32–33.
27 Tacitus, *Annales* 2,33.
28 See Hildebrandt 2012a.
29 Caligula: Cassius Dio 59,17,3; Suetonius, *Caligula* 52,1–5. Elagabalus: Scriptores Historiae Augustae, *Heliogabalus* 26,1. See also Hildebrandt 2012 a. For the legislation regarding silk, see Nardi 1984.
30 Martialis, *Epigrammata* 11,8,5 (for emperor Domitian's wife); Statius, *Silvae* 3,4,88–90 (for an influential eunuch at Domitian's court); Claudius Claudianus, *Panegyricus de Quarto Consulatu Honorii Augusti* 600–601 (for the child emperor Honorius). See also Hildebrandt 2015.
31 Evers 2017, 62–66; Hildebrandt 2017, 40–45. See also below.
32 So far, we have no papyri with information about silk from the Roman imperial period: Droß-Krüpe 2011, 25.
33 Scriptores Historiae Augustae, *Aurelianius* 45,4–5.
34 Plinius, *Naturalis Historia* 37,78,204.
35 Plinius, *Naturalis Historia* 6,26,101 and 12,41,84.
36 Seneca, *De Beneficiis* 7,9,5.
37 Tacitus, *Annales* 3,53,4.
38 Evers 2017, 97–109: papyrus SB XVIII 13167 = P. Vindobonensis G 40822.
39 Evers 2017, 108. For a differing calculation, see De Romanis 2020, esp. 249.
40 See Flemestad, Harlow, Hildebrandt and Nosch 2017, 256–258.
41 *Edictum Diocletiani de Pretiis Rerum Venalium* 24, 1–1a (purple-dyed silk); 23, 1a (undyed silk); 34, 1a (male lion); 23 and 24, 13 (silk reelers); 20, 9–11 (silk weavers). See also Hildebrandt 2021, 128; 130.
42 *Edictum Diocletiani de Pretiis Rerum Venalium* 19, 12; 19, 16. See also Hildebrandt 2017, 39–40.
43 On the persons and steps involved in the ordering of garments, see Bogensperger 2016.
44 *Codex Theodosianus* 10,20,13.

45 For the effect of sericin on the weight of silk, see Guo Rui 1998, 429. A historical Indian text, the *Arthashastra*, mentions that weavers cheated by soaking silk yarn in rice-gruel to make the fabric heavier: Mierse 2013, 213.
46 For an English translation of the text and a commentary, see Casson 1989.
47 *Periplus Maris Erythraei* 39 (Casson). For the translation of the terms related to silk, see Casson 1989, esp. 260, 263, 292.
48 *Periplus Maris Erythraei* 49 (Casson). Albaladejo Vivero 2013. For a network analysis of the textile trade in the *Periplus Maris Erythraei* and its main hubs, see Seland 2016, esp. 215 (on Barygaza).
49 *Periplus Maris Erythraei* 53–56 (Casson).
50 *Periplus Maris Erythraei* 64 (Casson). For the routes, see Casson 1989, esp. 26, 24, 213–14, 239.
51 Casson 1989, 238; McLaughlin 2010, 131–133.
52 Casson 1989, 26; Kenoyer 2017.
53 Casson 1989; Young 2001; Tomber 2008; Sidebotham 2011; Evers 2017; De Romanis 2020.
54 Schmidt-Colinet and Stauffer with Al-Asʿad 2000, 8, 12–13. See also Żuchowska 2013 and 2016.
55 Schmidt-Colinet and Stauffer with Al-Asʿad 2000, e.g. 27–28 (for elaborate Chinese *jin* silks), 159 cat. 319 and 178 cat. 453 (for "Western style" silks), 30–31 (for embroidered silks). See also Hildebrandt 2021.
56 Hildebrandt 2012 b; on pin-shaped objects in textile production see Flemestad, Harlow, Hildebrandt and Nosch 2017.
57 Evers 2017, 62–66; Hildebrandt 2017, 40–45; see also Vicari 2001; Kádár 1967; Kádár 1968.
58 Bogensperger 2016.
59 Martialis, *Epigrammata* 11,27,11.
60 Hildebrandt 2017, 39.
61 CIL VI 9678. Hildebrandt 2017, 44; Evers 2017, 64.
62 Evers 2017, 99–109.
63 Evers 2017, 108.
64 Heliodorus, *Aethiopica* 1,3,2,7.
65 CIL XIV 2793. The name Aulus Plutius Epaphroditus, probably referring to the same person, is also known from other inscriptions: CIL VI 24356, CIL XIV 2812. See Amiri 2012; Hildebrandt 2017, 42–43; Evers 2017, 64.
66 Amiri 2012, esp. 132–137.
67 CIL XIV 2812. Amiri 2012, esp. 127–128, 137. Evers 2017, 64 suggests parallels with patron-client networks in the trade with incense, perfume, ivory and jewellery at Rome.
68 CIL VI 24356. Amiri 2012, 139; Evers 2017, 64.
69 Amiri 2012, 137–139; Evers 2017, 64.
70 CIL VI 9814 (Lucius Plutius Agatho) und CIL XIV 2433 (Lucius Plutius Eros). Amiri 2012, 138–143 (with a table) and Evers 2017, 64.
71 Evers 2017, 64.
72 Ruffing 2013 who shows that in contrast, Egyptian traders preferred to collaborate with free agents.
73 See Evers 2017 for a recent discussion of the theories.
74 Evers 2017, 151–164, esp. 157. The terms *Yona* and *Yavana* are originally related to Greek speakers and etymologically connected to the Ionians, Greeks who lived along the West coast of present-day Turkey. However, with time the term would come to comprise other people from the West: Karttunen 2015.
75 CIL VI 9890. Evers 2017, 63; Hildebrandt 2017, 43.
76 Evers 2017, 63–64.
77 Evers 2017, 151–164.
78 Evers 2017, 154–157.
79 Evers 2017, 157.
80 The Indian silks may have been of the species *Antheraea mylitta* and *Antheraea assamensis*: Evers 2017, 157–158; Kenoyer 2017. See also preceding discussion.
81 Evers 2017, 158–162, esp. 162.
82 Evers 2017, 162–164.
83 Evers 2017, 164.
84 Terpstra 2013, 86–87; Terpstra 2015, esp. 76.
85 Ruffing 2019, 322–325 with further literature.

86 A Palmyrene temple and inscriptions found in Italy suggest direct connections: Terpstra 2016, 39–42; Ruffing 2019, 326.
87 Jones Hall 2004, 224; Hildebrandt 2017, 44.
88 IG XIV 785. Ruffing 2019, 318.
89 Heliodorus, *Aethiopica* 5,19,2,6.
90 Procopius, *Anecdota* 25,14–15.
91 Ruffing 2002, 367.
92 *Midrash Samuel* X: Evers 2017, 65.
93 Evers 2017, 65.
94 Johannes Chrysostomos, *Homiliae in Epistulam ad Ephesios* 2,13,58.
95 Evers 2017, 64.
96 Ammianus Marcellinus 14,3,3; Hourani 1995, 48.
97 For an overview see Nardi 1984.
98 *Codex Iustinianus* 4,40,2.
99 Procopius, *De Bellis* 1,20,9.
100 Procopius, *De Bellis* 1,20,19–13, esp. 12.
101 Procopius, *Anecdota* 25,14–26.
102 Procopius, *De Bellis* 8,17,1–8.

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30

CHRISTIAN DISCOURSES ABOUT SILKS IN ANTIQUITY

Berit Hildebrandt

Silk was a material that was very much sought-after in Antiquity, but at the same time its use was very controversially discussed. The extant literary texts are overwhelmingly critical of silk and connote the material with luxury, wasteful consumption, immorality, effeminate behavior, prostitution, and foreign customs.[1] These connotations were not only connected to silk, but also to other exotic luxury goods. They are based on dichotomies that structured Roman thinking and contrasted, among others, male self-containment with female weakness, a purportedly austere Roman traditional lifestyle with foreign "barbarian" luxury and in extension moral and immoral behavior. Catherine Edwards has shown that these discourses cannot be interpreted literally, because they served as a tool of peer control and exclusion for the Roman elite by questioning the ability of individual members to rule and exert influence over others. Also, they constructed a – purportedly modest – traditional Roman way of living and Roman values and ideals as superior to non-Roman ones. Their main argument was based on the notion that a person who succumbed to luxury was not able to govern himself, and thus unable to govern others. In this line of thought, foreigners, especially oriental rulers, were depicted as effeminate and morally inferior to Roman leaders because their conspicuous consumption and luxurious lifestyle showed their innate weakness.[2] Since this moralizing rhetoric dominates the literary discourses about silk, it easily leads to the assumption that it represents the opinions of the majority of Roman authors. However, it has to be kept in mind that the extant texts were often selected and copied by Christians who probably gave preference to texts that propagated their own points of view on luxury and "immoral" pagans who succumbed to it.[3] In addition, in the context of luxury discourses everyone could be an attacker and target at the same time. This is for example true for the younger Seneca who was very critical about luxury (including silk clothing), but was at the same time accused of being a wealthy collector of citrus wood tables that were among the most prestigious and expensive objects of male desire of his time.[4]

Roman Clothing and Discourses About Silk

The discourses about silks in early Christian texts follow the main arguments of the luxury discourses in moralizing pagan texts, even though the reasons given against silk mirror Christian ideology.[5] How ancient pagan texts in general judged silk textiles and silken garments depended very much on their genre, the aim of the author and their intended audience. At

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closer examination, even the Roman elite seems to have been divided on the topic: The historian Tacitus vividly described a highly controversial discussion among the members of a senate meeting in 16 CE, during the reign of the emperor Tiberius, about banning excessive luxuries.[6] Even though Tacitus' dialogues are fictitious, the core of the dispute as well as the historical figures seem to have been based on historical protocols that chronicled those meetings.[7] The discussion shows that within the Roman elite, there were deep divides over the use of luxury goods and their appropriateness. While some saw them as a sign of the decline of morals, others considered them a highly deserved reward for the members of the elite, the senators and knights, who as leaders in war risked their lives for the *res publica*. However, the senators were able to agree upon the prohibition of two items: silk clothing for men and massive golden tableware.[8] This allows to deduce that the number of silk-wearing men must have been large enough to warrant a discussion in the senate, and that silk clothing for males was still considered unacceptable by a majority, at least in public. Some of the reasons can be gleaned in the work of the younger Seneca who quotes the philosopher Demetrius. Demetrius purportedly complained about Roman matrons whose diaphanous silk clothing revealed their bodies to passers-by on the streets in the same way it did to their (assumed) paramours in the bedroom. If that was not enough, these silks were bought at an enormous sum from people "unknown even to trade".[9]

However, the contrast between traditional Roman clothing that appropriately covered the body and was mostly made of wool and the imported diaphanous silk fabrics was only one part of the problem.[10] Precious goods and their conspicuous consumption seem to have played an important part in the status negotiations surrounding the new hierarchy of the principate already from the very beginning.[11] At the same time, the early *principes* needed to avoid the negative connotations of monarchy and tyranny and to maintain the illusion of a still existing *res publica* in which they were just the "first among equals". Not all adhered to it: Aloys Winterling has shown that Caligula and Nero, who have been characterized as "bad" emperors and questionable characters by their critics, exposed the contradiction between their actual status and the way that it was rhetorically framed at their time. Among other things, both used status symbols and followed lifestyles that reminded of Eastern customs and monarchies.[12] Caligula, for example, is said to have eschewed traditional Roman clothing and instead preferred foreign silk garments and jewel-studded shoes that evoked oriental luxury.[13] Even in the *Historia Augusta*, a collection of the lives of Roman emperors written in the 4th century CE, luxurious clothing and silk still served as a means of character assassination for "bad emperors". Heliogabalus is criticized for having worn pure silken dresses, although half-silken dresses were already available at his time (and seem to have been an acceptable compromise), and he is even credited with having been the first emperor to have worn silk, although this doubtful honor is attributed to Caligula by earlier authors.[14]

However, sumptuary legislation of the same time, the 4th century CE, shows that at that point the use of silk was widespread and coveted enough to warrant regulations, especially since it needed to be imported and was available only in limited quantities.[15] Silk that was dyed with the most precious kind of purple is even one of the most expensive goods in the emperor Diocletian's Edict on Maximum Prices from 301 CE.[16] Late Antique laws show that purple-dyed silk garments were more and more claimed by the emperor for his exclusive use and that of his family and court.[17] The purple silk mantle even became a symbol of the imperial power itself.[18] In addition, the emperors increasingly tried to monopolize the production and trade of silk, and also its use as a gift in diplomatic exchanges, as prize during games and as part of the payment for subordinates.[19]

Through these legal texts, we thus get a very different perspective on silk than in the moralizing literary sources. Accordingly, the few extant examples of court poetry that mention the use of silk are always positive. The poet Martial, our earliest case, mentions a fragrant silk garment that belonged to the wife of the emperor, the *domina*, which must refer to Domitian's wife.[20] The poet Statius mentions persons from Domitian's inner court circle, like an eunuch and the wife of one of his freedmen, who also wore silks.[21] In the 4th century, the poet Claudian admiringly described the splendid garment of the child emperor Honorius that consisted of a purple-dyed silken fabric that was embellished with gold and studded with jewels.[22] The same elements had been unacceptable for Caligula, but by Honorius' time, there was no question any more that the emperor was indeed "the first" and luxurious silk garments were seen as appropriate signs to express his monarchic status.[23]

The quality of these later silk fabrics must have been heavier than the light, diaphanous textiles that the early authors criticize, since the textiles needed to support the weight of jewels and to cover the emperor's body in an appropriate way. This does not exclude that different qualities were in use at the same time though: The *Historia Augusta* mentions that another "bad" emperor, Commodus, appeared before the Roman people in a revealing silk garment that exposed details of his groin, which was considered highly offending.[24] Generally, however, silk fabrics in Late Antiquity – or at least the most precious ones – seem to have become increasingly elaborate through costly dyestuffs like purple, gold threads, embellishments with precious stones, and elaborate weaving techniques.[25]

The following archaeological examples highlight the wide variety of silks that were available in the regions around the Mediterranean and the provinces of the Roman empire.[26] Silk was for example found in Italy in the city of Pompeii that was covered under the volcanic ashes of Mount Vesuvius in 79 CE. These finds consisted of a knitted purple-colored silk textile and a mineralized fragment of a purple and gold textile that was probably woven of silk, since this combination is often attested to both in archaeological finds and in ancient texts.[27] Already in the 2nd century CE the author Apuleius wrote about robbers who stole textiles made of silk and gold.[28] Archaeological fragments of gold-purple-silk-fabrics from the 3rd to 4th centuries have been found in the whole Roman Empire, which shows that they appealed not only to the elites in the big cities.[29] In addition, the textile finds of the oasis city of Palmyra in modern-day Syria, dated from the 1st century BCE to the 2nd century CE, give an impression of the wide range of silk fabrics that were available in the Mediterranean region during the first centuries of the principate. Many of Palmyra's inhabitants were involved in the caravan trade with the East, and due to its desert climate, numerous silk fragments have been preserved in the tombs of the local elites. Their patterns range from Chinese motifs to embroidered flowers and damasks that display the characteristics of Western weaving traditions and that were probably woven by local weavers with imported silk skeins and yarns.[30] Centuries later, the imperial Byzantine silk workshops produced splendid multicolored silk fabrics with medallions, Christian motifs and scenes from the Old Testament that were traded in the whole Mediterranean region.[31] For those without the means to buy a pure silk fabric, there was the possibility to embellish one's garment with silk applications. Such applications, dated to the 5th–7th centuries CE, were found in larger numbers in Egypt, especially in Akhmim where they were used to decorate tunics.[32]

Looking at the written sources, it makes sense that the women of the emperors were the first to wear silks. Not only did they have the means to buy the expensive fabrics, but they also had more freedom to experiment with new materials in their clothing than men. The traditional clothing of Roman male citizens was highly charged with political symbolism. It consisted of

an undergarment, the tunic, and a kind of semicircular mantle that was wrapped around the body, the *toga*, both of which were traditionally made of light wool and could be decorated with purple stripes of different widths that designated the political rank of its wearer. Also the *principes* as "first among equals" were supposed to wear these traditional garments.[33] Any addition of pattern and embellishments would have disturbed the visual representation of the political hierarchy. In contrast, Roman female dress was semantically more open and allowed for more color and decoration. In the case of married women, it consisted at this early time of an undergarment, a long dress (*stola*) and a mantle (*palla*).[34] However, both Roman women and men were accused of having preferred silk dresses to the traditional clothing that was usually made of wool, quite impractical and voluminous and, in the case to the *toga*, needed expertise in order to be draped correctly around the body. Ancient satirists described clients who followed their patrons through Rome in hot weather, clad in disarranged and scruffy *togae*.[35] It therefore comes as no surprise that Pliny complains that silk was preferred to traditional clothing by men for its lightness in summer. To judge from Seneca's criticism of Roman matrons in silk, the predilection for the exotic garments was shared by the women.[36] At the same time, the texts reveal the gap between discourses about the ideal of Roman clothing traditions and actual practices.

Christian Authors on Silk Clothing

The early Christian authors followed the *topoi* of criticism that their pagan predecessors used in order to claim moral superiority, but related their arguments to the bible and their theological beliefs.[37] Their ascetic ideals equated simplicity and humility with ragged, undyed, dark and coarse garments and even, in the case of ascetics living in the desert, nudity as a costume of the body.[38] Writers like Tertullian, Clement of Alexandria and the 4th-century archbishop of Constantinople, John Chrysostom, relied in their arguments on the authority of the bible, for example Paul's recommendation that women should not wear expensive dresses, gold or pearls, or braid their hair, but instead dress modestly and decently and focus on good works in order to revere God.[39] Also Peter admonished women against the wearing of fine clothes, gold and braided hair, and instead asked them to focus on their "inner adornment" in order to please God.[40] Both Paul and Peter were in turn influenced by Graeco-Roman and Jewish moral teachings about the proper adornment of married women.[41]

While pagan authors criticized men and women alike for preferring silk garments instead of traditional wool or linen dresses, Christian authors often focused on women and especially the virgins, that is, nuns who were supposed to live a life of self-restraint and sexual abstinence that surpassed even Roman ideals of sexual virtue.[42] Accordingly, Christian authors charged discourses about the virgins' dress, accessories, and beautification with symbolic meaning based on virtue and piety and created a set of signs like short hair and dark coarse clothes that allowed onlookers to immediately recognize them as part of a Christian ascetic community. These strict rules of behavior allowed the virgins to distinguish themselves from their pagan peers.[43] In the words of Kristi Upson-Saia, their distinctive appearance and behavior turned them into "social capital for their Christian communities" and made them "potent showpieces of Christianity".[44] For example, Jerome praised the ascetic Paula for her dirty and unkempt appearance that made her in his opinion much more powerful than the many women of her time who paraded in silk, gold, and gems.[45]

However, this ideal ascetic lifestyle had the potential to create a lot of tension among followers and their families and peers, especially for rich women who threatened the existence of elite family lines and inheritances when they chose not to have children, but instead joined

ascetic groups and donated their wealth to the church.[46] For those women of the elite who did not wish to leave their roles as wives and daughters, it was difficult, if not impossible, to fulfill the ideals of self-restraint and abstinence, because as members of elite families, they were expected to represent their status and wealth and to carry on the family legacy. As a compromise (although early Christian writers admonished all Christian women, whether married, unmarried, widowed, or virgins, to restrain themselves with regard to their dress and appearance) married women of the elite and those who intended to marry within their social circle seem to have been allowed some latitude, as well as men of high status.[47] In the 4th century CE, Gregory of Nazianzus advised a bride from an elite family to abstain from garments that were diaphanous (probably an allusion to silk), purple-dyed and embellished with gold, which shows indirectly the popularity of such garments among wealthy Christian women.[48] That Christian women wore silk is also attested to by John Chrysostom.[49] He asserted that the wives of rich men usually wore silk and gold, but that the best way to distinguish oneself was to actually avoid the competition altogether since someone always would wear a more precious garment. In contrast, a woman in a woolen garment would be admired by all. In another passage, John Chrysostom wrote about a discussion in his community about "costly apparel" that was to be banned, and whether silk was exempted because it was not as expensive as gold.[50] Again, rich Christians seem to have sought arguments to keep their silken wardrobes while still wishing to conform to the norms of their church.

An exception for wearing silk was given by Gregory of Tours, a historian of Merovingian Gaul and bishop of Tours in the 6th century, who propagated humble clothing made of coarse materials for an ascetic Christian lifestyle. In his mind, shiny garments were appropriate for saints and angels. However, when he wrote about a girl's sarcophagus that was destroyed one year after her death, he underlined that her body and her white baptismal silken garment were well-preserved, which he seems to have interpreted as a sign that its wearer possessed Christian virtues.[51] In the right context, silk could be acceptable. One also needs to take into consideration that Christian authors addressed communities in very different parts of the Mediterranean, from Asia Minor and Palestine to Alexandria, North Africa and Rome, and that the intended audiences could be very specific groups: Men, married or widowed women, monks and ascetics. The contexts of their writings could therefore differ considerably.[52] Generally though, Christian authors condemned luxurious garments as much as their pagan predecessors.

Clement of Alexandria, one of the early authors who is writing in the 2nd century CE, was among those who aimed at promoting sets of appropriate Christian behaviors that excluded luxurious clothing and adornment.[53] One of Clement's direct influences was the philosopher Musonius Rufus who thought that a "good life" could be "won through daily ascetical exercise and practice".[54] Musonius warned against fine clothes that in his opinion lead to delicate skin and a pampered and soft body, which he contrasted negatively with a body that is sturdy and shows signs of hard work.[55] In his critical arguments against silk, Clement echoed earlier pagan authors like the already mentioned Seneca or Pliny the Elder in warning rich women against the immoral revelation of the body through the costly diaphanous silk garments that outwardly showed their lack of self-containment.[56] Another of his criticisms – that was also prominent in the writings of pagan authors – was the waste of the family's and husband's money: Women should neither waste time nor money on costly garments, adornment and cosmetics, but manage the resources of their household wisely and responsibly.[57] Since Clement interprets the act of baptism as one of rebirth that clothed the baptized body with Jesus Christ,[58] in his mind women and men could demonstrate their ability to harness their passions and desires through proper dress that "expresses the image and likeness of God".[59] Clement even went so far as to advise married couples to live like sister and brother together after having secured the next

generation of their family.[60] Looking and acting "more masculine" was the ideal for women in a religion that cherished "constructed perfect masculinity", in the words of Harry O. Maier.[61] A woman's beauty should derive from her virtue and not from clothing, adornment and deceptive make-up that appealed to the opposite sex – like diaphanous silks that clung to the curves of her body.[62] Even though women were not supposed to turn into men – for example, they were to walk measured, not quickly like a man – they were supposed not to attract attention,[63] which the revealing and costly silk garments certainly did.

Cyprian, the bishop of Carthage in the first half of the 3rd century CE, attacked costly silk garments with similar arguments like Clement. In one of his writings, Cyprian explicitly addressed the virgins and argued that in order to be a true servant of Christ, ascetic women needed to abandon every enticing form of dress and adornment that could be sexually appealing to a man.[64] He also found that the desire for precious garments prevented the soul of their wearers from donning Christ.[65] His ongoing criticism as well as that of other Christian authors like Tertullian suggests, however, that silk garments, even made more expensive through purple-dye and gold embellishments, were still very much desired by those who could afford them, moral criticism notwithstanding.[66]

And yet another factor played a role in the critical stance of Christian authors like John Chrysostom: The rich should donate to the poor and the churches and not spend their money on luxuries.[67] Like in the view of earlier pagan writers, wealth was mainly problematic when used for oneself, not when it was shared with the community.[68] This could explain why silk became acceptable in the context of donations.

Silks in Churches

Silk fabrics fulfilled different functions in churches. We hear of silken hangings, altar coverings, wrappings for relics and holy shrines as well as shrouds and tomb coverings.[69]

Around the early 5th century CE, it became popular for rich women to donate their silk garments to churches where they were used as altar coverings and as embellishments for the building. Palladius wrote about the possibly earliest example, a widowed noblewoman named Olympias who became a deaconess and a close friend of the already mentioned John Chrysostom. Under his tenure, she donated her silk garment to the church of Hagia Sophia in Constantinople.[70] As Sean Leatherbury has discussed, her gift triggered a trend that numerous wealthy aristocratic women followed, among them Pulcheria, the daughter of the emperor Arcadius, Eudocia, the wife of the emperor Theodosius II, and Melania the Younger. Melania's silk garments were used as altar cloths, but some were also cut up in order to embellish the church, maybe in the form of curtains and hangings.[71]

The effect of such splendid donations must have been dazzling. The pilgrim Egeria wrote in the early 5th century about her travels in the Eastern Mediterranean and the Holy Land that included visits to the churches of Jerusalem, the Anastasis and the Church of the Holy Cross on Golgotha and the Church of the Nativity in Bethlehem: "You see nothing there but gold and gems and silk. If you look at the hangings, they are made of silk with gold stripes; if you look at the curtains, they are also made of silk with gold stripes".[72]

A century later, in the 6th century CE, the donation of silk garments for the covering of altars is also attested for the western provinces.[73] Gregory of Tours writes about an interrogation he conducted with a woman named Leobovera, an abbess of the Monastery of the Holy Cross at Poitiers.[74] The abbess was accused of having taken a silken altar cloth in order to make a dress for her niece, but she was able to give a convincing explanation for the resemblance: A nun named Didimia had given a silk garment to the abbess that she in turn had gotten from

her noble and wealthy family. The abbess made an altar cloth out of it, but only after having cut off a part of the textile to use for other purposes (which implies that the silk garment must have had a considerable size). She used part of the cut-off silk, which was purple-dyed, to trim her niece's tunic, which was to be given to the niece when she was serving in the monastery.

