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Questions of Ancient Human Settlements in Xinjiang and the Early Silk Road Trade, with an Overview of the Silk Road Research Institutions and Scholars in Beijing, Gansu, and Xinjiang

by Jan Romgard

Victor H. Mair, Editor
Sino-Platonic Papers

Department of East Asian Languages and Civilizations
University of Pennsylvania
Philadelphia, PA 19104-6305 USA
vmair@sas.upenn.edu
www.sino-platonic.org

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Jan Romgard
Stockholm University
and the
University of Nottingham

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The Chinese Dynasties¹

Xia	夏	2100-1600 BC
Shang	商	1600-1045 BC
Zhou	周	1045-256 BC
Xi Zhou (Western Zhou)	西周	1045-771 BC
Dong Zhou (Eastern Zhou)	东周	770–256 BC
Chunqiu (Spring and Autumn)	春秋	770–476 BC
Zhanguo (Warring States)	战国	475–221 BC
Qin	秦	221–206 BC
Han	汉	202 BC-AD 220
Xi Han (Western Han) ²	西汉	202 BC-AD 23
Dong Han (Eastern Han)	东汉	AD 25-220
Wei, Jin, Nan-Bei Chao	魏晋南北朝	220-589
Sanguo (Three Kingdoms)	三国	220-280
Wei	魏	220–265
Shu Han	蜀汉	221–263
Wu	旲	220-280
Jin	当	265-420
Xi Jin (Western Jin)	西晋	265-316
Dong Jin (Eastern Jin)	东晋	317-420
Liu Chao (Six Dynasties)	六朝	222-589
Shiliu Guo (Sixteen Kingdoms)	十六国	304-439
Nan-Bei Chao (North. & South. Dyn.)	南北朝	420-589
Nan Chao (Southern Dyn.) ³	南朝	420-579
Bei Chao (Northern Dyn.) ⁴	北朝	386–581
Sui	隋	581–618
Tang	唐	618–907
Wudai Shiguo	五代十国	902-979
Wudai (The Five Dynast.; North China)	五代	907–960
Shiguo (Ten Kingdoms; South China)	十国	902-979
Song	宋	960–1279
Bei Song (Northern Song)	北宋	960–1127
Nan Song (Southern Song)	南宋	1127-1279
Liao (Qidan 契丹; Khitan)	辽	916–1125
Jin (Nüzhen 女真; Jurchen)	金	1115–1234
Yuan	元	1279-1368
Ming	明	1368-1644
Qing	清	1644–1912 ⁵

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¹ The information on the Dynasties is taken from Endymion Wilkinson, *Chinese history: A manual* (Cambridge & London: Harvard University Press, 2000), pp 10–12.

 $^{^2}$ Western Han and Eastern Han are also called Former Han (Qian Han) 前汉 and Later Han (Hou Han) 后汉.

³ The Southern Dynasties are: Liu Song 420–479, Qi 479–502, Liang 502–557, and Chen 557–589.

⁴ The Northern Dynasties are: Northern Wei 386–534, Eastern Wei 534–550, Western Wei 535–556, Northern Qi 550–577, and Northern Zhou 557–581.

1 Introduction

Why study the Silk Road? What difference does it make whether or not we do research on an old communication route situated deep within the deserts and mountains of the Eurasian continent? Well, my answer would be that it is absolutely vital. The similarities between the present globalisation and the various heydays of the Silk Road are abundant. Many of us still do not understand what is really going on in the world right now: global trade, collisions between traditional values and new ways of life, migrations and meetings with people of different cultural backgrounds, languages, and religious beliefs. We tend to believe that this is something new, something mankind has never encountered before in the same scale, and with the same overwhelming effect on old economic and social structures. That is not true. It has happened before on a much bigger scale than we readily believe, and with far more implications for our lives today than we realize.

Contacts and conflicts between religions, peoples, and cultures in the background of international trade have repeatedly been seen along the Silk Road. Zoroastrianism, Buddhism, Confucianism, Christianity, and Islam have been spread on the same paths as the traders and migrants on the Silk Road. If we include the sea trade routes of the Silk Road, three continents, Europe, Africa, and Asia have been involved. It is because of the ancient encounters on these trade paths that Muslim and Buddhist communities exist today in Central, East, and Southeast Asia. Power struggles for control of the trade have led to numerous military confrontations in history. Outbursts of religious and political extremism have also repeatedly been seen on its tracks as well as prolonged periods of peaceful coexistence and interchange between people of different backgrounds and religious beliefs. Thus the conflicts mankind struggles with in our own time have happened many times before.

By looking at history, the periods of stability as well as the wars, and by gaining

⁵ The last emperor, Puyi 溥仪, abdicated on February 12, 1912.

insights into other peoples' history and their cultural backgrounds, we can better understand and deal with what is happening today. That is why Silk Road studies are so important.

1.1 Purpose

The purpose of this paper is to make a qualitative study of the current Chinese Silk Road research regarding Xinjiang, focusing particularly on recent discoveries and studies on early cultures and settlements in the Tianshan Mountains and the Tarim Basin. Questions of the origin, ethnicity, and location of the earliest settlements as well as the establishment of Silk Road trade from the Bronze Age to the Han dynasty has been the primary focus of Xinjiang Silk Road research in recent years. This is therefore also the dominant focus here. The questions I have had in mind while reading this material have been: What has taken place in recent Chinese research on the subject? What new information can be found in Chinese excavation reports and published articles? Are there any differences between the Chinese conclusions on these findings compared to results published in the West? Have views on the subject changed in any way during the examined time period, and if so—why?

An overview of the institutions and scholars in Beijing, Gansu, and Xinjiang who study the Silk Road is presented as an appendix. The reason for this addition is as follows:

While trying to learn about Silk Road studies in China I have found it hard to retrieve information on the research performed by Chinese scholars. I searched the Internet and Western books on the subject, but these seldom revealed much about Chinese research and researchers. The names of scholars and their research topics were seldom given in Chinese characters, which made it difficult to find the original source in Chinese. As a beginner in this field I felt the need for some kind of reference work to explain the different institutions in China, where they were situated, who the most important scholars were, and what their research interests were. But such a work did not exist. The problem of language differences, plus the lack of information on Chinese sources in Western books implied as well that scholars working on the same problems

and sharing the same interests in this particular research field in many cases probably were unaware of the names of their Chinese colleagues and what they were writing about. I therefore compiled such information and present it here as an appendix.

1.2 Method, limitations, and materials

This paper is based primarily on scientific articles on Silk Road research published in Chinese journals of archaeology and history during the years 2001–2006. To evaluate the Chinese research in a wider context, works on Xinjiang archaeology published outside China were also consulted. I have also searched the Internet to obtain further material.⁶

I have not made a detailed inquiry into every discipline or time period included in the abundant Silk Road research field, but have instead concentrated on early settlements in Xinjiang and the beginning of the Silk Road trade.

Other topics seen in the material, such as the research in Xinjiang on the spread of Zoroastrianism, Buddhism, and Islam, Sogdian migration and trade, and the Chinese influence in the area from Han to Tang, have not been dealt with in this paper. Some of this can instead be seen in the Appendix.

The material for the overview of Chinese research institutions and scholars has been collected primarily by using databases of Chinese scientific articles. First, whenever I saw a reference to a Chinese researcher that seemed important, I made a search for all of the articles written by that person in the databases. Then I scanned his/her articles to find references to other Chinese researchers. Thus I soon had gathered a list of names that often recurred, indicating that they were important in China. Then I searched for articles written by others at the same institution to find more names, and among these I determined who the most important scholars were. I also looked for the kind of subjects

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⁶ The amount of material I gained in these various ways became very large, in fact much larger than expected. This surplus material is presented in the Appendix. I knew of the cross-disciplinary character of the Silk Road studies, but nevertheless found the extent of such research in China a surprise. Silk Road research is certainly just as vast and complex as the geographical area it covers.

on which the different institutions seemed to focus. Finally, I looked for more information about the respective scholars and institutions on the Internet.

Apart from the above, I have also had much help along the way, during work on both this paper and on its appendix, from scholars in Sweden and abroad who contributed their contacts in China and answered my many questions on various aspects of Silk Road research.⁷

1.3 Definitions

The term "Silk Road" first came into use in the book *China 1*, written in 1877 by the German geologist and explorer Ferdinand von Richthofen. He called the ancient route of precious commodities, transported from China through Central Asia to Rome, "Die Seidenstrasse". Sven Hedin described it as an "artery through the whole ancient world" and "from the point of view of cultural history, the most important communication path between peoples and continents that ever has existed". Frances Wood, in her recent book *The Silk Road*, points out that it was not a single route, but rather a series of routes, in which a huge number of middlemen were involved before the goods reached their final destinations. She also describes it as a "portmanteau term covering not only a vast geographical area ... but also a long cultural history". The Xinjiang-based archaeologist

⁷ I am very much obliged to professors Håkan Wahlquist, Stockholm Ethnological Museum; Staffan Rosén, Stockholm University; Magnus Fiskesjö, Cornell University, New York; Valerie Hansen, Yale University; Daniel C. Waugh, University of Washington, Seattle; Torstein Sjövold, Stockholm University; Lin Meicun, Peking University; Chen Xingcan, Chinese Academy of Social Sciences, Beijing; Mei Jianjun, University of Science and Technology, Beijing; Wang Xin, Shaanxi Normal University, Xi'an; and the staff of the British Library's Dunhuang collection: Susan Whitfield, Imre Galambos, and Kate Hampson. Many thanks to them all!

⁸ Baron Ferdinand von Richthofen in *China 1*, quoted by Sven Hedin, *Sidenvägen*, (Stockholm: Albert Bonniers Förlag, 1936), p 310.

⁹ Sven Hedin, *Sidenvägen*, p 313.

¹⁰ Frances Wood, *The Silk Road: Two thousand years in the heart of Asia*, (Berkeley and Los Angeles: University of California Press, 2002), pp 9–10.

Hou Can points out, in defining the scope of Silk Road research, that it involves not only historical studies on the various development and declining stages of the Silk Road, but also geographical studies of the areas where the trade took place, ethnological studies on the various peoples involved, and religion studies on the different beliefs along the road, as well as studies of the culture and arts spread along its paths.¹¹

The field of Silk Road research can thus, from such a "portmanteau" point of view, involve not only the many commercial interchanges through time, but also the cultural interchange and encounters between the various peoples along the Silk Road; the history of the peoples who traded, migrated, settled, and mingled along with the trade, and the spread of cultural habits and religious attributes that came with them.

The time span of the Silk Road concept has been widened in recent years. From the traditional Chinese point of view, the Silk Road came into use after the diplomat Zhang Qian's exploration of the Western Regions in the early Han dynasty and the increased Chinese interest that followed his return. But as the Chinese archaeologist An Zhimin states:

The initial opening of this communications line was by no means marked with the Han envoy Zhang Qian's journeys to the Western Regions or with the emergence of silk trade; it may be traced to prehistoric times, which is exemplified by the discovery of bronze culture along the "Silk Roads". ¹²

In this paper, the Silk Road is defined as a communications line on the Eurasian continent centered in Central Asia, where contacts, trade and cultural exchanges took place between the Eastern and Western parts, spanning from the earliest time to the Qing dynasty.

As the Silk Road studies regarding Xinjiang involve the earliest contacts of

¹¹ Hou Can, "Sichou zhi lu xue de hanyi, neirong ji qi fangfa", 丝绸之路学的涵义, 内容及其方法 (Implications, contents, and methods of Silk Road studies), *Sichou zhi Lu* 1997:06, pp 9–11.

¹² An Zhimin, "Cultural complexes of the Bronze Age" in Mair, ed., *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, vol 1, p 45.

people from Eastern Eurasia and Western Eurasia, many terms regarding the identity and ethnic origin of the human settlements in the province will be used. This terminology is seen in the Chinese material as well as in the Western sources and is merely borrowed from there. The terms Europoid, Caucasian, Indo-European, Proto-European, European, proto-Celtic, West-Eurasian indicating the remains found of a people having, what in many sources are called, "European features". I will mainly use the words Caucasian, Proto-European and West-Eurasian. This people has in its turn been claimed to have spoken an extinct Indo-European language called Tocharian. The term Indo-European is also used for the speakers of Indo-European languages in general. For the people of the Eastern parts of the continent and of Asian descent, the terms Asian, Mongoloid and East Eurasian are used. "Mongolians" specifically indicates people originating from Mongolia, "Han Chinese" indicates the majority people in China proper, "Proto-Tibetan" refers to a group of predecessors to the people of the Tibetan north-eastern communities, while "Tibetan" as well as the term Tibeto-Burman refers to the ethnic Tibetans. Khams-Tibetan is a group within the ethnic Tibetan community situated in eastern Tibet. The term "Central Asians" refers to the modern population in Central Asia.

The question of how to transcribe Xinjiang place names is a complicated issue. The names are written differently in almost every source and this is causing confusion and extra trouble when dealing with Silk Road studies. The Chinese sinification of Xinjiang since the 1950s, and the consequent use of Chinese transcriptions of Uighur places in Chinese maps, have not made the problem easier. Some Chinese authors occasionally use transcriptions into English of Uighur place names in short English summaries or in translated titles of their articles, but not in a consistent way. Only the Chinese names of Xinjiang sites and cultures are consistent in their reports. As I primarily have used Chinese sources in this work, I have chosen to use the pinyin transcriptions of the names in Chinese. When it comes to the names of Uighur scholars involved in Silk Road research I have not always been able to find out their proper names. I have therefore mainly used their names as seen in the Chinese articles.

1.4 Disposition

This paper begins with an overview of the more important archaeological sites of early cultures in the province. Then a survey of the discoveries made at the different locations in the past as well as recently is presented. Thereafter the Chinese explanations for the presence of early cultures in Xinjiang are introduced, where the people came from, their ethnic origin, and what happened to them. Furthermore, the Chinese research on the questions of ancient human settlement in the Xinjiang oases areas, climate changes, and possible connections between the settlements and desertification will be described. The paper ends with a section in which directions in Xinjiang research and reflections from the survey are discussed.

An overview of Silk Road institutions and scholars is placed as an appendix after the paper. The bibliography covers both the paper and the Appendix.

2 Current early Silk Road studies regarding Xinjiang

A word that repeatedly appears in Chinese excavation reports is "qiangjiu" (emergency rescue). Pipelines, railroads, highways, water reservoirs, hydro-electrical stations, and housing constructions force archaeological institutes to rush out and conduct excavations to save what can be saved of the archaeological remains before it is too late. Constant visits by grave robbers also force archaeologists to go into the field to conduct emergency excavations. This applies even to the once remote and isolated site of Loulan (Kroraina), to which the construction of roads in conjunction with oil exploration has made it possible to drive all the way by car. This situation has in its turn lead to the desire of local archaeologists to excavate untouched sites, in order to get the upper hand over robbers. Under such circumstances it is easy to see that being an archaeologist in China today must be the busiest work in the world. It also means that the many forced

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Ma Zhefei, "Loulan mausoleum remains lost", *People's Daily online*, 030324, http://english.people.com.cn/200303/24/eng20030324 113909.shtml, (070510).

excavations during the examined time period have continuously provided the scientific community with new information on the Silk Road history. At the same time it has brought up just as many new questions: many preliminary reports exist but there are few follow-ups and final conclusions. There has often been little time for reflection and thorough examination of the retrieved material. Questions of dating, as well as complete descriptions of the remains, are still lagging, making it hard to evaluate the discoveries and put them in a wider context.

Although this means that we still have to wait for the final results in many cases, I will present as much as possible of the latest archaeological work from the information currently at hand. Much of the older information about sites and discoveries are here gathered from the American–Chinese work *The Bronze Age and early Iron Age peoples of Eastern Central Asia* (1998) edited by Victor Mair. An international field of scholars has contributioned to the book, and among them are many of the foremost Chinese archaeologists and historians. The editor is the American sinologist Victor Mair, who has played a significant part in the international research on Bronze Age cultures in Xinjiang. It was he who in the early 1990s made the West aware of the discoveries of Bronze Age Caucasian mummies in the Tarim Basin. Because this scientific anthology, as well as the book *The Tarim mummies* (2000), written by Mair and the archaeologist J.P. Mallory, have been frequently quoted in Western research on the early Xinjiang cultures, they will be used as reference works here in order to compare the recent discoveries to the situation at the turn of the century.

2.1 Archaeological sites in Xinjiang from 2000 BC to the Han dynasty

The sites are here described in chronological order as far as possible, since finds on some sites overlap each other in terms of dating. To make it easier to follow, the description also moves in roughly a clockwise order, starting from what until recently have been considered the oldest remains in Xinjiang, at the Gumugou site in the eastern Tarim Basin. The sites described here are all from the early Bronze Age, ca 2000 BC, through the early Iron Age, ca 400 BC, to the Han dynasty.

The archaeological research in Xinjiang is concentrated on 12 major sites (see map, page 17) situated from the Altay Mountains in the north of the province (bordering on Kazakhstan, Mongolia, and Russia) to the Tianshan Mountains in the middle, the Pamirs in the west (bordering Tadjikistan, Afghanistan, and Pakistan), the Kunlun Mountains in the south (bordering on the Tibetan area, and on India in the south-western parts), and the Turfan area near Gansu Province in the east.

- 1. The first major Xinjiang Bronze Age site is situated in the eastern part of the Tarim Basin. The culture is called the Gumugou¹⁴ 古墓沟 Culture after the excavation site explored in 1979. It lies just west of the dried-up lake Lop Nor along the Kongque River, thus occupying the same area as the later ancient city of Loulan. The finds have been dated to ca 2000–1500 BC. The site of Xiaohe 小河 (Small River), lying further to the south of the Kongque River, has also been attributed to this culture. The cemetery at Xiaohe, also called Cemetery 5 and "Ördek's necropolis", was first excavated by the Swedish archaeologist Folke Bergman in 1934. Apart from the Xiaohe remains, similar finds made by Aurel Stein in the Lop Nor area and an excavated site at Tieban 铁板 River, where the so-called "Beauty of Loulan" was unearthed 16, also belong to this culture.
- 2. The second site lies north of the Tianshan Mountains in the Junggar Basin and at the foothills of the Altay Mountains. The oldest remains are attributed to the

¹⁴ In Western sources often referred to as Qäwrighul.

¹⁵ Though some Chinese articles state that Bergman discovered this site, this is not entirely true. He himself gave credit to the Uighur guide Ördek who already in 1900 had taken part in the Hedin expedition and the discovery of Loulan. When meeting Hedin again in 1934, he told him about a discovery he had made in the 1910s of a hill covered with a thousand coffins while searching for treasure in the desert. Persuaded by his story, Hedin and Bergman engaged the then 72-year-old guide anew, and Bergman consequently named the site "Ördek's necropolis" after the rediscovery. See Folke Bergman, *Archaeological researches in Sinkiang*, (Stockholm, 1939), pp 51–52.

¹⁶ A female Caucasian mummy dated by her surrounding blanket to be 3800 years old. Mallory and Mair, *The Tarim mummies*, p 140.

Ke'ermuqi 克尔木齐 Culture and dated to 2000 BC. The grave settings and the excavated pottery indicate a relationship with the Afanasevo Culture situated in the Altay and Yenisey area.¹⁷

- 3. The third site lies northeast of the Gumugou site, in the area of the Hami oasis (Qumul) in the eastern parts of Xinjiang, near Gansu province. It includes the Yanbulake 焉不拉克 (Yanbulaq) cemetery and culture dated to 1750–1300 BC¹⁸, as well as the Kezi'erqueqia 克孜尔确恰 (Qizilchoqa) burial site dated to 800–550 BC (though first estimated to 1350–800 BC).
- 4. The fourth area is located around the Turfan Basin, where remains from what are called the Aidinghu 艾丁湖 (Ayding Lake) Culture, also referred to as the Jushi (Gushi) Culture, has been found. This site also includes, among others, the Subashi 苏巴什 cemetery. Though the earliest finds date to 1400 BC, some of the latest remains run into the Iron Age to ca 300 BC.¹⁹
- 5. The fifth site, of the Xintala 新塔拉 (Yengidala) Culture, is dated to 1700–1400 BC and lies further westwards from the previous site, near Bosten Lake. It was a sedentary culture, as indicated by the wheat, millet, stone sickles, querns, and animal bones that have been found, along with a bronze axe and painted pottery with a resemblance to a series of Bronze Age finds in southern Siberia and on the Central Asian steppes belonging to what is called the Andronovo Culture. ²⁰
- 6. The sixth site is located in roughly the same area as the Xintala Culture, although north of the Bosten Lake in the Tianshan Mountains, and is considered to be

¹⁷ Ibid., p 146.

¹⁸ An Zhimin, "Cultural complexes of the Bronze Age" in Mair, ed., *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, vol 1, p 58. This dating is however, according to Mallory and Mair, under dispute. Some have wanted to divide the findings into two periods, ca 1750–1300 BC and 750–550 BC, while others have dated it into one period of ca 1000–700 BC. Mallory and Mair, *The Tarim mummies*, p 141.

¹⁹ Mallory and Mair, *The Tarim mummies*, p 144.

²⁰ Ibid., pp 144–145.

related to it. It is dated to 1000–400 BC and called the Chawuhu 察吾呼 (Charwighul) Culture. The burial customs are similar to those of the northern steppe cultures like the Andronovo Culture. The pottery is similar also to finds in Kazakhstan and Gansu.

- 7. The seventh is a series of sites on the northern slopes of the Tianshan Mountains and in the Barkol grasslands. One of them, the Sidaogou²¹ 四道沟 Culture, dated to 1000–100 BC, seems to have been a settled agricultural community, although other remains nearby indicate a nomadic community as well.
- 8. The eighth consists of a series of sites located in the Yili River valley area, from which large bronze weapons and vessels frequently have been excavated.²²
- 9. The ninth site is located on the Pamir plateau in the western part of Xinjiang. Chinese archaeologists discovered Bronze Age remains for the first time in the province in this area during excavations of the Xiangbaobao²³ 香宝宝 cemetery in 1976 (it was not known at the time how old Stein's and Bergman's finds in the Lop Nor area actually were). Handmade pottery and many bronze items, such as arrowheads, small tools and earrings, but also some ironware, were found. It has been dated to 900 BC–500 BC. The Haladun China Culture and the Aketala China Ch
- 10. The tenth site is situated on the northern foot of the Kunlun Mountains and the

²¹ Called "Tört Erik" in some Western sources.

²² An Zhimin, "Cultural complexes of the Bronze Age in the Tarim Basin", in Mair, ed., *The Bronze Age and Early Iron Age peoples of Eastern Central Asia*, p 47.

²³ Also referred to as Shambabay.

²⁴ Shui Tao, "On the relationship between the Tarim and Fergana Basins in the Bronze Age", in Mair, ed., *The Bronze Age*, p 162.

²⁵ Han Kangxin, "The physical anthropology of the ancient populations of the Tarim Basin", in Mair, ed., *The Bronze Age*, p 563.

²⁶ Also called Qaradöng.

²⁷ Also called Agtala.

southern edge of the Tarim Basin, east of Hetian (Khotan). It contains the Shanpula²⁸ 山普拉 cemetery, found in 1984²⁹, where handmade pottery (showing similarity to the Xiangbaobao cemetery), bronze and iron tools, and wool coats have been found among the funeral objects. It was dated to 200 BC.³⁰

- 11. The eleventh is in the area of Qiemo (Cherchen), where the main site is called Zahongluke 扎洪鲁克, excavated in 1989. Several mummies dressed in woollen textiles were found. C14 tests revealed that the remains were from 1200–700 BC.³¹
- 12. The final important area contains several sites found recently in the Taklamakan desert, in the northern parts of the ancient riverbeds of the Niya and Keriya rivers. The oldest city ever found in Xinjiang was discovered here in 1994, and Bronze and Iron Age remains have been excavated in this area from the 1980s to 2000s.³²

²⁸ Also called Sampul.

²⁹ Shui Tao, "On the relationship between the Tarim and Fergana basins in the Bronze Age", p 163.

³⁰ Han Kangxin, "The physical anthropology of the ancient populations of the Tarim Basin", p 563.

³¹ He Dexiu, "A brief report on the mummies from the Zaghunluq site in Chärchän County", in Mair, ed., *The Bronze Age*, pp 169–174.

³² Zhang Yuzhong, "Jinnian Xinjiang kaogu xin shouhuo" 近年新疆考古新收获 (New finds in Xinjiang archaeology in recent years), *Xiyu Yanjiu* 2001:03, pp 110–111, and Zhang Hongzhi, "Zhong-Fa lianhe zai Keliya heliuyu kaogu wancheng tianye diaocha" 中法联合在克里雅河流域考古完成田野调查 (Allied Chinese-French archaeological field examinations at Keliya River valley), *Xinhua online* 2005 12 21, http://www.xj.xinhuanet.com/2005-12/21/content 5869491.htm, (070510).

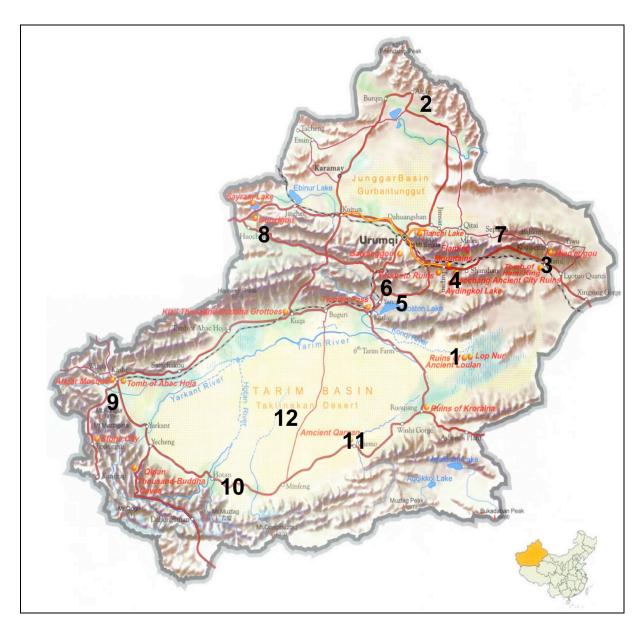


Figure 1: Prehistoric sites in Xinjiang. (Original map from: http://www.muztagh.com/images/map/map-of-xinjiang-large.jpg).

2.1.1 Discoveries of human remains at the sites

In the majority of the sites above, mummies and human skeletons of Caucasian origin have been found. At some locations, people of exclusively European or Asian origin were found, but in others Caucasian and Mongoloid persons were buried together in the same cemeteries. This presented new questions. When and how did these people meet? Did they trade? Did they exchange and share cultures, religions, and technological knowledge with each other? Or are some of the remains older than the others, indicating that they didn't meet at all? To find answers to these questions Chinese and Western archaeologists have compared grave-goods like pottery and textiles found on different locations, looked for signs of a nomadic or settled population, and studied the kinds of domestic animals the cultures raised and what agricultural techniques they used. The human remains have moreover been examined using osteological studies on skeletons and DNA tests on some of the preserved mummies.

Historians in their turn have looked for answers in ancient Chinese sources. In this search, the main clue has put scholars on the track of a people called the Yuezhi 月氏, believed to be jade traders who were already providing China with this commodity by the Shang and Zhou dynasties³³, and described in Han dynasty sources thus: "The skin color of the people was reddish white, and they were skilled in shooting arrows and riding horses." As we shall see, it is believed that the Yuezhi were equivalent to a people called Tocharians (Tuhuoluoren 吐火罗人), named after the now extinct Indo-European language they spoke. However, there is also research in China indicating that the Yuezhi/Tocharians might have had a close relationship with a Proto-Tibetan people

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³³ Liang Junyan, "Kunshan zhi yu he 'yushi zhi lu'" 昆山之玉和"玉石之路" (The jade of the Kunlun Mountains and 'The Jade Road'), *Xinjiang Difangzhi* 2002:02, p 60.

³⁴ From a note in Da Yuan zhuan 大宛传 (Account of Fergana), *Shiji* 史记 (Records of the Grand Historian), as quoted in Chen Chien-wen, "Further studies on racial, cultural, and ethnic affinities of the Yuezhi" in Mair, ed., *The Bronze Age and Early Iron Age peoples of Eastern Central Asia*, vol 2, p 773. The quotation concerns the people of the Kushan empire, referred to in ancient Chinese sources as Da Yuezhi 大月氏 (Greater Yuezhi).

called the Qiang 羌.

2.2 Archaeological excavations and the question of the ethnic origin of the early cultures in Xinjiang

We shall now look into the more important of the above archaeological sites, concentrating on those places where new excavations have been made during the time period examined.

2.2.1 The discoveries at the Xiaohe cemetery

In 1934 Folke Bergman excavated a site in the Lop Nor area located next to a water flow he called Small River (Xiaohe). It contained a cemetery on a sand hill marked by wooden posts. The mummies he found had "non-Mongolian features," and Bergman draws parallels to similar mummy finds made by Aurel Stein in the area.³⁵

The lack of pottery at the site made it impossible for the Swedish excavator to date the findings using the then-prevailing method of comparative archaeology, but the lack of signs of contact with China (no silk was found), made him conclude that it must have been older than the Chinese expansion to the region in the Western Han dynasty, thus earlier than 200 BC. Moreover, Bergman and the textile expert Vivi Sylwan, who later examined some of the artefacts brought back to Stockholm, could see a surprising resemblance in the clothing, especially the fringed loin-cloths, to Bronze Age grave finds in Denmark, even though Bergman remarked that "there are of course no direct connections".³⁶

During excavations to the north of the Xiaohe site, at Gumugou, Chinese archaeologists found human remains in 1979 dated to 1800 BC that were defined to be of

³⁵ Folke Bergman, Archaeological researches in Sinkiang, p 144.

They more specifically draw attention to the fringed skirts found in Egtved, Denmark. Folke Bergman, p 76, and Vivi Sylwan, *Woollen textiles of the Lou-lan people*, (Stockholm, 1941), p 10. The modern textile expert Elizabeth Wayland Barber, upon reading the publications by Bergman and Sylvan, made the same parallel in her book *The mummies of Ürümchi* (pp 104–105).

Caucasian origin.³⁷ Wheat grains, bones, and woollen textiles in the graves indicate an agricultural and stockbreeding society. The wooden posts still standing upright at the graveyard bore traces of sharp tools, apparently bronze axes, making this the earliest Bronze Age culture in the area. The grave goods also included microliths (stone tools) and copper and jade objects. No pottery was found on the site. It was later concluded that this culture must be related to the Bergman find.

At the end of 2000, Chinese and Uighur archaeologists rediscovered the Xiaohe site.³⁸ Since then a series of excavations has been made at the site, mainly conducted during 2003–2005.³⁹ The findings so far have astonished the excavators. It has turned out that the Xiaohe remains contain the largest number of mummies ever found at any single site in the world to date.⁴⁰ Of a total number of approximately 300 graves, 167 tombs have been excavated, but unfortunately more than one hundred of the remaining tombs,

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The Bronze Age, p 559. The claim that the excavated bodies are of Caucasian origin was, according to Mallory and Mair in 2000, not supported by the then-available biological evidence (*The Tarim mummies*, p 244). However, in 2004, Jilin University, equipped with China's first archaeological DNA laboratory, published results of DNA tests on mummies from the Lop Nor area. The results are said to prove that the tested mummies are Caucasian and 3800 years old. Unfortunately, it is not clear from the short summary I have had access to whether the report specifically concerns the Xiaohe or Gumugou remains, but I find it likely that it concerns the latter. Cui Yinqiu et al., "Xinjiang Luobo nuo'er diqu Tongqi Shidai gudai jumin mtDNA duotaixing fenxi" 新疆罗布诺尔地区铜器时代古代居民mtDNA多态性分析(Mitochondrial DNA polymorphism analysis of ancient inhabitants of Xinjiang Lop Nor district during the Bronze Age), *Jilin Daxue Xuebao (Yixue Ban)*, 2004:04, pp 650–652.

³⁸ Wang Binghua, "Xiaohe kaocha duanxiang" '小河'考察断想 (Random thoughts on the investigations at Xiaohe), *Xiyu Yanjiu* 2001:02, pp 50–56. It is clear from Wang Binghua's description that it was thanks to a new (1997) translation into Chinese of Bergman's book from 1939, *Archaeological Researches in Sinkiang*, that the tombs could be found again in 2000.

³⁹ The excavations have been led by Idris Abdursul (Yidelisi Abuduresule) 伊弟利斯 阿不都热苏勒 of the Xinjiang Archaeological Institute and Yang Lian 杨镰 (1947–) of the Chinese Academy of Social Sciences in Beijing.

⁴⁰ "A remarkable rediscovery: The Xiaohe Tombs", (*China Pictorial*, June 2, 2005), *Zhongguo Wang*, http://www.china.org.cn/english/features/Archaeology/130815.htm, (070510).

One of the first articles on the rediscovery states that the buried mummies clearly have European features,⁴² and the preliminary results indicate that the earliest graves are from ca 2000 BC.⁴³ Peking University archaeologist Lin Meicun 林梅村 is of the opinion that there are similarities between the Xiaohe burial site and the Ke'ermuqi site on the southern slopes of the Altay Mountains and, if that observation is correct, it means that the age of the Xiaohe remains might be equivalent to, or even earlier than, those of the Gumugou site.⁴⁴

Lin Meicun has moreover described a wood construction believed to be a "xiangtang" 享堂 (a sanctuary for worshipping ancestors), found on top of a female grave located at the very center of the burial site.⁴⁵ He is therefore of the opinion that women had an important position in this culture. As no pottery, at least in the early excavations, was found either on the Xiaohe site or at the Gumugou site, it is difficult to make direct comparisons to other contemporary cultures further eastwards. However, it is worth noting that woollen textiles, found in rich amounts in Xiaohe, also have been found in

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⁴¹Idilisi and Li Wenying, "Shouhu Da Loulan" 守护大楼兰 (Guarding the Great Loulan), *Zhongguo Wenhua Yichan* 2005:05, p 40. In a report in *Xinjiang Wenwu* 2003, it is said that the remains possibly are older than the Gumugou. Yidelisi et al., "2002 nian Xiaohe mudi kaogu diaocha yu fajue baogao" 2002年 小河墓地考古调查与发掘报告 (Investigation and excavation of the Xiaohe cemetery in 2002), *Xinjiang Wenwu* 2003:02, p 46.

⁴² Wang Binghua, "Xiaohe kaocha duanxiang" '小河'考察断想, pp 50–56.

⁴³ Idilisi and Li Wenying, "Shouhu Da Loulan" 守护大楼兰, p 40.

⁴⁴ The most recent report from the excavators at Xiaohe (October 2007) contradicts this theory and the earlier reports on the dating. It is there stated, that the remains excavated in 2003 (when the first two layers of the five at the southern side of the burial area were examined) are as late as 1650–1450 BC. However, since this report concerns only the upper layers, and the reports from the continued investigations have not yet been published, the age of the oldest remains is still not entirely clear. Yidelisi et al, "Xinjiang Luobupo Xiaohe mudi 2003 nian fajue jianbao" 新疆罗布泊小河墓地2003年发掘简报 (A brief excavation report on Xiaohe graveyard 2003, located in Luobupo, Xinjiang), *Wenwu* 2007:10, pp 4–43.