Long mantles were especially well fitted as altar coverings since they consisted of rectangular pieces of fabric that could easily be adapted to different purposes, from being wrapped around a body to being used as coverings or hangings. John Chrysostom complained that a considerable number of women wore silk mantles (and were, in his opinion, therefore actually "naked" because they lacked the garment of virtue),[75] which meant – if we are to take him by his word – that the rich women of the elite had a lot of silk fabrics to donate potentially.

Paul the Silentiary gave an elaborate description of such a silk cloth in 562 CE. The context of his description was the second consecration of the church of Hagia Sophia in Constantinople after its dome was rebuilt. Paul described the cloth that covered the golden altar as a product of "the foreign worm" (i.e. the silk worm) and as dyed with precious purple. It was made of threads in many shades of color and shone with gold and silver threads. The fabric depicted Christ clad in a golden garment and holding a bible, flanked by Paul and Peter who were clad in silver. All three were standing in a triple arcade. On the border of the textile, charitable deeds of the Byzantine emperors including Justinian were depicted, embodied by the hospitals and churches that they founded. Other parts of the cloth showed scenes from the life of Christ.[76]

The altar cloth had a special meaning since it covered the holy table that often held the relics of saints and was seen as a parallel to the sepulcher of Christ, rendering it symbolically a burial shroud.[77] The question whether this cloth should be elaborate or modest elicited controversial answers. Pope Silvester purportedly admonished at the Council of Nicaea in 325 CE – according to a passage in the *Liber Pontificalis* – that "the sacrifice of the altar should not be celebrated in silk or in dyed cloth, but only in naturally produced linen, just as the body of our Lord Jesus Christ was buried in a fine linen shroud".[78] While referring to the 4th century CE, the text was written in the 6th century CE and might rather have mirrored its own time.[79] In any case, it suggests that altars were often covered in precious silks and colorful textiles and not the light linen fabric that the advocates of ascetic simplicity would have preferred. As with other regulations regarding luxurious textiles, it is difficult to establish whether they were actually followed, and if so, where and for how long.[80] In the second half of the 8th century CE on and in the first half of the 9th century CE, the donations of silk textiles to churches seem to have gained considerable dimensions. Leo III alone is said to have given over 700 silk textiles to churches.[81]

The precious fabrics became even more controversial when given by female donors who gained through their gift a powerful physical and symbolical connection to the holy altar, the rituals connected with it and in extension Christ himself.[82] Not everyone wanted to allow women this kind of access and prestige: The patriarch Nestorius purportedly removed an altar cloth donated by Pulcheria from the Hagia Sophia.[83]

Archaeological Finds

Since silk is a sensitive material that easily disintegrates, ancient silk finds are rare. They often come from sarcophagi, church treasures, bogs, or deserts.[84]

Many silk fabrics were discovered in church treasures. They usually served as a cover for human remains that were venerated as relics and put inside reliquaries.[85] Silks could even become relics themselves, for example through contact with the mortal remains of the saints

that were wrapped in them or through contact with an altar in which the relics were embedded or the tombs of *saints*.[86] One example is the silk mantle that was put on the tomb of Saint Martin of Tours and thereby became a relic itself.[87]

Several silks of this kind have been found in church contexts, for example in Cologne in Germany connected to the shrine of Saint Severin and in Maastricht connected to the shrine of Saint Servatius.[88] A splendid example is a yellow silk twill with a purple ground and scenes from the Story of Joseph from the treasury of the Sens Cathedral. It protected relics from the Holy Land and dates to the 5th or 6th century.[89]

Not all Christian authors agreed with the custom of keeping the mortal remains of persons who were declared martyrs and saints as relics in costly containers. Jerome found strong words of displeasure for the people who venerated these ashes instead of venerating Christ and for the emperors and bishops who transferred the mortal remains of the martyrs and kept their ashes in silk and golden vessels.[90]

Silk fabrics are also sometimes preserved in tombs and sarcophagi. However, it is often impossible to determine whether they belonged to a Christian burial or not since cemeteries and catacombs could be used over long times and by different communities. Moreover, during many earlier excavations, textiles were neglected and/or their exact find spots not properly registered.[91] The find contexts can be crucial though, since Christian textiles "were made using the same techniques and materials as any other Roman or secular textile", as Jennifer L. Ball has stressed. Usually, they were made from wool and linen. Some display Christian iconography and are easier to identify, but others do not, especially when they came from the households of their donors.[92]

An early silk find from Italy comes from a burial in the catacombs beneath Sant'Agnese on the Via Nomentana in Rome. The catacombs are named after the martyr Agnes who was executed in 250 CE because of her faith and buried in the cemetery of the Praetorian Guard in the Via Nomentana. In the following centuries, a necropolis developed around her grave.[93] From the hip and thoracic region of one of the mummies that was buried in a loculus tomb in the so-called gallery 28, textile remains were taken and analyzed. They were identified as *bombyx mori* silk, that is, mulberry silk that needed to be imported from China at this time. Due to the bad preservation, the garment could not be identified, but a microscopic analysis showed very fine warp and weft threads that were part of a pure silk garment.[94] Another silk find came from the catacombs that were named after the martyrs Saint Marcellinus and Peter on the Via Cassilina in Rome (in antiquity: Via Labicana). The area had originally been used as a burial ground by troops of the emperor. Later the relics of Marcellinus and Petrus who lost their lives during the Diocletianic persecution were buried there.[95] In an adjacent site that was probably used for a mass burial, corpses were covered with gypsum, probably for hygienic reasons.[96] On one of the lumps of gypsum (without an exact find-context), the calcified textile fragments showed traces of a loose silk weave and a silk twill from the 3rd century CE.[97] Also a sarcophagus tomb that was found under the church building in the area of the catacombs named after the martyr Saint Sebastian on the Via Appia in Rome yielded a very fine silk twill. Silk textile remains were found in the neck and chest area of the deceased who was possibly male. The lower body seems to have been wrapped in a purple-colored silk block-damask under which fragments of a very fine additional silk textile were found. The deceased seems to have worn yellow silk stockings made of block-damask and open shoes that probably belonged to a high official of the imperial court or a man of the church. Radiocarbon dating supported a date for the interment in the late 2nd or early 3rd century CE.[98] Another example for silk in a grave context are the mortal remains of the bishop Paulinus. His remains were buried in the 4th century CE in a coffin in a church in Trier in modern-day Germany together with precious silk fabrics.[99]

The Roman historian Ammianus Marcellinus who wrote in the 4th century CE – and was very much aware of the messages that dress and accessories sent about the status, authority and aspirations of their wearers – could have had church officials like the aforementioned in mind when he complained that the bishops of Rome paid too much attention to their clothing, status and prestige.[100] Again, the difference between theory (or ideology) and practice becomes evident when we turn to the report of Gregory of Nyssa. He wrote that the bishop Meletius (who died in 381 CE) was buried in Antioch with silk textiles.[101] Such luxuries incensed the contemporary Christian writer Jerome who criticized burials with gold and silk fabrics sharply, asking whether the cadavers of rich people could only rot in silk.[102]

However, the predilection for silks seems not to have been limited to bishops and rich women of their congregations. A tomb chamber in Antinoopolis in Middle Egypt has yielded 18 female mummies who were interpreted as nuns because of their highly uniform garments and the Christian symbols connected to their interment. The excavator dated the grave to the middle of the 4th century CE. The mantles of the deceased were embellished with applied decorations that were probably made of yellow-red silk, and the sleeves of their tunics with silken borders.[103] The silken trims the already mentioned abbess Leobovera used for her niece's tunic come to mind.

To sum up: Although men of the church admonished their congregations and especially the women (and the virgins/nuns in particular) not to wear silk and tried to limit the use of silk fabrics in churches, the prestige and appeal of silks seems often to have been stronger than ascetic ideals. The exclusivity of silk and the splendid material, color and decoration of silk fabrics served as a powerful visualization of their owners' status and wealth. Their use could be framed as an appropriate gift for answered prayers and a visualization of the glory of God, especially since the emperors were among the donors.[104] As Xinru Liu has stated, the hierarchical political structure of the Byzantine empire that was visualized and expressed through the emperors' splendid silks was projected onto the Christian church.[105]

Notes

1 For an overview, see Hildebrandt 2012; Hildebrandt 2009.
2 Edwards 1993, esp. 25.
3 Edwards 1993, 32–33.
4 Seneca, *De Beneficiis* 7,9,2 and 7,9,5–9; Cassius Dio 61,10,3 (Xiphilinos); Tacitus, *Annales* 13,42 (general criticism). See also Edwards 1993, esp. 1–19 and Wagner-Hasel 2002, 345–346.
5 Hildebrandt 2009; Upson-Saia 2011.
6 Tacitus, *Annales* 2,33.
7 Devillers 2003, 54–55.
8 Tacitus, *Annales* 2,33,1.
9 Seneca, *De Beneficiis* 7,9,5.
10 Croom 2002, esp. 16. In addition, also linen and half-silken fabrics could be woven in diaphanous, gauze-like qualities, as a textile find from the oasis city of Palmyra in modern-day Syria shows: Schmidt-Colinet and Stauffer, with Al-Asʿad 2000, cat.no.s 489–490 (wool and silk) with pl. 74c. See also Petronius, *Saturae* 55,6,15–16 who quotes Publilius Syrus and names *nebula linea*, "fog-like linen", as an example for immoral diaphanous clothing.
11 Wagner-Hasel 2002.
12 Winterling 2018.
13 Cassius Dio 57,15,1; Suetonius, *Caligula* 52,2. Hildebrandt 2016, 67–68.
14 Scriptores Historiae Augustae, *Heliogabalus* 26,1; Harlow 2005, esp. 147; Hildebrandt 2009, 214–216.
15 See the chapter on silk trade in this book.
16 *Edictum Diocletiani de Pretiis Rerum Venalium* 24,1a.13.

17 *Codex Theodosianus* 15,7,11 (393 CE) and 10,21,3 (424 CE). Nardi 1984; Oikonomides 1986; Liu 1998, 74–79.
18 Steigerwald 1990, esp. 238; for an overview over the use and meaning of purple in antiquity see Reinhold 1970.
19 Rollason 2016; Hildebrandt 2019.
20 Martialis, *Epigrammata* 11,8,5.
21 Statius, *Silvae* 3,4,88–90 and 5,1,213–215.
22 Claudius Claudianus, *Panegyricus de Quarto Consulatu Honorii Augusti* 585–601.
23 Hildebrandt 2016.
24 Scriptores Historiae Augustae*, Commodus* 13,1.
25 Hildebrandt 2021 and 2016.
26 They cannot give a complete overview since a catalogue of the extant ancient silk finds in Europe and the Mediterranean regions is still a *desideratum* and will be part of another research project. But see the references in Hildebrandt and Paetz gen. Schieck 2020.
27 Mitschke and Paetz gen. Schieck 2012, esp. 17.
28 Apuleius, *Metamorphoses* 4,8,2. See also Gleba 2008.
29 See, e.g., Wild 2013 (finds from Britain, France and Germany); Reifarth 2013 (finds from Trier in modern-day Germany); Mitschke, Paetz gen. Schieck and Melillo 2014 (calcified textiles from Pompeii).
30 The finds are extensively published in: Schmidt-Colinet and Stauffer with Al-Asad 2000. See also Hildebrandt 2021.
31 Hildebrandt and Paetz gen. Schieck 2020, 207–210, esp. 209.
32 Hildebrandt and Paetz gen. Schieck 2020, 209; De Moor, Schrenk and Verhecken-Lammens 2006.
33 Hildebrandt 2009 and 2012; Croom 2002, esp. 31–53; on the *toga*, see Goette 1990; Vout 1996; George 2008 and Flaig 1993, esp. 199–203.
34 Croom 2002, 88–95.
35 George 2008 with references.
36 Plinius, *Naturalis Historia* 11,27,78; Seneca, *De Beneficiis* 7,9,5–9. Hildebrandt 2009 and 2012.
37 The following selection does not claim to be complete. The aim is to give an overview over uses of silks in Christian contexts.
38 Maier 2013; Upson-Saia 2011, esp. 33 and 35.
39 1 *Pauli Epistula ad Timotheum* 2,9–10. Upson-Saia 2011, 37.
40 1 *Petri Epistula* 3,3–4. Upson-Saia 2011, 37.
41 Maier 2013, 76.
42 Upson-Saia 2011, esp. 33, 37–38, 46–48. See also Hildebrandt and Paetz gen. Schieck 2020.
43 Upson-Saia 2011, esp. 33–36.
44 Upson-Saia 2011, 35.
45 Hieronymus, *Epistulae* 45,3. Upson-Saia 2011, 57.
46 Upson-Saia 2011, esp. 33–34.
47 Upson-Saia 2011, esp. 34, 49–50, 52–53 with references.
48 Gregorius Nazianzenus, *Carmina* 2,2,6.7, Steigerwald 1990, 223–224. Upson-Saia 2011, 48. For more criticism regarding silk garments that indirectly attests their popularity, see below.
49 Johannes Chrysostomus, *Homilia* 28 *in Epistulam ad Hebraeos* 6. Upson-Saia 2011, 52.
50 Johannes Chrysostomus, *Homilia* 28 *in Epistulam ad Hebraeos* 5. Upson-Saia 2011, 40.
51 Gregorius Turonensis, *Liber in Gloria Confessorum* 34. Newbold 2005, 11.
52 Upson-Saia 2011, 36.
53 Upson-Saia 2011, 35–36.
54 Maier 2013, esp. 73.
55 Musonius Rufus 19,11–12. Maier 2013, 74.
56 Clemens Alexandrinus, *Paedagogus* 2,10*bis*, 107, 3–5. Seneca, *De Beneficiis* 7, 9, 5; Plinius, *Naturalis Historia* 11, 26, 76. See also Edwards 1993 on the connection between luxury, immoral behavior and lack of self-control.
57 Clemens Alexandrinus, *Paedagogus* 3,2,4–14 and 3,2,5,4. See Maier 2013, 83; Upson-Saia 2011, 45. Seneca, *De Beneficiis* 7,9,5.
58 Maier 2013, 78.
59 Maier 2013, 79–85, esp. 79–80 with ancient sources.
60 Maier 2013, 81.

61 Maier 2013, 81, 83. See for example Clemens Alexandrinus, *Stromateis* 6, 12, 100, 1–6,12,101,1.
62 Clemens Alexandrinus, *Paedagogus* 2,10*bis*, 107,5.
63 Clemens Alexandrinus, *Paedagogus* 3,11,73,4. Maier 2013, 83.
64 Cyprianus episcopus Carthaginiensis, *De Habitu Virginum* 5. Upson-Saia 2011, 37–38.
65 Cyprianus episcopus Carthaginiensis, *De Habitu Virginum* 13.
66 Cyprianus episcopus Carthaginiensis, *De Habitu Virginum* 13; Cyprianus episcopus Carthaginiensis, *De Lapsis* 30, 3. Cf. Tertullianus, *De Pallio* 4, 10.
67 Upson-Saia 2011, 44–45.
68 Wagner-Hasel 2002, esp. 329, 346.
69 Ball 2018; Liu 1998, 113–116 with references to the ancient sources.
70 Palladius, *Historia Lausiaca* 61, 3–4; Leatherbury 2017, 253.
71 Palladius, *Historia Lausiaca* 61, 3–4. Leatherbury 2017, 253–254.
72 *Egeriae Peregrinatio* XXV 8. Ball 2018, 226 (also for the translation).
73 Leatherbury 2017, 254. On the problems of finding a fixed terminology for altar cloths, leave alone one that allows assumptions about the material they were made of (if it was not explicitly stated), see Ball 2018, 227.
74 Gregorius Turonensis, *Historia Francorum* 10,16. Leatherbury 2017, 254.
75 Johannes Chrysostomus, *In Acta Apostolorum* 25,167.
76 Paulus Silentiarius, *Descriptio Sanctae Sophiae* 755–805; Leatherbury 2017, 249; Ball 2018, 227; cf. Liu 1998, 89.
77 Leatherbury 2017, 244–245.
78 *Liber Pontificalis* 34,7. Leatherbury 2017, 245; Ball 2018, 227.
79 Kritzinger 2016, esp. 96, 99. Leatherbury 2017, 245.
80 Leatherbury 2017, 245, with reference to Fournet 2006, mentions Egyptian papyri that suggest that silken altar cloths were used even outside of urban centers.
81 Brubaker and Haldon 2011, 83–85, 104–108.
82 Leatherbury 2017, 254.
83 Leatherbury 2017, 254. Nestorius, *Ad Cosmam* 5–8.
84 Hildebrandt and Paetz gen. Schieck 2020, 207–208.
85 Ball 2018, 229.
86 Leatherbury 2017, esp. 254–255 and 244.
87 Gregorius Turonensis, *De Virtutibus Sancti Martini* 1,11; Newbold 2005, 11.
88 Hildebrandt and Paetz gen. Schieck 2020, 209–210; see, e.g., Schrenk and Reichert 2011 and Stauffer 1991 with cat. I.C.4.
89 Ball 2018, 229.
90 Hieronymus, *Contra Vigilantium* 5,25–28.
91 Ball 2018, 223–224. An exception are textiles with Christian iconography, like cushions under the head of the deceased that were decorated with a cross: Ball 2018, 224.
92 Ball 2018, 221, 223. Henry Maguire has underlined the apotropaic and protective functions of the textile designs that added another dimension to their decorative properties: Maguire 1990.
93 Mitschke and Paetz gen. Schieck 2012, 121.
94 Mitschke and Paetz gen. Schieck 2012, 123 (samples A 3 and A 4–5).
95 Mitschke and Paetz gen. Schieck 2012, 124.
96 Mitschke and Paetz gen. Schieck 2012, 124.
97 Mitschke and Paetz gen. Schieck 2012, 125.
98 Mitschke and Paetz gen. Schieck 2012, 128–130.
99 Reifarth 2021.
100 Ammianus Marcellinus 28,4,8; 14,6,9–10; 27,3,14–15. Newbold 2005, 6.
101 Gregorius Nyssenus, *Laudatio Meletii* 857M; Liu 1998, 113.
102 Hieronymus, *Vita Sancti Pauli* 17,30,4.
103 Paetz gen. Schieck 2012, 234; Hildebrandt and Paetz gen. Schieck 2020, 209.
104 For the motives for gift giving see also Leatherbury 2017, esp. 251–254.
105 Liu 1998, 116–117.

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31

THE CREATION AND SPREAD OF *TIRAZ* TEXTILES ACROSS THE SILK ROADS

Arielle Winnik

Tiraz – cloth inscribed with Arabic text that traditionally includes the name of the caliph and date of production – is the best-known textile type of the medieval Islamic world.[1] While *tiraz* textiles are firmly ensconced within the canon of Islamic art, they are usually viewed as unconnected to the global textile system. Yet, even prior to the Mongol invasions (ca. 1250), *tiraz* textiles circulated well beyond Islamic-ruled lands. This article argues that *tiraz* was indeed an international art, in both its origins and its spread across Eurasia. *Tiraz* developed from pre-Islamic robes of honor, which were garments sovereigns gave to subjects and foreign rulers in recognition of fealty, a tradition that was prevalent across Eurasia. While there is no evidence that pre-Islamic robes of honor had inscriptions, they often displayed images of the sovereign. In the early Islamic world, inscriptions including the name of the caliph replaced royal effigies on robes of honor, creating a connection to the sovereign via text rather than image. Though *tiraz* originally served as robes of honor, its association with royal authority led to its popularity outside the court in lands under Islamic hegemony and beyond. In systems of royal requisition, centralized authorities directed production of *tiraz* across vast territories. Textiles with standardized Arabic inscriptions were therefore fashioned throughout much of Eurasia, familiarizing them to viewers across the landmass. Court ceremonial, wherein inscribed textiles were displayed to foreign dignitaries, introduced *tiraz* to intercultural audiences, who appropriated the use of such textiles as emblems of power. In addition, *tiraz* reached new groups through long-distance trade. Individuals or groups reinterpreted these textiles, such that *tiraz* accrued diverse meanings in the various cultures along the Silk Roads.

Defining and Studying the Tiraz Corpus

The term *tiraz* is thought to derive from the Persian word for "embroidery".[2] Contemporary scholars usually define *tiraz* as a category of textiles with Arabic (or pseudo-Arabic) inscriptions; however, that definition is debated.[3] In the medieval period, the term could refer to inscribed textiles and the state-sponsored workshops where they were manufactured.[4] The association of *tiraz* with caliphal workshops has led some scholars to place all luxury textiles produced in the medieval Islamic world under this rubric.[5] Others define *tiraz* more broadly to include objects in any media (e.g. textiles, papyri, ceramics) that (1) were produced in state-sponsored workshops and (2) include protocollary inscriptions. However, the term *tiraz* may

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have had various meanings.[6] This chapter defines *tiraz* as inscribed textiles originally associated with caliphal production. The word "originally" is key to this definition because textiles with the same materials, techniques, and inscriptions became fashionable and were eventually produced for the masses, to be sold on the open market.[7] Both "official" caliphal textiles and "unofficial" imitations are part of the same sociocultural tradition.[8]

Tiraz inscriptions conventionally include the date and place of manufacture, providing substantial information about circumstances of production. The majority of extant *tiraz* dates from the 9th to 12th centuries. Though *tiraz* was woven across the Islamic world, most examples survived in Egypt because of the dry climate. While archaeological provenience for these pieces is rarely known, it is believed that thousands of pieces were recovered from the cemeteries of Fustat (near Cairo).[9] Unsurprisingly, most of these were fabricated in Egypt, but exceptions remain. Ikat *tiraz* were woven in Yemen, and inscribed textiles from Islamic Spain and Central Asia, among other locales, have been preserved.

Early studies situated *tiraz* textiles narrowly within the realm of Islamic political history, as historical documents, and disassociated the epigraphic evidence from its material and functional contexts.[10] This emphasis on textual data even led collectors and dealers to cut inscriptions from larger textiles. Later studies, such as Ernst Kuhnel and Louisa Bellinger's groundbreaking 1952 catalog of *tiraz* textiles in the Textile Museum in Washington D.C., include technical and functional analysis.[11] However, these and other publications of the 20th century focus on single collections, limiting their usefulness.[12] Jochen Sokoly aimed to resolve this situation by surveying almost 2000 textiles from over a dozen collections and drawing upon textual sources about the *tiraz* system.[13]

Major studies of *tiraz* typically include only examples that are dated or have protocollary inscriptions and ignore textiles produced outside official channels and those with non-traditional inscriptions or pseudo inscriptions though they were part of the same artistic phenomenon. Though there are studies on *tiraz* from Sicily, Spain, and Central Asia, these textile groups are rarely studied inter-regionally. In a notable exception, Irene Bierman discussed *tiraz* textiles from Egypt to Sicily to continental Italy.[14] Louise Mackie examined *tiraz* within the larger field of Islamic textiles, and she placed that field in the greater Eurasian context, emphasizing important relationships between Islamic textiles, including *tiraz*, and those produced elsewhere along the Silk Roads.[15] This article examines *tiraz* from this broad perspective, emphasizing the global nature of its origin, production, and transmission.

Robes of Honor in the Pre-Islamic World

Tiraz textiles were traditionally gifted by the caliph to honored subjects and client kings. In their origin as royal gifts, *tiraz* were robes of honor. The tradition of gifting robes of honor stretched back to antiquity across Eurasia.[16] By the advent of Islam, robes of honor were established features of royal protocol in the Sasanian and Byzantine empires. Pre-Islamic heads of state invested courtiers and foreign dignitaries with fine clothing in recognition of service and as a sign of fealty.[17]

For example, in 521/2, Tzath, leader of the Laz people of the Black Sea region, pledged allegiance to the Byzantine Emperor Justin I in exchange for protection from the Sasanian Shah Kavad. Tzath received a robe of honor modeled on Byzantine imperial regalia. Indeed, a bond between the benefactor and beneficiary was key to the investiture system in early Byzantium and Sasanian Persia. According to the historian John Malalas (491–578):

> He [Tzath] wore a Byzantine imperial *stephanion* [small crown] and a white *chlamys* [cloak] of pure silk. Instead of a purple *tablion* [rectangular panel], it had a gold

Figure 31.1 Emperor Justinian, San Vitale Apse, ca. 547, Basilica of San Vitale, Ravenna.

> imperial *tablion* and in the middle of it there was an authentic small portrait bust with an image of the Emperor Justin. He also wore a white *sticharion* [tunic], and a *paragaudes* [garment with a purple border] with gold imperial embroidery, also having an image of the emperor.[18]

The outfit is similar to the costume of the Byzantine emperor, but precisely chosen details articulate Tzath's subservient position in relation to the emperor. The term *stephanios* (the diminutive of *stephanos*, "crown") conveys Tzath's esteemed yet subordinated status. The robes work similarly. Derived from military dress, the silk *chlamys* (cloak) was a characteristic garment of the emperor and his courtiers; it projected Tzath's position as attendant of the emperor and guardian of his realm.[19] The silk *tablion* was the same gold color as that traditionally worn by the emperor, as seen in the 6th-century mosaic of the Emperor Justinian and his attendants in San Vitale, Ravenna (Figure 31.1).[20] This robe of honor both emulated and diverged from the dress of the emperor, simultaneously assimilating Tzath to his sovereign and articulating a hierarchy between them.

The bond between emperor and honored subject could be expressed in even stronger terms. Malalas notes that the emperor's effigy adorned the vestments of the Lazi king. The portrait of the emperor on the body of the vassal king underscored Tzath's subservience, for this emblem made clear to any viewer that he served Justin I.[21]

From Robes of Honor to *Tiraz*

The earliest Islamic polities, formed during and after the lifetime of the Prophet Muhammad (570–632), inherited and remade the robe of honor tradition. Muhammad and his followers brought the entirety of the Arabian Peninsula under Islamic control. The four successors of the Prophet, known as the Rashidun (Rightly Guided) (632–661), conquered most of the Sasanian

Empire and large sections of the Byzantine Empire, including the Levant and Egypt. Under the Umayyad Caliphate (661–750), Islamic rule spread across Eurasia, from the Iberian Peninsula to the borders of western China. The Umayyads inherited control of state-run textile factories in the territories they conquered.[22]

Throughout this period of expansion, Muslim political leaders used robes of honor to recognize esteemed individuals. Following pre-Islamic models, these gifts created a political bond between giver and recipient, while articulating a sociopolitical hierarchy. The *Hadith* (sayings of the prophet) collection of Ibn al-Athir states that the Prophet imparted his own *burda* (mantle) to the poet Ka'b ibn Zuhayr in appreciation for a moving poem.[23] That Muhammad gave the poet his own cloak signifies the bond between donor and recipient that was significant in robe of honor gifting practices in the pre-Islamic period. In fact, Norman A. Stillman notes that the Arabic word for robes of honor, *khil'a*, "denotes the action of removing one's garment (*khala'a*) in order to give it to someone".[24] Early historical sources do not record the use of robes of honor during the Rashidun or Umayyad caliphates.[25] Such references do appear, however, in later medieval sources, which raise the possibility of Islamic continuity with pre-Islamic practices. The *Aghani* (a 10th-century collection of songs and poems) reports that the Caliph Abd al-Malik ibn Marwan (r. 685–705) bestowed a robe of honor on the poet al-Akhtal, a story that echoes Muhammad's gift to Ka'b ibn Zuhayr.[26]

> When he finished, 'Abd al-Malik said to a servant boy, "Take him by the hand, boy, and help him out, heap robes of honor upon him, and reward him generously". Then he proclaimed, "Every people has its poet, and the poet of the Banu Umayyah is al-Akhtal".[27]

In early Islamic societies, as Suzanne Pinckney Stetkevych notes, the gift of robes of honor in appreciation of poetry is a ritual exchange that "reaffirms the authority of the ruler and the bond between rulers and ruled".[28] The subject's bond with the sovereign is symbolic, establishing a correspondence between the ascension of al-Akhtal to poet laureate and that of 'Abd al-Malik to caliph.[29]

Tiraz textiles distinguish themselves from earlier Islamic robes of honor by their inscriptions. It is possible that text conveying imperial authority supplanted iconography, like imperial effigies, that appeared on pre-Islamic robes of honor. This process is apparent in other categories of early Islamic material culture. In 691, the Caliph 'Abd al-Malik ordered that Arabic become the language of all administration, an edict that led to Arabic calligraphy replacing both other scripts and, in some cases, imagery. As a result, the name of the caliph gradually supplanted figural imperial imagery on coinage. Textiles may have developed in a similar way. The later Islamic historian al-Bayhaqi (994–1066) specifies that 'Abd al-Malik's decree also applied to inscriptions on garments (*thiyab*) and tapestries (*sutur*), although al-Baladhuri (806–892) and al-Tabari (939–923) list only coinage and papyrus as being affected.[30] The belief that *tiraz* inscriptions supplanted imperial portraiture can be traced back to at least the later medieval period, however. The Mamluk historian Ibn Khaldun (1332–1406) wrote that

> the pre-Islamic Persian kings used to make *tiraz* with the images and likenesses of monarchs or other images and likenesses specifically designated for that use, and later the Islamic monarchs substituted for that the inscribing of their names together with other words of good omen or praises of God.[31]

Medieval viewers, then, believed inscriptions on textiles to have displaced imperial portraiture on earlier robes of honor.

The reforms of 'Abd al-Malik established Arabic text as an imperial symbol. In the period following his edict, the name of the caliph served as a key signifier of political authority. The public pronouncement of the caliph's name in the *khutba* (Friday sermon), *sikka* (coinage) and *tiraz* were the ruler's prerogatives, symbols of his legitimacy. The inscribed name of the caliph on *tiraz* marked the recipient as a supporter and intimate of the caliph. Much like the imperial effigies and emblems on pre-Islamic robes of honor, *tiraz* inscriptions created a bond between sovereign and subject.

The *Tiraz* System Across the Abbasid Caliphate

The Abbasid Caliphate was established in 750 after a revolution in the Umayyad Caliphate. At their greatest extent, Abbasid territories stretched 4000 miles, from the Maghreb in North Africa to Central Asia. The Abbasids were the first Islamic dynasty to codify the robe of honor system and employ it throughout their vast empire. By the 9th century, medieval historians wrote of caliphs regularly bestowing silk garments – along with crowns, jewelry, and swords – to esteemed subjects.[32] The members of the caliph's inner circle even became known as "those who wear the *khil'a*".[33] While the sources do not specify what these garments looked like, robes of honor likely included *tiraz* textiles in both sumptuous materials (such as silk and gold) and more standard ones (such as linen).[34] The Abbasids delegated responsibilities over their large empire and employed robes of honor to symbolize political authority to the borders of their territories and beyond. The name of the caliph inscribed on garments worn by regional authorities communicated that they served the caliph.

Abbasid rule was unstable, however. The caliphs relied on provincial governors to manage their large domain. In the 9th and 10th centuries, several of these administrators declared independent dynasties, including the Tulunids (868–905) in Egypt and the Levant and the Samanids (819–999) in Central Asia. These new rulers declared independence by instructing the state workshops to inscribe textiles in their names, rather than that of the Abbasid sovereign.[35] Political fragmentation also led to the rise of autonomous dynasties not previously associated with the caliphate, including the Buyids (934–1062) in Greater Iran, who eventually conquered Baghdad. The Buyids retained the Abbasids as puppet leaders and continued to produce *tiraz* in the name of the Abbasid caliph.

As the Abbasid Empire fragmented, *tiraz* continued to express political meanings. When the Buyid Emir 'Abud ad-Dawla (936–983) was invested as governor of Iraq and Jazir in 977/8, he received numerous gifts, of sumptuous materials, including robes of honor, weapons, inscribed standards, a crown, and "an unstuffed seat of honor embroidered with gold, complete with its leather cushions, carrying the name of [the caliph] al-Muti-li-Allah", among other items.[36] The geopolitical situation in Greater Iran at the time sheds light on how the gifts, especially the *tiraz*, functioned. A Shiite dynasty, the Buyids had doctrinal differences with the populations in their newly conquered territories, which contained largely Sunni populations. The Buyids feared Sunni hostility. Maintaining the Abbasids, a Sunni dynasty, as puppet rulers afforded the necessary legitimacy to retain political control. The presence of the name of the caliph on 'Adud al-Dawla's gifts provided material proof of Buyid legitimacy in the Sunni worldview. In fact, when 'Adud al-Dawla received the offerings, "he was greatly pleased, but he added: I prefer that the seat of honor be stuffed and carried in the street so that others can see its splendor and the honor which is brings".[37] Of the dozens of gifts, 'Adud al-Dawla was most concerned that the throne inscribed with the caliph's name be displayed publicly.

Another means by which *tiraz* spread was through the system of its requisition. The Abbasids revamped the administration of *tiraz* manufacture to such a degree that aspects of

the textiles were standardized across the empire. Under Abbasid rule, a large proportion of textile workshops on the Silk Roads manufactured textiles with inscriptions of similar content.[38] Variances between the textiles of different centers persisted, however, in epigraphy, materials, and techniques.[39] For example, two silk textiles employ different weaving techniques and were produced on opposite ends of the Abbasid Empire during of the reign of the caliph al-Muktafi (r. 902–908). The first, from Merv (Marw) in modern-day Turkmenistan, is a *mulham* (a tabby weave of silk warps and wefts of another material, usually cotton).[40] It employs silk chain stitch embroidery to produce a kufic script in a style associated with Greater Iran:

> (In the name of God, the Merciful), the Compassionate. Happiness to the caliph Abu Muhammad al-Muktafi billah, Commander of the Faithful, may God strengthen him. What has been ordered (to be made in the private factory) at Marw, year (?)[41]

Another cloth from the same period was produced in Tinnis in the Nile Delta. This fringed linen cloth is embroidered in couching and backstitch with silk in a kufic typical of Egyptian examples.

> In the name of God, the Merciful, the Compassionate. Blessing from God to the Servant of God Abu Muhammad, the Imam al-Muktafi billah, Commander of the Faithful, may God strengthen him. What has been ordered by the Amir to be made in the factory at Tinnis under the direction, year 290 . . .
>
> Harun, Client of the commander of the Faithful.[42]

Despite having been produced over 2000 miles apart, the principal inscriptions on the two textiles follow the same formula. Under the Abbasids, the *tiraz* system may have been partially centralized. The administration in Baghdad would place an order (perhaps specifying the inscription) through a provincial office, which would supervise production and then dispatch the items to the imperial center.[43] Yet differences in epigraphy, materials, and technique indicate that regional distinctions in production remained. These local features were familiar to clientele. For example, the historian Al-Tha'alibi (961–1039) wrote that Merv was particularly well known for *mulham* fabric.[44] Egypt, in contrast, was known for linen textiles, sometimes with silk embroidery. That both textiles likely ended up in Egypt shows the extent of the caliphate's administrative and commercial networks.

Disseminating *Tiraz* Interculturally Through Elite Ceremony and Display

As the Abbasid Empire fragmented, a rival caliphate arose. The Fatimids (909–1171) were an Ismaili Shiite dynasty that differed from previous caliphates in their belief that the caliph was not only a political authority but also an infallible spiritual leader. The Fatimids emerged in Ifriqiya (modern-day Tunisia) in the early 10th century, and the Caliph al-Mu'izz (r. 953–975) conquered Egypt in 969. The Fatimid and Abbasid caliphs each claimed to be the true political and spiritual leader of the *ummah* (Muslim community). Accordingly, each produced *tiraz* in his name. The Fatimids extended their empire throughout the Arabian Peninsula and the Levant, at one point ruling over the holy cities of Mecca, Medina, and Jerusalem. Control of Egypt's Red Sea coast and much of Yemen facilitated trade along maritime routes and enabled the dynasty to play a dominant role in international commerce. In fact, the Cairo *genizah* (a trove of hundreds of thousands of medieval documents produced by Egypt's Jewish

community and preserved in the Ben Ezra Synagogue in Old Cairo) shows that Fatimid Egypt was extensively involved in the import, production, and export of textile goods and materials.[45]

Like the Abbasids, the Fatimids distributed *tiraz* as a symbol of political allegiance, bestowing these textiles on their preferred subjects within and outside the empire. The Shiite caliphate orchestrated elaborate public processions to maintain the dynasty's social order and promote the authority of the caliph-imam.[46] Inscriptions in rich materials such as silk and gold played an important role in this ceremonial and its propaganda.[47] The traveler and poet Naser-e Khosraw (1004–1088), described *tiraz* textiles of the most expensive materials and sophisticated techniques on display at the opening of the Nile canal in 1047:

> When the sultan [i.e. caliph] mounts, ten thousand horses with gold saddles and bridles and jewel-studded reins stand at rest all of them with saddle-cloths of Byzantine brocade and *buqalamun* woven seamless to order. In the borders of the cloth are woven inscriptions bearing the name of the sultan of Egypt.[48]

The public nature of the display was vital to its political effect. Nasir notes that "the whole population of old and new Cairo"[49] beheld the procession, as did foreign dignitaries, "a contingent of princes from all over the world – the Maghreb, the Yemen, Byzantium, Slavia, Nubia, and Abyssinia".[50] The arrangement of the event, with spectators surrounding but separated from the caliph, articulated social hierarchies.[51] The opulent *tiraz* textiles displayed in the parade further signified a separation between the members of the court and the masses, who presumably did not wear garments of such fine materials or inscribed with the caliph's name. Yet the public nature of this ceremony ensured that appreciation for the prestige of Arabic-inscribed textiles spread beyond the courtly elite.

Ceremonial in diplomatic exchanges also facilitated the dissemination of *tiraz*. Both the Abbasids and the Fatimids employed inscribed textiles as diplomatic gifts to emphasize the power and prestige of their regimes. In 998, the Abbasid Caliph al-Muqtadir hosted Byzantine envoys. The Abbasids hung 38,000 draperies, including 12,000 examples of gold brocade, some containing animal figures in medallions, others with *tiraz* bands, and

> twenty-five thousand five hundred large Chinese, Armenian, and Wasiti drapes (*sutur*) with designs, as well as [those of| embroidered (*mutarrazah*) linen voile (*dabiqi*) and other kinds. Eight thousand [of these twenty-five thousand five hundred] were found with embroidered [or woven] inscriptions (*tiraz*) citing the commissioner's order (*'amaluhu*) and name such as that of al-Ma'mun, al-Mu'tasim, al-Wathiq, al-Mutawakkil, al-Mu'tazz and al-Muktafi, and the rest of the drapes were inscribed with the names of others.[52]

The Abbasids displayed *tiraz* inscriptions on textiles associated with production centers across and beyond their territory, as far as China. The names of the caliph and his predecessors – indeed, any Arabic inscription – on these textiles lays claim to a vast expanse of territory. The sumptuousness of the textiles advertised Abbasid wealth and prestige. The envoys traveled to Baghdad to appeal for the return of Byzantine captives, a request the Abbasids granted. Yet the Abbasids conceded to the Greeks' entreaty while maintaining the upper hand. The Byzantine envoys "brought enormous gifts",[53] but the Abbasids sought to outdo them and overwhelm them in opulence. The envoys were led through lavish exhibitions of luxurious objects, exotic animals, and thousands of slaves before being granted an audience with the caliph. This labyrinth was so great that "as [the envoys] viewed all the things in the courtyards, passageways,

Figure 31.2 Mantle of Roger II, 1133–1134, Kaiserliche Schatzkammer, Vienna, Credit, KHM-Museumsverband.

sitting-halls, and treasuries, they became bewildered and confused".[54] The *tiraz* in luxury materials was part of this display, aimed at expressing superiority and affluence.

Reinterpreting *Tiraz* Across Eurasia

The display of *tiraz* to local and intercultural audiences caused people within and outside Islamic polities to associate Arabic-inscribed textiles with political authority. Extant textiles and images of clothing in other media demonstrate that the appeal of *tiraz* extended from western Europe to eastern China, and individuals chose to wear these textiles to express their rank and wealth. This *tiraz* was not always in legible Arabic script; pseudo inscriptions, inscriptions in other letterforms, and even blank spaces that evoked missing text were employed. There was no one way that the fashion for *tiraz* spread, and there was no one meaning for these inscribed textiles. As these textiles appeared along the Silk Roads, individuals reinterpreted them to fit new circumstances.

A 12th-century royal mantle (Figure 31.2) incorporates a *tiraz* inscription in order to affirm the rule of Roger II, king of Norman Sicily. Sicily had belonged to the Byzantines until the Islamic Aghlabid dynasty (800–909), client kings of the Abbasids, conquered it in 902. The island fell into Fatimid control in 909 and was conquered by the Normans in 1060. The Normans assumed Islamic prerogatives of political authority, including *tiraz*, to project royal power.[55] The mantle's materials and iconography conveyed wealth and political and diplomatic authority.[56] It is constructed of red samite (weft-faced compound weave silk). Across the back, depictions of lions (intercultural symbols of imperial power) overpowering camels flank a central tree. These designs are fashioned in couched gold and silk thread, and outlined in thousands of pearls. Arabic text runs along the hem.

The Arabic inscription reasserts the message of Norman power and prestige. The content of the inscription adapts caliphal models to send a message about Roger's right to rule Sicily:

> This is what was made in the royal *khizanah* (treasury or household), full [i.e., the *khizanah*] of (or the royal *khizanah* operating with) happiness, honor, good fortune,

Figure 31.3 King Gagik-Abas of Kars, his wife, and daughter, 11th century, Jerusalem, Armenian Patriarchate, MS 2556, fol. 135 bis. Library of Congress Collection of Manuscripts in the Armenian Patriarchate of Jerusalem.

> perfection, long life, profit, welcome, prosperity, generosity, splendor, glory, perfection, realization of aspirations and hopes, of delights of days and nights, without end or modification, with might, care, sponsorship, protection, happiness, well being (success), triumph, and sufficiency. In Palermo (*madinah Siquliyah*) in the year 528. [1133–1134][57]

Like the inscriptions on protocollary caliphal textiles, this text mentions the name of the textile factory with the date and expressions of benediction. Yet while the blessings in Islamic inscriptions are directed to the ruler as petitionary prayers, here they describe the present state of the *khizanah*. The administration of the *khizanah* serves as a metaphor for Roger's rule. The good wishes anticipated for the caliph on Islamic *tiraz* are here fulfilled under Roger's sovereignty, which has ushered in "a perfected earthly existence".[58] This inscription, along with the materials and iconography of wealth and power, reinforces Roger's legitimacy.[59]

The Caucasus, a region with close proximity and diplomatic ties to the Abbasid Caliphate, was another area in which *tiraz* became popular. The territories of Armenia and Georgia were comprised of various competing dynasties that were at times clients of the Abbasids and at times of Byzantium. As a result, the dress portrayed in Armenian and Georgian official imagery employed Islamic and/or Byzantine emblems of power. A portrait of King Gagik-Abas of Kars (r. 1029–1065) in a Gospel book (Jerusalem, Armenian Patriarchate, MS 2556) (Figure 31.3) depicting the ruler, his wife, and daughter exemplifies the use of Islamic prototypes. The royal family sits cross-legged on a cushioned throne with supports in the shape of lions. Such imagery imitates royal imagery in the Islamic world.[60] They each wear a garment known as a *qaba* – a caftan of Turkic heritage that was common along the Silk Roads – embellished with

(illegible) *tiraz* armbands. The throne cushions also display *tiraz*. Thomas Mathews and Anne-Christine Daskalakis argue that the image served as a presentation of Gagik-Abas's daughter as his official heir. The portrait conveys this message through the figures' gestures, the central position of the princess, and the *tiraz* on her tunic.[61] The *tiraz* was an emblem of power which, when worn by both the princess and her parents, signified the transfer of authority from one generation to the next.

The practice of wearing *tiraz* spread from the Caucasus to Byzantium through the borderland territory of Cappadocia.[62] In an 11th-century donor painting in the Karabas church in in the Sognali Valley, the *protospatharios* (high-ranking Byzantine court official) Michael Skepides wears a costume similar to those of Gagik-Abas and his family (Figure 31.4). A repeat-patterned silk caftan features pseudo-*tiraz* armbands. Skepides likely chose to be painted in his finest clothing.[63] Indeed, it is possible that Cappadocians did not identify *tiraz* as Islamic. They may have associated these textiles with their Armenian and Georgian neighbors or perceived them to be thoroughly Cappadocian.[64] The use of *tiraz* in Cappadocian portraits reflects the intercultural nature of material culture in medieval borderlands.

The nomadic Turkic Qipjac people of the southern Ukrainian steppe also utilized *tiraz*. Warren Woodfin et al. have identified pseudo script in an early 13th-century burial of an esteemed individual in a mound known as the Chungul Kurgan.[65] The pseudo inscription decorated a gold and silk tablet weave that served as straps of a shield and bow case. The Qipjacs may have received the *tiraz* through trade, gift exchange, or plunder.[66] Though the Qipjacs were known to raid their neighbors, they also maintained normalized relations with them. Qipjac nobles intermarried with the royal families of Kievan Rus, Georgia, Bulgaria, and the Khwarazm-shahs (an Islamic dynasty of Central Asia), events that may have been marked with gifts.[67] The Chungul Kurgan was located on a bustling commercial route linking Asia Minor with northern Europe. Sudaq, just 270 km from the Chungul Kurgan, was an important trade center. The writer Ibn al-Athir (1160–1232/3) describes it as the

> Qipjaq's city from which they trade. It is on the Black Sea and ships come there, bearing textiles. The Qipjac buy them and sell female slaves and mumlukes, fox, beaver and grey squirrel furs and other items found in their lands.[68]

Merchants from the Sultanate of Rum, the Caucuses, and Kievan Rus traded wares in Sudaq.[69] The Qipjacs may have purchased or bartered *tiraz* on the open market in Sudaq or other centers.

Regardless of how the Qipjacs acquired the *tiraz* band, it is clear that they understood its meaning as an emblem of political power.[70] The burial was filled with luxury items associated with authority in sedentary Eurasian societies, some of which were adapted for Qipjac use. For example, the deceased wore a *qaba* with a wide pleated skirt that allowed for horseback riding, an important activity for the nomadic Qipjacs. The caftan has embroidered decoration in the form of the Byzantine *loros*, the ornate stole that was perhaps the best-known Byzantine emblem of imperial authority.[71] The deceased, then, wore a distinctly Qipjac caftan decorated with a thoroughly Byzantine symbol. The *tiraz* in the burial, in opulent materials, also signified power and prestige. In the Islamicate world, *tiraz* was commonly applied to armor and emphasized the wearer's military strength.[72] The bands in the Chungul Kurgan allowed the wearer to carry the shield and bow case on horseback.

Tiraz textiles also traveled eastward. Images from the Buddhist Alchi monastery in Ladakh depict *tiraz*. Ladakh is positioned in the western Himalayas, at the crossroads of modern-day India, Pakistan, Afghanistan, China, and Tibet. In the period the paintings are thought to have been produced (1150–1220), the region lay between the Hindu Kingdom of Kashmir and the

Figure 31.4 Line drawing of a donor portrait of Michael Skepides, 11th century, Karabas Church, Cappadocia. Line drawing by Dr. Jennifer Ball. Courtesy of Dr. Jennifer Ball.

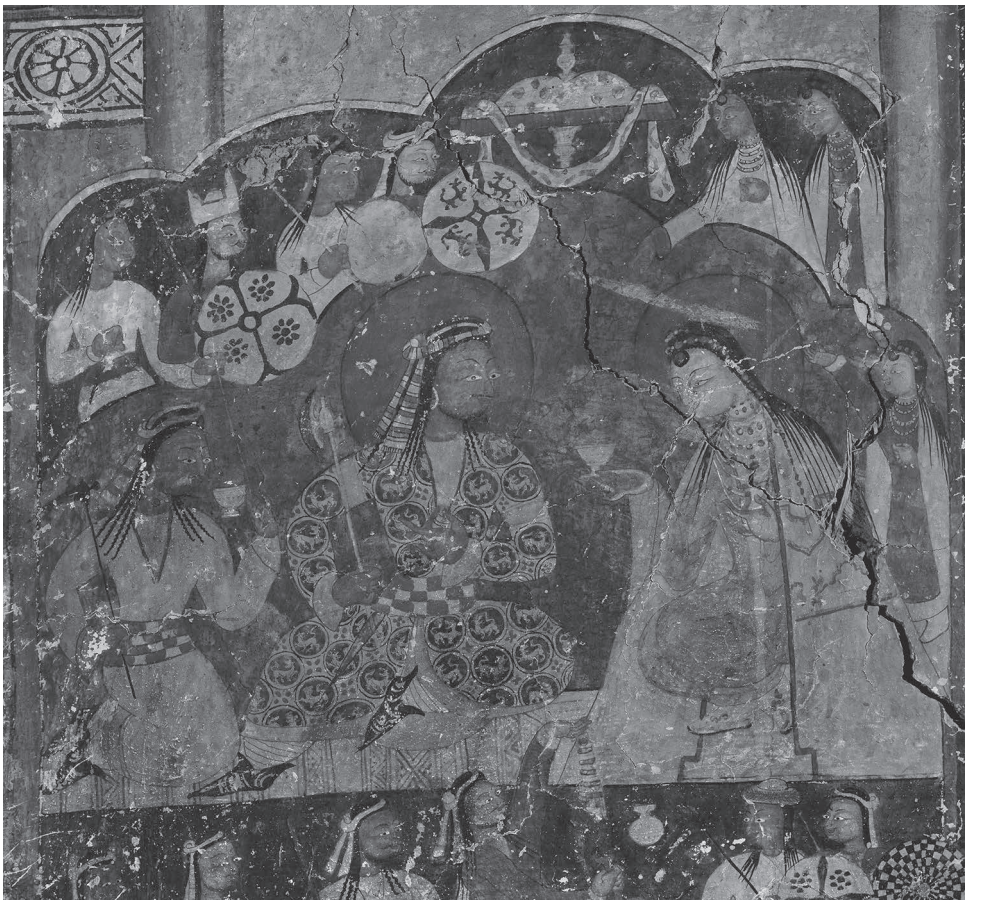

Figure 31.5 Royal scene, Dukhang Temple, Alchi. Photograph by Jaroslav Poncar. Courtesy of Jaroslav Poncar.