⁴⁵ Lin Meicun, "Tuhuoluoren de qiyuan yu qianxi" 吐火罗人的起源与迁徙 (The origin and migrations of the Tocharians), *Xiyu Yanjiu* 2003:03, p 17–18. This is also stated in Idris Abdursul's and Li Wenying's description of the Xiaohe finds, "Shouhu Da Loulan" 守护大楼兰, p 37.

western Gansu, where the Qijia 齐家 Culture was located. As sheep did not exist in early China, this is possibly an indication of an early link between West and East. ⁴⁶ The ethnic origin of the Gansu cultures of the time, was, as far as archaeological excavations have revealed, exclusively Mongoloid.⁴⁷

2.2.2 The archaeological investigations in the Hami area

The next area of Bronze Age cultures at which excavations have been made recently is situated northeast of Lop Nor around the oasis town of Hami. Here human remains found in the Kezi'erqueqia gravefield excavated in 1978, 1986, 1991, and 1995–1996 were of Caucasian origin.⁴⁸ In contrast, at the Yanbulake site excavated in the mid 1980s, eight out of 29 examined skeletons were estimated to be of Caucasian origin while the others were defined as Mongoloid, or to be more specific, "similar" to the "Khams-Tibetan type".⁴⁹ This has been considered to be a very important discovery as it indicates the earliest proof of East-West contacts in the area.⁵⁰ The grave goods include painted pottery, woollen knit-ware, small bronzes such as knives, needles, mirrors, and arrowheads. At the latest graves a few small iron knives have been found, indicating the introduction of iron tools.⁵¹ Moreover, a wall of stamped earth and mud bricks was found still standing up to 5 m in height. Mud bricks are a common find in excavations of the agricultural oasis communities of Bactria and Margiana, famous in western Central Asia for their advanced irrigated farming.⁵² Somehow this mud-brick technique must have spread eastwards to Hami.

⁴⁶ Mallory and Mair, p 134.

⁴⁷ Ibid.

⁴⁸ Mallory and Mair, pp 142 and 188; Mair, ed., vol 1, p 78.

⁴⁹ Chen Chien-wen, in Mair, ed., vol 2, p 768.

⁵⁰ Zhang Yuzhong, "Jinnian Xinjiang kaogu xinshouhuo" 近年新疆考古新收获 (New achievements in Xinjiang archaeology in recent years), *Xiyu Yanjiu* 2001:03, pp 108–111. More than 700 graves are said to have been excavated.

⁵¹ An Zhimin, "Cultural complexes", p 58.

⁵² Mallory and Mair, p 141.

In 2003 researchers from the Xinjiang Archaeological Institute, Xinjiang Museum, and Xinjiang University of Medical Sciences published new results from studies of 13 human skulls found on the northern slopes of Tianshan Mountains in the Hami area. They concluded that the remains were older than the above, dating from the 19th to the 13th centuries BC, and that both Europeans and Asians were mixed together in the same area of tombs, though the majority of the examined skeletons belonged to people of Asian origin.⁵³ If that is the case, these results contradict the American sinologist Victor Mair's claim in an interview in 2005 that there were only Caucasians present in the area until East Asian people entered the eastern parts of the Tarim Basin about 3000 years ago. In an interview in 2006 however, Mair said: "From around 1800BC, the earliest mummies in the Tarim Basin were exclusively Caucausoid, or Europoid", thus more in line with the present Chinese results.⁵⁴ It has to be noted though that ironware has been found in conjunction with some of these remains, indicating that at least part of the finds belong to a much later era: the late Bronze Age and early Iron Age⁵⁵.

2.2.3 Later investigations in the Chawuhu area

The next culture on which research has focused in recent years is the Chawuhu Culture in the Tianshan Mountains. The research on this culture is considered to be of such importance that it was nominated in 2006 for what is said to be "the most authoritative archaeological award in China", the so-called "Xia Nai archaeological achievement award" of the Institute of Archaeology, Chinese Academy of Social

⁵³ Wang Bo, Chang Xien and Cui Jing, "Tianshan beilu gumu chutu renlu de zhongzu yanjiu" 天山北路古墓出土人颅的种族研究 (A study on the races of the human skulls unearthed in the ancient tombs of northern slopes of Tianshan Mountains), *Xinjiang Shifan Daxue Xuebao (Zhexue Shehui Kexue Ban)* 2003:1, pp 97–107.

^{54 &}quot;Genetic testing reveals awkward truth about Xinjiang's famous mummies" (AFP), *Khaleej Times online*, http://www.khaleejtimes.com/DisplayArticle.asp?xfile=data/todaysfeatures/2005/April/todaysfeatures_April37.xml§ion=todaysfeatures (070430) and "A meeting of civilisations: The mystery of China's celtic mummies", *The Independent online* 28 August 2006, http://news.independent.co.uk/world/asia/article1222214.ece, (070509).

⁵⁵ An Zhimin, "Cultural complexes", p 58.

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The culture got its name following a series of discoveries made at the foot of the Chawuhu pass southwest of the town of Baluntai in Hejing county: 2000 tombs belonging to this nomadic culture were found. What is striking in the Chinese reports, expressed, for instance, in a news article originally published in the *Xinjiang Ribao* on January 8, 2002, is that both Caucasian and Mongoloid skeletons again are said to have been found, thus underlining a Eurasian connection rather than simply a European one. In the same article, the Chawuhu finds are estimated to be 2500 years old, and the excavated pottery to be similar to artefacts found both in southern Siberia and in the Turfan region. The similarities to the Siberian finds, as well as to Kazakhstan finds, indicates that this culture is related to, or a successor to, the Andronovo Culture. Pottery, arrows, bronze knives, bronze horse-bits, silver, gold, ironware, and even horses were found among the grave goods; obviously horses were quite important for this community. Moreover, its location in the mountains, where movement from northwest to the eastern parts of the Tarim Basin was facilitated, is no coincidence. Lü Enguo 吕恩国 of the Xinjiang Archaeological Institute has described the site as: "Chawuhu Pass was a vital communication line. As research deepens, the historical significance of the Silk Road increases as its route becomes longer in both space and time". 57 Jilin University has recently published results from DNA analysis of examined corpses excavated from the Chawuhu tombs and said to be approximately 2500–3000 years old. The conclusion was that

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⁵⁶ "15 academic achievements conferred Xia Nai Archaeological Prize", *People's Daily online* 24 February, 2006,

http://www.archaeologynews.org/link.asp?ID=66881&Title=15%20academic%20achievements%20conferred%20Xianai%20Archaeological%20Prize, (070604).

⁵⁷ Zhang Ruimin and Kong Xudong, "New thinking on origin of the Silk Road", *Xinjiang Ribao* 8 January, 2002, as translated by Zhang Tingting and published online on *Zhongguo Wang*, http://www.china.org.cn/english/2002/Jan/25113.htm, (070517).

... in the central areas of our country's Tianshan Mountains in Xinjiang the Mongolian[⁵⁸] race already was present as far back as during the Bronze Age and until the early stages of the Iron Age. The ancient inhabitants of the Chawuhu gully were probably a mixed antique community of the European and Asian races.⁵⁹

Thus a meeting place for East-West contacts can be said to have developed in the area at that time. Compared to the earliest remains of Caucasian mummies examined in the Lop Nor area though, there is still a gap of 800 years.

The Xinjiang Archaeological Institute published a report in 2002 on the ethnic origin of ancient human remains found in a cemetery near Shihezi city, west of Urumqi, between the Chawuhu pass and the Yili River valley. Through racio-typological studies of the craniums it was defined that the people buried in this area were Caucasians. The grave field was estimated to be from the Warring States period to the Western Han dynasty. ⁶⁰

2.2.4 New excavations in the Yili River valley area

A series of huge excavation projects were conducted in the 2000s in the Yili River valley due to the construction of a hydroelectric station in the Tianshan Mountains. In one of the excavation reports the findings were described as rarely seen on prehistoric sites in Xinjiang. Multiple layers, representing different time periods, were found. Artefacts from the Andronovo Culture were found on a larger scale than ever before within the present Chinese borders. Precious pottery, wooden objects, rich amounts of animal bones, as well as microliths, also were found. The latter were considered to be

⁵⁹ Xie Chengzhi et al, "Xinjiang Chawuhugou gudai jumin xianliti DNA xulie duotaixing fenxi" 新疆察吾 呼沟古代居民线粒体DNA序列多态性分析 (Analysis of mitochondrial DNA from the ancient tombs of Chawuhu), *Jilin Daxue Xuebao (Lixue Ban)* 2005:04, pp 538–540.

⁵⁸ That is, Mongoloid, not Mongolians.

⁶⁰ Chen Liang, "Xinjiang Shihezi Nanshan shiduimu rengu de zhongxi yanjiu" 新疆石河子南山石堆墓人骨的种系研究 (A racio-typological study of the human craniums from the stone cemetery at South Mountain, Shihezi City, Xinjiang), *Kaogu yu Wenwu* 2002:01, pp 69–80.

among the most important artefacts present. In addition, the archaeologists examined a series of cliff paintings found nearby; however, they could not yet determine the age of these or whether they belonged to the nearby graveyards.⁶¹

The largest excavation done so far in the Tianshan area, also necessitated by the same engineering project preparing to flood the area, is that of several grave fields located in Bietebasitao, Nilka county.⁶² More than 630 tombs are said to have been investigated, stretching from the time of the Warring States period to the Han dynasty and finally to the Jin dynasty. The excavation team has found very rich graves showing that people of the ruling elites had been buried there. Among the more interesting objects retrieved from the ground are ruby and gold rings that the researchers believe cannot have been produced locally. The intaglios in the rings seem to picture "ancient mythologies once present in Central and Southwest Asia" about goddesses and queens. This find is unfortunately not further explained or described by the authors of the report, who point out only that the "implication of this find goes without saving". 63 The only guess I have without any further information is that the motives of the intaglios are related to Greek mythology. What is worrying is that more than 600 tombs were excavated between April and October 2003. Did the team really have time to properly investigate such a huge number of graves in that time? What more may possibly now be lost in the area affected by this hydroelectricity project?

If the intaglios indeed contained motives of Greek mythology, then this find is related to a very important period in the Silk Road trade. As pointed out by, for instance, Liu Xiaorong 刘小荣, the trade between East and West took a substantial leap forward

⁶¹ Liu Xuetang and Guan Ba, "Xinjiang Yili hegu shiqian kaogu de zhongyao shouhuo" 新疆伊犁河谷史 前考古的重要收获 (Important results of the prehistoric archaeology of the Xinjiang Yili River valley), *Xiyu Yanjiu* 2002:04, pp 106–108.

⁶² Liu Xuetang, Tuo Huti and Alifu, "Xinjiang Nileike xian Bietebasi taomuqun quanmian fajue huo zhongyao chengguo" 新疆尼勒克县别特巴斯陶墓群全面发掘获重要成果 (Important results from the comprehensive excavation in the pottery tomb cluster in Bietebasi, Nilka county, Xinjiang), *Xiyu Yanjiu* 2004:01, pp 106–108.

⁶³ Ibid., p 108.

with the Greek expansion under Alexander the Great in the fourth century BC.⁶⁴ The subsequent Hellenisation of vast areas, influence from Greek tradesmen, use of Greek coins, and the demand for precious goods in the newly founded cities led to increased trade. Spices from India, gold from Siberia, silk from China and jade from Central Asia were exchanged on an unprecedented scale. The later more or less Hellenistic kingdoms and empires that came to power in Persia and Central Asia (Parthia and Bactria) continued to play important roles in the trade and cultural interchange. Greek mythology from the Hellenistic world, Zoroastrian belief from Parthia, and Buddhist influences from India came with the trading communities and mingled with local customs and religions. Liu explains that this still can be seen in, for instance, the style and motives of the earliest Buddhist mural paintings and sculptures in the Qiuci grottoes. It is possible that the intaglios recently unearthed in the Yili River valley, if they indeed do contain images of Greek mythology, are yet another sign of the Greek influence in the Xinjiang area from the fourth century BC. As we shall see, this spread of Greek influence can also be attributed to the Yuezhi.

East of the Pamir Mountains in the Kashgar area, construction work has led to other recent forced excavations, in this case because of the construction of a water conservancy facility. The majority of the findings in the older graves seem, even in this case, to have connections to the Andronovo Culture.⁶⁵

2.2.5 New discoveries in the Niya and Keriya rivers area

Bronze Age cultures were found in the southern parts of the Taklamakan desert in the late 1980s and early 90's by a joint Chinese–Japanese team. The discovery was made

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⁶⁴ Liu Xiaorong, "'Sichou zhi lu' shang de Xila wenhua" "丝绸之路"上的希腊文化 (Greek culture on the Silk Road), *Lishi Jiaoxue* 2001:09, pp 20–24.

⁶⁵ Other more recent graves were also found on the site, containing few or no burial articles at all. These can, according to the author, still give important insights into the Muslim burial customs of the time. Wu Yong, "Xinjiang Kashi Xiabandi mudi kaogu fajue xin shouhuo" 新疆喀什下坂地墓地考古发掘新收获 (New harvest from the archaeological excavations at Xiabandi Graveyard in Kashgar, Xinjiang), *Xiyu Yanjiu* 2005:01, pp 109–113.

40 km north of the Niya remains and the artefacts were also found to be similar to items found at archaeological sites in Kazakhstan and Siberia, thus again pointing in the direction of the Andronovo Culture.⁶⁶

In the mid-1990s a joint Chinese–French team also found Bronze Age remains when they followed the ancient riverbed of the Keriya River in the Taklamakan. Starting from the Wei-Jin dynasty city of Kaladun they made a survey into the desert and first discovered remains of a previously unknown city that they named Yuansha gucheng 圆沙 故城 (city of the round sands). ⁶⁷ A further 14 km in Taklamakan they found pottery and other artefacts with a striking similarity to the Bronze Age items found earlier in the northern parts of the Niya River.

The discovery of this city has led to four more excavations at Yuansha in 1993–2005. The final report will be published later in 2007, but some of the results have already been revealed. Carbon dating has proved that the city walls are 2200 years old, making it the oldest city ever found in Xinjiang. However, as no traces of Han dynasty remains were discovered, it is considered to date to even earlier than the Western Han. Of 20 graves found in the settlement only three were still intact. The human remains in them, dressed in woollen textiles, were of Caucasian origin and C14 analysis indicated that they were buried 2100 years ago. Animal bones from many different domesticated species were found, among them goats, sheep, camels, horses, dogs, and cows. Even in the surrounding area many bones from sheep were found, indicating advanced animal husbandry. Irrigation ditches also were found throughout the city area, as well as traces of wheat and millet, millstones, and caches for storing grain, all indicating an advanced

⁶⁶ Zhang Yuzhong, "Jinnian Xinjiang kaogu xin shouhuo" 近年新疆考古新收获 (New achievements in Xinjiang archaeology in recent years), *Xiyu Yanjiu* 2001:03, p 110.

⁶⁷ Ibid., pp 110–111.

⁶⁸ Zhang Hongchi and Yidelisi, "Yuansha gucheng zhi mi: Zhongfa liang guo zhuanjia dui Yuansha gucheng de kaogu faxian" 圆沙故城之谜—中法两国专家对圆沙故城的考古发现 (The mystery of the ancient Yuansha city: Experts of the two countries China-France on the archaeological discoveries of the ancient Yuansha city), *Pami'er* 2006:04, pp 104–107.

agricultural society as well. The identity of the inhabitants of the Yuansha city is still, however, something of a mystery. The head of the excavations on the Chinese side, Idris Abdursul, has pointed out that their origin, religious belief, social organisation, and language are unknown.⁶⁹

Conclusion

What we can conclude from the above is that there have been repeated discoveries of remains related to the Andronovo Culture (2300–1000 BC) from Chawuhu to Keriya. The Andronovo Culture consists of a series of Bronze Age sites situated from southern Ural, to Kazakhstan and Southern Siberia. The Xinjiang remains also seem to reveal indications of animal husbandry, such as domesticated cows and sheep and, from the Chawuhu onwards, horses. Finds of the most recent date in Keriya indicate a settled agricultural community involving also advanced animal husbandry. Iron technology is gradually introduced during this period. Mud-brick technique known from the Oxus civilization was used also in the Hami region, and advanced agriculture with irrigation technique was used in the cultures of the Yuansha.

2.3 Chinese explanations of the origin of the early settlements in Xinjiang

As Li Shuicheng 李水城 of Peking University has pointed out, the discovery of mummies with European features belonging to Bronze Age settlements in Xinjiang has brought to life an old discussion on the origin of Chinese civilization. Li refers to Dr Johan Gunnar Andersson, who in the 1920s put forward the theory that the prehistoric painted pottery technique found in the Yellow River valley originated in Central Asia and then spread to China through the steppe areas. Though Andersson has since been

⁷⁰ Li Shuicheng, "A discussion of Sino-Western cultural contact and exchange in the second millenium BC based on recent archaeological discoveries", *Sino-Platonic Papers*, *97*, (December 1999), http://sino-platonic.org/abstracts/spp097_sino_western.html, (070517).

⁶⁹ Ibid., p 107.

⁷¹ J.G. Andersson, "An early Chinese culture", Bulletin of the Geological Survey of China, no 5, (Peking,

accused by the Chinese of having a colonial view in his research⁷², and he himself later revised his original arguments⁷³, indications of another kind might now prove him right. The introduction of both bronze and iron tools seems to have traveled from west to east, as well as the use of wheeled wagons and the domestication of the horse. For a country that has presented some of the most amazing inventions to the world, this idea is understandably not always easy to accept. Li Shuicheng for example, denies it in his article from the late 1990s, claiming that the prehistoric cultures of China instead gradually advanced to the West.⁷⁴ He is convinced that an East Asian population situated in western Gansu migrated westwards to the Hami oasis. There they met "some members of the primitive Europoid race" that he says had crossed the Altay Mountains at the same time and advanced southward into the eastern parts of Xinjiang. It was these early contacts, according to Li, that caused the foundation of "small oasis states" in the area and "led to the formal birth of the Silk Roads" connecting Europe with Asia.