Muslim Ghaznavid and Ghurid sultanates.[73] Along with Buddhist sacred images, the Alchi Monastery includes paintings with royal themes like the so-called royal drinking scene in the Dukhang (assembly hall), which features a cross-legged king flanked by his queen and crown prince (Figure 31.5). Finbarr Barry Flood has examined the relationship of the figures' clothing to cross-cultural contacts between Ladakh and its neighbors. The central figure wears a silk *qaba* with repeat patterned roundels depicting lions.[74] *Tiraz* bands with pseudo-Arabic script encircle the arms. Flood identifies the central figure as a Buddhist king from Ladakh who has chosen to be depicted in the clothing of his Muslim Turkic neighbors because these garments were universal emblems of kingship.[75] Already in the 9th and 10th centuries, elements of Turkic dress had become associated with sovereignty in the western Himalayas.[76] Particular features of the royal drinking scene suggest that this was the case in the period of its production as well. The central figure sits crossed-legged in the manner common in princely scenes throughout the Islamic world. At Alchi, *tiraz* appears only on royal figures, suggesting the painters understood the device to be associated with kingship.[77]

In contrast, Pratapaditya Pal has argued that the paintings in the Dukhang transform the building into a Buddhist vision of paradise specific to the Yogatantra school.[78] The royal

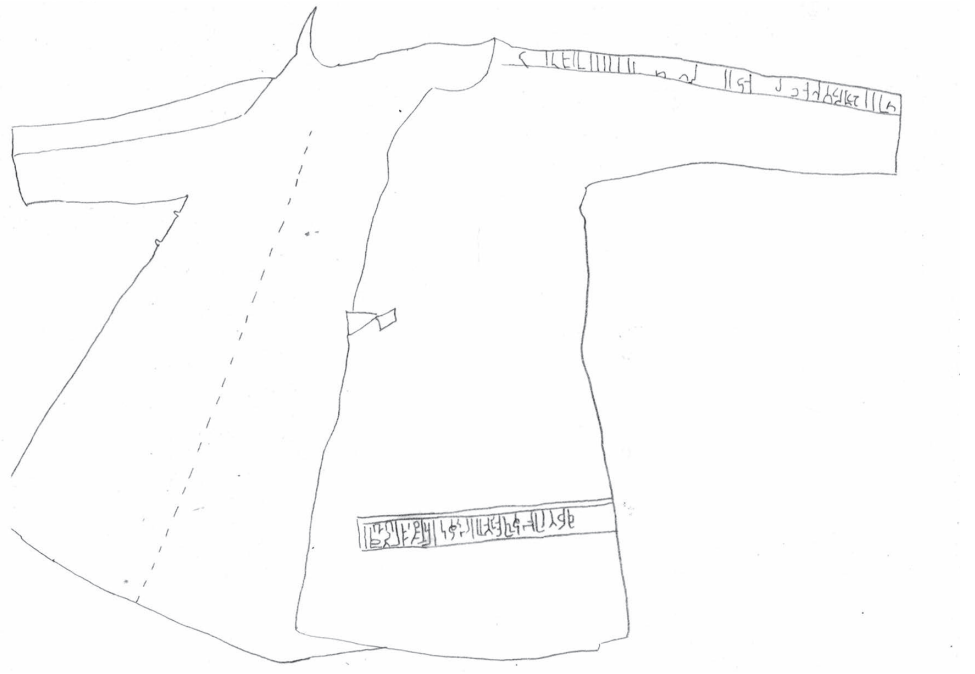

Figure 31.6 Line drawing of a robe, 1162, Helongjiang Provincial Museum, Harbin. Drawing by Dr. Eiren Shea. Courtesy of Dr. Eiren Shea.

drinking scene may be inspired by Islamic prototypes, but its elements – including the *tiraz* – cohere with other paintings in the Dukhang to form a uniquely Buddhist tableau. In Yogatanta, royalty is symbolic of paradise, and deities are meant to have the attributes of kings.[79] That the figures in the royal drinking scene wear garments emblematic of kingship (including *tiraz*), and mirror the deities in the surrounding scenes creates a paradisiacal vision. The scene itself has elements that Pal cites as symbolic of paradise in the Iranian canon, for example, the figures' enthroned status and the atmosphere of merriment.[80] Thus, proto-Islamic and Islamic iconography, including *tiraz*, is juxtaposed with characteristically Buddhist imagery to depict a uniquely Buddhist paradise.

A garment from a tomb near Acheng in northeast China also employed *tiraz*. A king of the state of Qi (1115–1234), likely Wanyan Yan (d. 1162), wore a robe with a pseudo-inscription, woven in supplementary gilded weft (Figure 31.6).[81] The objects in the tomb had belonged to the king during his lifetime, meaning that the inscribed robe may have been worn in both life and death.[82] Eiren Shea notes that the pseudo letterforms mimic not Arabic but Devanagari, a South Asian script.[83] The leaders of the Jin dynasty practiced Buddhism, so the South Asian style script may have been chosen to emphasize the king's Buddhist identity.[84] However, the form of the inscription may also reference to general conceptions of western exoticism; that the letterforms resembled a South Asian script rather than a Semitic one may not have been a crucial, or even decipherable, difference. The makers or wearers may have known that garments inscribed with western scripts, especially in luxurious materials like the gilded thread employed here, connoted authority and prestige and chosen stylized designs that evoked such letterforms. That the inscription lay along the hem and down the sleeves of the garment, as on Central Asian robes,[85] further suggests that the robe aimed to evoke occidental foreignness.

Conclusion

From its origins in Byzantine and Sasanian robe of honor traditions, *tiraz* had a specific association with political authority and prestige through a bond with the sovereign, expressed by his inscribed name. The Abbasid and Fatimid Caliphates employed Arabic inscriptions on textiles of luxurious materials to send a message of authority and prestige to audiences within and beyond their borders. The study of *tiraz* shows that the Silk Roads were a network of political and diplomatic exchange as much as a conduit of trade. *Tiraz* spread throughout the Abbasid Caliphate through administrative networks of production, and within and beyond the borders of the Abbasid and Fatimid Caliphates through political and diplomatic ceremony, as well as commerce. Though developed in Islamic empires, *tiraz* ultimately became an art form and symbolic gesture associated with societies outside the Islamic world. Arabic and pseudo Arabic-inscribed textiles, or even textiles inscriptions in other scripts or with a blank space where an inscription could stand, became intercultural emblems of authority and prestige across Eurasia.

Notes

1 I thank Alicia Walker, Sylvia Houghteling, and Michelle Al-Ferzly for their helpful comments on an earlier version of this chapter.
2 Louise Mackie, *Symbols of Power: Luxury Textiles from Islamic Lands, 7th–21st Century* (Cleveland: Cleveland Museum of Art, 2015), 85.
3 Nancy Mickelwright, for example, considers the term too broad, comprising "a hodgepodge of silk, linen, and cotton fabrics and various colours and weaves, decorated with woven, embroidered, and painted bands that may contain inscriptions, pseudo inscriptions, or ornament of other kinds". Nancy Mickelwright, "*Tiraz* Fragments: Unanswered Questions About Medieval Islamic Textiles," in *Brocade of the Pen: The Art of Islamic Writing*, ed. Carol G. Fisher (East Lansing, MI, Kresge Art Museum, Michigan State University, 1991), 32.
4 Mackie, *Symbols*, 85.
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6 Jochen Sokoly, "Tiraz Textiles from Egypt: Production, Administration, and Uses of Tiraz Textiles from Egypt Under the Umayyad, Abbasid and Fatimid Dynasties" (D.Phil dissertation, Oxford University, 2001), 4.
7 Protocollary *tiraz* inscriptions mention two types of workshops, the *tiraz al-khassa* (private) and the *tiraz al-amma* (public). According to Jochen Sokoly, the caliph directly oversaw production in the *tiraz al-khassa* and the broader government managed the *tiraz al-amma*. However, some *tiraz* inscriptions mention no workshop, and those were likely produced in non-governmental workshops. Jochen Sokoly, "Towards a Model of Early Islamic Textile Institutions in Egypt," in *Islamische Textilkunst des Mittelalters: Aktuelle Probleme*, ed. Karel Otavsky (Riggisberg, Switzerland: Abegg-Stiftung, 1997), 119–20. Mackie, *Symbols*, 86.
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25 Dominique Sourdel, "Robes of Honor in 'Abbasid Baghdad During the Eighth to Eleventh Centuries," in *Robes and Honor: The Medieval World of Investiture*, ed. Stewart Gordon (New York: Palgrave, 2001), 137.
26 Early Islamic leaders often provided robes of honor to poets. These gifts emphasized the import of poetry. See Suzanne Pinckney Stetkevych, *Poetics of Islamic Legitimacy: Myth, Gender, and Ceremony in the Classical Arabic Ode* (Bloomington: Indiana University Press, 2002), 77.
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28 Stetkevych, *Poetics*, 88.
29 Stetkevych, *Poetics*, 88.
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31 Stillman and Stillman, *Arab Dress*, 123.
32 Sourdel, "Robes of Honor," 138–9.
33 Stillman, "Khil'a."
34 Sokoly, "Tiraz Textiles," 226–7.
35 Stillman and Stillman, *Arab Dress*, 126.
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37 Al-Sabi, *Rusum dar al-Khilafah*, 78.
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39 Sokoly, "Textiles and Identity," 277.
40 Mackie, *Symbols*, 121.
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49 Naser-e Khosraw, *Book of Travels*, 50.
50 Naser-e Khosraw, *Book of Travels*, 49.

51 Bierman, *Writing Signs*, 96.
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32
VIRTUAL SILK ROADS
Objects, Exhibitions, and Learners

Daniel C. Waugh

The goal of this volume is to encourage a broader, interdisciplinary approach to the histories of the so-called Silk Roads than we have seen in much of the scholarship to date. My task here is to articulate how the visual and material evidence about the Silk Roads might contribute to the teaching and learning about interdisciplinary world history. That is, this is not a chapter devoted to detailed scholarly analysis of particular objects, groups of them, or themes: my focus is on education and learning, drawing on extensive experience in teaching the Silk Roads and related subjects and on more than a decade of editing a widely ranging annual devoted to the subject.[1] My choice of examples, drawn largely from museum collections, is perforce very selective but should illustrate how such material has been or might be best presented and used. Given the huge amount of evidence we now possess, with more being unearthed every day, it will take dedicated effort and resources if the substantial scholarly achievements in "Silk Road Studies" are to achieve their potential in humanistic education.

The Silk Roads as a Figment of the Imagination

Most scholars nowadays whose research might somehow relate to the silk roads would probably admit that "Silk Road Studies" is not a scholarly discipline, the designation of the "subject" derived from a quite narrowly conceived first use of the term in the 19th century.[2] "Silk Road" since has been invoked for many purposes, including the political and commercial, that have nothing to do with historic patterns of exchange across Afro-Eurasia. So there are restaurants and apparel shops which use the term to lure customers to their exotic offerings, political think tanks concerned with contemporary geo-politics which see in the building of oil pipelines something related to camel caravans of the 8th century, and national programs of global economic development which invoke the silk roads if under a variant of the name. A recent, sweeping history of the Middle East down to the present by a respected medieval historian disguises its offering by putting "Silk Road" in its title. Even those who have devoted much of their professional lives to projects at the core of the academic research which may be most relevant here admit that so far they cannot think of a better term to encompass what they do. "Silk Road" gets attention, it sells. I readily confess I am not about to abandon the term.

Of course in admitting all this, as many scholars now emphasize, in the process it is appropriate to take a critical look at the work of those who first put The Silk Road on the map. So

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Map 32.1 Map of Afro-Eurasia showing locations mentioned in this chapter, captioning added by the author. The topographic base map is adapted from https://visibleearth.nasa.gov/images/57752/blue-marble-land-surface-shallow-water-and-shaded-topography/57759l, provided by NASA without copyright restriction.

we now have a Ferdinand von Richthofen, traditionally credited with coining the term, who was not just involved in dispassionate scholarship. The approach in some of the early studies of Buddhist art along the silk roads was not to learn about its intrinsic merits and contexts but rather to find elements of the arts of Classical Antiquity. Classics of travel literature, which are certainly relevant for us, have been de-constructed with some enthusiasm in the post-colonial world. Museums are having to grapple, often painfully, with the legacy of having accepted sponsorship from donors who earned their riches by means that are now roundly condemned, or having accepted art works without having adequately verified their provenance. Demands for repatriation of museum holdings increase. Curatorial decisions of the past are now being questioned, and the competition is on to hire curators who can bring new perspectives to how the public might view the objects museums exhibit.[3] Whether the result can satisfy, for example, specialists in art history is a good question. Recently when I asked of a group of experts on Islamic art what they thought of the remounted Islamic art collection in the Albukhary Foundation Gallery of the Islamic World in the British Museum, the opinions ranged from cautiously positive to decidedly negative, the critics bemoaning the fact that the education department in the museum, not the curators, had dictated key decisions.[4] As all this is happening, we might well wonder whether we can ever locate the silk roads in any meaningful and lasting way. They may be a moving target, one that can never be caught.

There are many questions that need to be addressed regarding how we would define the subject, important among them determining its chronological and geographic scope. Conventional treatments have focused on the period between the last two centuries before the Common Era, when Han China expanded westwards, and the end of the 15th century, when European ships first made it around Africa and reached India. Inherent in this scheme have been assumptions about the primacy of sedentary empires and elites, but then their weakening and decay, overtaken by the European advances that are seen to have eclipsed traditional overland routes. Even within the traditionally defined chronological boundaries of the silk roads, there are differing opinions as to when they flourished or when, perhaps on account of political disruptions, there was little long-distance exchange of ideas and products.[5] Quite apart from whatever the material record reveals, the traditional scheme is the product of reliance on written sources which invariably see the world through the lens of sedentary elites. Those who may have had no need to write and in any event did not possess the skills to do so thereby have been disadvantaged.

Our new thinking about all this has extended the scope of inquiry to begin the examination of Afro-Eurasian exchange much earlier than the late 1st millennium BCE: at very least, we might well go back into the Bronze Age.[6] On the other end of the scale though there still seems to be resistance to the idea that the story of the silk roads should extend at least through what, in European terms, we call the "early modern" era. These days, pastoralists in the mountains and steppes are receiving overdue attention, and their interactions with sedentary neighbors viewed as often mutually advantageous. Underwater archaeology has become hugely important in helping to balance treatment of overland routes with attention to maritime ones. Of course what all this rethinking means is that to present our "subject" in any coherent overview is all the more difficult, if not impossible. There are too many threads, leading in too many different directions.

Apart from questions of periodization, any treatment of the silk roads, if conceived of broadly as historic trans-regional exchange, has to grapple with the questions about changing patterns of connections over shorter and longer distances and with the fact that silk was but one item exchanged and not necessarily the most important one.[7] Is this really a history of early "globalization", as some would have it, or does it rather make more sense to focus

on overlapping and interconnected smaller regions? Might one better do just the opposite and try to apply concepts of network theory to break down the barriers erected by the traditional focus on a few routes and a few major centers? Do the patterns which can be established for the movement of textiles and textile technology match the patterns for the movement of, say, glass or ceramics? Is there not considerable regional variation in the way in which imported religious beliefs and practices were accepted, adapted or rejected? There is no simple chronology and geographic focus for the treatment of individual subjects under the elusive rubric of "The Silk Road".

Collections and Exhibitions Past and Recent

There is a substantial and growing interest today in introducing history to broad audiences through objects. That is, objects whose stories might be deemed to illustrate broad historical contexts and issues are selected out of the multitude of possibilities. Through their "biographies", we may be able to learn about when and how they were created, how they may relate to one another, what they might have meant to their contemporaries, and how the understanding of them may have changed in subsequent eras, if they survived to be seen or used. Where they may have been lost for a time to history, their rediscovery can also be an interesting way of seeing how we learn about the distant past as well as the concerns of the more recent present. Arguably almost any museum exhibition, be it in the permanent collection or a temporary blockbuster, presents a history through objects. Exhibitions relating to the silk roads certainly incorporate this approach. At least one recent book, by Susan Whitfield (2018), explicitly uses the object-centered approach to introduce the silk roads. The challenge in such undertakings is to decide what object(s) to select: museum displays may overwhelm the viewer with too much. If but a few examples are to tell an intelligible story, are they really the "most illustrative" and then can they be contextualized intelligibly without an overwhelming amount of detail?[8] With but a small selection, can one find thematic connections and contextualize them, or is one left with a collection of discrete and largely unrelated examples? Ideally the result is a distillation of the large and complex, a streamlining of knowledge that avoids academic obscurity at the same time that it challenges thinking and is not simplistic.

Apart from print books, how one experiences objects may be quite varied. In museum space, the curators' grouping and juxtaposition of objects of itself may tell a story, even if the viewer does not read the generally cryptic captions. In the world where now one can get an audio guide or an app to connect with a mobile device, there may be a lot more to be learned from it, and this does have the advantage of allowing the visitor to contemplate the object while hearing it discussed. Exhibition catalogs generally have at least a few substantial essays written to introduce the whole collection and/or highlight features of what is in it. The descriptive captioning for individual pieces in such catalogs is likely to approximate the fuller treatment that in the museum one otherwise is going to get only from the audio guide. In our technologically sophisticated era, many museum exhibits will supplement the display of objects with short video presentations that may explain how objects were made, what their imagery may suggest, reconstruct how the objects were situated in their original environment, or the like. There is, of course, the danger of information overload, or the temptation to look only at the screen and not really study the actual object. However, students of the silk roads may be at an advantage in museum visits where particularly popular works of art (e.g. the Mona Lisa or Venus de Milo in the Louvre) draw the crowds away from a great deal of importance whose study illuminates the remote past.[9]

However sophisticated and well-designed exhibits may be, a single visit hardly allows enough time to absorb what they offer. Buying the catalog to take home allows one to continue to learn. Rare are the cases where a significant website has been created for any special exhibition and, even if it has, whether it would continue to be available once the exhibition has closed. In such a circumstance then, those who would wish to learn from museums' collections and cannot visit them have to rely on whether the institutions have committed resources to education and accessibility online. Fortunately, we live in times when a huge amount of progress has been made in such ventures.[10] Major collections are increasingly online with high quality images, though the viewer often is left with little guidance as to how to connect one object with another in the same collection and rarely given links to view analogous objects in some other institution's collection. Learning how best to use collection search pages can be a challenge, especially given the unfortunate practice of systematizing objects in frameworks defined by dynastic or political designations that may have little to do with "art" or "culture". Yet there are tools that allow a visitor to a website to create "one's own" collection of favorite objects at least within the framework of a single institution. If intelligently used, such tools have huge potential for enhancing learning.

Few museums can claim to be comprehensive in their holdings, which is one of the most important reasons we have special exhibitions. However visionary the curators of such exhibitions may be, of course their success may depend on what objects can be obtained on loan. After all, certain objects of great importance do not travel (for example, think murals still *in situ* or some fragile manuscript fragments). An institution's clout and financial resources mean that what is possible for, say, the Metropolitan Museum in New York is not going to be possible for a university art museum. Yet arguably what ostensibly is limited in scope in many cases may yield the best results in opening lines of broad inquiry, stretching the mind far outside the immediate objects.[11]

A selective examination of some "silk-road-related" collections and exhibitions, even if they do not have the key phrase in their titles, will illustrate what can be accomplished. It does seem as though certain objects over and over are the ones chosen to say something about the silk roads. Understandable, of course, where for certain topics considered to be of great importance, the choices are few, and it is necessary to turn to stable collections of material that is unlikely to be superseded by some new discovery. Might this, however, be a kind of "route inertia" (to borrow Toby Wilkinson's phrase regarding the conventional mapping of the silk roads), which should be reconsidered? Re-examination of the familiar with a set of new questions though can lead to meaningful reinterpretation.[12] And in any event mere repetition is not be a bad thing – I am always happy to revisit familiar objects to learn more.

The German Turfan Collections

For specific examples, we might start with some of the objects collected by the German Turfan (Turpan) expeditions early in the 20th century, since they represent a "classic" and ostensibly well-known set of materials that arguably illustrate much of what the silk roads are about.[13] The history of the collection is steeped in controversy, starting with the fact that the murals, for example, were rather brutally cut from the walls of the cave temples. The "Foreign Devils" on the silk roads at work . . . ? Of course, what was thereby saved might well have been defaced or otherwise perished at the hands of local populations, even if affixing the panels to the walls of the museum in Berlin then meant the larger ones could not be removed to safety and were destroyed by a bomb in World War II. The war also brought some looting by Russian occupiers, with the pieces they took only relatively recently redisplayed in the Hermitage Museum in St. Petersburg.[14]

A major selection from the Berlin Turfan collections was the subject of one of the first silk road exhibitions ever to be mounted in the United States (*Along the Ancient Silk Routes* 1982). Included were a good many of the now best-known mural fragments from cave sites such as Kizil and Bezeklik, statuary, and some of the brilliantly illuminated Manichaean manuscript fragments that had been salvaged at Khocho (Gaochang). One of the advantages of this exhibition's catalog (and by analogy, many others) was its ability to contextualize the pieces of large compositions using expedition photos and drawings made *in situ*. A great many of the items displayed in New York in 1982 then were displayed back in Dahlem in the permanent installation in the Museum of Indian Art (now folded into the larger Museum of Asian Art), and many of them and other less frequently seen parts of that collection are on display in its new home in the Humboldt Forum.[15]

How many times and in how many places have audiences viewed the Dragon in a Lake (Bezeklik, MIK III 8383), the presumably Tocharian donors from the Cave of the Sword Bearers at Kizil (MIK III 8426a, b, c), or the Uighur donors from Bezeklik (MIK III 6876 a, b)? The most wonderful of the Manichaean book leaves from Khocho (MIK III 4979) certainly has traveled, so much so that it is deteriorating and like most of the fragile manuscript material may never be allowed to travel again. Equally fragile is the much-displayed banner from Khocho (MIK III 4524) considered to depict a Uighur prince. Objects such as these continue to be important sources for our knowledge of religious belief and practice, patronage, and the identity and attire of the local elites. The online collections database of the Berlin State Museums already contains a great many images, including items from the Turfan expeditions, though there is more still to be added.[16] The Berlin website includes only basic captioning but no analytical discussion for the Turfan material. However, an Internet search does turn up other resources with these works where one can learn a lot more.[17] A virtue of the Berlin database is its posting (under the subheading "Fotoarchiv") of a great many of the expedition photos taken at the time the objects were acquired, which thus helps to contextualize them.

The Berlin museum already had mounted in its entirely the interior of one of the cave temples whose murals were removed, an important achievement for showing the three-dimensional space, including the domed ceiling (the "Cave of the Ring-Bearing Doves", Kizil Cave No. 123; see the photographs in Russell-Smith 2015: 124 and color plate v).[18] Such "reconstructions" either in physical space, by computerized modeling or immersive 3-D technology are really essential for any appreciation of some of the most important examples of "silk road art". Short of being able to display an actual cave temple, the excellent recent exhibition of the art of the Mogao Caves mounted by the Getty Research Institute was able to include three carefully produced replicas of the temples, thus enhancing greatly the viewer's appreciation of the material.[19] Providing "access" through technology that makes possible virtual tours of such spaces is crucially important where the crush of visitors is leading to the deterioration of the sites.[20] That said, there is still no real substitute for the experience of actually seeing the art in its original context.

Up From the Desert Sands

Soil conditions too frequently are not conducive to preservation of organic materials at some of the sites of great importance for study of the silk roads. Naturally, our interest in silk (and other textiles) makes the cases where there is good preservation of particular interest, although, as with many objects, there is the danger that isolated, unique examples may encourage overgeneralization as to what they prove. There are some famous cases to consider here, ones which

have attracted particular attention in part for what they suggest about the Central or West Asian (even Indo-European) connections across Asia in early times.

Arguably the greatest silk road traveler was not the Venetian Marco Polo, the Moroccan Ibn Battuta, or the Buddhist pilgrim-monk Xuanzang, but the anonymous "Yingpan Man", who has shown up in Tokyo, Mannheim, Berlin, Santa Ana (California), Houston, Philadelphia, Brussels, Hangzhou, and, I am sure, some other locations around the world (Figure 32.1a).[21] If he has a current permanent home, it is now in Urumqi, although he was found at the archaeological site of Yingpan in the Lop Desert in 1995 in tomb 95BYY0M15. Whoever he was (most posit he was a merchant, possibly a Sogdian, who lived in ca. 4th century CE), he was attired remarkably, his non-Chinese face covered by a mask, his trousers of a purple floral design, and his red and gold brocade gown (combining wool and silk) depicting little cupids (erotes) and symmetrically paired bulls and stags, the design arguably "western" in its inspiration. His gown may have been produced in Kushan Empire territories or somewhere in West Asia, his trousers woven somewhere in Central China from Xinjiang silk, the pillow under his head a damask whose pattern is also known from finds at Mawangdui (Changsha), Loulan and Palmyra (Syria). Other objects excavated at Yingpan point to a cultural mixing, including a couple of manuscript fragments in Indian Prakrit written in Kharoshthi script.

An equivalent amount of attention has been given to what most think are portions of a pair of woolen trousers which then were repurposed as a wall hanging and were unearthed at Shanpula (Sampula) east of Khotan along the Southern Silk Road (Tomb 1, excavated 1984).[22] They depict a spear-holding warrior of distinctly "western" visage under an image of a flute-playing centaur (Figure 32.1b). Most reproductions of this textile show only the upper part, omitting the fragment that includes two plaques of the warrior's belt. Analogues to the image may be found in gold objects associated with the Scythians of centuries prior to the Common Era and in Classical Greek art, the centaur possibly brought to Central Asia in the time of Alexander the Great. The textile probably was woven somewhere in Central Asia in the 1st century BCE. The Shanpula graves contain many other textile fragments, including woolen skirts with decorative bands showing a design that is analogous to that on textiles excavated at Niya in the Taklamakan and which have been found as far away as Palmyra in the Syrian desert.

Recent technical analysis of these textiles emphasizes the complexity of interactions in weaving techniques and materials whose documentation is still largely a matter for extensive future research (Hildebrandt and Gillis 2017). While there are alternative views, of particular interest is the emphasis by the textile expert Angela Sheng on "cultural exchange between ancient Rome and China as an indirect one, relayed from region to region" and the fact that to study the early production and migration of textiles requires taking into account wool-making, and not simply silk (ibid.: xvii–xviii). Even if the focus is only on silk, there is much to be done using the new analytical tools which are available to determine where silks were produced and by what techniques (were fabrics imported intact, created by unraveling their threads and re-spinning and re-weaving?).[23] As is well known, China certainly did not maintain a monopoly on silk production: over time important centers of silk production were established across Asia and through the Mediterranean world, a fact which complicates analyses of provenance, the spread of motifs and our understandings of the functions silk played in different cultures. I personally am fascinated by the examples of silks which garbed medieval Christian clerics and rulers, who surely were conscious of the fact that often their robes were embroidered with Arabic inscriptions and the fabrics thus were probably woven by Islamic craftsmen who in some cases were employed at Christian courts (Figure 32.2).[24]

For the early textiles excavated in the Taklamakan, our immediate concern here, the interpretive context has been the various archaeological cultures which have produced such

Figure 32.1 a) Detail of tunic of "Yingpan Man", excavated in Tomb 15 at Yingpan in the southern Taklamakan desert, dated 4th–5th centuries. Wool and silk. Collection of the Xinjiang-Uighur Regional Museum, Inv. no. 95BYYM15. b) Fragment of trousers (repurposed as a wall hanging) excavated at Shanpula, Lop District, near Khotan, Cemetery 1, Grave no. 1, ca. 1st century BCE. Wool. Collection of the Xinjiang-Uighur Regional Museum, Inv. no. 84LSIM01:C162. All of the photos in Figs. 32.1–32.11 taken by and copyrighted by Daniel C. Waugh.