The concept of an eastward spread of technology has, however, gradually begun

^{1923),} pp 34-42.

⁷² Magnus Fiskesjö and Chen Xingcan, *China before China*, (Stockholm: Museum of Far Eastern Antiquities, 2004), pp 114–118.

⁷³ If one reads Andersson's own accounts, it is hard to see how he could be accused of having a colonial approach in his research. In fact, in his "Researches into the prehistory of the Chinese", *Bulletin of the Museum of Far Eastern Antiquities* 15, (Stockholm, 1943), he clearly expresses what he thought about the "amazing bias of a certain school of European archaeologists" (p 228) when he said that it was "not only unfounded but rather disgraceful when we Europeans, working under a superiority bias that lacks proportion and perspective speak of 'Herren-völker' who brought a superior culture to China" (p 291). He also pointed out in the same work that some pottery had features that rather indicated "that China was the giver and the West the recipient" (p 287). To understand why he proposed the idea of an eastward spread of painted pottery in the first place, one has to be aware of the fact that his discovery of prehistoric sites in China constituted the very start of prehistoric archaeology in that country. There simply did not exist any relevant Chinese archaeological reports to compare it to. Instead he did what any archaeologist of his time would have done: he used the then-prevailing method of comparative archaeology to find answers to the mysteries of the newly found pottery by consulting the reports available: from the West and the Near East. The European scholars he consulted about the pottery finds, no doubt also influenced him in his western origin theory.

⁷⁴ Li Shuicheng, "A discussion of Sino-Western cultural contact".

to win acceptance in China. As early as 1993, the influential archaeologist An Zhimin (now in his 80s), of the Chinese Academy of Social Sciences, asked if the early metal findings in China could be a sign of a prehistoric Silk Road that brought technology from the northwest.⁷⁵ In 1998, while asking for more research on the matter, he went one step further, saying: "The earlier occurrence of both bronze and iron in comparison with North China suggests that Xinjiang functioned as an intermediate link in the eastward spread of metal culture". 76 And furthermore: "It can be imagined that initially bronze and iron technology took its rise in West Asia, first influenced the Xinjiang region, and then reached the Yellow River valley, providing external impetus for the rise of the Shang and Zhou civilizations."⁷⁷

Today Li Shuicheng is also of the opinion that some technological input may have come from the West. In an article published in 2003 he says: "we can confidently disprove the proposal that 'Yangshao culture came from the West' but to deny all possibilities of external influence on the development of Chinese civilization is to 'stop eating for fear of choking". He still upholds his view though, of a westward spread of the Chinese civilization rather than the opposite. His opinion is that first the Chinese Yangshao 仰韶 Culture (ca 5000–3000 BC) expanded westwards, then the Majiayao 马 家窑 Culture, followed by the Machang 马厂 Culture. Finally, the Siba 四坝 Culture migrated from the Hexi corridor into eastern Xinjiang where this people met with the above mentioned "primitive" population from the West. In his view, this westward trend was "caused by the continuous outward expansion of the Yellow River civilization", and

⁷⁵ An Zhimin, "Shilun Zhongguo de zaoqi tongqi" 试论中国的早期铜器 (On early copper and bronze artifacts in China), Kaogu 1993:12, p 1117.

⁷⁶ An Zhimin, "Cultural complexes of the Bronze Age" in Mair, ed., *The Bronze Age and early Iron Age* peoples of Eastern Central Asia, vol I, p 45.

⁷⁷ Ibid., p 60.

⁷⁸ Li Shuicheng, "Ancient interactions in Euroasia and Northwest China: Revisiting J.G. Andersson's legacy", Bulletin of the Museum of Far Eastern Antiquities 75, (Stockholm, 2003), p 19.

that it "deeply influenced the later cultures in [the] Xinjiang area". 79

Li Shuicheng's colleague, the archaeologist and metal expert Mei Jianjun 梅建军, has in recent years focused his research primarily on early metal findings in China proper and the Northwestern provinces. He states that, "It has become increasingly clear that the early development of copper-based metallurgy in Northwest China may have received impetus from the Eurasian steppe" Mei brings up an idea suggested by Fitzgerald-Huber 1, that the archaeological evidence indicates connections between the Qijia Culture and, what is called the "Seima-Turbino", a transcultural complex across northern Eurasia (from Finland to western Mongolia), where, among other things, early bronze items have been found. Mei furthermore explains that metal analyses done in China also indicate a possible link directly to the Urals. According to him, the contacts that spread technological ideas consisted of "a complex pattern of interregional interactions, rather than a simple process of one-way diffusion". Not only the Seima-Turbino complex and the Qijia were involved, but possibly also the Okunev (by Russian scholars believed to have been a mongoloid population in the Altay), Andronovo, Siba, Tianshanbeilu, Afanasevo, and the Machang.

What we can conclude from the above is that the current archaeological evidence points to an eastward spread of at least some technology from the West. But with regard to the Xinjiang mummies and early metal items that have been discovered at their sites⁸⁴,

⁷⁹ Ibid., p 12.

⁸⁰ Mei Jianjun, "Qijia and Seima-Turbino: The question of early contacts between Northwest China and the Eurasian steppe", *Bulletin of the Museum of Far Eastern Antiquities* 75, (Stockholm, 2003), p 44.

⁸¹ See Louisa G. Fitzgerald-Huber, "Qijia and Erlitou: The question of contacts with distant cultures", *Early China* 22, (1995), pp 38–52.

⁸² Mei Jianjun, "Qijia and Seima-Turbino", p 37.

⁸³ Ibid., p 41.

⁸⁴ Mei Jianjun has in personal correspondence explained to me that only among the items recovered during the recent excavations at Xiaohe cemetery, a bronze mirror, more than ten gold rings and several copper pieces have been found.

who were these people, or possibly peoples, that might have brought this technology eastwards, and from where did they arrive? In a recent interview in *The Independent*, it is said that Victor Mair

resists attempts to impose a theory of a single people arriving in Xinjiang, and believes rather that the early Europeans headed in different directions, some travelling west to become the Celts in Britain and Ireland, others taking a northern route to become the Germanic tribes, and then another offshoot heading east and ending up in Xinjiang.⁸⁵

Thus he believes that the Caucasian communities found in the Tarim Basin indeed had a European origin. But if that is the case, where did they enter? In 1939 Folke Bergman drew parallels of the Xiaohe findings to other cultures in many different directions, indicating that he really did not know, but two of the associations he made are still interesting in the present discussion. First, he saw similarities in the triangular decorations on arrows found in Xiaohe to patterns on objects from Bronze Age cultures in the Central Southern Siberia. Second, he was certain that the wool used in the textiles had a connection with the West, in particular one find that he compared in quality to wool from sheep herds in ancient Bactria. As we shall see, the idea of a European entry either directly from the West or from the steppe cultures in the north is today the prevailing theory. In Chinese research of the last years there has been a focus on the North, on comparisons with the Bronze Age cultures affiliated to the Andronovo culture in southern Siberia and on the Central Asian steppes. Many reports have linked these cultures together.

Of interest in this matter are the discoveries of Xinjiang jade on sites both on the

⁸⁵ Clifford Coonan, "A meeting of civilisations: The mystery of China's celtic mummies", *The Independent online*, 28 August 2006, http://news.independent.co.uk/world/asia/article1222214.ece, (070509).

⁸⁶ Bergman, *Archaeological researches in Sinkiang*, p 80. The patterns also looked similar to objects belonging to Bronze Age cultures in the Ordos region in Inner Mongolia as well.

⁸⁷ Ibid., p 75.

Eurasian Steppe and in China proper. Xinjiang jade has been found in graves in for instance Henan and Shanxi as well as many times in graves from the Andronovo Culture in the Eurasian Steppe.⁸⁸ The most important jade traders in early times were apparently the Yuezhi, the people associated with the Tocharians. Interestingly enough, a study of the Gumugou and Xiaohe finds has identified the population there as Tocharians.⁸⁹

Another important factor to take note of is that the earliest Bronze Age cultures in Xinjiang, like the Gumugou Culture, seem to have been a mixed agricultural and nomadic society, while later cultures turned out to be settled agricultural communities. For a settled agricultural community in the desert areas however, it is important to know how to use irrigation techniques, such as was seen during the investigations of the later cultures in the oases along the Niya and Keriya Rivers. Since this kind of large-scale irrigation first developed further westward in Central Asia, in Bactria and Margiana, ⁹⁰ the question is, how did it spread from there to the Tarim Basin?

In 1998, the Chinese scholar Shui Tao 水涛 was of the opinion that Bronze Age cultures in the Tarim area were related to the Bronze Age cultures directly west of the Pamirs. ⁹¹ He believed that a group of people passed through the Pamir Mountains and

⁸⁸ Liang Junyan, "Kunshan zhi yu he 'Yushi zhi lu'" 昆山之玉和"玉石之路" (The jade of the Kunlun Mountains and "The Jade Road"), *Xinjiang Difangzhi* 2002:02, pp 59–60.

⁸⁹ K. Jettmar, "Archäologie in Xinjiang und ihre Bedeutung für Südsibirien", Beiträge zur allgemeinen und vergleichenden Archäologie 12, pp 139–153 (1992), as quoted in E.E. Kuzmina, "The Tarim Basin people and pastoralists of the Asian steppes", in Mair, ed., *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, vol 1, p 70.

⁹⁰ Shui Tao, "Xiyu shiqian wenming fazhan de ruogan lilun wenti" 西域史前文明发展的若干理论问题 (Some academic problems on the progress of prehistoric civilization in the Western Regions), *Xiyu Yanjiu* 2005:04, p 46. Shui Tao refers to the area where irrigation techniques developed as located "in front of the Kopet-Dag range". This mountain range is situated in modern day Turkmenistan on the border to Iran. The oases civilisations of Bactria and Margiana was situated to the east of this mountain and to the west of the Pamir and the people living in the area at that time were probably Indo-Iranians. Shui Tao also points out that it is not yet clear how this irrigation technique spread to Xinjiang.

⁹¹ Shui Tao, "On the relationship between the Tarim and Fergana Basins in the Bronze Age", in Mair, ed., *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, vol 1, pp 162–168.

entered the western Tarim Basin some time during the first half of the first millennium BC, or possibly during the second half of the second millennium BC. A branch of these people continued to the northeast where they finally met with a Mongoloid population in the Chawuhu site, while another group went to the south of the Tarim Basin and settled down near Khotan or further eastwards towards Lop Nor. Shui's theory was based largely on the studies by Han Kangxin 韩康信, the Beijing scholar behind China's large-scale skeletal studies of human remains in Xinjiang. Han Kangxin posited that there were different kinds of Caucasians that entered the province. 92 First, there was the group in Gumugou that he defined as Proto-European, similar to peoples of the former Soviet Union's excavations in Kazakhstan, Siberia, and the Volga River basin. Second, "several centuries BCE or a little earlier",93 another group of an Eastern Mediterranean type (by Han called "Indo-Afghans"), crossed the Pamir Mountains and entered Xinjiang from the West, as indicated by examinations of skeletal remains found in the Pamirs and along the southern Tarim to the Lop Nor area. There was also a third group of Caucasians (by Han called "Pamir-Ferghana"), who were declared to have entered from the West at about the same time but further northwards. Remains of this type had, according to Han, been found in the Tianshan Mountains and the upper areas of the Yili River. Some of these new groups arriving from the West were believed to be related to the Sakas (Scythians), who probably were an Iranian people.⁹⁴

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⁹² Han Kangxin, "The physical anthropology of the ancient populations of the Tarim Basin", in Mair, ed., *The Bronze Age*, vol 2, pp 558–570.

⁹³ Ibid., p 567.

⁹⁴ Ibid., pp 562–563. Professor Qian Boquan has made several studies of the migration and disappearance of the people of the Wusun state after its collapse in 179–178 BC. The inhabitants of that state moved westward to the Yili River valley and later until the early fifth century to the Pamirs. Thus some of the early graves in the Yili river area can possibly be attributed to the Wusun as well. The Wusun people have been assigned variously to the Sakas, Indians, Turks—and to the Yuezhi, in spite of the fact that the latter two fought. Qian Boquan, "Wusun de xiqian, kuosan he xiaoshi" 乌孙的西迁, 扩散和消失 (The westward migration, diffusion, and disappearance of the Wusun), *Xinjiang Shehui Kexue* 2006:05, pp 115–122, and Qian Boquan, "Wusun he Yuezhi zai hexi de gudi ji qi xi qian de jingguo" 乌孙和月氏在河西的故地及其西迁的经过 (The motherland of the Wusun 乌孙 and the Rouzhi [Yuezhi] 月氏 in Hexi Corridor and their

Three different theories can thus be distinguished regarding the entrance of early Caucasians in the area. First, as expressed by Li Shuicheng, they could have entered from the northeast, from what is called the Afanasevo Culture, crossed the Altay Mountains, and moved southward to Hami and beyond. Second, they could have come from the north, from the Andronovo Culture. Third, they could have come directly from the West, possibly from the agricultural communities of the Oxus civilization in Bactria and Margiana, passed the Pamirs, moved along the Tianshan, and finally ended up in the Tarim Basin. Alternatively, a first wave of these "Westerners" migrated both to the northern parts of the Eurasian steppes and then to the Tarim Basin, or might have come directly there. Just as likely as these various scenarios is the possibility that the immigration took place in several waves in different periods and that the peoples who entered Xinjiang came from several directions. Further DNA analysis of ancient human remains on the northern side of the Altay Mountain area might reveal more clues to the solution of this problem. DNA tests have recently been made on 36 skeletal remains from Kazakhstan dated from 1500 BC to 500 AD. The results proved similar to the results from the DNA tests of the Xinjiang mummies, namely that the earliest remains were exclusively Europoid, while later a people of east Eurasian descent arrived from the east and seem to have coexisted with the earlier communities. 95

2.3.1 Recent Chinese theories

Much remains to be resolved in this matter. Several recent archaeological works such as the excavations at Xiaohe and the Chinese–French investigations in the northern Keriya River area have not yet been finally concluded. However, the repeated recent finds of remains related to the Andronovo Culture in the north seem to indicate a closer relation to the cultures of the northern steppe than to the Oxus civilization. In fact, the connections to the north are emphasised in the few articles that so far have been published since the more recent archaeological discoveries were made.

migration westernward [sic]), Dunhuang Yanjiu 1994:04, pp 104–112.

⁹⁵ C. Lalueza-Fox et al., "Unravelling migrations in the steppe: Mitochondrial DNA sequences from ancient Central Asians", *Biological Sciences*, May 2004, vol 271, Issue 1542, p 941–947.

Shui Tao is now also paying attention to the pastoral steppe cultures in the northwest. He argues that the nomadic peoples' mixed society of small agriculture and animal husbandry was important for the spread of agricultural technology. When agricultural techniques improved, it was just a matter of time before parts of the population settled. The continued contacts between the settlers and the nomadic tribes led to increased trade and cultural communication. The settled communities grew and in time developed into cities. This process may be seen in the new discoveries in the Keliya River valley. Although he is of the opinion that the process probably was much more complicated, involving several migrations from the West, Shui now says that it is very likely that the Bronze Age Caucasian remains found in the Tarim Basin can be assigned to the Tocharians and the Yuezhi. 96

An influential archaeologist at Peking University, Lin Meicun 林梅村, in his turn reasons that the development of the Bronze Age cultures in Xinjiang actually came from a mix of several migrations from both western and eastern communities. First, a group of people migrated eastwards through the steppe from the area around the Black Sea and the Caspian to form the Afanasevo Culture. A part of this group crossed the Altay Mountains southward and formed a culture called the Ke'ermuqi Culture, situated in the Junggar Basin on the southern slopes of the Altay Mountains. The similarities in the archaeological finds between these two cultures is a proof of this, Lin claims, making it further possible to date the Ke'ermuqi Culture to 2200–1900 BC. Later, ca 1800 BC, the group of this population that became the ancestors of the Yuezhi/Tocharians, moved further south to the Tarim Basin and formed the settlements in Gumugou and Xiaohe. When the Andronovo culture emerged and expanded, another wave of European people entered the Junggar Basin, which forced a remaining group from the Ke'ermuqi culture to move to the Tarim Basin. On the way they met a Mongoloid population that had arrived from the east, which Lin identifies as a Proto-Tibetan people (the remains of Mongoloid

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⁹⁶ Shui Tao, "Xiyu shiqian wenming fazhan de ruogan lilun wenti" 西域史前文明发展的若干理论问题 (Some academic problems concerning the progress of prehistoric civilization in the Western Regions), *Xiyu Yanjiu* 2005:04, p 50.

people on the Yanbulake site have been described by Chinese anthropologists as similar to Khams-Tibetans) called the Qiang. Now, the people from the Ke'ermuqi Culture, together with some of the new arrivals from the Andronovo Culture, possibly bringing knowledge of mud-brick constructions and irrigation techniques, and the Qiang formed a mutual agricultural society in the Tarim. Some of the newcomers stayed in the mountains near Bosten Lake, however, where the Xintala and Chawuhu cultures developed, while others settled down in the Taklamakan oasis areas. The recent discoveries of Andronovo pottery among the Niya sites are a proof of this, Lin reasons, and he also argues that the pottery in Niya can be divided in two groups: one that can be attributed to the Tocharians and another that can be assigned to the Qiang. Thus the theory put forward by Lin Meicun explains the development as a series of migrations and interactions of different peoples both from the East and the West. But why did the early cultures of a Caucasian population not penetrate further eastwards into Gansu and China proper? Lin is of the opinion that the Mongoloid cultures in Gansu simply stopped the European migrants from penetrating further eastwards. Otherwise, he gathers, Chinese culture would have received more influence from Western civilization. 97

The idea expressed by Lin of a mixed Tocharian and Proto-Tibetan group in the Tarim Basin is not uncontroversial however. It is true that many Chinese archaeologists believe that the human remains of Asian origin found in the Yanbulake site are related to what is called "Khams-Tibetans", and that they, using studies of the skulls of mummies found in the southern parts of the Tarim Basin, like those of the Zahongluke Culture, have arrived at the conclusion that they were "Europeans, but possessing local characteristics". ⁹⁸ Chinese researchers interpret this and ancient Chinese sources ⁹⁹ to mean that this people was a branch of the Western Qiang that mixed with a Caucasian

⁹⁷ Lin Meicun, "Tuhuoluoren de qiyuan yu qianxi" 吐火罗人的起源与迁徙 (The origin and migrations of the Tocharians), *Xiyu Yanjiu* 2003:03, pp 18–19.

⁹⁸ He Dexiu, "Mummies from the Zaghunluq site in Chärchän County", in Mair, ed., *The Bronze Age and early Iron age peoples of Eastern Central Asia*, p 174.

⁹⁹ See note 94.

community. But this idea has been utterly dismissed in the West by, for instance, Victor Mair. In a direct comment on these studies he states: "The Qiang are generally recognized to be a Tibeto-Burman people attested already in the Shang period oracle bones (c. 1200 BCE). It is more likely that the Zaghunluq [Zahongluke] people were Indo-Europeans, perhaps Iranians or Tocharians."

But is Victor Mair correct in this assumption? Is it not possible that the Tocharians of that time indeed were a mixed people of Europeans and Proto-Tibetans? According to Christopher Beckwith, the Qiang were a nomadic group of people about whom "extremely little" is known. We know that they lived in "northwest China" but were considered to be non-Chinese, spoke foreign languages, and dressed differently from the Chinese. What we do know however from the Han sources is that the Yuezhi and the Qiang had close contacts with each other. In a description in the Hou Hanshu 后汉书 (History of the Later Han), on how the Yuezhi were forced by the Xiongnu to move westwards, it is told that some of the Yuezhi, called Lesser Yuezhi 小月氏 escaped southwards and instead settled with the Qiang in the mountains. 102

The historian Liu Xinru 刘成如 describes the development in a slightly different way. 103 By putting the osteological measurement of ancient human skulls aside, and instead primarily looking at ancient Chinese sources, she provides explanations of the connections between nomadic tribes on the Eurasian Steppe, the agricultural settlements

¹⁰⁰ Editor's comment in the text of He Dexiu, "Mummies from the Zaghunluq site in Chärchän County", in Mair, ed., *The Bronze Age and early Iron age peoples of Eastern Central Asia*, p 174.

¹⁰¹ Christopher I. Beckwith, *The Tibetan empire in Central Asia: A history of the struggle for great power among Tibetans, Turks, Arabs and Chinese during the early Middle Ages*, (New Jersey: Princeton University Press, 1987), pp 5–6.

¹⁰² "Xi Qiang zhuan" 西羌传 (Account of the Western Qiang) in the *Hou Hanshu* 后汉书 (History of the Later Han), as described and quoted in Chen Chien-wen, "Further studies on racial, cultural, and ethnic affinities of the Yuezhi" in Mair, ed., *The Bronze Age and Early Iron Age peoples of Eastern Central Asia*, vol 2, pp 770–771.

¹⁰³ Liu Xinru, "Migration and settlement of the Yuezhi-Kushan: Interaction and interdependence of nomadic and sedentary societies", *Journal of World History*, Fall 2001, vol 12, Issue 2, pp 261–292.

in the Tarim Basin, and the significance of the Tocharians as traders and spreaders of culture and religions on the Silk Road. She points out that the nomadic Yuezhi were mentioned for the first time in Chinese sources in 645 BC as suppliers of jade. But their trade and contacts with China started much earlier. The Yuezhi quite likely was the group that during the Shang dynasty already provided the Chinese rulers with Xinjiang jade. ¹⁰⁴ Yuezhi continued to be a trading partner with the Chinese court and was one of the strongest neighbouring tribes to China until another nomadic tribe, the Xiongnu (known as the Huns in the West), forced them to migrate westwards. Some Yuezhi, according to Liu, had already by then left their nomadic lifestyle and settled down in agricultural societies in the Tarim Basin. The rest of the Yuezhi conquered what in Chinese sources is known as Daxia, probably the Hellenistic Bactria. ¹⁰⁵ When the Xiongnu also became a problem for China in the Western Han dynasty, the Chinese diplomat Zhang Qian went on a mission to the Yuezhi to ask for help. He did not get military help, but he managed to buy horses, the typical symbol and trading object for the nomadic peoples of the steppe, and for these he traded Chinese silk.

Liu is of the opinion that the Tocharian language at this time became the language of the ruling elite of a huge area, centered in Bactria, where the Yuezhi founded the Kushan Empire. She also argues that the number of people embraced by this new identity consisted of several tribes, not only by those that originally might have had an Indo-European background. When the Yuezhi later conquered the northern parts of India, this caused even more people of different backgrounds to intermingle. The nomadic culture of the original Yuezhi also mixed with new elements as the relatively liberal new rulers

¹⁰⁴ More precisely, according to the excavations of Shang dynasty tomb of Fu Hao, all the jade originated from the oases area of Khotan located in the southwestern parts of the Tarim Basin (ibid.). It is also significant that jade objects were found during the Gumugou excavations, the culture that has been identified as the earliest Tocharian/Yuezhi tribe in the Tarim Basin. Dolkun Kamberi, "A century of Tarim archaeological exploration (ca 1886–1996)", in Mair, ed., *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, vol 2, p 793.

¹⁰⁵ Chen Chien-wen, "Further studies on racial, cultural, and ethnic affinities of the Yuezhi" in Mair, ed., *The Bronze Age and Early Iron Age peoples of Eastern Central Asia*, vol 2, p 773.

embraced influences from Persia, Greece, and India. It was this people who now increased the trade with their long-term business partners in the East. It was this people who, because of its nomadic background and contacts, could develop the long-distance trade with China. It was at this time that Zoroastrianism, and even more importantly Buddhism, started to spread to China. Liu sees two indications of this in the fact that the Buddhist Gandharan art that spread eastward at the time had typical Greek features (the Yuezhi learned about both Buddhism and Greek culture from the residents and trading partners within their new territories), and in the fact that the symbol of the nomads, the horse, became an important icon in Chinese Buddhist art. Clearly, the importance of the Kushan Empire, lasting for several centuries, and, even more, the importance of the Yuezhi as a trading tribe in the early Silk Road trade, cannot be overestimated.

The recent shift in the Chinese view of the earliest location of the Yuezhi tribe is worth noting. According to Sima Qian 司马迁 (ca. 145–90 BC), the Yuezhi originally lived somewhere between Dunhuang and Qilian, 106 and it has therefore naturally been assumed that they indeed resided in present-day Gansu, between Dunhuang and the Qilian Mountains. But this was not necessarily the case. Liu Xinru points out that the town called Dunhuang, though its name has a Tocharian origin, was not established until after Zhang Qian's return from his mission to the Yuezhi. Therefore the original Dunhuang must have been located somewhere else. Lin Meicun, the scholar who posited that the Tarim cultures were a mixed society of Tocharians and Qiang, has actually provided a solution to this problem. 107 He believes Dunhuang in the Sima Qian text refers

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lived in the area between the Qilian (Mountains) and Dunhuang, but after they were defeated by the Xiongnu (Huns) they moved far away to the West, beyond Dawan, where they attacked and conquered the people of Daxia [Bactria] and set up the court of their king on the northern bank of the Kui River" (as quoted in Lin Meicun, "Qilian and Kunlun: The earliest Tokharian loan-words in ancient Chinese", in Mair, ed., *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, vol 1, p 476).

¹⁰⁷ Lin Meicun, *The western region of the Han-Tang dynasties and the Chinese civilisation*, (Beijing: Wenwu Chubanshe, 1998), pp 64–67, 78. I have unfortunately not been able to get a copy of this book. I am therefore relying on the account of this source in Liu Xinru, "Migration and settlement of the Yuezhi-Kushan". However, Lin describes how he came to the conclusion that Qilian is derived from the Tocharian

to Dunhong Mountain, which, according to ancient Chinese sources (*Shanhaijing*), was a part of the Tianshan Mountain range. Moreover, the name Qilian can also be associated with the Tianshan area rather than the Qilian Mountains in Gansu. In Tocharian mythology, according to Lin, the name Qilian could be associated with heaven, thus the Chinese name of the mountains in the area became Tianshan, the "Heavenly Mountains". The implication of this new theory is that the Yuezhi originally could have been located somewhere near modern Turfan rather than in western Gansu. Such a conclusion is actually more in line with the archaeological evidence of the Caucasian remains.

Regarding the possible ethnic origin of the Yuezhi, however, Liu Xinru has made her opinion clear: the speculations on the ethnic origin of the Tocharian speakers and the present cranial and DNA studies of the Tarim mummies are irrelevant. As she says:

If the Yuezhi were the dominant force in Central Asia, as reported in the Chinese literature, and if the Yuezhi were Tuharan[108] speakers, it could mean that many groups of people who originally were neither Yuezhi nor Tuharan speakers were incorporated into the Kushan regime [...] or, more generally, Tuharan speakers in Central Asia, were not ethnically homogeneous. Their physical features may actually have varied from region to region from the time they lived on the border of agricultural China, to the time of their settlement in Bactria and then India. 109

word for "heaven" in "Qilian and Kunlun: The earliest Tokharian loan-words in ancient Chinese" (Mair, ed., vol 1, p 479). It was apparently Victor Mair who first noticed that the Tocharian word transcribed like the ancient Chinese *qilian* should be equivalent to the Latin *caelum*; "sky, heaven".

¹⁰⁸ Tocharian.

¹⁰⁹ Liu Xinru, "Migration and settlement of the Yuezhi-Kushan: Interaction and interdependence of nomadic and sedentary societies", page unknown as I have read the article online in HTML format on the research database Academic Search Premier. Liu also mentions the Sakas (often referred to as Scythians) and the Wusun (possibly also an early Scythian tribe), two groups believed to have arrived from the West in the later part of the first millennium BC, among the peoples with which the Yuezhi by this time had met and mixed with.

Thus the Yuezhi/Tocharians, according to Liu, were by this time conceivably a mix of people with many different backgrounds. If any epithet at all is needed, they maybe best could be defined as Eurasians.

As a matter of fact recent DNA tests made in the West might support Liu's theory. The results of the tests of the remains in Kazakhstan, of the Lop Nor mummies and of the Chawuhu remains, indicate that there first existed a preliminary exclusively Caucasian population that later co-existed with a population that came from the east. As pointed out by Lalueza-Fox and others, several genetic studies have demonstrated that the modern day Central Asian peoples are genetically speaking "extremely heterogeneous". 110 Moreover, Iron Age mtDNA samples of human remains from the northern Tarim Basin have turned out to be "extremely similar" to modern Uighur and Kazak samples. 111 Modern Central Asians are thus a mix of European, Indian, and Mongolian genes etc, and this mix of genes can be traced back all the way to the Iron Age. It seems therefore that there was a transitional period during which Central Asian peoples of different backgrounds intermarried, and that the population over time, especially over longer migration periods, became very heterogeneous. 112

¹¹⁰ C. Lalueza-Fox et al., p 942.

¹¹¹ Christopher P. Thornton and Theodore G. Schurr, "Genes, language and culture: An example from the Tarim basin", *Oxford Journal of Archaeology*, Feb 2004, vol 23, issue 1, p 94.

¹¹² C. Lalueza-Fox et al., however, conclude with a rather dramatic end for the "Tocharians". They believe their results further indicate that "the genetic legacy of the prehistoric European eastward movement was erased by later Asian expansions, and thus had almost no genetic contribution to present-day Asians. Such extinction may be related to the demographic processes that also led to the disappearance of the Tocharian languages" (p 946). It might be that the dramatic migrations, of, for example, the Huns, the Han expansion in the Han dynasty, and later the Uighurs during the Tang, indeed caused a dramatic change in demography. But it does not necessarily mean that the Tocharians were wiped out then or in direct conjunction with immigration/invasions from the east.

2.4 The ancient settlements in Xinjiang and the question of the environment

In an ironic comment on the use of vocabulary by Western scholars concerning research on the Tarim mummies, Thornton and Schurr ask why "proto-Celtic" "Europeans" should migrate "[...] thousands of kilometres across two vast mountain ranges and the entire Eurasian Steppe just to settle on the outskirts of one of the most inhospitable deserts in the world[...]". That is indeed a good question to ask, although the archaeological evidence shows that something of the kind actually did happen. Instead it might be more fruitful to ask the question: Why are there so many ruins of ancient cities and finds of agricultural settlements in one of the driest areas in the world?

As a matter of fact, a number of Chinese articles specifically focus on questions such as the flow of ancient rivers, climate changes in history, human settlements and the environment, and the present desertification in Xinjiang and Gansu. I believe it to be one of the more important themes in Chinese research on the Silk Road today. This research concerns human settlements and the environment from pre-Han through the Tang dynasty onwards to the fall of the last imperial dynasty, the Qing. The idea of the Chinese researchers seems to be to find information on the effects of climate changes and human interference in the environment and to use this knowledge both to explain the rise and fall of ancient cities as well as to find solutions on how to stop similar environment degradation in our time.

These questions were put at the top of the agenda during the rediscovery of the Xiaohe cemetery. The archaeologists used the description and map in the newly published Chinese edition (1997) of Bergman's book *Archaeological researches in Sinkiang* in order to find the site. What puzzled the team was that there was water present in the Xiaohe River bed in Bergman's account but not when they themselves came to the area 66 years later. Only dry poplars and tamarisks remained to be seen along the riverbeds. Why, the team asked, did the water conditions change in this area, and how has

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¹¹³ Thornton and Schurr, "Genes, language and culture", p 100.

this affected the civilizations once present in this region? The archaeologist Wang Binghua has in his very first article on the rediscovery called for increased cooperation with other scientific disciplines to find answers to these questions.¹¹⁴

The shifting water supply and the ancient course of the rivers in the Tarim Basin has actually puzzled explorers and archaeologists for generations. The problem can be traced back all the way to the discussions on the whereabouts of the lake Lop Nor in the 19th century by the Russian officer and explorer Przjevalskij on one side and the German geologist and explorer Richthofen on the other. As a student of the latter and a great admirer of the former, Sven Hedin decided to solve the problem. It was during the search for the whereabouts of Lop Nor in 1900 that he and his expedition by chance made the discovery of the ancient city of Loulan. Hedin could finally explain that the entire Lop Nor must have shifted position several times in history depending on the location at which the feeder streams entered it. The upper reaches of the rivers streaming into Lop Nor had simply changed directions when they from time to time became clogged. Because of this change of inflow and the certain spatial conditions in the geography, the lake had in fact migrated. Proof of this came in the 1920s when the lower reaches of the Tarim again changed their flow, entered the dried riverbed of the Kongque River, and caused the entire lake to shift position. Hedin believed such a change must have been the reason why the ancient city of Loulan once was abandoned. 115 Since the 1930s though, the water in the lake and its feeding link from the Kongque River have dried out, possibly because of too much irrigation. That is the reason why water could be present during Bergman's excavations in the 1930s but not at the turn of this century when Wang Binghua and his team reexcavated the Xiaohe tombs.

Recent Chinese studies have found causes for desertification not only in shifting water flows but also in connections to human migration from the Tianshan to the Taklamakan oasis areas. It is believed that the population in the mountains grew when

¹¹⁴ Wang Binghua, "'Xiaohe' kaocha duanxiang" "小河"考察断想 (Random thoughts on the 'Xiaohe' investigations), *Xiyu Yanjiu* 2001:02, pp 50–56.

¹¹⁵ Sven Hedin, *Den vandrande sjön*, (Stockholm: Albert Bonniers förlag, 1937), pp 324–341.

farming and animal husbandry came into use. Despite times of worsened climate conditions, the cultures therefore expanded further down the mountain river valleys and finally made settlements in the desert oases. Increased farming, animal husbandry, human efforts to control the water and the establishment of larger and larger societies led to conflicts between mankind and its environment. In the end it affected the condition of the oasis areas negatively. The continued desertification led to still further efforts from the local cultures to exploit the available natural resources. Thus climate changes and human settlement both were the cause of the increased desertification.¹¹⁶

Chinese researchers have also found correlations between human expansion and its environmental conditions from a wider perspective. It has been concluded in recent studies that there were three periods in the entire history of China at which cities were developing very fast; first from the Yangshao 仰韶 Culture (as mentioned, ca 5000–3000 BC) to the Longshan 龍山 era (3000–2000 BC), then from the Spring and Autumn period through the Warring States period to the end of the Western Han dynasty, and, finally, from the Sui through the Tang dynasties. A comparison with climate studies of the periods reveals three corresponding warm periods in the climate, an observation that is believed to be no coincidence. It has been emphasized by the authors of such studies that the connections between the climate and the course of history need to be recognized as a significant factor in the development of human societies. The implication of this is naturally that the warm periods stimulate growth of human settlements. However, for the oases in the arid areas of Xinjiang, warming is likely, as we soon shall see, to have an opposite effect.