Figure 32.2 Coronation mantle of the Holy Roman Empire, incised silk/samite (Byzantium or Thebes?), silk stitching, gold, pearls, enamel, filigree, and precious stones. Created in Norman Sicily under King Roger II, the Arabic Inscription dated 1133/34. Inherited by the House of Hohenstaufen and added to the Imperial treasure following the coronation of Emperor Frederick II in 1220. Collection of the Imperial Treasury, Vienna, Inv. No. WS XIII 14. Photo by author.

striking finds. To a considerable degree we seem to be dealing with Indo-European and/or other non-Han peoples, the evidence for their presence in some cases well antedating the Common Era and what traditionally has been considered the "beginning of the silk roads". Most famously, of course, the cemeteries have yielded some remarkably well-preserved mummies, which was part of the reason for an exhibition that included Yingpan Man that toured in the United States.[25] The visitor today to the Xinjiang-Uighur Autonomous Region Museum in Urumqi can see a special display that contextualizes one or two of these mummies with related artefacts, but the overall interpretive scheme in the museum (at least some years ago) has been to emphasize not the wide ethnic and cultural diversity of the peoples of early Xinjiang but rather the ways in which their allegedly harmonious interactions presaged the modern era of ethnic harmony under Chinese rule.[26] In fact it was difficult to learn about the distinct cultural environments, and artefacts from single locations were not always displayed in connection with one another.

Textile Finds in the Altai and Mongolia

Much has been done in recent decades to dispel the notion of nomadic pastoralists as uncultured barbarians who could do no better than plunder sedentary societies. We know a great deal about symbiotic relationships, mutually beneficial interactions, and increasingly about the important influences exercised by the nomads on their sedentary neighbors.[27] Pure nomadism may have been rare; some recent evidence attributes to the nomads the early transmission of important cereals across Asia. Thanks to the frozen ground which has preserved organic material at many sites, the textiles found in the Altai mountains of southern Siberia and in Mongolia are amongst the most important evidence of the cultural interactions across Asia and the involvement of the pastoralists who were instrumental in such exchange. The finds made

in the early Scythian graves in the Altai have long been known – they include Chinese silks and woolen textiles probably made somewhere in the Achaemenid empire. Evidence from chemical analysis suggests that even the felts (which we would have expected to be produced locally) were dyed with substances not available where the objects were found.[28] Arguably the best-known object is what has long been considered the earliest knotted wool carpet, whose motifs echo depictions in Achaemenid art. Most histories of carpet weaving invoke this example at the start of their story; various reproductions of it may be found on the Internet.

Excavations in the cemeteries of Noyon uul in northern Mongolia in the 1920s, which were generally not carried out following the best methodologies for documenting finds, turned up carpets probably woven locally out of camel hair, some very elaborate pieces of Chinese brocades, and weavings with images of individuals who probably came from Western Asia.[29] More recent excavations in this same region have uncovered textiles whose patterns clearly point to distant contacts with the West, among them scenes involving some kind of religious ceremony in a textile that likely came from a region such as Bactria. Apart from the textiles, there are abundant finds of Chinese bronze mirrors and lacquerware, remains of Chinese chariots, and even an exquisite blue-and-white glass bowl from the Roman East. While much of this evidence comes from tombs of the elite, it seems possible that there was so much of the lacquerware, it also was deposited in tombs of ordinary people (Figure 32.3).[30]

The main collections of Xiongnu artifacts are in the State Hermitage Museum in St. Petersburg and the National Museum of Mongolian History in Ulaanbaatar.[31] A major exhibition of Xiongnu "treasures" held in Ulaanbaatar in 2011 included the publication of the fullest catalog yet of archaeologically documented Xiongnu materials, with information about some of the excavations, but confined its purview to those discovered on the territory of Mongolia within today's borders.[32] This meant that important finds from, for example, Transbaikalia were not included. Given the role the Xiongnu played in the early history of the silk roads as conventionally told, one might wish for more and readily accessible resources of substance regarding their material culture, with greater attention to devoted not merely to the finds from elite tombs but to those which might be attributed to ordinary individuals.[33] Xiongnu objects have been included in some special exhibitions outside of Russia and Mongolia, and there are at least some open-access avenues for those who do not read Russian or Mongolian to learn more and see a selection of images.[34]

The Silk Roads as an East Asian Phenomenon

Traditional treatments of the silk roads have been skewed by a focus on East Asia: China as the Land of Silk, the interest in and discovery of the routes to the west when Emperor Wu Di sent Zhang Qian to find help to fight the Xiongnu, the "Buddhist conquest of China" and Xuanzang the great pilgrim/monk. . . . The "eastern focus" has included (as we have already noted) areas such as Turfan and the oases around southern rim of the Taklamakan, which had not been originally ethnically or culturally Chinese but would experience the impact Chinese culture and over time be brought under Chinese political control.

While outside of Korea and Japan there still tends to be inadequate attention devoted to their connections with the silk roads, they are an essential part of our story if we wish to encompass the full range of societies who were in one way or another affected by this web of international exchange. Think, for example of what one learns from the recent exhibition in Kyongju, Korea, "Silla meets West Asia",[35] or the serious involvement of Korean archaeologists in excavations in Mongolia. The national museum in Korea contains important collections of material from along the silk roads in today's Xinjiang (much of this the legacy of the

Figure 32.3 Remains of a Chinese lacquerware bowl with gilded brass rim, photographed *in situ* in Xiongu tomb No. 97, ca. 1st century CE, Tamiryn ulaan khoshuu, Arkhangai Aimag, Mongolia, 2005. Removal of the artefact was unsuccessful, as all that remained of the bowl was the paint layer, which disintegrated. Photo by author.

expeditions to Inner Asia led by the Japanese scholar, Count Otani).[36] The collections sealed up in the imperial treasury of the Shosoin in Nara (Japan) in the 8th century contain some of the most important objects from along the Silk Roads, many in pristine condition. Many of these are well known from various exhibitions, and there is now an online collections database with high-quality photographs.[37] A selection of objects from the Shosoin is displayed each year accompanied by well-illustrated catalogs. Japanese scholarship has long been among the leading contributors to silk road studies. One of the most important websites for silk road studies is that of the Japanese National Institute for Informatics, which has posted (from the collection of the Toyo Bunko) complete scans of most of the significant early reports published about the early expeditions and a great deal of other useful material.[38] Thus, one can access the Stein, Pelliot and German Turfan publications (among others), with all their photographs and drawings.

The Chinese collections are a different story, in that most Chinese museums still have not made much of what they hold openly accessible to those who cannot visit them.[39] Loans to exhibitions elsewhere have drawn heavily on Chinese collections, and the material so loaned often provides the most vivid indications of the long-distance connections that are at the core of what we understand by the silk roads. One of the best, if traditional, selections of such material was in the exhibition mounted first in the Dayton (Ohio) Art Institute in 2003 and then shown in Memphis (Tennessee) (*The Glory of the Silk Road*). While Dayton (perhaps better known for the Wright-Patterson airbase and its very interesting museum . . .) might seem like an odd location for such an exhibition, in fact, the Dayton Art Institute contains an excellent East Asian collection that has been supported by collectors locally (for highlights, www.daytonartinstitute.org/art/collection-highlights/asian-art-collection/); there is also now a full collection database online. The curator responsible for the special exhibition Li Jian (who has

since moved on) did a remarkable job of obtaining important loans of some of the iconic items which tell stories about the silk roads. The exhibition included one of the decorated woolen skirts excavated at Shanpula,[40] silk fragments from Niya, a Kharoshthi-script document from Niya, the now well-known Sogdian document (dated 639 CE) from Turfan concerning the purchase of a slave girl,[41] a Sasanian glass stem cup found at Simsim near Kucha,[42] and finds from the Astana Cemetery in Turfan including one of the most remarkable textile fabrics dating from the 4th to mid-5th centuries.[43] For me, the absolute stars of the show were the silver cups excavated near Xi'an in 1970, which would seem to have Sogdian prototypes or might even have been produced by Sogdians in China, and the encrusted necklace and bracelets that were part of the tomb inventory of Sui princess Li Jingxun (Figure 32.4).[44]

Several of these items were also in the much larger exhibition the Metropolitan Museum mounted the next year, its catalog (Watt et al. 2004) still one of the best for coverage of the arts in China between 200 and 750 CE, a period when international connections were particularly important in the shaping of Chinese elite tastes. The Metropolitan's exhibition included the Shanpula trouser fragment and also a good many items that normally are attributed to the Sogdians, the culturally Iranian international merchants who frequented the routes to China and in well documented instances settled there and occupied positions in the Chinese administrative hierarchy. The Sogdians in China were in fact an important focus of the Asia Society's somewhat deceptively titled exhibition entitled "Monks and Merchants", which was mounted in 2001 and whose catalog remains a basic resource for students of the early silk roads.[45] The exhibition included the longest of the famous "Sogdian ancient letters", found by Aurel Stein in a watchtower west of Dunhuang (the letter is translated here, and translations of the other letters from the same packet are also available on the "Silk Road Seattle" and IDP websites).[46] Those letters are vivid evidence of the Sogdian presence in what is now China at the beginning of the 4th century CE. There are a good many items from the tombs of Sogdians resident in China, including one of the funeral beds decorated with reliefs that illustrate aspects of Sogdian Zoroastrian religious beliefs.[47] For more on resources about the Sogdians, see "The Sogdians at the Freer/Sackler" below.

Some of the tombs contained Sasanian silver coins, which seem for a time to have been a currency of account along parts of the Silk Roads, and some striking Byzantine gold coins or their bracteate imitations, arguably not used as currency but exotica attached to garments or in a few instances placed in the mouths of corpses as payment along the road to the afterlife. Among the most striking of all the objects included in the "Monks and Merchants" exhibition (one which I privileged to see in its home Guyuan Municipal Museum in 2009 along with the Sasanian glass cup found with it) is a silver-gilt ewer, probably made in southern Central Asia, depicting the Judgment of Paris.[48] The ewer was in the tomb of one Li Xian (d. 569), who may well have acquired it during his service as the commandant at Dunhuang, one of the key towns on the routes connecting to the West (Figure 32.5). A number of analogous ewers have been found in Chinese tombs; they served as inspirations for ceramic imitations produced by local artisans.

The Silk Roads in "the West"

It should be clear from the preceding that just to look at the evidence from East Asia reveals a great deal about the reach of the silk roads beyond the western borders of what is now China. The other chapters in this book help to provide a perspective from the West that so often in the past has been lacking in Silk Road studies. For want of space, I shall be very selective in my comments on objects and resources that might be of particular interest in this regard, recognizing that there is much more to be said.

Figure 32.4 Necklace excavated in tomb of Sui Dynasty princess Li Jingxun (buried 608), Xi'an. Imported from the Sasanian Empire or Central Asia. Collection of the National Museum of Chinese History, Beijing. Photo by author.

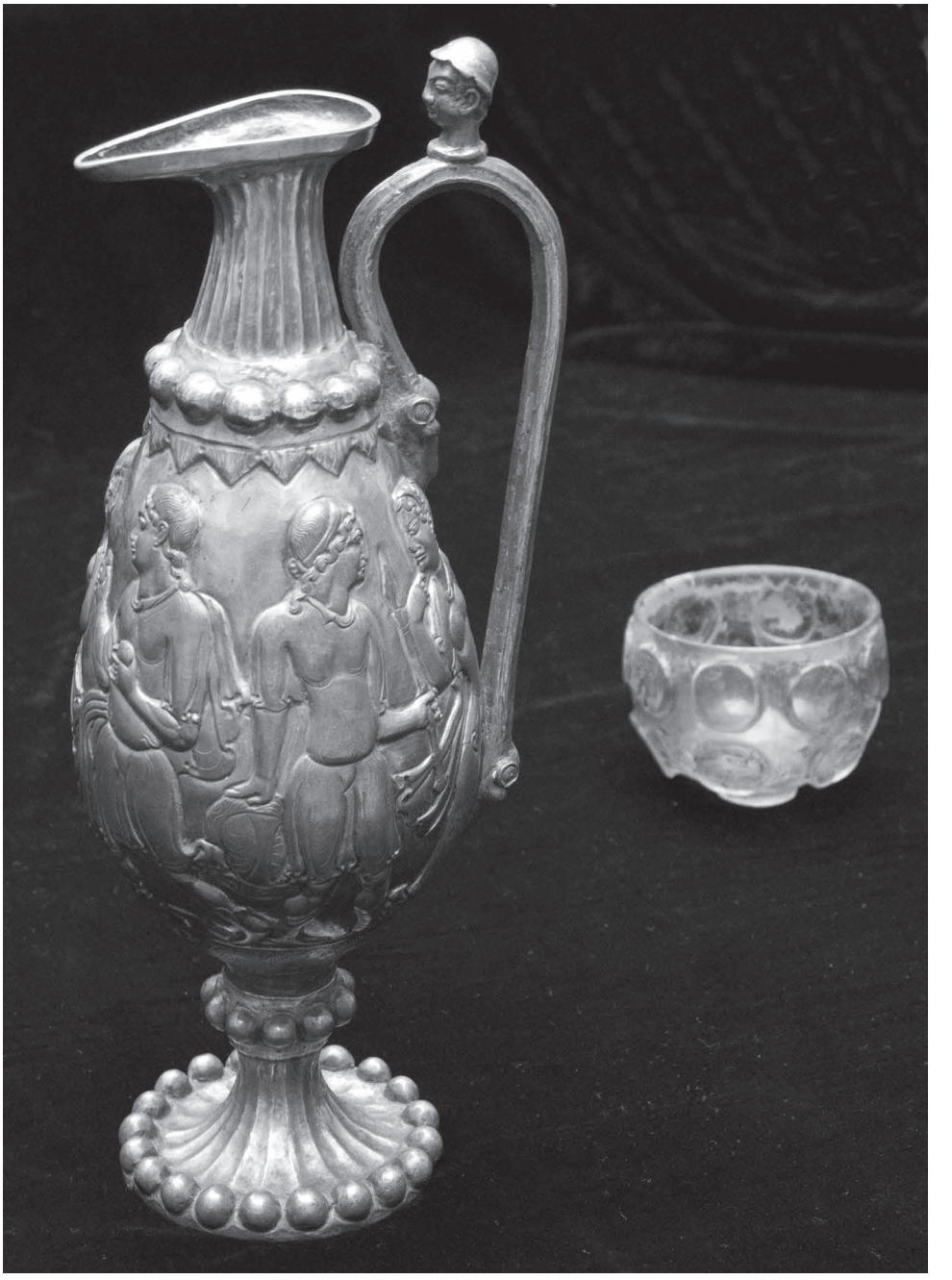

Figure 32.5 Gilt silver ewer, 5th–6th century. Probably made in Tocharistan (Bactria), depicting legend of Paris and Helen of Troy; Sasanian glass cup (soda-lime glass), ca. 6th century. Both excavated in tomb (dated 569) of Li Xian and his wife; Guyuan, Ningxia Autonomous Region. Collection of the Guyuan Regional Museum. Photo by author.

While the traditional treatment of the Silk Roads (as evidenced in the multipart NTK-CCTV television extravaganza of the 1980s), has the caravans arriving in Rome, in fact, of course, what was important was not Rome itself but the Roman East and before that the area of the Hellenistic states which succeeded Alexander the Great and extended up to India. Just as from the Chinese standpoint Zhang Qian gets pride of place for opening the way to the Western Regions, Alexander the Great is given pride of place for laying the groundwork for the routes extending from the Mediterranean world. In both cases, this is an oversimplification that ignores, among other things, a lot of earlier evidence. Were one to choose two or three locations which could serve to illustrate the Hellenistic and Roman contributions to the Silk Roads, they might well be Ai Khanum, an essentially Greek city founded on the Amu Darya river in Central Asia, Dura Europos, an important border outpost on the Euphrates, and Palmyra in the eastern Syrian desert. For all of these, there are many options for obtaining information and striking visual evidence, although generally not as much as we should have via open access on the Internet.

Ai Khanum

The most accessible and well-illustrated information for Ai Khanum now may be the various catalogs printed for the traveling exhibition of treasures from the National Museum of Afghanistan which would have exposed to a huge audience for the first time what silk road experts have long known about the importance of the Bactrian "crossroads of Asia".[49] Without the tragedy of the wars in Afghanistan and the destruction inflicted by the Taliban on some of the great monuments of antiquity there, it might the cultural heritage of the region would still be little known to the general public. Of course the modern interest stimulated by the Ai Khanum section of the exhibit somewhat perversely might well parallel the response to the German Turfan expeditions at the beginning of the 20th century: the realization that one might find in far-off reaches of Asia elements of "familiar" Classical Antiquity of the West. Ai Khanum, after all, is full of such evidence: city planning, sculpture and the striking inscription quoting the Delphic oracles. The site was essentially unknown before the French excavations which extended from 1964 to 1979. To focus only on the Hellenistic legacy in the region would, of course, be hugely distorting, as other parts of that same exhibition of treasures suggested.

The Afghan treasures exhibition included sections which shed light on possible connections with nomad polities in southern Central Asia, with India and possibly even as far off as Egypt. A few finds of very early date seem to be part of an "Oxus Cultural Complex" that existed as early as the late 3rd millennium BCE. There is striking gold work excavated in 1978 at a site known as Tillya Tepe, which has been dubbed a "nomad necropolis" dating from the 1st century CE. It includes an iconic crown with dangling leaves, an elaborate inlaid pendant with a "dragon master", dozens of appliqués and bracteates, carved gemstones and much more, which connect with the larger world of the Scythians who interacted with the Greek colonies on the Black Sea and who inhabited areas as far away as the Altai mountains of southern Siberia. One of the most striking objects is a dagger with an elaborate inlaid gold handle, its form similar to that depicted on the belts of the nomads shown bringing tribute to the Achaemenid rulers of Persepolis.

One of the most revealing of the Afghan sites (still only partially excavated) is at Begram, where what may have been a storehouse of goods contained a lot of blown glass fish-shaped vessels (similar to ones found as far away as Roman Germany), glass beakers with enameled scenes out of Hellenistic or Roman art, bronze and plaster sculpture in the Roman tradition, and a great many pieces of ivory with carved relief of figures that incorporate elements of

Figure 32.6 Glass excavated at Begram, Afghanistan: enameled beaker depicting the Abduction of Europa, 1st century CE, from Site 2, Chamber 13, Inv. No. MG 21228; flask in shape of a galley, 1st century CE, Site 2, Chamber 10, Inv. No. 21840. Collection of the Musée Guimet, Paris. Photos by author.

both Western and Indian sculpture (Figure 32.6).[50] There are still questions as to how much of this material was imported from afar, or whether at least some of it could have been produced in regional workshops closer to Begram. Much more technical study will be needed to reach conclusions. Clearly though what we have at Begram is substantial evidence of cross-cultural interactions and exchange in a location that arguably was in the center of silk roads, connected not just east and west but also south and north.

Dura Europos

As an important frontier city located on a major river (the Euphrates), Dura Europos, founded by the Seleucid successors to Alexander the Great, experienced subsequent occupation by the Parthians, the Romans and the Sasanians. While the city then seems to have been abandoned, a later Muslim fortress was erected along the edge of the site. Major excavations undertaken at Dura in the 1920s and 1930s and then resumed in the 1950s recovered a huge amount of interesting material about the multicultural population. There were substantial remains attesting to the worship of local deities, a Roman shrine to Mithra, what is considered to be the earliest Christian depiction of Jesus, and the remains of a synagogue which had an extensive pictorial program, a narrative cycle based on the Old Testament. Most of the synagogue paintings are now in the National Museum in Damascus; the Christian house baptistery and a lot of Dura materials are in the Yale University Art Museum, since Yale became centrally involved in the early excavations. The published archaeological reports are extensive, and there are various, easily searchable books on Dura. Yale has created a valuable online presentation from the early

Figure 32.7 Relief sculptures from Palmyra, depicting a merchant ship and a loaded camel. Collection of the Palmyra Museum (photographed in 2010). Photos by author.

excavations (https://artgallery.yale.edu/online-feature/dura-europos-excavating-antiquity), which includes discussion of the work, an array of its photographs, and color images of the paintings done then in situ (at a time before there was much color photography). One can also find today on the Internet a good many images of the original art and objects. How one would integrate this material into a broader enquiry about the Silk Roads is, of course, a good question. But at very least there is a lot here to consider regarding multi-confessional communities, the importance of border settlements, the role of empires. Some recent collections of essays and materials can point in new directions.[51] Unfortunately, excavation at the site stopped during its occupation by the Islamic State, a time when a great deal of damage was done to the remains.

Palmyra

Like the sites in Afghanistan, Palmyra may have come first to the attention of a modern general audience only thanks to the tragedy of destruction, in this case the deliberate dynamiting of many of its historic buildings by the minions of the Islamic State and the destruction of at least some of its sculpture. Of course Palmyra has a significant place in historical memory, with the quixotic resistance by its Queen Zenobia to Roman conquest, only for her to be taken off in chains to Rome. The city was a multicultural emporium, with Greek (the language used in the territories of the Roman East) coexisting with the local Palmyrene language. Palmyra sculptures include depictions of loaded camel caravans and ships, the latter significant for the trade brought across the Syrian desert to the Euphrates, where boats then could be loaded for transport to the Persian Gulf and beyond (Figure 32.7). In the 18th century, like so many important sites in the Middle East, it was "re-discovered", the evocative engravings of its ruins by Robert Wood finding an enthusiastic audience amongst those seeking evidence of Roman civilization in far off places.[52] Palmyra has been extensively excavated, studied and important buildings "restored" only in some cases to be destroyed by the Islamic State. There is a corpus of inscriptions, and the portrait images affixed within the Palmyrene tower tombs (many of them also now destroyed) fortunately can still be viewed in a good many museum collections.[53] The inscriptions and textiles found in the tombs have been studied and published, the results, however, not likely to be readily accessible to general audiences. The textiles are of interest for what they reveal about long-distance trade including connections that reached China.

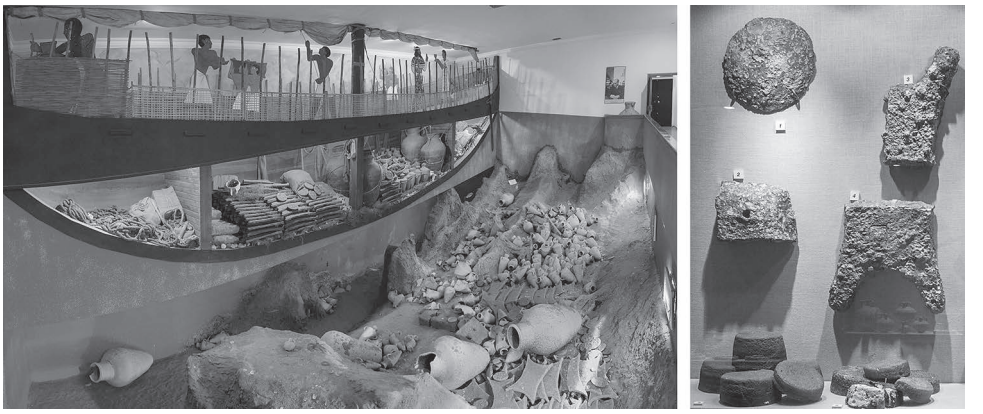

Figure 32.8 The Bronze-Age Uluburun ship: museum display/reconstruction; tin and glass ingots found in the wreck. Collection of the Museum of Underwater Archaeology, Bodrum, Turkey. Photos by author.

Overland and Maritime Connections in World of Islam

While many have been stimulated to learn about the silk roads because of an interest in the spread of Buddhism, what encouraged my interest was courses on the Islamic world. There are particularly rich possibilities for exploring the international interactions in Afro-Eurasia if we focus on the activities of Muslim merchants and examine artistic, scientific and other kinds of exchanges.

Maritime Connections and Archaeology

Silk road history is not just about overland exchange but also one in which maritime routes were extremely important starting well prior to the Common Era. Some highlights of the evidence (and more is continually being brought up from the depths) include the Uluburun Late Bronze Age ship, which sank off the coast of Anatolia on its way north with a cargo that included copper and tin ingots, ingots of blue glass, hippopotamus teeth, an Egyptian scarab (of Nefertiti) and much else (Figure 32.8).[54] Of particular interest in the cargo was the tin, which came from mines in southern Central Asia and was so valuable (for manufacturing bronze when mixed with copper) that it would be transported overland to the Mediterranean. In the Roman period, we can document the trade connecting the Red Sea and East Africa with India, where the cargoes included a lot of pepper and other spices, the sailors taking advantage of the monsoon winds to make a direct passage across the open expanses of the Indian Ocean.[55] Roman coins and remains of amphorae are abundant at sites along the Indian coast. The port of Berenike in the Red Sea has been extensively excavated, documenting the presence there of an Indian community.[56] Finds include large quantities of peppercorns from the Kerala coast, and timbers undoubtedly repurposed from derelict ships which had been constructed in India. For Chinese trade with Japan in a much later period (early 14th century), one of the most important shipwrecks to have been excavated was found near Sinan Island off the coast of Korea.[57] Not only did it contain large quantities of ceramics (especially celadons), but its cargo included as well spices that would have to have come from southeast Asia, a reminder of how important the spice trade was in our history of the silk roads.