There have also been attempts to use linguistic studies to find evidence for connections between the formations and disappearances of human settlement in the Xinjiang desert areas. This is explicit in a recent study on the origin of the name of the

¹¹⁶ Wang Penghui, "Shiqian shiqi Xinjiang de huanjing yu kaoguxue yanjiu" 史前时期新疆的环境与考古学研究 (Prehistoric Xinjiang environment and archaeology), *Xiyu Yanjiu* 2005:01, pp 44–50.

¹¹⁷ Xu Longguo's Ph.D. thesis, *Chinese Academy of Social Sciences' Institute of Archaeology online*, http://www.kaogu.cn/en_kaogu/show_News.asp?id=154, (070422).

Taklamakan Desert. The old assumption, according to the scholar Qian Boquan 钱伯泉, is that Taklamakan means "jinqu chu bu lai" 进去出不来 (if you go in you cannot come out)¹¹⁸. Other translations of the name often seen in modern texts are "desert of death", or "place of no return". Qian Boquan is instead of the opinion that Takli derives from the Turkic word Tohlak or Tohrak, meaning poplar. Thus the name in his opinion means: "Duo huyangshu de difang" 多胡杨树的地方 (a place full of diversiform-leaved poplar) [sic]. This interpretation can be questioned 120, but, regardless whether Qian Boquan's interpretation is right or wrong, it certainly is in agreement with the idea that parts of the Taklamakan desert once might have been vegetated land.

It is not only historians, archaeologists, and linguists in China who are looking into the problem of ancient oasis settlements, climate change, and desertification. Scholars from other disciplines are also involved, using cross-disciplinary methods and modern technology to provide new insights into these questions. For instance, a group of researchers at the Institute of Geology and Geophysics of the Chinese Academy of Social Sciences, using ancient and modern sources, archaeological evidence and state-of-the-art

¹¹⁸ Qian Boquan, "'Takelamagan' de lishi ji mingcheng hanyi" '塔克拉玛干'的历史及名称含义 (On the history and implication of "Taklamakan" [sic]), *Xinjiang Daxue Xuebao (Zhexue Renwen Shehui Kexue Ban)* 2005:04, pp 53–57. Quotation is on p 53.

¹¹⁹ Ibid., p 54. English translation was made from the summary on p 57.

¹²⁰ In a study on this subject in 1997 ("The toponym Takla-makan", *Turkic Languages*, vol 1, pp 227–240), Gunnar Jarring reached another conclusion. He first searched for written sources of the name from the time of Marco Polo forward to the exploration of the area in the 19th and 20th centuries, which led him to realise that its origin must be quite recent. In fact, he found that the name was not mentioned until 1865. In the ancient Chinese sources the Taklamakan has no name. Jarring believes that the components of the name must be Arabic, and that it came into use by the followers of Yakub Bek during his rule over Eastern Turkestan in the mid-19th century. The interpretation of the name in Jarring's opinion is *taqlar makan*, "the place of ruins", because *tāq* means an "arch" or "ruins with arches", "-lar" is a plural suffix, and *makān* means place, habitation. The only thing that could possibly indicate an agreement (apart from the meaning of a place) with the interpretation by Qian is that *taq* (though only if of Persian origin) could mean "a tree; a fire of which will burn for seven days" (that is, tamarisk). Still, this *taq* is very far from the Turkic "Tohlak"/"Tohrak", meaning "poplar". Jarring does not even mention the assumption that Taklamakan could mean "place of no return"—presumably he did not take it into serious account.

technology, has provided new answers to questions concerning the relationship between the environment, climate change, and human settlement in the Tarim Basin. 121 The group examined reports on ice cores in the Kunlun Mountains and texts from the Han dynasty, such as Sima Qian's *Shiji* 史记 (Records of the Grand Historian), especially the parts concerning the Xinjiang area that were based on the reports by Zhang Qian; analysed maps ranging in date from the Qing dynasty to the explorations of Richthofen, Stein, and Hedin (including the maps from the Chinese–Swedish expedition of the 1930s, the *Sven Hedin Central Asia Atlas: Memoir on Maps*); and read the information gathered from archaeological excavations; and, by comparing and adjusting all this data to satellite images, arrived at explanations of the rise and fall of ancient settlements in the Tarim Basin. The group especially looked into the water flows of the Keriya and Niya rivers as well as the directions of the lower reaches of the Kongque River and the changes of the lake Lop Nor. The time span examined was from the time of the Yuansha city, which carbon dating has indicated was first inhabited during pre-Han and abandoned in Eastern Han, to the Qing dynasty.

The group could see that the satellite images revealed a dried-out delta north and west of the Keriya River. It also noted an ancient water flow that once must have linked the Keriya and Niya rivers—actually the same information that led the Chinese-French expedition to the discovery of the Yuansha ruins. Moreover, the position of the ancient settlements turned out to have been on rather flat areas adjoining the dried river channels, indicating that it must once have been suitable for agricultural purposes. The reports from the archaeological investigations in turn confirmed this observation, because grains, irrigation channels, and the bones of household animals had been found during the excavations of, for instance, the Yuansha ruins. But while the Yuansha city was abandoned during the Eastern Han dynasty, evidence for crop cultivation and city structures was found to have existed in other desert areas until the fifth century, thus indicating other causes for the decline of the various settlements. The group concluded

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¹²¹ Yang Xiaoping et al., "Hydrological changes and land degradation in the southern and eastern Tarim Basin, Xinjiang, China", *Land degradation and development* 2006:17, pp 381–392.

that the Yuansha and Karadung cities probably were abandoned because of a shift in the flow of the Keriya River. But what caused the other cities to decline? The reports from the Han dynasty literature indicated that the lake Lop Nor was quite large at the time, while the Qing dynasty maps showed that it had turned into several small lakes and decreased in size (and finally, in the late 20th century, vanished). The answer was to be found in the ice cores from the Kunlun Mountains as well as in the archaeological observations noted above, that agricultural settlements declined and ceased to exist after the fifth century. From 500 AD both temperature and precipitation decreased, causing the flow of the rivers to decline and consequently an abandonment of the cities and furthermore a reduction of the size of the lake Lop Nor. The change of the Keriya River that led to the decline of the Yuansha and Karadung cities was probably due to sand sedimentation in the old riverbed.

2.5 Summary

Archaeological research in Xinjiang during the time period examined has predominantly focused on the early cultures in the province, especially their origin and migration, and on the early contacts of East and West that took place here. The prevailing opinion in China is that a population related to the Afanasevo Culture crossed the Altay Mountains and entered Xinjiang ca 2000 BC, possibly even a little earlier than that. Ca 1800 BC a group of these people reached Tianshan and the Tarim Basin and formed the Gumugou Culture. Later, when the Andronovo culture expanded into the areas of the Afanasevo Culture on the Northern Eurasian steppe, new groups arrived (possibly bringing knowledge of irrigated agriculture brought from contacts with Bactria and Margiana). The expansion also pushed some of the remaining people on the southern slopes of the Altay Mountains southward. The new arrivals met an Asian people from the east. Some of these groups settled down in the Tarim, while others retained a nomadic lifestyle. Chinese research appears to emphasize the contacts with a Mongoloid population more than does Western research. It is believed by some scholars, as expressed by Liu Xinru, that the original group of people, associated with the Tocharians

and the Yuezhi, had an identity that was later extended to include people of many different backgrounds (including other arrivals from the west, among them those of Indo-Iranian identity such as the Saka, and arrivals from the east, such as the Xiongnu). Others, such as Lin Meicun, believe that these people were a mix of Tocharians and a Proto-Tibetan group called the Qiang. Regardless which, the original group of Caucasians that formed the first cultures in Xinjiang was itself influenced by other cultures when it, much later, was pushed westwards to Bactria and formed the Kushan Empire.

3 Discussion

This paper concentrates on the excavations and the research that have shed new light on the early settlements in Xinjiang and their fate, as well as on the initialising periods of the Silk Road; this has also been the predominant focus of archaeological work on the region during this period. Why this focus? Why this special interest in Bronze Age, Iron Age, and early Han dynasty cultures when the archaeological remains from the Eastern Han, Sui, Tang and onward are also abundant along the Silk Road? One reason is, of course, the attention that the discoveries of Xinjiang mummies of Caucasian origin have brought in the West and the political implications these discoveries have for the present Chinese rule of the region. According to Mair and Mallory, the question of the origin of the Tarim mummies has been a rather sensitive topic in China, and the authorities there originally stalled the work when Western scholars, in cooperation with Chinese archaeologists, made DNA tests of the corpses. 122 As we have seen, this has changed. Now DNA tests have also been made by the Chinese institutions, confirming that the oldest mummies found in Xinjiang indeed are of Caucasian origin. Nevertheless, the significance the discovery has for modern Chinese politics in the region cannot be overestimated. In his foreword to the book *The Ancient Corpses of Xinjiang*, the Chinese historian Ji Xianlin 季羡林, then already in his 80s, expressed concern about how this discovery could, and already had, been used by local Uighurs in Xinjiang:

However, within China a small group of ethnic separatists have taken advantage of this opportunity to stir up trouble and are acting like buffoons. Some of them have even styled themselves the descendants of these ancient "white people" with the aim of dividing the motherland. But

¹²² Mallory and Mair, The Tarim mummies, p 12.

these perverse acts will not succeed; the more than 56 nationalities of our great motherland will definitely not permit this to happen. 123

The Chinese authorities are thus worried that Uighur nationalists will use the mummies as proof of their right to be the rulers of Xinjiang, although they did not settle in the area on a large scale until the mid-ninth century collapse of the Uighur Empire centered in what is now Mongolia.

Today, not only skulls of ancient humans of Han, Turkic, Tibetan, and European descent are measured in China, but blood and DNA examinations are also made of members of the modern population to help trace their origins. Of course, this kind of research is currently being done in many parts of the world, and I have no reason to question it per se. But from what I have seen in surveying such research in Beijing, Gansu, and Xinjiang, there is no doubt that politics still intervene in history studies, especially when it comes to research on West China. Sometimes it is even clearly stated in the texts that the goal of the writer's study is to raise "the political awareness", "strengthen the unification of the minority groups", and "protect the unity" of "the motherland". These kinds of formulations are frequently used. In such a context it is easy to understand that unwanted results might be withheld; not even necessarily by the authorities, but by self-censorship from the authors themselves. The Chinese researchers know what kinds of results are politically correct and what are not. They know what kind of language is expected and what kind of topics it pays to write on, and they definitely know what might cause them trouble. When it comes to the Xinjiang mummies, it can at least be suspected that the Chinese authorities have political reasons to prove either that remains found in Xinjiang are of Asian origin or, if that is not possible, to at least imply that the Caucasian remains are not of Uighur origin. With this in mind it would be rather surprising if any indications to the contrary were to be found.

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¹²³ Ji Xianlin's foreword to the book *Xinjiang gushi – gudai Xinjiang jumin ji qi wenhua* 新疆古尸 古代 新疆居民及其文化 (The ancient corpses of Xinjiang), edited by Wang Binghua, as quoted and translated by Victor Mair, available online on the eurasianhistory.com website: "Xinjiang gushi – gudai Xinjiang jumin ji qi wenhua", http://www.eurasianhistory.com/data/articles/c03/547.html, (070513).

Lalueza-Fox et al. refer, for example, to a study on the Xinjiang population in 2002 (by Yao et al.), in which no "European lineages" were said to have been found. 124 By comparing this to their own study on ancient remains in Kazakhstan as well as to another study in 2003 (also by Yao et al.) on modern Chinese people, Lalueza-Fox draws the conclusion that "the genetic legacy of the prehistoric European eastward movement was erased by later Asian expansions, and thus had almost no genetic contribution to the present-day Asians." However, the first study (by Yao et al.) on the modern Xinjiang population was based on samples from only 47 individuals. How representative for the population is that and how was this selection made? Moreover, how does this correspond to the numerous other studies (actually mentioned by Lalueza-Fox et al. themselves) that the modern Central Asian population is a mix of what is called west-Eurasian lineages (the oldest Tarim mummies' mtDNA contains west-Eurasian lineages) as well as east-Eurasian lineages? It is a fact that is not explained by the authors.

As Thornton and Schurr point out: "For the modern-day inhabitants of this region, the relationship between genes, language, and culture in the past, as well as in the present, is of far greater consequence than perhaps we are willing to admit." Even though the referred study by Yao et al. may be correct in its conclusion, it is necessary to be critical and to have the present political situation of the region in mind when reading studies on this subject. Even two of the foremost scholars in the research on the Tarim mummies, Mallory and Mair, have been rather uncritical of the Chinese results. Though they remark that some of the classification used in China to define the ethnicity of ancient humans is "extremely old fashioned" many of their conclusions on the whereabouts of Caucasian cultures have been based on Chinese skull studies. Craniometry is a branch of research

¹²⁴ C. Lalueza Fox et al, "Ancient migrations in Central Asia", *Biological Sciences* May 2004, p 946.

¹²⁵ Ibid.

¹²⁶ Ibid., pp 942 and 945.

¹²⁷ Thornton and Schurr, p 100.

¹²⁸ Mair and Mallory, p 238.

that can, according to what I have learned through mail contacts with osteologists, ¹²⁹ reveal measurable and scientifically correct information on the ethnicity of human bones. That implies that the overall conclusion about whether the excavated skeletons are Caucasoid or Mongoloid may be correct, although I must say that it sounds more like politics than science when remains, such as those examined in the southern Tarim Basin for instance, are defined to be "Caucasian with local characteristics".

The need for increased cooperation is repeatedly seen in the material. Several scholars openly ask for more cross-provincial and cross-disciplinary work. Wang Binghua for example asked for help in solving the problem of how the drought in the Tarim Basin affected the ancient settlements, and Wang Penghui has asked for more research on different aspects of the prehistoric cultures (like their art, religion, family life, cultural and economic interchanges, etc.), and requested help from other scientific disciplines beyond historians and archaeologists in order to through new light on ancient life along the Silk Road. 130

Wang Penghui furthermore stresses the need for increased discussions between scholars in China. Debate between scholars is indeed surprisingly absent in the Chinese scientific journals. Surely there are disagreements within the Silk Road research community, but such are seldom seen. Possibly some debate is going on in Internet communities; certainly the number of Internet resource sites on history and archaeology studies is increasing. The website http://www.eurasianhistory.com, for example, run by the department for China–Foreign Relations History Studies at the Chinese Academy of Social Sciences, explicitly asks for contributions, debate, and discussions from scholars studying the Silk Road and Central Asian history.

When it comes to Chinese archaeological research, the focus on the question of prehistoric migrations and early cultural exchanges on the Silk Road is likely to continue.

¹²⁹ My thanks to Professor Torstein Sjövold, Department of Osteology Studies, Stockholm University, who patiently answered my many questions on this subject.

¹³⁰ Wang Penghui, "Xinjiang shiqian shiqi kaoguxue yanjiu xianzhuang" 新疆史前时期考古学研究现状 (Current conditions of prehistoric archaeology in Xinjiang), *Huaxia Kaogu*, 2005:02, pp 51–61 and 78.

During a meeting in Lanzhou, where delegates from archaeological institutes and cultural relics officials from the northwestern provinces and Beijing gathered in December 2003, it was agreed to increase cooperation on a few major topics. These topics involved research on the nomadic northwestern steppe cultures and ancient cultural exchanges and migrations in Tibet and Qinghai, studies on Bronze Age cultures in the northwestern regions, early bronzeware in China, the Qijia culture in western Gansu, and the culture of the former Zhou dynasty. Questions of the origin of Chinese civilization, the spread of metal technology and early settlements, migrations and cultural exchanges during China's prehistory thus are the focus also for coming years.

In addition to the research mentioned in this work, one other topic is very important right now in Silk Road studies, that on the Sogdians. The discoveries in Xi'an of the Sogdian tombs of An Qie (2000), Shi Jun (2003), and Kang Ye (2004?), and the rich reliefs and epitaphs they contain have contributed to the insights of Sogdian communities in China. Since these graves also provide light on Zoroastrian burial customs in China, their discovery has led to an increased interest in this religion. The increased focus has in its turn ignited a re-evaluation process in which previously excavated sites are searched for signs of Zoroastrian beliefs that earlier might have been overlooked. In the Buddhist grottoes of Dunhuang, for example, new evidence for Zoroastrian burial customs has recently been found, and a scholar at the Dunhuang Institute claims that new finds indicate that Sogdians may still have resided in the area until some time between the Yuan and Qing dynasties. 132

At the beginning of this paper I mentioned the scale of the current excavations on the Silk Road and that the word qiangjiu (emergency rescue) is almost constantly

¹³¹ Gansu Archaeological Institute, "Xibu diqu kuashengqu xiezuo kaogu zuotanhui jiyao" 西部地区跨省区协作考古座谈会纪要 (Summary of the symposium on trans-provincial cooperation in the Western areas), *Kaogu yu Wenwu*, 2004:02, p 76.

¹³² Liu Yongzeng, "Mogaoku di 158 ku de naguqi yu Suteren de sangzang xisu" 莫高窟第158窟的纳骨器与粟特人的丧葬习俗 (The ossuary in Cave 158 at Mogao Grottoes and burial customs of the Sogdians), *Dunhuang Yanjiu* 2004:02, 13–18, 109–117.

repeated in the excavation reports. One wonders if the archaeologists really have time to do proper excavations in such constant hurry. The fact that only a few universities can graduate doctoral students in archaeology in a country as large as China must clearly be an indication that a seriously undersized workforce is available to deal with the constant task of emergency excavations.¹³³ Another possible indication of an insufficiency is that the head of the Cultural Heritage Administration at the Xinjiang cultural ministry is openly asking for more international cooperation and help with research on the excavated relics.¹³⁴

The disadvantage from an archaeological point of view of a country like China that is undergoing very rapid change is the risk of losing too much information for the future. Too many sites are now being destroyed (as always after a complete excavation) using present techniques that most likely will be improved in the future, and, considering the pressure to save what can be saved, in most cases the archaeologists lack the time to conduct thorough on-spot investigations. The excavators in China are of course striving to do the very best they can; but important clues into the past may be lost forever.

On the other hand, this transformation of the society from the view of the present generation of historians, archaeologists, and sinologists may not be all for the worse. In a sense it is as though the energy and excitement of early 20th century explorations into the

what can be seen in the lists in the Yearbooks of Chinese archaeology 2003–2004 (*Zhongguo kaoguxue nianjian* 中国考古学年间 2003 and 2004). Professor Chen Xingcan has explained to me that the total number of universities that can confer doctoral degrees is about ten in China, a surprisingly small number in such a large country. Moreover, there seems to be not only a lack of well-educated archaeologists, but also of staff with know-how on cultural relics protection in China. According to an article on *Zhongguo Wang*, fewer than ten people have a doctor's degree in cultural relics protection in the entire country, "Who safeguards China's ancient cultural heritage?", *Zhongguo Wang*, http://www.china.org.cn/english/travel/94342.htm. According to *People's Daily*, Japan is now contributing by offering quick education for staff from the cultural relics departments in Northwestern China. The specific goal is to save the Silk Road relics. See "Specialists get training to save the Silk Road", People's Daily online 18 May, 2006, http://english.people.com.cn/200605/18/eng20060518_266720.html, (070610).

¹³⁴ "Int'l co-op in archaeology welcomed in Xinjiang", *Zhongguo Wang* (*China Daily* 12 March, 2004), http://www.china.org.cn/english/international/90073.htm, (070530).

fortunes and secrets of the ancient Silk Road sites have returned. The rapid changes are forcing more excavations, revealing many more mysteries of the past than otherwise would have been revealed in our time. Zhang Yuzhong concludes an essay on the recent archaeological achievements in Xinjiang thus:

We are convinced that, as a result of the implementation of our country's strategy for Western China and the great development of Xinjiang's economic construction, the strength of the input in the cultural relics field will in its turn grow, and with the increasing force that our country invests in the cultural relics field in Xinjiang, the archaeological work in Xinjiang will inevitably develop even faster.¹³⁵

This is of course a statement written in a typical Chinese propagandizing tone, but considering the current archaeological rush to catch up with the bulldozers and grave robbers, there is some truth in the idea that expanded construction is inevitably causing an increase in archaeological output. For better or worse, that is probably the case with archaeological work throughout the entire country.

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When I started work on this survey, I was initially surprised to see how few Chinese names appeared in Western studies on Silk Road history. I believed it to be caused by the language barrier. After reading these studies, however, I have understood the reluctance to use reports that often are openly biased, or more specifically, where the writers of reports and articles on archaeology and history are using a very nationalistic language. On the other hand, I believe some of these Chinese researchers are using a different tone in publications published abroad from that used in their statements at home. Without the needed political phrases, it is easier to see a more objective reasoning behind

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¹³⁵ Zhang Yuzhong, "Jinnian Xinjiang kaogu xin shouhuo" 近年新疆考古新收获 (New achievements in Xinjiang archaeology in recent years), *Xiyu Yanjiu* 2001:03, p 111.

their views. I have also in personal contacts with Chinese scholars got the impression that they indeed are much more open than could be imagined from reading their publications in scientific journals.

Maybe one should turn the situation completely around, and instead ask what impression the Chinese researchers have of the Western scientific community? From what I have understood in reading the material for this survey, there is a huge interest in China in getting more information about Silk Road research in the West. If there is some truth in the initial assumption that many Western scholars find it difficult to take account of Chinese research due to the language barrier, then the same could be said of the Chinese researchers. It is unfortunately very rare that contemporary works by Western scholars are translated into Chinese. Instead, when Chinese scholars eventually gain access to new translations, it is often of old classics: works written by the Silk Road giants of the early 20th century like Aurel Stein, Paul Pelliot and Sven Hedin. New publications may make a surprisingly large impact in such a context. The recent translation of Folke Bergman's Archaeological researches in Sinkiang, for example, is frequently mentioned in Chinese scholars' reference lists. This is of course very positive, and it stresses the huge need for more translation work of this kind. However, the side effect of primarily publishing old classics on Silk Road studies is that Chinese scholars who cannot read English may base their image of contemporary Western research on the ideas of an era long gone. A colonial view of the world was, after all, fully accepted until the 1930s, as was employing a nationalistic tone. It was perfectly acceptable to bring back human skulls and classify them according to a more or less Darwinian view of the human race, and it was perfectly normal to make patronising remarks on and judge the character of the local populations encountered in terra incognita in social Darwinist terms. Maybe it is not only the present political climate that encourages a nationalistic spirit among the Chinese, but also the selection of Western research literature made available to them, with its repeated reminders of the mistakes of the past.

Appendix

An Overview of the Silk Road Research Institutions and Scholars in Beijing, Gansu, and Xinjiang

The idea of this overview is to peer over the fence, or rather the Chinese language wall, and take a snapshot picture of the current Chinese studies on the Silk Road. Which universities and academic institutions are in the lead in this research field? Which scholars are the most important in Silk Road studies in China today? And—very concisely—what are they researching?

In short, the purpose of this section is to provide an overview of the most important institutions and persons involved in Silk Road studies in China. As this indeed is a very big field involving many disciplines, I have chosen to concentrate on institutions situated in Beijing, Gansu, and Xinjiang. One exception is the Jilin University Research Center for Chinese Frontier Archaeology, because this institution plays an important role in the studies on early cultures in Xinjiang.

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1 Beijing 北京

1.1 Beijing Daxue 北京大学 (Peking University)

The major research facilities concerned with the Silk Road field within the Peking University are Kaogu Wenbo Xueyuan (School of Archaeology and Museology), and the Zhongguo Gudaishi Yanjiu Zhongxin (Research Center on Ancient Chinese History), situated at the History faculty.

Kaogu Wenbo Xueyuan 考古文博学院 (School of Archaeology and Museology)

At the moment the department has 19 professors, 12 associate professors, and 9 lecturers. The total number of students is about 200. The teaching and research work (regarding archaeology) are divided into different sections depending on time periods: Jiushiqishidai Kaogu Jiaoyanshi 旧石器时代考古教研室 (Section for Old Stone Age Archaeology), under the lead of Huang Yunping 黄蕴平, Xinshiqi Shang-Zhou Kaogu Yanjiushi 新石器商周考古教研室 (Section for New Stone Age and Shang-Zhou Archaeology), headed by Xu Tianjin 徐天进 (and deputy director Zhang Chi 张驰), and Han—Tang Kaogu Jiaoyanshi 汉唐考古教研室 (Section for Han—Tang Archaeology), directed by Zhao Huacheng 赵化成. The School of Archaeology and Museology also has a special section for pottery studies: Taoci Yanjiusuo 陶瓷研究所 (Research Institute for Ceramics) headed by Quan Kuishan 权奎山.

The current director of the School of Archaeology and Museology is Gao Chongwen 高崇文 (1948–).

The most influential scholar in the Archaeology Department regarding Silk Road studies is Lin Meicun 林梅村 (1956–). His specialty is Silk Road archaeology and ancient Central Asian scripts. In recent years he has written about the entrance of Zoroastrianism into China, translated ancient Buddhist scripts from the Qizil grottoes ¹³⁶, and studied the entrance and spread of the Tocharians in Xinjiang. In a recent article in

¹³⁶ Lin Meicun, "Leikeke shoujipin zhong de wu jian qiantuoluoyu wenshu" 勒柯克收集品中的五件犍陀 罗语文书 (Five Gandhari documents in the Le Coq Collection), *Xiyu Yanjiu* 2004:03, pp 72–82.

Wenwu on Zoroastrianism and the Gaochang remains (near Turfan in Xinjiang), he summarized Western, Japanese, and Chinese research on the religious beliefs of its ancient inhabitants.¹³⁷ (It was not until the early 1990s that the first Chinese scholars began to realize that the material they held concerning the Gaochang state pointed to religious features of Zoroastrianism.)¹³⁸

Li Shuicheng 李水城 (1953–) is an expert on interchanges on the Silk Road before the Han dynasty. Among his later researches are studies into the eastward spread of mace heads from Egypt and the Near East to Northwestern China. During an international symposium in Xi'an in 2002 he stirred up some attention in the Chinese press when he announced that the Silk Road was no less than 5000 years old. Li based this on his studies of mace heads found in Gansu, Shaanxi, and Xinjiang, estimated to be 3000–5000 years old. He explained that they bear striking similarities to those used in Ancient Egypt and the Near East. Li has also, as mentioned in the paper, studied early contacts between East and West in the border areas between Xinjiang and Gansu.

Qi Dongfang 齐东方 (1955–) is a specialist in Han–Tang archaeology, East–West interchanges, and art archaeology. In one of his recent articles he studied images of camels on figurines and murals from the Northern Dynasties to Tang. He noticed that the camels often were pictured together with Central Asian merchants, indicating the importance of the camel as a symbol for the Silk Road trade. He has also studied Tang

¹³⁷ Lin Meicun, "Gaochang huoxianjiao yiji kao" 高昌火祆教遗迹考 (On the historical traces of Zoroastrianism in Gaochang), *Wenwu* 2006:07, pp 58-67, as well as in *Xiyu Yanjiu* 2003:03, pp 9-15.

¹³⁸ One of the pioneers in this research on the Chinese side was Jiang Boqin 姜伯勤 (1938–), professor at Sun Yat-sen University. He wrote several articles and books on the subject in the early 90s and was the first in China to believe that the Gaochang inhabitants were Zoroastrians.

[&]quot;Experts: East-West exchanges began 5,000 years ago", *People's Daily online*, http://english.people.com.cn/200212/18/eng20021218 108694.shtml, (070509).

¹⁴⁰ Qi Dongfang, "Sichou zhi lu de xiangzheng fuhao – luotuo" 丝绸之路的象征符号—骆驼 (A symbolic marker of the Silk Road—the camel), Gugong Bowuyuan Yuankan 2004:06, pp 6–25. Others who have studied the Silk Road merchants as seen in art and literature are Cai Jingbo 蔡静波 and Yang Dongyu 杨东宇 at the Shaanxi Normal University. They have shown that foreign salesmen in literary works from the Tang dynasty were described as traders in either jewelry or medicinal herbs or as "xiaoshang-xiaofan" (small

dynasty gold and silver ware, utensils that in many cases bear traces of foreign influences and trade.¹⁴¹ Apart from his office at the Archaeology Department, Professor Qi is also affiliated with the Center for Research on Ancient Chinese History at Peking University and Jilin University's Research Center for Chinese Frontier Archaeology, underlining his importance as a supervisor and researcher in the field.

Several recent studies on Buddhist art and its eastward spread into China have been done at the institution. Li Chongfeng 李崇峰 (1960–), for example, has compared the Northern dynasty Dunhuang caves and others to the cave temples in India, and Chen Xiaolu 陈晓露 has looked at stupas and pagodas in the grottoes of Qingyang in Gansu, then reexamined the stupas in the Loulan ruins, and finally compared these stupas to the ones in Gandhara. In this way he has been able to trace the spread of Gandhara art along the Silk Road. 142

Other researchers affiliated with the department who have done or are doing research touching the Silk Road area, are Chao Huashan 晁华山 (1939–), a specialist in Buddhism and Central Asian archaeology, Li Boqian 李伯谦 (1937–), former director of the department for archaeology and museology, specialising in Xia, Shang, and Zhou dynasty archaeology, Lin Li, who has written a recent study on the ruins of on-ground Buddhist temples in Xiahetu'er och Wushitu'er in Xinjiang, Ma Shichang 马世长 (1939–), who during the 2000s supervised several master degree and doctoral dissertations in the field, and Zhao Huacheng 赵化成 (1952–), head of the Section for Han-Tang Archaeology, specialising in Qin archaeology.

tradespeople and peddlers). Cai Jingbo and Yang Dongyu, "Shilun Tang-Wu dai biji xiaoshuo zhong de hushang xingxiang" 试论唐五代笔记小说中的胡商形象 (On the image of foreign traders in literary sketches of the Tang and Five dynasties), *Xiyu Yanjiu* 2006:03, pp 93–96.

¹⁴¹ Qi Dongfang, *Tangdai jin-yinqi yanjiu* 唐代金银器研究 (Research on Tang dynasty gold and silver), (Beijing: Zhongguo Shehui Kexueyuan Chubanshe, 1999).

¹⁴² Chen Xiaolu, "Cong bamianti Fota kan Jiantuoluo yishu zhi dongzhuan" 从八面体佛塔看犍陀罗艺术之东传 (Eastward spread of Gandhara art seen in octagonal stupas), *Xiyu Yanjiu* 2006:04, pp 63–72.

Lishixue xi 历史学系 (History Department)

One research group situated within the History Department of Peking University is especially interesting from a Silk Road point of view, namely the Research Center on Ancient Chinese History.

Zhongguo Gudaishi Yanjiu Zhongxin 中国古代史研究中心 (Research Center on Ancient Chinese History)

The Research Center was established in 1982 under the name "Center for Research on the Middle Period of Chinese History". It changed to its present name in 1999.¹⁴³ It has the same rank as an academic department. The main focus of research is on Tang and Song studies (618–1279). Twelve researchers are currently employed by the unit, and 26 other researchers are also affiliated with it but belong to other departments and universities.¹⁴⁴

Professor Rong Xinjiang 荣新江 (1960–) is definitely the most important Silk Road scholar in this department. Though still only in his 40s, he has earned a position as one of China's leading historians, especially in this particular field. Much of his recent research has focused on the history of the Sogdians. He has for instance proven how far eastwards the migration of the Sogdians actually went. They settled, not only in the oasis cities of the Tarim Basin, but also farther away in cities like Dunhuang, Jiuquan, and Lanzhou in Gansu, the capital Chang'an, northward into Inner Mongolia, and even as far away as in Hebei and Liaoning. Rong's studies have also shown how open the Tang society was to welcoming them, and that, not only Sogdians, but also other peoples from

¹⁴³ "Lishi yange" 历史沿革 (Evolution history), *The Center for Research on Ancient Chinese History online*, http://www.pku.edu.cn/academic/zggds/001/002.htm (070426) and the English version "History of establishing the center", http://www.pku.edu.cn/academic/zggds/english/index.htm, (070426). Basic facts regarding the researchers working at the center have also been retrieved from this page (apart from the links described in the footnotes under each name).

¹⁴⁴ Zhang Xiqing 张希清 (1945–) is director of the center. His main research interests are the history of the Song, Liao, and Jin as well as the history of Chinese political institutions and Chinese culture. "Zhang Xiqing" 张希清 (Zhang Xiqing), http://www.pku.edu.cn/academic/zggds/002/001.htm, (070426).

Central Asia played an important part as traders and officials in China at the time. 145

Among the many master's and doctoral students who have had Professor Rong as supervisor is Dr Bi Bo 毕波 (?), who has written a recent dissertation on Sogdian merchants.

Another prominent Silk Road researcher at the institution is Wang Xiaofu 王小甫 (1952–). His studies concern the history of China's frontier relations, Tibetan history, and Sui–Tang history. The title of his doctoral thesis in 1989 was "Tang, Tubo, Dashi guanxishi" 唐·吐蕃·大食关系史 (History of the relations between the Tang dynasty, Tibet, and the Arab empire). Professor Wang has in recent years written articles describing the Silk Road as in fact a network, examined the Uighur culture and the establishment of the Khitan state, and objected to Russian scholars' views of a safer and more reliable trade route called the "Sable Road" (said to have existed fom the Eastern Han dynasty through the Tang dynasty and linked Northeast Asia, North Asia, and Central Asia). Wang believes this Russian argument is "hardly convincing", saying that the trade route instead was a network initiated in "Zhongguo de Zhongyuan" (the Chinese central plains), that radiated outwards in an "optimal" transportation system from there. 146

Other interesting scholars at the center are Li Xiaocong 李孝聪 (1947–), the research center's deputy director, whose main research interests are the history of Sinoforeign cultural exchanges, the comparative history of cities, and historical geography

¹⁴⁵ Rong Xinjiang, "Beichao, Sui, Tang Suteren zhi qianxi jiqi juluo" 北朝隋唐粟特人之迁徙及其聚落 (The migrations and settlements of Sogdians in the Northern Dynasties, Sui, and Tang), *Guoxue Yanjiu*, 1999:6, pp 27–85.

^{146 &}quot;Wang Xiaofu" 王小甫(Wang Xiaofu), http://www.pku.edu.cn/academic/zggds/002/004.htm, and Wang Xiaofu, "Si lu shi yi zhang wang" 丝路是一张网 (The Silk Road is a net), https://www.pku.edu.cn/academic/zggds/002/004.htm, and Wang Xiaofu, "Si lu shi yi zhang wang" 丝路是一张网 (The Silk Road is a net), https://www.pku.edu.cn/academic/zggds/002/004.htm, and Wang Xiaofu, "Jene Yanjiu 2004:4, pp 186–202 and Wang Xiaofu, "Heidiao zhi lu' zhiyi – gudai Dongbeiya yu shijie wenhua lianxi zhi wo jian" '黑貂之路'质疑一古代东北亚与世界文化联系之我见 (Doubts over the "Sable Road"—my views of the links between Northeast Asia and world culture in ancient times), https://www.pku.edu.cn/academic/zggds/002/004.htm, and wang Xiaofu, "Heidiao zhi u' zhiyi – gudai Dongbeiya yu shijie wenhua lianxi zhi wo jian" '黑貂之路'质疑一古代东北亚与世界文化联系之我见 (Doubts over the "Sable Road"—my views of the links between Northeast Asia and world culture in ancient times), https://www.pku.edu.cn/academic/zggds/002/004.htm, and wang Xiaofu, "The Silk Road" is a net), https://www.pku.edu.cn/academic/zggds/002/004.htm, and https://www.pku.edu.cn/academic/zggds/002/004.htm, and https://www.pku.edu.cn/academic/zggds/002/004.htm, and https://www.pku.edu.cn/academic/zggds/002/004.htm, and wang Xiaofu, "黑貂之" "黑貂之" "是一古代本" "是一

and cartography,¹⁴⁷ and Luo Xin 罗新 (1963–) who is researching the history of Sino–Western communications and the history of Wei, Jin, and Northern and Southern dynasties, as well as studies of bamboo slips and tomb inscriptions.¹⁴⁸

1.2 Qinghua Daxue 清华大学 (Tsinghua University)

There are two persons at Tsinghua University, both affiliated with the History Department, who especially focus their research on Silk Road studies. They are Zhang Guogang and Zhang Xushan.