Chinese and Islamic written sources document active maritime trade connecting southeastern China, Southeast Asia, India, the Persian Gulf and Arabia. A ship excavated underwater at Belitung off the coast of Sumatra was of particular interest for its cargo, which must have been heading to the Middle East, and for the fact it was the first discovery of a ship possibly built in the Middle East which had traveled all the way to Southeast Asia (and presumably had reached China).[58] Dated to the 9th century, the Belitung wreck has made possible the reconstruction of a replica from the remains of its hull. In the cargo was some costly Tang period metalware and thousands of Chinese ceramics, many still packed in the large ceramic shipping jars. The majority of the ceramics were from Changsha, wares that are known from excavations in the Persian Gulf (for example, at Siraf) to have been popular in the Islamic world and undoubtedly had been produced for export, judging from some of the stylized motifs inspired by Arabic script.[59]

The excavations at the port city of Siraf have yielded a lot of ceramic shards, many of the vessels of Middle Eastern origin, but enough from China to demonstrate statistically that there was a peak in the Chinese imports in the late 8th and early 9th centuries – in other words coinciding with what we can now document from the cargo of the Belitung wreck. Other finds of ceramics, including ones discovered at Samarra, which was for a time the capital of the Abbasid Caliphate in the 9th century, demonstrate that Chinese wares were already being imitated by the Middle Eastern ceramicists. What is missing from the documentation of maritime archaeology is the perishable items that would not have survived immersion in the ocean.[60] In the case of the China trade, the most important of them would have been silk, which surely was part of many cargoes. However, textiles were also imported to China, among them silks and cottons woven in India.[61]

Like the overland trade, this maritime trade between China and the Middle East did not necessarily involve long-distance direct contact. Ships from southeastern China might stop in Vietnam or Malaysia, Sri Lanka and the Indian Coast, leaving off some cargo, picking up other goods. The trade extended over many centuries, one peak being perhaps in the Song Dynasty period. Even if it diminished some in the Mongol era, it facilitated important connections between Yuan Dynasty China and the Ilkhanids in Iran. And, of course, the Muslim populations in southeastern China who had settled there on account of this trade, were involved in the huge early Ming "treasure fleets" that made it all the way to East Africa in the first third of the 15th century.

Any study of the silk roads can benefit from a close examination of ceramics traded and produced in the Islamic world, and not just at the time of the Abbasid Caliphate starting in 750 CE. One of the most widely cited examples is the "blue-and-white" porcelains produced in China and exported in large quantities as early as the 14th century, which formed the core of major collections in the Middle East and were widely imitated by ceramicists there down through the 17th century. Chinese kilns produced ceramics to order for the Islamic market, for customers in India, and with the advent of European shipping to South and East Asia, for European customers. Recent underwater archaeology has brought up cargoes containing ceramics destined for Europe which can be matched with records kept by the Dutch East India Company. Indeed, most of this later evidence now is well known but, can easily be forgotten when the history of the silk roads is artificially truncated to the end of the 15th century.

And likewise it seems to make no sense to stop a discussion of the silk trade before the "early modern" period. Even if one insists the silk roads are just about silk, any serious study has to deal not merely with imports from China but also with the emergence of the silk industry in Central and West Asia and on across the Mediterranean to the Iberian Peninsula. A good many of the silks found in Church treasuries in Europe may well have come from Islamic Spain, not from the Middle East. Silks from Persia are a quintessentially "globalizing" subject, produced and/or managed by Armenians under the Safavids, shipped to the Mughal Empire,

sent west through Anatolia to Bursa and up the Volga to Moscow, Archangel and on to Amsterdam.[62] The Dutch and English competed for the maritime trade in silk out of Persia.

I have always found the story of the Armenian merchant Hovhannes, an agent for the Armenians in New Julfa (a suburb of Isfahan), to be one of the most interesting for a study of silk road trade and travel in the late 17th century.[63] He made his way down to the Persian Gulf, embarked for India, networked his way up through the Mughal dominions, and ended up in Lhasa before heading back south again. By the time he arrived in Lhasa, he surely no longer had the goods with which he had started or the ones he had purchased on first arrival in the Mughal territories. He left New Julfa supplied with a bit of silk and contact information for obtaining funds or goods along the way, and had he made it home, he might have brought with him some Tibetan musk or gold. That he traveled so far was probably unusual, and his account book is a rare and precious resource for us to learn about products, prices and mechanisms of exchange. The Armenians, in a sense, were the Sogdians of the early modern world (and in fact important in silk road trade much earlier).

A full discussion of resources concerning this late chapter in our story and another important silk road topic which takes us beyond the conventional chronology – the relationship between Chinese visual arts and Islamic painting – must be left for another day. There are plenty of options for teaching and learning about these matters.

Silver and Coins in the West and North

The evidence about silver and coinage along the silk roads west of China deserves some attention though, since it often is well beyond the ken of silk road studies. Were one to search for a single category of object that could be of the greatest value in our object-focused approach, it might well be coins. Coinage may serve many purposes, not all of them as currency to be used in commercial exchange. In fact it is generally recognized that much of the trade along the silk roads most commonly did not involve currency but rather direct exchanges of goods, including textiles, which could have functioned in lieu of cash. At the same time, coins are hugely important for our study, since their imagery and the patterns of their emission may provide the only evidence we have regarding some rulers, their pretensions and their beliefs.[64] A case in point would be the generally well-known gold staters of the Kushan rulers and the silver drachms of the Parthians. On them we find inscriptions in various languages, images of deities of different faiths, and ruler images which convey their ethnic identity in their attire or what they hold.

My concern here is with silver objects and silver dirhams produced in the Middle East and Central Asia which have been found in significant quantities in western Siberia and northern East Europe, carried there by traders or raiders who traveled the rivers through a region of otherwise almost impenetrable forests. Some of this evidence antedates the Islamic period – striking examples of elegantly produced gilt silver plates and other vessels in the remote northern woods, some clearly of Sasanian provenance, many with Sogdian inscriptions.[65] This Middle Eastern and Central Asian silver is well known for its imagery, which includes scenes of the royal hunt, dancers, court ceremonies or animals, an art known all across Asia and found also in tombs excavated in China. What often is lost in the discussion of the objects though is any serious consideration of where they ended up, only to be rediscovered beginning in the 18th century. Often found alongside them are equally impressive items of Byzantine metalwork and coinage, either of Middle Eastern or of Byzantine origin. While unfortunately we have no written sources that provide details of how these objects arrived, it is reasonable to suppose they were exchanged for the valuable forest products, in the first instance furs, but at various times also slaves, neither of which leave traces in the material record.

Figure 32.9 Silver from the Spillings Hoard and from Birka. The Spillings Hoard included bundles of silver bracelets; its coins are silver dirhams minted in the Islamic world mainly in the 8th–9th centuries. However, some are late Sasanian or Arab-Sasanian issues, as one can see in the center of the image of dirhams found at Birka, the coin there with an attached loop so it could be displayed as jewelry. Collections of the Gotland and Birka Museums. Photos by author.

While the silver dishes are relatively rare, the coins have been found in massive quantities. The Arab conquerors in the Middle East initially issued silver coinage in the 7th century CE that copied the silver drachms of the last Sasanian rulers but for the addition of a small Arabic inscription. It was common in other areas in the early period of Islamic rule to copy or adapt the existing local coinage. However, monetary reforms at the end of the 7th century led to the issuing of purely Islamic coinage, which with rare exceptions replaced any imagery with Arabic script text. The texts identified the issuers, dates and place of minting and included as well Quranic invocations. Such coins then were exported in huge numbers in various directions, some found along routes to the East, and hundreds of thousands at locations along the river routes connecting the Caspian and Black Seas in the South with the Baltic in the North.[66] Significant hoards of the coins are also found in parts of Scandinavia. Most of this coinage dates between the 8th and 10th centuries. The changing patterns of deposition of the finds over time can be used to document the chronology of the changes in the routes which in some cases then can be correlated with other evidence about political alignments and realignments. The coins provide evidence concerning the Khazars, who controlled the lower Volga River and northern Caucasus; carriers of the coins certainly included the Vikings or those operating under their aegis.

For a closer look at the coin finds, we can focus on two examples, one involving the Island of Gotland in the Baltic, the other Birka, west of today's Stockholm in Sweden. Gotland was a major center of Viking activity, conveniently situated for ships headed off to the trade routes down along the rivers of Eastern Europe. Later, in the era of the Hanseatic League, Gotland's largest town Visby was a flourishing commercial center. The largest Viking-era hoard of silver ever found was discovered in 1999 at the Spillings farm on Gotland (Figure 32.9).[67] There were 67 kg of silver (and another 20 kg of bronze objects). The silver included some 14,300 coins, most of them Arab dirhams, the latest date on which was 870/871 CE, thus providing a *terminus post quem* for the deposit. Many of the coins had been cut or chopped, and in addition there were a lot of silver bracelets and other silver scrap, reinforcing the impression that what counted here was the intrinsic value of the silver itself. That is, the coins of themselves did not serve as currency, but had value when their probity was confirmed and they were weighed. That kind of approach to the use of precious metals

along the trade routes was not unique: even the Uluburun ship of the Late Bronze Age had a collection of precious metal scrap. The Spillings Hoard coins came from all over the Islamic world (there even are a few pre-Islamic Sasanian issues too), which may attest to the wide-ranging exchange in it, though not necessarily Viking involvement everywhere. The coins could have been obtained by Viking traders in locations in the Caucasus or northern Iran, or in Baghdad itself, which we know they visited.

The Spillings Hoard included some rare coins attesting to cross-cultural fusion. The Turkic Khazars on the lower Volga had converted to Judaism (probably because some of their main trading partners were Jewish merchants on the routes that extended all the way to Spain). So we find a few imitation Arab dirhams in the hoard, where Moses has replaced Mohammed in the standard invocation to God and His prophet.[68] After all, in many cultures coins included expressions or symbols indicating religious affiliation of their issuers.

Another of the important Viking centers was at Birka on the Island of Björkö in Lake Mälaren, which, before the rise of the land in the post-glacial period in Sweden, could be approached by water from the Baltic. There has been a great deal of excavation at Birka, making it possible to reconstruct Viking houses, inventory burials, and obtain evidence about the "global" reach of the Vikings, something which is attested as well in runic inscriptions on stones erected in southern Sweden, Gotland, and at other locations in northern Europe. The Birka finds include Arab dirhams, some of them, as on Gotland, pierced so they could be attached to jewelry or sewn for decoration onto a garment. Wearing one's wealth in this way is common to many societies. The Birka (and other Viking graves) have also yielded silk, generally not large pieces of it, but rather small strips or irregular cuttings which then probably were sewn as decoration onto garments.[69] Many of these may have been woven locally, but some are intact pieces that must have been imported either from the Byzantine world or all the way from China. When we think of the silk trade, as evidence from other locations also tells us, we find that it was not necessarily whole bolts of cloth that were exchanged or gifted, but smaller pieces. This seems to have been the case in Xiongnu territory and in the areas controlled by the Alans in the Caucasus in the early Middle Ages (in particular, the burial site at Moshchevaia Balka). The Birka finds also include imported beads (another of the objects of trade along the Silk Roads) and some exotic spices which must have come ultimately from India or Southeast Asia.

New Directions

In short, if we want to write (perhaps better, rewrite) the history of the silk roads, we might be forced to look for a different descriptive title. Some have suggested "spice road"; others "bead road"; or we could easily write the history of Eurasian exchange as the history of the "glass road". Probably none of these would be a better choice. In conclusion then I wish to explore some of the existing models for how it might be possible to encompass much more than silk to support an interdisciplinary approach to our subject.

Databases: The IDP

Everyone who has worked on the silk roads presumably is familiar with the International Dunhuang Project (http://idp.bl.uk/), which reached its present impressive state under the inspired leadership of its now former director, Susan Whitfield. The quick summary of what it is all about is stated at the top of the opening page of the website:

> IDP is a ground-breaking international collaboration to make information and images of all manuscripts, paintings, textiles and artefacts from Dunhuang and archaeological sites of the Eastern Silk Road freely available on the Internet and to encourage their use through educational and research programmes.

While it is hardly necessary to introduce the IDP here, a discussion of it does touch on a range of issues relevant to my chapter.

As my earlier discussion of the Berlin materials and subsequent sections of this chapter make clear, one of the challenges of studying the silk roads is the unevenness of accessibility to collections, be they manuscripts, paintings or other "art objects", objects of daily life, and so on. The IDP is important for establishing a standard for international and multi-institutional collaboration which merits emulation if we might ever hope to provide full and open access to historic collections and to the most current research. For accessibility, mirror versions of its website are available in several of the important languages for silk road study. The more than half a million digitized images in the IDP database naturally start with the Aurel Stein collections in the UK, but include even more images from China, a major portion of the Pelliot expedition materials housed in France, and sizeable collections of material from Russian and Japanese collections. Already the Berlin Turfan manuscripts may be accessed via the IDP website. Furthermore, where there are published catalog descriptions of manuscripts or art, the IDP has been digitizing those. Thus, if one finds an object on the IDP website, it may be possible to find as well an informative descriptive caption. An example would the Roderick Whitfield's three-volume catalog of the Stein collections in the British Museum (Whitfield 1982–1985). Locating, say, a high-quality digital image of one of the banners from Mogao Cave 17 in the IDP database, one can then link to Whitfield's analytical description.

Apart from the objects and manuscripts in the database, the IDP has included images of Stein's photographs, identified from the catalogs of them compiled by John Falconer and Lilla Russell-Smith. Dazzled as many are by the riches of the manuscripts and paintings from along the silk roads, it can be easy to forget the photographic legacy of the early explorers and excavators. Stein left behind a huge amount of valuable photo documentation, some of which has been matched by recent photos take from the same vantage points by IDP to illustrate how sites may have changed since Stein was there. Among the very valuable features of the IDP are the "Brief Descriptions of Archaeological Sites", each of which may include a map and a selection of photographs.

In 2004, the British Library hosted one of the most ambitious silk road exhibitions ever mounted anywhere. Its catalog (*Silk Road* 2004), edited by Susan Whitfield and Ursula Sims-Williams, will continue to be a valuable resource for its breadth of coverage. The main sections are organized around locations (Samarkand, Khotan, Kroraina, Miran, Dunhuang, and Gaochang), and there are several stimulating essays by noted specialists. One can learn about money on the silk roads, early exhibitions of the Stein finds, life at Dunhuang, Tibetan culture at Dunhuang, sea charts and star maps, and much more. Images of objects (the majority from the Stein collections, but many others as well) are complemented by Stein's maps of sites, historic photos and modern photos of some of the Buddhist cave interiors. Since it is so easy to get lost just by searching in the complete IDP database, the fact that so many key objects from it are in the catalog with descriptive captioning means that the reader has a guide through the maze, organized into a number of sensible groupings. The IDP website retains a condensed introduction to the exhibition under those rubrics, with a small selection of the same images.

Impressive as the accomplishments to date are in the IDP, the goal in creating it had always been to do much more. There is a still very modest section of translations, even though each manuscript image is accompanied by a box where a translation could be added. There are still relatively few "educational" web pages, even though there has always been the goal of making the material accessible to as broad an audience as possible and not have it just be a massive database of use mainly to scholars. At the time Susan Whitfield stepped down, progress was well along on redesigning the whole website to make it more user-friendly. In its current form, for example, even though there are several different ways to search for, say, a manuscript, some of the operations are less than intuitive. One of the lessons of the IDP for any attempt to create and maintain a widely ranging cross-institutional Internet resource is that it all takes a huge amount of time, staff and institutional or other financial support. A lot of what IDP accomplished was thanks to outside grants, and some of the questions about its continuation are contingent on decisions regarding institutional support from the British Library.

The Metropolitan Museum's Presence on the Internet

If the IDP could serve as a model for inter-institutional initiatives on a large scale, the Metropolitan Museum of Art in New York could serve as a model for what might be achieved in a single institution whose mission is to collect, preserve, and make available to the public works of "art". The Met is distinctive, of course, in the scope of its collections, resources, and ambitions. Few other museums in the world occupy the same high ground in this respect. It is natural then that exhibitions and writing on the silk roads often will turn to the Met's collections, which contain some of the really iconic examples of relevant art, iconic perhaps in part precisely because the Met has them. Here we might keep in mind that both the Met and other museums periodically will issue volumes highlighting the "masterpieces" they contain, even if the definition of what constitutes a "masterpiece" might well be queried. The Met has such a volume for its Islamic collection, which will be my focus here, and likewise the Louvre has produced a "masterpieces" book in conjunction with the remounting of its Islamic galleries.[70] The publication of such collection highlights or exhibit catalogs (whether in print form or on the Internet) naturally raises questions about audience and purpose. I look at such material generally with the eye of the learner, with a focus on selection, intelligibility, contextualization and related matters. Naturally I bring to this effort background which most other learners may not have. The books can serve as a resource for those who cannot visit the collections, but they may also serve to complement and reinforce what one sees in the museum. A well-designed website can guide the learner and provide a lot of the information needed to appreciate any given object beyond just the visual stimulation of seeing it.[71]

The Met has been a pioneer in many ways with its website. At least some years ago, I have been told, the curators would have regular weekly meetings to discuss it and the incredibly valuable Heilbrunn Timeline of Art History, which, in the words of the website (www.metmuseum.org/toah/about/) "presents a thematic, chronological, and geographical exploration of global art history through The Met collection. [. . .] [T]he digital publication is a reference, research, and teaching tool conceived for students and scholars of art history". Here one can find hundreds of essays from the specific to the general, each of which then contains links to essays on related matters, chronologies, maps, and to a selection of high quality images of individual works, for each of which there is additional information and the possibility of seeing related works. In some cases, one can hear a curator discussing the particular work. Where the work has been included in one of the Met's special exhibitions, one can read the catalog entry or follow a link to download free a pdf of the entire book. This is truly an encyclopedia

of world art, one that takes advantage of the technology to point the user in possible paths that in hard-copy print might not be so easily followed. By looking at the several linked essays for any given object, the learner can acquire multiple perspectives for contextualization and understanding. For current and upcoming special exhibitions, there are separate pages, with links to the items that will be included.

What I have not found (is it there somewhere?) in the current incarnation of the website is gallery walk-through pages (this is where immersive 3-D technology could be used), which might let one see how the various works are positioned vis-à-vis one another. There are at least some links to images on web pages of other museums for objects that really are important to illustrate something which the Met cannot do from its own resources (see for example, from the page for "Takht-i Sulaiman and Tilework in the Ilkhanid Period", www.metmuseum.org/toah/hd/khan7/hd_khan7.htm). Obviously there is a lot more though that could be done in this regard. One of my concerns when I reviewed the Met's masterpieces catalog was the absence of contextualization with, say, images of the architectural setting in which something like a tile would have been placed. The current offering is mixed in this regard, with some of the few architecture pictures (e.g. for Timurids; see www.metmuseum.org/toah/hd/timu/hd_timu.htm) not really the best ones to illustrate a point, and others which could have been very effective not exploited to their full benefit (the wonderful ceiling of the tomb chamber at Natanz, which could have illustrated what *muqarnas* is to supplement the discussion of the Samarqand tile – see below[72]). This issue highlights a challenge presented by any "art object" focus, since the objects as now presented in collections or exhibitions are far removed from the contexts in which they were created and originally kept. Too often, of course, there simply is no documentation about archaeological context or provenance, which has then to be inferred by art historical or technical analysis.

To take an example, an incised "tile from a squinch" considered to be from Samarqand from the second half of the 14th century (Acc. No. 20.120.189) (www.metmuseum.org/art/collection/search/447256) was included in the Met "masterpieces" book and on the website is indicated as being "similar to tiles used at the Shah-i Zinda funerary complex in Samarqand". Here then is a perfect opportunity for the museum to have shown how it would have fitted *in situ* on one of the buildings of the Shah-i Zinda, where some of the original *muqarnas* tiles are still extant. And beyond that, while the description gives us a definition of what a *muqarnas* is (a kind of "honeycomb" decorative vaulting), I do not see any effort to illustrate or analyze this ubiquitous element of Islamic architecture.

As an experiment, I searched to see if I could find something to illustrate one or another of the interesting "desert palaces" referred to on the page for "The Art of the Umayyad Period (661–750)" (www.metmuseum.org/toah/hd/umay/hd_umay.htm). The essay properly lists them as examples of secular buildings, but with no links or illustrations. This, of course, then reminds us how even an encyclopedic collection such as the Met's cannot expect to have everything; to illustrate the "desert palaces" would have required links to some other resource elsewhere. Were I to choose a "monument of architecture" as one of my objects for discussing broad topics about cultural interaction along the Silk Roads, I might well choose the Umayyad "bathhouse" of Qusayr 'Amra in Jordan, situated as it is somewhere between the Classical world of Late Antiquity and the Sasanian world and incorporating so much imagery that would be off limits for Islamic art connected with religious buildings (Figure 32.10). However, for Qusayr 'Amra, the visitor to the Met will draw a blank. Short of one mural fragment in Berlin, to see it might require going to the Jordanian desert or looking at the now extensive collections of photographs archived at several Internet sites.[73]

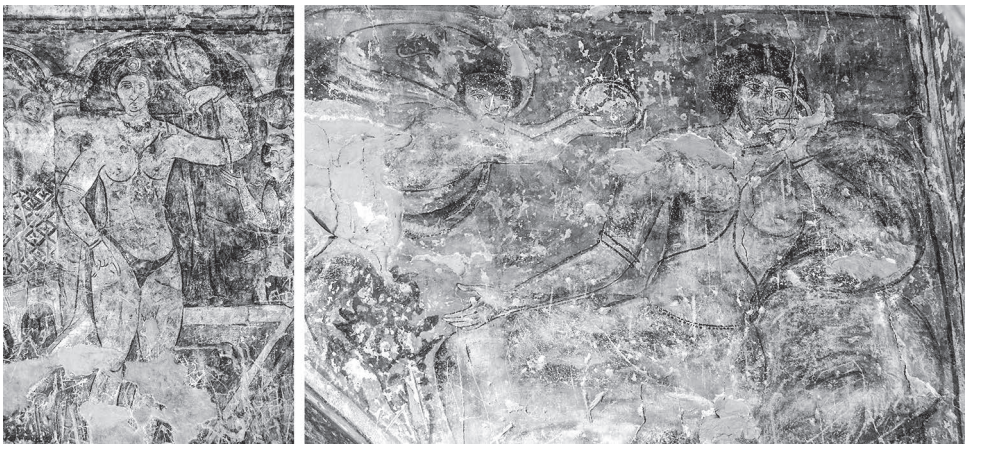

Figure 32.10 Murals in the Umayyad (8th-century CE) bathhouse at Qusayr ʻAmra, Jordan. The semi-nude bather on the left is on a wall with hunting scenes and images possibly of the rulers of contemporary Middle Eastern polities. The figure on the right draws on Hellenistic or Roman models. Photos by author.

The Sogdians at the Freer/Sackler

The structure of the Met's website, of course, allows for infinite possibilities, as it challenges the user by tempting him or her to stray from the original path. I suppose I suffer from instinctively wanting to be able to move in a logical and structured direction, even though not only the nature of the subject mitigates against that, but so also do the means through which nowadays we can hope to have maximum exposure to information. The only solution is to return again and again, follow some of the same paths and also explore new ones. However, there is a model for a narrower and thus more focused presentation using the latest technology, which points the way to a possible future for how we might study and illuminate the history of the silk roads.

It is the new exhibition about the Sogdians on the Smthsonian's Freer/Sackler website, which has to be viewed to be fully appreciated (https://sogdians.si.edu/). This is a cutting-edge venture into the use of the Internet to mount a serious exhibition only online, where the technology then permits the incorporation of material from collections (including permanent installations) from far off places. The Sogdians, of course, are at the heart of the history of the silk roads, the quintessential merchant-entrepreneurs, who traveled and settled widely and played a key role in commercial and cultural exchange across Asia for centuries, even if their homeland in southern Central Asia was never a major political power. By focusing on the Sogdians, the exhibition has a thematic core which then may make it possible to entice viewers into different sub-topics but not deprive them of the ability to find their way back to a starting point. There are several thematic foci, starting with "The Sogdians at Home (Art and Material Culture)" proceeding through sections on religion, their lives and deaths in China, their other widely ranging travels and activity, and ending with their modern rediscovery, in part using new technology. Here for the first time, one can explore in some detail through the Internet the important paintings from the Sogdian sites at Afrasiab, Panjikent, and Varaksha, which are kept as permanent displays in Russian and Central Asian museums. The carefully written essays are illustrated by equally carefully selected objects, some of which can be viewed from

all sides by 3-D technology. There are maps, drawings, reconstructions, photographs from archaeological excavation. A number of distinguished experts on the material discuss it in short videos. No book on the Sogdians and certainly no other museum presentation relating to them can equal the richness of what is here, which offers the kind of contextualization that is missing in much of what even the best museums conventionally offer. Would that this be but one chapter in a similarly constructed encyclopedic Internet-based version of the silk roads. As Lilla Russell-Smith (2020: 167), curator of the Berlin Turfan collection, writes in her laudatory review of the exhibition:

> This project has set a new standard in digital formats. [. . .] I hope other museums will also host similar detailed websites or digital exhibitions in the future. [. . .] It shows institutions how, during the current pandemic, new ways can be found for hosting information.

Back to the World of Print

The most recent large and sweeping print treatment of the silk roads is a book to which I contributed and thus perhaps cannot objectively discuss. It is Susan Whitfield's latest contribution (Whitfield 2019) to broadening our understanding of the silk roads, a lavishly illustrated volume which she orchestrated by bringing together a large number of contributors to write short essays, make suggestions about images, and help with some of the captioning. While it could be mistaken for a "coffee-table" book on account of its visual qualities, it is far more than just something to admire while relaxing in front of the fire. The concept is to organize the material (granted, very loosely) around landscapes and ecologies of the silk roads. So we have the steppe, mountains and highlands, deserts and oases, rivers and plains, and lastly seas and skies.[74] Within each section, it is sometimes surprising what turns up or might be expected to do so, only to discover with the good cross-referencing that it is to be found somewhere later in the book. The choice of images and objects includes the familiar: Yingpan Man, Li Xian's ewer, the inlaid lute from the Shosoin, the exquisite Manichaean manuscript fragment from Turfan and much more. But there is also the less familiar: the Spillings Hoard makes a cameo appearance, there is a 14th-century Muslim merchant's tombstone from Gujarat, and we see worship in a Zoroastrian cave shrine near Yazd. To see important buildings or sites in their larger geographical settings provides a sense of place often lacking if we focus on details: witness the distant view from above of the Tash Rabat caravanserai in the mountains of southern Kyrgyzstan or the photo taken on the edge of the Dura Europos ruins looking down the Euphrates. One of the most evocative images in the book looks shows a man descending a precarious path above a rocky gorge in Afghanistan, a large block of lapis lazuli from the remote mines there strapped to his back, this to introduce images illustrating how important that precious stone was in the history of Eurasian art and exchange.

To emphasize the geographical contexts as the book does is laudatory but challenging. And the reader quickly discovers that in some ways the presentation resembles what one encounters on the web pages of the Metropolitan Museum or (less so) the Sogdian exhibition of the Freer/Sackler. There are many paths, leading in many different directions, which may or may not suggest further connections worth pursuing. The reader can keep coming back to find something different by going down a different path. And, if searching for The Silk Road, she or he may conclude there is no *there* there: it is but a will-o'-the-wisp which can never quite be captured, a mirage on a never-ending horizon flickering in the desert heat.

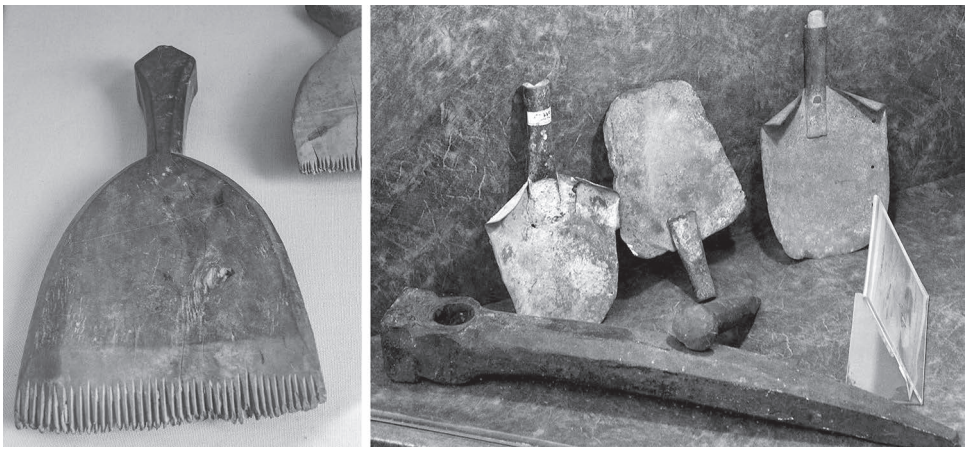

Figure 32.11 Artifacts of daily life: (a) a weaver's comb, obtained near Khotan in the early 1920s by Sir. Clarmont Skrine, Collection of the British Museum; (b) tools used by the workmen who kept the underground water channels (*karez*) free of debris in Iran, Collection of the Water Museum, Yazd, Iran. Photos by author.

Epilogue

I have been searching for The Silk Road for some time now with the expectation I might eventually find it. To a considerable degree my stimulation has come from looking at objects, most of which were produced by or for elites: the buildings they erected, the brocades they wore, the glazed ceramics on which they were served their food, the statuettes and other accoutrements placed in their tombs to accompany them in the afterlife, the manuscripts they read or which were recited, the images they worshipped. . . . Is this kind of evidence enough for us to understand what really went on in the lives of those who inhabited the landscapes and towns across Afro-Eurasia in pre-modern times? True, we have plenty of objects from the daily lives of ordinary people, but we normally do not choose them to illustrate an object-oriented narrative (Figure 32.11). The more the pity, since a weaver's comb or the spade used by the man whose responsibility it was to clear sediment from a *karez* arguably are more emblematic of life on the Silk Roads than any number of silks decorated with pearl roundels. But who is going to be carrying the comb or shovel on a caravan passing through the Hexi Corridor into the Western Regions? Life along the silk roads involved in the first instance the ordinary and the local, not the drama and romance of long-distance travel, the gifting of costly wares, or the translation of complex religious texts written in strange languages and scripts. A lot of ordinary people were responsible for producing the objects we so admire and choose to illustrate our books, but unless we have some document, it is almost impossible to get to know the makers or the facilitators who worked behind the scenes. Would that we had more letters like those of Mīwnāy, the Sogdian wife who was stranded and destitute in Dunhuang or that we could learn something about the slave girl from Samarkand sold to a Chinese monk for 120 silver coins in 639 in Turfan.

When I was in Kashgar in 1995, visiting the famous bazaar in the days before it had been sanitized and moved into permanent quarters in the name of modernization, I had a brief glimpse of what I like to think the "real" silk road might have been (see my photo essay, Waugh 2020). At the entrance to the bazaar was an open area where those who came into

town on their donkey carts could park them. At some later point in my own wandering, I came across a barber working in the open air on a customer, and discovered on returning home and developing my photos an uncanny resemblance to a barber and customer drawn by the Swedish explorer Sven Hedin when he was there over a century earlier. Vegetables were being weighed on simple balance beam scales. Spices and grains were arrayed for inspection in bags spread out on the ground. Big blocks of ice, presumably cut from the glaciers of the Pamirs, were waiting on the back of donkey carts for purchasers. The bazaar had no directional signs: it was there for locals who would know their way around and, unlike the outsider, would not lose their way. As seen through the lens of my Eurocentric biases and imagination, this all evoked a distant past that I could never know, even after I embarked on teaching The Silk Road a few years later. At very least, I was seeing a Kashgar that today, two decades later, can hardly be found.

One member of our group decided that the most insightful way to learn about the bazaar was to follow quietly behind one of the local farmers who had probably walked some distance in from the countryside to sell two sheep and use the proceeds to buy something to take home. The sheep seller wandered with his animals through the milling crowds, stopping now and then to examine some ware, ask a price, perhaps chat with an acquaintance and exchange some local gossip. By the time he arrived at the animal sales area of the bazaar, where sheep and other animals were tied in rows for inspection by buyers, he probably had a fair idea of what he might purchase to carry on the long walk back out of town and how much he might venture to offer for it. Well, this story has no end, for our time was up and our bus was waiting, even though the bazaar was still proceeding in the rhythms of local time. We were left to imagine how he bargained for what he bought and carried home. Perhaps like Hedin's barber, our sheep seller had been reincarnated from an earlier era when for most people the boundaries of community and family were what determined the patterns of life. This is The Silk Road of my imagination which I may never be able to grasp fully or explain to those who would wish to know.

Notes

1 In the years leading up to my retirement in 2006, I taught a survey of silk road history and related courses, including ones on the Mongol Empire. Outside of the university classroom, I have given presentations in conjunction with silk road related programs for several art museums. The educational website "Silk Road Seattle" (http://depts.washington.edu/silkroad) developed out of this activity (see below for specific references). To complement my interest in Central Asia and the Islamic world developed first in graduate school, I participated in summer institutes at the Mogao Caves at Dunhuang and in archaeological excavations of Xiongnu-era tombs in Mongolia. I have also been fortunate to travel and photograph over much of the Afro-Eurasian territory encompassing the silk roads, most recently for a Yale University project in Tibet. My responsibilities from 2003–2017 as sole editor of *The Silk Road*, now a substantial annual, included reviewing a wide range of publications and museum collections. A number of the articles in the journal, now edited by Justin Jacobs, will be cited below. All of the issues (or the individual articles) are open access: https://edspace.american.edu/silkroadjournal/issues/.

Note: unless otherwise indicated, the online resources cited in this article have last been accessed in January 2022, and English versions of websites have been prioritized over the same material in other languages. Readers should be aware that by the time this article is printed, some of the observations about online resources may need to be revised.

2 See Waugh 2007. However, now there is evidence that the term "Silk Road" had been used by others prior to Richthofen. See Mertens 2019.

3 See, for example Pogrebin 2019 for some of the new directions at the Metropolitan Museum of Art in New York.

4 I share many of the concerns about the Islamic gallery, though it has features that represent a considerable improvement over the old displays. For the museum's online presentation of the collection go to https://islamicworld.britishmuseum.org/?_gl=1*4hv1vy*_ga*NTU3MjUzNjM2LjE2NDMyMjQxMTY.*_ga_08TLB9R8X1*MTY0MzIyNDExNS4xLjEuMTY0MzIyNDEyMS4w. The web page has links to a range of supporting materials, including educational videos (with, e.g., traditional music, pottery making, and at least a few with historical contextualization for objects). There are links to the collections database for *all* the objects in each display case, with good color photos and at least basic descriptive data.

5 See, e.g., Benjamin 2018: 14, who writes of first and second silk road eras with a "decline in levels of transregional trade and cultural exchange" from the mid-3rd century CE to ca. 600 CE, the second era then ending ca. 1000 CE.

6 Inspiration for rethinking the starting point for the silk roads, even if silk may not have been the focus of the long-distance exchange, can be found in the important book by archaeologist Toby C. Wilkinson 2014 (see my review, Waugh 2014b), and in the magnificent Metropolitan Museum exhibition, *Beyond Babylon* 2008. Most of Wilkinson's book, including his imaginative maps, is accessible online via his website (https://tobywilkinson.co.uk/publications). The Met catalog and most of its others cited below are available to read online or download in pdf for free via: www.metmuseum.org/art/metpublications/titles-with-full-text-online?searchtype=F. Enter the title in the search box. Otherwise, one finds on the website page for past exhibitions only ten of the Beyond Babylon objects (www.metmuseum.org/exhibitions/listings/2008/beyond-babylon). A recent collection of essays (*Cultures* 2019) includes a number of accessible surveys of important work that is rewriting what we might call the prehistory of the Silk Roads in Xinjiang.

7 The respected historian Rong Xinjiang (2015) forcefully emphasizes the primacy of silk, as opposed to other objects which are increasingly getting attention, but his focus is on East Asia and Xinjiang. As much as anything, he seems to be responding to the skepticism expressed in the revisionist account by Valerie Hansen (2017; first edition published in 2012) about the scale of trade along the silk roads.

8 For contextualization, a critical consideration is whether the objects come from well-documented archaeological contexts. Many of the familiar objects lack any such documentation of provenance. The most valuable exhibition catalogs are often the ones that contain archaeologically documented items. Some (e.g., *Ursprünge* 2007) have organized them specifically by archaeological site, which thus enables one to connect the objects with a particular region and see them in context with other material obtained there.

9 For a somewhat heretical suggestion for dealing with the real challenge presented to museums which display overly popular works of art, see Farago 2019, the subject here specifically the Mona Lisa. While in part responding to the new challenges posed by managing museum crowding in the time of the COVID-19 pandemic, the Louvre has reconfigured how visitors will be able to view the Mona Lisa. See Nayeri 2020, reporting an interview with the museum's director.

10 This chapter was drafted prior to the outbreak of the COVID-19 pandemic, which has had a major impact on thinking about online resources and learning and is forcing museums to introduce measures that may limit attendance. However, a quick survey of some of the major museum websites discussed here suggests that so far little has changed with regard to digitization and the creation of tools for online learning. Some museums have added features such as "conversations with curators", where the focus may, of course, not cover objects related to the silk roads. The closure of museums and the financial impact on their ability to maintain staffing undoubtedly are an obstacle to undertaking more complicated projects. In educational institutions, of necessity there has been a substantial effort to employ distance technology in the absence of face-to-face instruction. However, to explore what that may mean for digitally enabled learning relating to the silk roads would require a separate chapter. Obviously there is already a great deal of potentially valuable educational video which would need to be systematized but may be limited in access to those who do not command the relevant languages. For example, Jens Østergaard Petersen has tabulated links to documentaries and lecture series on early China (in Chinese) (https://zhong-mishu.s3-eu-west-1.amazonaws.com/videos-on-early-China.html, last updated in spring 2020). There also are various Chinese museums which have used 3-D panoramic technology to provide a vivid, if perhaps superficial, visual introduction to what they display. I have not attempted to critique them for this chapter. Links may be found at www.ncha.gov.cn/art/2020/2/1/art_722_158567.html?fbclid=IwAR0lZ9zp9ssoNhN9GHXzyf8-y6M6IQc6XecZ9Na1Pz3WKWcSC3UgQRZ3AqY.

I am indebted to Keith Knapp's "China Roundtable" postings of March 25 and 27, 2020, for this information.

11 An excellent example is the exhibition curated by Rachel Ward at the Courtauld Gallery in London to contextualize a single object, an exquisite inlaid Ilkhanid-era "bag". See *Court and Craft 2014* (reviewed by me in *The Silk Road* 12 (2014): 169–171).

12 When the Seattle Asian Art Museum reopened recently following extensive renovations, the curators redesigned displays to break down traditional geographic or "civilizational" classifications (Chinese, Japanese, etc.) in favor of transnational thematic or functional ones. For the museum's explanation of this new approach, see http://inspire.site.seattleartmuseum.org/.

13 On the history of the expeditions, see the recent book by Dreyer 2015. The most significant expedition reports may be accessed online via the National Institute of Informatics – Digital Silk Road Project. Digital Archive of Toyo Bunko Rare Books (http://dsr.nii.ac.jp/toyobunko/).

14 The catalog for the Hermitage special exhibition of Buddhist art from Central Asia, much of it collected by Russian expeditions, is *Peshchery* 2008. On the remounted Central Asian galleries, see the illustrated overview by curator Julia Elikhina (2013). The Hermitage collections include the trove of thangkas and other artefacts brought back from Khara-Khoto by the expedition of Petr Kozlov in 1909, the paintings regularly exhibited and cited in work on Tibetan art. For the Khara-Khoto collection, see *Lost Empire* 1993 (exhibition held in Lugano); Samosiuk 2006, written by the collection's curator. Khara-Khoto material formed part of an exhibition mounted in several incarnations between 1991 and 1997, whose catalog (Rhie and Thurman 1996) is still an incredibly valuable resource for appreciation of Tibetan Buddhist art. The Hermitage Museum's collections database now includes many of the Khara-Khoto finds (see n. 31).

15 On the plans for the new mounting of the collection, see the article by its curator, Lilla Russell-Smith 2015. I am grateful to her for the opportunity to view the portions of the Turfan collection which were not at the time on public display in the museum. The new Asian Art galleries opened in September 2021. So far the museum website introduces them as part of what can charitably be termed a promotional video (www.humboldtforum.org/en/programm/digitales-angebot/digital-en/tour-of-the-new-presentation-of-the-collections-32834/), starting with the ethnographic collections, whose main emphasis is on the museum effort to apologize for the colonialist history of the German collections. The camera pans the galleries with but a very small view of the Turfan displays, where the familiar objects and some not previously displayed are presented in a kind of brutalist modern architectural setting. There is as yet (January 2022) no substantive material about the collection on the museum website; however, see n. 16 below.

16 In the collection database (Staatliche Museen zu Berlin: Preußischer Kulturbesitz: www.smb-digital.de/eMuseumPlus), under the heading for the Museum für Asiatische Kunst, choose "Süd-, Südost- und Zentralasien". The Turfan material is interfiled with a much more substantial selection of objects from the excellent Berlin collection of early sculpture from India. There are separate headings and links for the East Asian collections, the Byzantine and the ancient Near East museums. The images are professional studio-quality, but somewhat small if one wishes to examine details; they may be shared under Creative Commons license for non-commercial purposes. The collections pages for the Museum of Islamic Art contain over 11,000 items, with at least short descriptive paragraphs (in German) to accompany the images and basic data. A highlight of the collection is the early Islamic stucco panels excavated in the early 20th century at Samarra by Ernst Herzfeld. Classification of the several decorative styles of these panels had a major impact on analysis of early Islamic arts. Another section of the database of great importance for silk road studies covers the vast Berlin Numismatic Collection (Münzkabinett). The Berlin museums are now collaborating with "Google Arts & Culture" (www.smb.museum/ueber-uns/google-arts-culture/), where under the "Pergamonmuseum" one can already see some 3-D gallery views and zoom in on a selection of individual objects. A highlight is the stunning visual presentation with captioning showing the sculptures of the famous Pergamon Altar (https://artsandculture.google.com/exhibit/short-visit-pergamon-altar/pgLyQpMO5o3nKw?hl=en). While the focus there is on the ancient Near East (arguably a very important part of silk road history), the web pages include as well a great many objects from the Berlin Islamic collections. The images on the Google pages are larger and of better quality than many in the museum collections database, and for each object there is a substantial analytical discussion. This part of the Berlin museums' offerings on the Internet points the way to bright future for digital access.

17 In particular, note Zsuzsanna Gulácsi 2018. Gulácsi has now done the fundamental study of the Berlin Manichaean manuscript fragments as well. A huge amount has been written on the German

Turfan collections, starting with the publication of expedition reports and some popularizations based on them. The manuscript fragments are available in an online database (http://turfan.bbaw.de/dta-i-en). As a recent project focusing on Gaochang illustrates, there is much yet to be learned (Russell-Smith and Konczak-Nagel 2016, reviewed by me in *The Silk Road* 15 [2017]: 167–170). Among the exhibitions which borrowed from the Berlin collection was the absolutely stunning *In the Footsteps* 1998. A good many of the Turfan mural fragments were included, among them as Cat. No. 73, MIK III.8383, and Cat. No. 75, MIK III.6876b.

18 To reconstruct in museum space an entire room from a temple or other structure is certainly not a new idea. Both the Metropolitan Museum (at the Cloisters) and the Philadelphia Museum of Art have such exhibits. For those interested in Islamic interiors, the Museum of Asian Art in Berlin has its Aleppo Room, the inlaid and painted interior from an early 17th-century private house (granted, somewhat difficult to see well behind glass through a single doorway). The National Museum in Damascus has an even more fully preserved interior that includes floor and ceilings, as well as the inlaid paneling on the walls. Visitors may enter the room. Where textiles were an important part of interior décor, as was certainly the case in the Islamic world, such installations may fall short of really recreating the "original" space.

19 The Getty produced a superb catalog for contextualizing the material (Agnew, Reed and Ball 2016; see my review in *The Silk Road* 14 (2016), esp. pp. 242–246), and has kept on its website (www.getty.edu/research/exhibitions_events/exhibitions/cave_temples_dunhuang/gallery.html) a range of informative videos and images, including links to interactive virtual tours of three caves and a video showing the careful process of producing the replica caves. The Dunhuang Academy (www.dha.ac.cn/) has made rapid progress in adding valuable digital resources. It now provides panoramic tours of 30 caves (www.e-dunhuang.com/) with the option (if one registers and logs in) of being able to see high resolution images of all the key parts of the murals. The descriptive material is available in good English. Included in the selection is the 6th-century Cave 285, with its remarkable visual evidence of cross-cultural fusion. Also of interest are links on the website to exhibition highlights, among them the Tibetan sculptures which were deposited in the Mogao Caves museum. There are still some glitches on the website, with links that do not work, and a need for captioning.

20 It is important to distinguish between such "virtual tours" and the kind of "virtual reality" experience now increasingly finding adherents, where three-dimensional space can be viewed and reimagined with a special headset in ways that may be hugely stimulating but also may be far removed from reality.

21 As one can see from a video made on his arrival at the Bowers Museum in Santa Ana, his experience of modern travel was substantially different from that which he must have had in life (www.youtube.com/watch?v=Odol2obxGUw). There are a lot of decent images of him and details of his attire that come up with an Internet search. However, as is the case with many of the important museums in China, one looks in vain for information on the Internet from the Urumqi museum itself. For catalog entries about Yingpan Man, see *Secrets* 2010: 54–57, 194–195; *Ursprünge* 2007: 260; *Route* 2009: 144–147; *Silks* 2015: 152–155. On the motifs of the robe, see Bunker 2004.

Another well-traveled early representative of the Silk Road is the demure little anonymous lady dressed in her pearl-roundel blouse and striped skirt who was in Dayton and Memphis in 2003 (*Glory* 2003: 99), then traveled to New York to grace the dust jacket of the Metropolitan Museum's exhibition (Watt et al. 2004). She was in Brussels in 2009–2010 (see *Route* 2009: 160). Her original home was the late 7th-century Tomb 206 in the Turfan Astana cemetery, and, if she ever has a chance to stay home these days, it is as No. XB16676 in the Xinjiang-Uighur Autonomous Region Museum in Urumqi. She seems originally to have been accompanied at Astana by a less modest twin sister dressed in a skirt of the same fabric, but wearing a different, low-cut blouse and different belt. The sister was exhibited with other objects borrowed from the Urumqi collection by the Gansu Provincial Museum in Lanzhou in 2009. The Astana tombs contain a good many examples of silks with "pearl roundel" designs, which frequently have been exhibited and are of particular interest as evidence of the distribution of textiles and their motifs across the silk roads.

22 See *Ursprünge* 2007: 213–214; *Route* 2009:149, 151; Watt et al. 2004: 194–195; *Secrets* 2010: 149.

23 In Hildebrandt and Gillis 2017, for the technical analysis, note especially Sheng 2017, Zhao Feng 2017.

24 In particular here, I am thinking of the court of the Norman king of Sicily in the 12th century, Roger II, at which several of the garments that later became part of Habsburg imperial regalia were produced, including ones with Arabic inscriptions. Roger II's court was truly a multicultural environment,

where his cathedral in Palermo included Byzantine mosaics as well as a *muqarnas* ceiling in the nave, and under whose patronage flourished perhaps the greatest of all the Arab geographers, al-Idrisi. One of the most famous manuscripts (Arabe 2221) of al-Idrisi's geography, the maps in brilliant color, can be studied and downloaded from the website of the Bibliothèque nationale, Paris (https://gallica.bnf.fr/ark:/12148/btv1b6000547t/f21.item). The ethnic and religious identity of minority craftspeople working within a dominant culture is an important subject for studies of the silk roads. One thinks of Sogdians in Chinese-controlled territories or Armenians producing carpets or inlaid metalwork in the Islamic world. Carpets often described as "Turkish" in many cases probably were woven by Armenians (see Arnold 2014).

25 Popular accounts focusing on the mummies include Barber 1999, and Mallory and Mair 2000. For illustrated summaries about them see Mair 2010 and Mair 2016, both of which may be accessed online via the University of Pennsylvania museum's website for its journal *Expedition* (www.penn.museum/research/expedition-magazine). The mummies also were the subject of a somewhat sensationalist NOVA TV documentary in which both Barber and Mair appeared.

26 While it is important to realize that much may now have changed, for comments on what I saw in the Urumqi Museum, see Waugh 2008a. The treatment of the non-Han Khitan/Liao Dynasty is another example where political issues affect interpretation and display (see Standen and Bennett 2014). Fortunately, there are many well-illustrated exhibition catalogs for the Liao, even if the museums that have the major collections of Liao artefacts have not yet made them accessible online. Of particular value is *Gilded Splendor* 2006, mounted at the Asia Society, which had also retained on its website a very generous online presentation of the material, now, alas, inoperative given the retirement of the Flash player. For a generously illustrated photo essay of Liao material drawn from several museums, see Waugh 2017a, which includes references to some of the other exhibition catalogs. The Liao artefacts reveal a lot about extensive interactions across borders and with areas distant from northeastern China.

27 For one recent treatment, produced in connection with a special exhibition, see *Nomads and Networks* 2012, especially the essays by Stark and Claudia Chang. A few objects with descriptive captioning from the exhibition are still viewable on the ISAW website (https://isaw.nyu.edu/exhibitions/nomads-and-networks). A major reconceptualization of exchange across the steppe is Brosseder 2015; see also Honeychurch 2015. Benjamin 2018 is noteworthy for opening his discussion of the silk roads with a long chapter on nomads and the steppe.

28 For the Pazyryk and related materials from the Altai, one of the substantial Russian studies has been translated into English and published in a well-illustrated edition (Rudenko 1970). One of the most accessible sources on the Pazyryk textiles (which includes a discussion of the famous carpet) is Rubinson 1990. In his essay for *Nomads and Networks*, Stark devotes considerable attention to the Pazyryk finds. The spectacular more recent finds from the Ukok Plateau in the Altai have been popularized in, for example, Polosmak 1994. However, for the subsequent, serious analysis of those textiles, one has to consult other sources, especially Polosmak and Barkova 2005 (reviewed by Irene Good in *The Silk Road* 9 [2011]: 146–153). Some of the most important Pazyryk finds now are included in the Hermitage Museum's collections database (see n. 31).

29 The standard treatment of the early Noyon uul excavations is Rudenko 1962. There has been a huge amount of more recent excavation and study of Xiongnu sites. A widely ranging overview of a lot of the recent work is in *Xiongnu Archaeology* 2011. Online there is a short introduction to Xiongnu archaeology (Waugh 2008b) which takes into account some of the recent work. For an overview by one of the leading Russian archaeologists who has excavated in Transbaikalia, see Miniaev n.d. Several of his articles on his recent excavations and their interpretation are available in *The Silk Road*. The journal also has reports and analysis from the Mongolian-American Arkhangai and Takhilt excavations of 2005 and 2007. There is a nice web presentation of the 2005 excavations at Arkhangai n.d.

30 While there are various studies of the Chinese lacquerware eared cups (some with workshop inscriptions) found in a number of the Xiongnu elite tombs (see, e.g., Pirazzoli-t'Serstevens 2009), the abundance of lacquerware that seems to have been present in burials of individuals of presumably lesser social status is poorly documented. In such cases, what remains may be merely a paint layer that quickly disintegrates when exposed to air and then has been discarded. On this problem, see Waugh 2006.

31 For the Hermitage collections of the Pazyryk and Xiongnu material and other collections of the arts of the early Eurasian nomads, there is an extensively illustrated Russian-language exhibition catalog, *Kochevniki* 2012. Similarly wide-ranging, but with a more limited selection of images is the

exhibition catalog, *Im Zeichen* 2007, which has a section on the Ukok excavation. See also: *From the Lands of the Scythians* n.d.; Charrière 1979; in Japanese (with English captions), *Scythian* 1969. The Hermitage now has an extensive collections database (www.hermitagemuseum.org/wps/portal/hermitage/explore/artworks/?lng=en), with good images and captioning. In the category entitled "Oases on the Silk Route" (best located by typing that phrase into the search box) is an extensive set of images of the Xi-Xia period Buddhist banners found at Khara-Khoto and a good many objects collected by Russians from Kucha, Shan-Shan, Turfan, Dunhuang and Khotan. In the broad category of "Archaeological Artifacts", for the subcategory dealing with Eastern Europe and Siberia, are images of the finds from the Pazyryk Culture. A search for objects from the Russian excavations at "Noin Ula" (Noyon uul) turns up seventy-two items. There is now a proper catalog of that collection, whose full version unfortunately is available only in a Mongolian publication, with a rather badly illustrated Russian version the more accessible one. See my review notice in *The Silk Road* 18 (2020): 169–170, which also discusses a video gallery talk on the collection available on YouTube (www.youtube.com/watch?v=Ynh2owE3FmM). Even if the picture selection is limited and the image quality less than ideal, the "Silk Road Seattle" web pages for the Pazyryk (https://depts.washington.edu/silkroad/museums/shm/shmpazyryk.html) and Noyon uul (https://depts.washington.edu/silkroad/museums/shm/shmnoinula.html) material in the Hermitage are still of some value, with the Noyon uul page including scans of the black-and-white photos and the full text in English of the publication by Trever 1932. While the Hermitage collection database now includes excellent images of many of the Central Asian gilded silver dishes found in the Urals (searchable under "Iran" > "silver"), the "Silk Road Seattle" pages for that material are still of value for the scans of Ia. I. Smirnov's 1909 portfolio which includes detailed views and the Sogdian and other inscriptions (https://depts.washington.edu/silkroad/museums/shm/shmsasanian.html; https://depts.washington.edu/silkroad/museums/shm/shmeiranca.html).

32 *Khunnugiin öv* 2011, text in both Mongolian and English. Unfortunately, the National Museum of Mongolia in Ulaanbaatar has yet to develop a significant website. However, there is a selection of good images via Google Arts and Culture (https://artsandculture.google.com/partner/the-national-museum-of-mongolia), which could lead to a fuller online presence. For a detailed treatment of the Mongolian-Russian excavations at Noyon uul in recent years one has to consult Polosmak, Bogdanov and Tseveendorzh 2011 (see my review in *The Silk Road* 10 [2012]: 151–153) and Polosmak and Bogdanov 2016. There is a set of videos (where one can choose to listen either in English or in German) on the Mongolian-Russian excavation of Tomb 22 at Noyon uul, impressive for what it reveals about the imposing size of the tomb and the difficulties of investigating it. One can learn a lot about the conditions in which the textiles were found and saved and also about the process of restoration. The pages with links to each set are: https://lisa.gerda-henkel-stiftung.de/kurgan_22?nav_id=4678; and https://lisa.gerda-henkel-stiftung.de/xiongnu_das_grab_des_hunnenfuersten_mongolei?nav_id=946. A selection from these would make excellent material to introduce the archaeology to students. For an interesting analysis of the restored textile and its trans-Asian connections, see Polosmak and Karpova 2016, which posits a possible Eastern Mediterranean origin of the cloth. A discussion of several of the Noyon uul textiles, including the striking piece with the ritual scene unearthed in Tomb 31, is in Yatsenko 2012. His focus is on costume; he includes for comparison a discussion of both Yingpan Man and the spear-carrying warrior from Shanpula.

33 The excavations in Transbaikalia have included extensive work at sites such as Ivolga and Dureny, where there are the remains of dwellings and cemeteries that contain a great many "ordinary" burials. For references, see Miniaev n.d., which will need to be supplemented by ongoing Russian work at Ivolga. There are still many unanswered questions about the origins of the Xiongnu and the ethnic composition of those who occupied the sites attributed to them.

34 There was a small exhibition of Xiongnu artefacts drawn from Russian collections held in Brussels in 2005–2006, with a catalog in French and Flemish (*Huns* 2005). A generous selection of Xiongnu artefacts was included in the large German exhibition, *Dschingis Khan* 2005. The essay in the latter by Jean-Paul Desroches includes a range of good illustrations and is of particular interest for its summary and diagrams of the Mongolian-French excavation of the largest known Xiongnu tomb, located at Gol Mod II. For online resources, see previous notes.

35 The catalog of this exhibition, which displayed both items excavated in the local tombs of the Silla elite and items from several Japanese collections, is *Silla* 2008. There is captioning and minimal text in English, the rest in Korean.

36 There is a recent, detailed study of some of the earliest of these artefacts: *Lop nor 2016* (captioning in Korean and English; text only in Korean). A sense of the scope of the collections in the National Museum of Korea (including a lot of the Central Asian material) may be found in Waugh 2016. The museum's website (https: www.museum.go.kr/site/eng/home) includes nearly 7000 good quality images in the collections database but with mostly cryptic captioning. An excellent introduction to some of the extraordinary objects (with substantial analytical essays for each) can be found by clicking on "collections" > "curator's picks". The website has pages for individual galleries, the one devoted to the Central Asian collection with nearly four dozen high quality images (www.museum.go.kr/site/eng/showroom/list/756?showroomCode=DM0024).

37 The URL is: http://shosoin.kunaicho.go.jp/en-US. There are three pages of descriptive text about the institution and its collection, and online access to its *Bulletin*, in which the articles are in Japanese though with English summaries. The collections webpage (https://shosoin.kunaicho.go.jp/en-US/search) is easy to search; photos often show multiple views and details and there is basic descriptive captioning. The material may be used following Creative Commons guidelines. A still useful introduction to the Shosoin collection, with analysis of key objects, is Hayashi 1975.

38 The website is "Digital Silk Road: Digital Archives of Cultural Heritage Digital Silk Road Project National Institute of Informatics" (http://dsr.nii.ac.jp/). The expedition book scans, in high resolution, are incredibly valuable for those with no access to the print books, but leafing through them online takes a lot of time. Maps have also been separated out into another section of the website, and there is an animated map of routes in the "Digital Museum". The website includes an extensive collection of modern photos taken at many of the historic sites starting in Xi'an and Lanzhou and then focusing on the "Western Regions" beyond.

39 I have not done a thorough search on the Internet. The National Museum of China in Beijing has a website accessible in nine languages (http://en.chnmuseum.cn) and now a huge collections database. So far there seems to be no search function, which means scrolling through endless listings of objects accompanied by small thumbnails. Clicking on them does not bring up a full-size image or any additional descriptive data beyond that of the tabular listing. The "highlights" of the collection so far include but a small selection of items. The China National Silk Museum (www.chinasilkmuseum.com/index.aspx) has a good website with a searchable collections database. The museum has sponsored a number of interesting exhibitions, for some of which there are good catalogs. One of the intriguing developments has been the museum's involvement in the creation of an Interactive Map of World Silk, which has been unveiled at a conference but apparently has not yet gone online (see www.chinasilkmuseum.com/gjslzx/info_305.aspx?itemid=28219). The most comprehensive online resource for images of objects in Chinese museums seems to be Gary Lee Todd's "World History Photos" (https://worldhistorypics.weebly.com/), where one can easily locate each of the many museums he has visited and in which he has photographed everything he can. The thousands of photos include both the objects and, where available, captioning. The images have not been subjected to technical editing, which means that the quality can vary, though on the whole is quite good for most study purposes. His website also includes material relevant to silk road studies for locations outside China (e.g. Mongolia, Korea, South and Southeast Asia).

40 Cat. No. 1 (Xinjiang Institute of Archaeology Inv. No. 92LSIIM3:1), also in *Ursprünge* 2007, No. 105, accompanied by other examples (Nos. 102, 104).

41 Cat. No. 48; *Route* 2009: No. 6; most recently reproduced in Whitfield, ed. 2019: 416. For a translation, see Yoshida's appendix to Hansen and Yutaka 2003.

42 No. 13 (Xinjiang-Uighur Autonomous Region Museum, Inv. No. XB12950); *Route* 2009: No. 51; Watt et al. 2004: No. 96.

43 No. 37, from Astana Tomb No. 177 dated 455 CE. For a close-up and a discussion, see Li Wenying's essay in *Chinese Silks* 2012: 187–189.

44 For the cups, see esp. Nos. 99–103; Watt et al. 2004: 318–319; *Route 2009*: 75. The necklace and bracelets (now in the National Museum of China in Beijing) are Nos. 114–115; the necklace also is in Watt et al. 2004: No. 187 (pp. 294–295). Objects with most of the elements of the design of the necklace have been found in a cemetery in Georgia in the Caucasus; the provenance of the piece is probably Iran or western Central Asia. A mural in the Ajanta caves in India shows a very similar bracelet. For details about the necklace and bracelet, see Xiong and Laing 1991.

45 Juliano and Lerner 2001. The Asia Society website retains a set of pages with highlights from the exhibition, compact but informative overview texts and captions and smallish, but serviceable images (http://sites.asiasociety.org/arts/monksandmerchants/intro.htm).

46 Cat. No. 8, letter No. 2 (BL, Or. 8212/95, with accompanying wrapper and envelope, 8212/99); also included in *Route* 2009: No. 46. Letters Nos. 1 and 3 are of special interest as rare examples of a woman writing about her difficult situation in real life. For them, see *Silk Road* 2004: 248–249. Nicholas Sims-Williams' translations of the letters are also available at: https://depts.washington.edu/silkroad/texts/sogdlet.html.

47 Cat. No. 106 (coll. of the Tianshui Municipal Museum, Gansu). There is a great deal else one can consult on the funeral beds and their imagery – too many titles to cite here. This catalog description is valuable in part for the inclusion of other items found with the funeral bed, among them a set of instrument-playing musicians (Cat. No. 107), now displayed in the Gansu Provincial Museum, Lanzhou. The burials of elite Sogdians in China also include inscription epitaphs (Cat. No. 83) and incised tomb doors (Cat. No. 81a, b) showing dancers doing the "Sogdian whirl". Much of what we know about the biographies of the Sogdians in China, about their culture and religious beliefs is derived from the epitaphs and the relief-carved slabs of the funeral beds. Comprehensive and well illustrated guides to the Sogdian remains in China are Wertmann 2015 and Huber 2020 (reviewed by Michael Drompp in *The Silk Road* 18 (2020): 154–157).

48 Cat. Nos. 30, 31; also Watt et al. 2004: Nos. 157, 158; *Route* 2009: Nos. 47, 55. Visitors to the Guyuan Municipal Museum are unlikely to see in the main exhibit hall the genuine objects, but rather poor replicas. The ewer and the glass cup are kept safe under lock and key and shown only by special arrangement.

49 Aurel Stein certainly appreciated what Afghanistan might offer, but he managed to get there only toward the end of his life; his remains are in Kabul. One of the pioneering exhibitions which emphasized the cross-cultural riches of the region was *Crossroads* 1992. A recent volume of substantial essays (*After Alexander* 2007) contains a great deal of information on new discoveries. The standard, comprehensive guide to the archaeological riches of Afghanistan, recently updated, is Ball 2019.

Essays for the catalogs published in connection with the Afghanistan treasures exhibition are not identical. The U.S. version is *Afghanistan* 2008. The French catalog, produced for the exhibition hosted by the Musée Guimet in Paris, is *Afghanistan* 2006. There have been many other venues, one of the more recent in the National Museum of Korea in Seoul (*Apeuganiseutan* 2016).While there were some videos and computerized reconstructions of the site produced in connection with the exhibition, so far the visual material available on the Internet is rather limited. There seems to be no dedicated website of substance about Ai Khanum and its treasures, though it is fairly easy to piece together introductory information (e.g. from Wikipedia).

50 Sanjyot Mehendale, now Chair of the Tang Center of Silkroad Studies at the University of California, Berkeley, has done some of the most detailed study of the ivory and bone carvings and published her results on the Internet at http://ecai.org/begramweb/. She contributed an essay to the U.S. edition of the Afghan treasures catalog. In 2019 she delivered the opening lecture in a silk road series for the Seattle Asian Art Museum, where the Begram material was part of her presentation. She argued for the long-distance import of a lot of the Begram material, but in response to questioning admitted that it was possible objects were produced in workshops closer to Begram. As with so much of the art along the silk roads for which one can find analogues in distant cultures, often differences in technique and execution argue for reproduction copying of foreign models and not necessarily importation from the distant workshops operating within very different cultural contexts. She pointed out that the chemical composition of some of the glass found at Begram is similar to that in glass found in Roman Egypt, but then it is possible, since ingots of glass and glass scrap were traded, that those who made some of the Begram objects had imported their raw material and had created the objects in some location other than its source.

The Begram ivories could be part of a very interesting trans-national study, as there was extensive trade in ivory and the use of it to make devotional figures, furniture decoration and jewelry in various parts of Afro-Eurasia over a long period. For a study of striking ivory carvings produced in ancient Assyria, see the important and beautifully illustrated study by Herrmann 2017.

51 See *Edge of Empires* 2011 and *Dura Europos* 2011 (e-book available to download free at https://archive.org/details/duraeuroposcross00brod), both of which I reviewed in *The Silk Road* 10 (2012): 171–174, 177–179. Taken together, the essays in these books provide a lot of information on daily life, religious belief and practice and some of the wider international connections. For Dura Europos there are good photos posted to the Manar Al-Athar website at Oxford (www.manar-al-athar.ox.ac.uk/), which is a major image source for sites in the Middle East. The material can be accessed via

the country listings on the sidebar, which then take one to the scrollable pages with the linked list of individual structures and features at each site.

52 The nice overview of Palmyra as a caravan city by Albert Dien (originally published in *The Silk Road*) may be accessed on Silk Road Seattle at http://depts.washington.edu/silkroad/cities/syria/palmyra/palmyra.html, supplemented by a set of digital images made from Wood's 1753 engravings (http://depts.washington.edu/silkroad/cities/syria/palmyra/rwood/rwood.html). Dien's essay includes a bibliography of some of the most useful publications about Palmyra. For a book-length introduction to Palmyra's history, see Raja 2022, written by the director of the Danish project mentioned below in n. 53.

53 For a short photo essay depicting several of the major buildings and a selection of the funeral portraits, see Waugh 2015, commemorating the Syrian scholar of Palmyra who was brutally murdered by ISIL. More than 450 of my photographs from Palmyra and various museums with Palmyra sculptures have now been added to the Oxford HEIR (Historic Environment Image Resource) Project (http://heir.arch.ox.ac.uk/pages/search.php). HEIR is of particular interest for study of the Hellenistic, Roman and Byzantine East. It includes many older pictures from Oxford archives and is adding hundreds of my photos for sites such as Ephesus and Pergamon. The Palmyra Portrait Project in Denmark (https://projects.au.dk/palmyraportrait/), which has already been the catalyst for a lot of new research on Palmyra, will be posting a comprehensive database of over 4000 sculptures from collections around the world.

54 The finds from the Uluburun wreck were an important part of the Metropolitan Museum's "Beyond Babylon" exhibition in 2008–2009, and are discussed in its catalog on pp. 288–380. The material is in the collection of the Bodrum Museum of Underwater Archaeology in Turkey, along with exhibits from other shipwrecks which document the trade in the Eastern Mediterranean. One of the exhibits is an excavated wreck of a ship carrying scrap glass being sent north for recycling from medieval (Islamic) Egypt. Nautical archaeology along the Turkish coast is continuing to reveal important new material, as one can see from a presentation by Deborah Carlson (President of the Institute of Nautical Archaeology, https://nauticalarch.org/) that was streamed on 26 January 2022 by the American Research Institute in Turkey about a 5th-century BCE ship that foundered not far from Bodrum. The presentation, envisaged as the first of a series, will be made available online.

55 The trade between the Red Sea and India, traditionally involving shipping close to the coasts, is famously documented in a mid-1st-century CE Greek text, "The Periplus of the Erythraean Sea", which covers the whole route and lists products that were to be obtained. The text is available online at Silk Road Seattle (http://depts.washington.edu/silkroad/texts/periplus/periplus.html), but for the most recent translation and extensive commentaries to it, one should consult Casson 1989. There is a very large literature on the Roman trade with India.

56 The best way to access information about Berenike is via the website: www.archbase.com/berenike/. It provides introductory overviews and then discusses the finds from the archaeological work between 1994 and 1999. The links on this page to the more recent Polish excavations no longer work, but one may find the reports on the ongoing work on the website of the Polish Centre of Mediterranean Archaeology at the University of Warsaw (https://pcma.uw.edu.pl/en/2019/04/17/berenike-2/). The project is on Facebook at: www.facebook.com/theberenikeproject/. A very good book introducing the Berenike excavations is by one of the lead archaeologists (Sidebotham 2011).

57 The most thorough exhibition catalog for the Sinan ship is *Sinan* 2016, produced for the reopening of a gallery devoted to it in the National Museum of Korea. There are extensive pictures of the finds and captioning in English, but otherwise the text is entirely in Korean. For a sampling of the objects, see www.museum.go.kr/site/eng/exhiSpecialTheme/view/past?exhiSpThemId=76701&listType=list. A substantial collection of photos taken in the Sinan gallery is in Todd's website, cited in n. 39. The ship sank in the early 14th century. Since its cargo contains no blue-and-white porcelains, the argument *ex silentio* has been used to buttress the conclusion that Chinese production of blue-and-white began only in the late Yuan period.

58 Unfortunately, controversies over the privately organized initial excavation of the wreck led to the cancellation of the plan for an exhibition at the Smithsonian Institution. However, in 2017 the Asia Society mounted an exhibition of the materials, on loan from the Asian Civilisations Museum in Singapore. Two good books display a lot of the material and include extensive discussion of the ship itself: *Shipwrecked* 2010; *Tang Shipwreck* 2017 (produced in conjunction with the Asia Society exhibition). A recent study of the wood in the ship has has argued that it is of South Asian origin. The Singapore museum's website includes but a brief gallery overview with three selected objects

(www.acm.org.sg/galleries/tang-shipwreck). The Asia Society website (https://asiasociety.org/new-york/exhibitions/secrets-sea-tang-shipwreck-and-early-trade-asia) has a video interview about the wreck in which there are film clips of the actual underwater work. The informative proceedings of a symposium held in conjunction with the exhibition are also available via Youtube at: www.youtube.com/watch?v=y1h3Fm1W9Uc. Two of the presenters wrote essays for *Tang Shipwreck*. One of them, Derek Heng, in a lecture for the Seattle Asian Art Museum silk road series, included some striking material from the Song Dynasty Nanhai No. 1 shipwreck found off the harbor at Guangzhou and caisson-lifted for full study on land in the museum constructed there for it. On Nanhai No. 1, see articles by Xu Yongjie in *The Silk Road* 5/2 (2008): 16–19; 13 (2015): 84–87, and more generally with reference to other Chinese nautical archaeology, Hilgers 2011.

59 For detailed analysis of the ceramics excavated at Siraf, see Tampoe 1989. A still useful discussion of what we know about the Persian Gulf trade in the Abbasid period (using evidence from Siraf and Samarra) is in Hodges and Whitehouse 1983, Ch. 6. Their book questions Henri Pirenne's idea that the rise of Islam cut off the Mediterranean trade and forced Europe to turn inward. There is now much more archaeological evidence from Indian Ocean sites regarding trade with China.

60 This point is emphasized in the short talk linked to the British Museum's Islamic galleries web pages by Dr. Seth Priestman, a former curator who was in charge of the museum's Siraf project (https://islamicworld.britishmuseum.org/audio/22). Unfortunately, he provides only generalizations about the imports and does not spell out what one can learn about the rise and fall of trade routes from the chronology of the ceramic finds.

61 See Guy 1998. On the trade in cotton, see Dale 2009. In the Mongol era, imports of silks woven in the Middle East became popular in Yuan China (see Allsen 1997).

62 For an introduction to the Persian silk trade and the Armenian networks involved in it, see Matthee 1999 and Arslanian 2011.

63 On Hovhannes and his account book, see Khachikian 1966 and Khachikian 1967.

64 A valuable introduction to coinage over a long period in the geographic heart of the silk roads is Cribb 2007. For East Asia, the most important study now is Wang 2004. Regarding other kinds of currency, especially payment in rolls of silk, see *Textiles* 2013. No study of silk road trade should ignore the essays in this last volume. There are many possibilities for finding images of coins, notably among them the websites of the British Museum, the American Numismatic Society, and the Berlin Münzkabinett.

65 The most valuable collection of this material is in the Hermitage Museum, whose curator, Ia. I. Smirnov (1909), published a portfolio of photographs, reproductions of the inscriptions, and maps identifying the locations of the finds. As noted earlier (n. 31), I have posted digital images of his maps and most of his photos. For more recent cataloging and discussion of important objects, see Darkevich 1976; Trever and Lukonin 1987; Marshak 1971. The images and the substantial English portion of Marshak's book also are available at https://depts.washington.edu/silkroad/museums/shm/marshak/marshak.html. Recently a posthumous revised and expanded edition of Marshak's pioneering doctoral dissertation on early Eurasian metalwork was published (Marshak 2017). A good many of the exhibition catalogs relating to the Silk Road in China include metalwork found there which has its analogues with the objects found in Siberia and Northeastern Europe.

66 The systematic cataloging and study of the dirham finds in Eastern and Northern Europe was a long-term project of the late Thomas Noonan, whose work then has been continued by one of his students, Roman Kovalev. See Kovalev's page on Academia.edu (https://tcnj.academia.edu/RomanKovalev), where he has posted a great many important articles with the appropriate references. He is completing a major study of the northern trans-Asian trade that generally has escaped the notice of students of the silk roads.

67 For an introduction, see my illustrated review of a book issued by the Gotlands Museum (Waugh 2011). The importance of silk road connections of Scandinavia has been emphasized in the *Bulletin of the Museum of Far Eastern Antiquities* 81 (2020). Among the essays of particular interest are Hedenstierna-Jonson 2020 and Larsson 2020.

68 See Kovalev 2005. Of considerable interest for the history of the silk roads in this part of Europe is the record of the journey from the Arab Caliphate by Ibn Fadlan in the early 10th century. It has been translated along with an important account of the Indian Ocean trade with China, written by an Arab from Siraf (*Two Arabic Travel Books* 2014). These texts now been issued in separate paperback volumes that would be suited for classroom use.

69 For Viking-era silk finds, see Vedeler 2014. Most of her examples are from the Oseberg ship burial in Norway, but she does include some discussion of the Birka finds. Larsson 2020 expands considerably our knowledge of Viking-era silk.

70 See my reviews: Waugh 2013 (on the Met's *Masterpieces* 2011); Waugh 2012 (for the Louvre). In the case of these two extraordinary collections and in others that include "Islamic" art, the focus on the single object (for example, a ceramic tile) may fail to convey what its original context in physical space would have been. The Met disappoints in this regard (see below). In its published catalog for the Islamic collection (*Arts* 2012), the Louvre has included a good many photographs of buildings, but not always ones focusing in on the details which would show the architectural context for, say, tile work. However, in its new Islamic galleries, the Louvre reassembled a domed Mamluk-era porch ceiling over a passageway between two parts of the gallery, which enables to viewer to experience how it would have defined the original space, and there is a large reconstructed panel of Iznik tiles that approximates how they would have sheathed a wall in a Turkish mosque. The extensive Louvre Islamic collections may be studied from the museum's collections database, with good photos (often multiple views and some gallery views showing the display context) and at least basic descriptive information (in French), with the option to download a pdf of the descriptive page including one image. However, I have yet to locate anything resembling the kind of supplementary information which is so abundant for the Met collection. Other noteworthy collections of Islamic art include that in the Los Angeles Country Museum of Art (one of the first museums to create collection pages for all its holdings) (www.lacma.org/), which offers free pdfs of some of its catalogs. Particular note should be made of The David Collection in Copenhagen (www.davidmus.dk/en/collections/islamic), which makes freely available via its website what may be the best museum photography of Islamic art anywhere. The collection is easily searchable by dynasty, materials, or cultural themes. The overview and caption essays are good, and one can supplement looking at the chronologically selected objects with maps, photos of architecture, and examples of coins. The museum charges no admission fee and offers visitors free use of an info-tablet via which one can access all the captions and the audio guide. Numerous special exhibitions drawn from the collection have been accompanied by superbly illustrated catalogs that contain informative essays and captioning.

71 See my discussion, with reference to the Seattle Art Museum (Waugh 2014a). The comments there about the museum's Internet presence now need to be updated. However, a highlight is still the brilliantly designed online catalog of its Chinese paintings (http://chinesepainting.seattleartmuseum.org/OSCI/).

72 The Louvre catalog depicts the *muqarnas* ceiling in its pages illustrating the tiles presumed to have come from there (*Arts* 2012: 250). However, the museum's display of those tiles provides no sense of their original architectural context – they are difficult to view, high on a wall in the museum, rather than at eye-level as they were atop the dado of the Natanz tomb chamber above a mosaic of star and cross lusterware tiles. Some of the dado can be "reconstructed" from museum examples even if at Natanz all one can now see is their "reflection" in the wall stucco from which they had been torn by collectors and others in the modern era. For an important example of what might be done to display objects such as ceramic tiles in an approximation of their original context, see McClary 2018, whose example is the Natanz material. In its new Islamic galleries, the British Museum similarly displays individual tiles in positions that convey nothing of the original architectural context. In the substantial Islamic collection of the Victoria and Albert Museum in London (https://collections.vam.ac.uk/search/?page=1&page_size=15&id_category=THES48932&id_gallery=THES49806), tiles are presented with reference to presumed provenance or date, but positioned arbitrarily to fit limited wall space.

73 See, however, the portfolio-size publication and study of the paintings, in the first instance the work of Claude Vibert-Guigue (Vibert-Guigue, Bisheh and Imbert 2007), reviewed by me in *The Silk Road* 10 (2012): 175–177, 183–186, and for a very interesting analysis of the site's history, Fowden 2004. My photos from Qusayr 'Amra, now available at ArchNet (www.archnet.org/collections/1351) were taken in 2010 prior to a cleaning and restoration project that has dramatically revealed a great deal of previously obscured detail. Another extensive set (taken in 2013) is on the important website of Dick Osseman (https://pbase.com/dosseman_jordan/amra), who has made available what is arguably the fullest private archive of professional quality photography (more than 80,000 images) with a focus on Turkey and other parts of the Middle East. A full set of pictures taken *after* the recent cleaning is available at Manar al-Athar (www.manar-al-athar.ox.ac.uk/), where follow the link to Jordan and the index page where one scrolls down to the image sets for Qusayr 'Amra.

74 For a photo essay illustrating how one might, counterintuitively perhaps, focus on water as a connecting theme for studying the silk roads, see Waugh 2017b.

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