Professor Zhang Guogang's 张国刚 (1956–) research is focused upon the society and institutions of medieval China and Sino-Western relations and cultural interchange. He is the president of Zhongguo Tangshi Xuehui (China Association of Tang Studies). He has been a professor in Germany as well as in Japan and Taiwan. According to what can be seen from his recent publications, much of his focus has been on religious features and interchanges on the Silk Road. He has, for instance, written about Buddhism in Chinese society during the Sui and Tang dynasties, about the first encounters of Christian missionaries in China, and about cultural exchanges between China and the West during the Ming dynasty. 149

Professor Zhang Xushan's 张绪山 (1963–) specialty is the history of the Byzantine Empire. His research looks at Silk Road studies, especially during the age of the Romans and the Han dynasties. He has also written an article about Byzantine coins

¹⁴⁷ "Li Xiaocong" 李孝聪 (Li Xiaocong), http://www.pku.edu.cn/academic/zggds/002/002.htm, (070426).

^{148 &}quot;Luo Xin" 罗新 (Luo Xin), http://www.pku.edu.cn/academic/zggds/002/011.htm, (070426).

¹⁴⁹ Foxue yu Sui-Tang shehui (Buddhism and society in Sui-Tang China), (Hebei Renmin Chubanshe, 2002) and Cong Zhong-Xi chu shi dao liyi zhizheng Ming-Qing chuanjiaoshi yu Zhong-Xi wenhua jiaoliu (From first meeting to the controversy of rituals: Missionaries in Ming-Qing China and Sino-Western cultural communication), (Renmin Chubanshe, 2003). The information about Zhang and the titles of his recent works are taken directly from the Tsinghua University website, "Zhangguogang jiaoshou" 张国刚教授 (Professor Zhang Guogang), Tsinghua University online, http://166.111.106.5/xisuo/lsx/teacher/zhangguogang.html, and the English version, "Zhang Guogang" 张国刚 (Zhang Guogang), http://166.111.106.5/xi-suo/lsx/eng/faculty/zhangguogang.html, (070608).

excavated in China. Zhang received his PhD in Greece in 1998. 150

1.3 Zhongguo Shehui Kexueyuan 中国社会科学院 (Chinese Academy of Social Sciences [CASS])

There are a number of institutions at the Chinese Academy of Social Sciences (CASS) doing research on the Silk Road. The primary ones are the Institute of Archaeology, the Department for China–Foreign Relations History Studies, and the Research Center for China's Borderland History and Geography.

Kaogu Yanjiusuo 考古研究所 (Institute of Archaeology)

The Institute of Archaeology of the Chinese Academy of Social Sciences was established in 1950. It is considered to be the most important archaeological research institution in the country. In total, 173 researchers are working there, among them 11 PhD supervisors and 51 Master's degree supervisors. The main scientific journals published by the institute are *Kaogu 考*古 (Archaeology), *Kaogu Xuebao 考*古学报 (Journal of Archaeology), and *Kaoguxue Jikan 考*古学集刊 (translated on the Institute's webpage as "Archaeology Periodicals"). The institution is also in charge of the publication *Zhongguo kaoguxue nianjian* 中国考古学年鉴 (Yearbook of Chinese Archaeology). Liu Qingzhu is the director of the Institute.

The Institute of Archaeology is divided into five departments: Shiqian Kaogu Yanjiushi 史前考古研究室 (Department of Prehistoric Archaeology)¹⁵², Shang-Zhou

^{150 &}quot;Zhang Xushan jiaoshou" 张绪山教授 (Professor Zhang Xushan), *The History Department of Tsinghua University online*, http://166.111.106.5/xi-suo/lsx/teacher/zhangxushan.html, 070608).

¹⁵¹ "Introduction of the Institute of Archaeology, CASS", CASS Institute of Archaeology online, http://www.kaogu.cn/en_kaogu/show_News.asp?id=157, (070422).

¹⁵² The Department of Prehistoric Archaeology is called Xinshiqi Kaogu Yanjiushi 新石器考古研究室 (Department of New Stone Age Archaeology) on the Chinese version of the Institute's website. However, Professor Chen Xingcan 陈星灿, who is affiliated with the department, has kindly explained to me, that the name indeed should be 史前考古研究室 (Department of Prehistoric Archaeology), as it is in the more recently updated English version.

Kaogu Yanjiushi 商周考古研究室 (Department of Shang and Zhou Archaeology), Han-Tang Kaogu Yanjiushi 汉唐考古研究 (Research Department of Han to Tang Archaeology), Bianjiang Kaogu Yanjiu Zhongxin, Guowai Kaogu Yanjiu Zhongxin 边疆考古研究中心,国外考古研究中心(Research Center for Frontier Archaeology and Research Center for Foreign Archaeology), and finally Kaogu Keji Shiyan Yanjiu Zhongxin 考古科技实验研究中心 (Center for Scientific Archaeology).

The most important of these departments regarding Silk Road studies are the Research Center for Frontier Archaeology and the Research Department of Han to Tang Archaeology. However, the other departments are also to a certain degree involved in issues touching the Silk Road field (such as the Bronze Age cultures in the northwest and West–East regions and their interchanges, signs of agricultural technology interchanges between East and West, etc.). I will here briefly describe each of the departments and then summarize the most important scholars and their research regarding Silk Road themes, regardless of their department affiliation.

Department of Prehistoric Archaeology

The main research focus is on the origin of agriculture, animal domestication, craft industry, distribution, and socio-economic structures of ancient cultures and the origin of Chinese civilization. Director is Wu Yaoli 吳耀利, and deputy director is Fu Xianguo 傅宪国.¹⁵³

Department of Shang and Zhou Archaeology

The research of this department includes the origin of the Chinese civilization, Xia and early Shang cultures, and the capitals of the Shang and Zhou dynasties. The main focus is on the Bronze Age. There are six archaeological fieldwork teams within the department, working on sites in Henan, Shaanxi, Beijing, and Shanxi. Du Jinpeng 杜金鹏

^{153 &}quot;Department of Prehistoric Archaeology", *CASS Institute of Archaeology online*, English version: http://www.kaogu.cn/en_kaogu/show_News.asp?id=165. Chinese version: "Xinshiqi Kaogu Yanjiushi" 新石器考古研究室, http://www.kaogu.cn/cn_kaogu/show_News.asp?id=16, (070505).

is the director; Xu Hong 许宏 the deputy director. 154

Research Department of Han to Tang Archaeology

The department's staff is studying the origin and development of Chinese ancient cities, especially the administration and structure of the Han to Tang capital cities. They are also researching the international cultural and economic interchanges during that period. Director of the department is An Jiayao 安家瑶. Deputy directors are Chen Liangwei 陈良伟 and Zhu Yanshi 朱岩石. 155

Research Center for Frontier Archaeology

This center was established in 1999 (though some of the field teams within it go back to the 1960s and 70s). Wang Renxiang 王仁湘 is the director (and also involved in the Tibet Team). Cong Dexin 丛德新 and Li Yuqun 李裕群 are deputy directors.

The focus of the Research Center for Frontier Archaeology is on a huge geographical area spanning from the coasts in northeastern, eastern, and southern China (in which areas the research also includes underwater archaeology), to Inner Mongolia, Ningxia, northern Gansu, Xinjiang, Qinghai, and Tibet. There are three archaeological teams within the center: the Inner Mongolia Team, founded in 1959 (which also includes the Northeastern Team), directed by Dong Xinlin and Liu Guoxiang 刘国祥; the Xinjiang Team, established in 1978 and mainly focusing on the cultures south of Tianshan Mountain, directed by Wu Xinhua 巫新华; and finally, the Tibet Team, founded in 1990 and headed by Zhao Huimin. 156

^{154 &}quot;Department of Shang and Zhou Archaeology", *CASS Institute of Archaeology online*, English version: http://www.kaogu.cn/en_kaogu/show_News.asp?id=165. Chinese version: "Shang-Zhou Kaogu Yanjiushi" 商周考古研究室, http://www.kaogu.cn/cn_kaogu/show_News.asp?id=17, (070505).

^{155 &}quot;Research Department of Han to Tang Archaeology", *CASS Institute of Archaeology online*, English version: http://www.kaogu.cn/en_kaogu/show_News.asp?id=163. Chinese version: "Han-Tang Kaogu Yanjiushi" 汉唐考古研究室, http://www.kaogu.cn/cn_kaogu/show_News.asp?id=18, (070505).

^{156 &}quot;Research Center for Frontier Archaeology and Research Center for Foreign Archaeology", *CASS Institute of Archaeology online*, English version: http://www.kaogu.cn/en_kaogu/show_News.asp?id=162. Chinese version: "Bianjiang Kaogu Yanjiu Zhongxin, Guowai Kaogu Yanjiu Zhongxin" 边疆考古研究中

One very important researcher regarding the mummy discoveries in Xinjiang is Han Kangxin 韩康信. Han's studies regard primarily osteological examinations of ancient human bones. His book of 1994, *Sichou zhi lu gudai jumin zhongzu renleixue yanjiu* 丝绸之路古代居民种族人类学研究 (Anthropological studies on the ethnicity of ancient Silk Road inhabitants), has been widely quoted by archaeologists and historians in both China and the West.

Gong Guoqiang 龚国强 finished his dissertation at the Institute of Archaeology (Chinese Academy of Social Sciences) in 2002, on Buddhist temples in the capital city of the Sui and Tang dynasties. According to the abstract, Chen divides the temples into different types, looks into the development of the different styles and the reasons for them, and notes influences from the Southern and Northern dynasties as well as from India. He also investigates the influence that the Buddhist temples of the Sui and Tang dynasties had on the development of Buddhist temples in the capital cities in Northeast Asia. (Gong Guoqiang was previously Team Director of the Xinjiang Team under the Research Center for Frontier Archaeology.)

Shijie Lishi Yanjiusuo 世界历史研究所 (Institute of World History)

Research at the Institute of World History is mainly focused on modern and contemporary world history (West European and North American history, Russian history, East European history, Japanese history, etc). But there is also research on the ancient and medieval world. In that section, called Gudai Zhongshiji Shi Yanjiushi 古代中世纪史研究室 (The Department of Ancient and Medieval History Research) there is

心、国外考古研究中心 (Research Center for Frontier Archaeology and Center for Foreign Archaeology), CASS Institute of Archaeology online, http://www.kaogu.cn/cn_kaogu/show_News.asp?id=19, (070505).

http://www.kaogu.cn/en_kaogu/show_News.asp?id=155 and Zhongguo kaoguxue nianjian 2003 中国考古学年鉴 2003 (Yearbook of Chinese Archaeology 2003), (Beijing: Wenwu Chubanshe, 2004), p 391. The title of the thesis is "Sui-Tang Chang'ancheng Fosi yanjiu" 隋唐长安城佛寺研究 (Study on the Buddhist temples in Chang'an—capital City of the Sui and Tang dynasties).

^{158 &}quot;Zhongguo Shehui Kexueyuan Shijie Lishi Yanjiusuo" 中国社会科学院世界历史研究所 (Chinese Academy of Social Sciences Institute of World History), *Institute of World History online*, http://worldhistory.cass.cn/chinese/chinese index.htm#, (070602).

especially one researcher, Liu Xinru, who is important.

Liu Xinru's 刘欣如 (1951–) research and publications have focused mainly on ancient relations and trade between India and China, but she has also written many articles on Silk Road history. Among her English publications are: *Ancient India and ancient China: Trade and religious exchanges (A.D.1–600)* (Oxford University Press, 1988), *Silk and religion* (Oxford University Press, 1996), "Silk, robe, and relations between early Chinese dynasties and nomads beyond the Great Wall," in Stewart Gordon, ed., *Robes and honor: The medieval world of investiture* (New York: Palgrave, 2001). 159

Zhongwai Guanxi Shi Yanjiushi 中外关系史研究室 (Department for History Studies on China–Foreign Relations)

The Institute of History has since 1979 had a special research group focusing on the history of China's foreign relations, called "Zhongwai Guanxi Shi Yanjiushi" 中外关系史研究室 (Department for History Studies on China–Foreign Relations). Ten researchers are currently affiliated with the department, five of them having a doctoral degree and three a master's degree. The research group is studying Eurasian history especially, thus their work, according to the institution's website *Eurasian Studies*, covers the Eurasian steppes and neighbouring areas, namely Xinjiang, Gansu, Ningxia, Qinghai, Tibet, Asia Minor, Iran, Arabia, India, Japan, Korea, and even Central and Eastern Europe. The cultural, religious, economic, and political interchanges in history within this area are studied. 160

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^{159 &}quot;Zhongguo Shehui Kexueyuan yanjiuyuan: Liu Xinru" 中国社会科学院研究员:刘欣如 (Chinese Academy of Social Sciences research fellow: Liu Xinru), Chinese Academy of Social Sciences online, http://www.cass.net.cn/y_09/y_09_06/y_09_06_02/y_09_06_02_59.htm. "Liu Xinru" 刘欣如 (Liu Xinru), Institute of World History online, http://worldhistory.cass.cn/english/txt/renyuan_txt_all/liuxinru_face.htm, (070602).

^{160 &}quot;Zhongwai Guanxi Shi Yanjiushi jianjie" 中外关系史研究室简介 (Brief introduction to the Department for History studies on China-Foreign relations), *The Institute of History online*, http://ich.cass.cn/Article_Show2.asp?ArticleID=268 and "Introduction to 'Eurasian Studies'", *The Department for History Studies on China-Foreign Relations online Eurasian pages*: http://www.eurasianhistory.com/english.htm, (070606).

Research concerning the Silk Road is especially centered around the influential professor Yu Taishan 余太山 (1945–). He is head of the Department for History Studies of China–Foreign Relations. His main research focus is on the Central Asian and China–West communications until the ninth century AD. He is the chief editor of the scientific journal *Ou-Ya Xuekan* 欧亚学刊 (Eurasian History Studies). Several very influential Chinese scholars have published articles recently in this journal. He is the main editor of an often-quoted book, *Xiyu tongshi* 西域通史 (Comprehensive history of the Western regions), (Henan: Zhongzhou Guji Chubanshe, 1996).¹⁶¹

Li Jinxiu 李锦绣 (1965–) is the department's deputy director. Her research is about the history of the Sui-Tang-Five Dynasties period, trade goods in history, and Dunhuang studies. (She worked at the Dunhuang–Turfan material center at Beijing Library in the early 90s). Li searches for the historical sources of the Tocharians in one of her most recent articles.¹⁶²

Zhongguo Bianjiang Shi-Di Yanjiu Zhongxin 中国边疆史地研究中心 (Research Center for China's Borderland History and Geography)

This center was established in 1983. The objectives for its research are very political. According to the institution's webpage, its main tasks are to use Marxism–Leninism, Mao Zedong thought, and Deng Xiaoping theory as "guidance" in order to make sure that the development goes in the "correct" political direction, to carry on research about the history of the border areas in the "patriotic tradition of the Chinese people," and to contribute to the "stability and development of the border areas" in order

¹⁶¹ "Zhongwai Guanxi Shi Yanjiushi jianjie" 中外关系史研究室简介 and "Yu Taishan" 余太山 (Yu Taishan), *the Institute of History online*, http://ich.cass.cn/UserInfo.asp?UserID=66, (070506).

[&]quot;Li Jinxiu" 锦 绣 (Li Jinxiu), the Institute History online: ofhttp://ich.cass.cn/UserInfo.asp?UserID=69, (070506), and Li "'Tongdian Bian fang Jinxiu, dian ''Tuhuoluo' tiao shiliao laiyuan yu 'Xiyu tuji'" '通典·边防典' '吐火罗'条史料来源与'西域图记' (The historical sources of the entry "Tochari" in Tong Dian Bian Fang Dian [Frontier defense volume of the "Comprehensive Manual"] and Xiyu tuji [An illustrated book of the Western Regions]), Xiyu Yanjiu 2005:04, pp 25–34.

to "safeguard the nation's unity". Moreover, it is said that it will do research on the "forming and development patterns of a unified multiethnic China", and study the historic "experiences and lessons" from past politics and policies in the border areas. The idea of these studies is thus (as it is openly avowed in the text) to learn how to deal with modern key problems in the border areas as well as to make predictions for possible future development.

Nineteen researchers were affiliated with the center in 2004. The scientific journal *Zhongguo Bianjiang Shi-Di Yanjiu* 中国边疆史地研究 (China's Borderland History and Geography Studies) is published by the institution. ¹⁶³

From this introduction it might be possible to think that the center's research concerns only modern 20th-century studies, and therefore is not of interest for Chinese Silk Road studies, but that is not the case. The research, according to what can be seen in the introductory pages on the center's website, is also about ancient history, religious development (in, for example, Xinjiang, with a focus on Islam), ethnic migrations and development in history, ethnic minorities' cultural and political history (such as the Uighurs and the Tibetans), and—in order to find solutions for modern economic development—also about economy and trade in the past. There is therefore research being done in this institution that indeed is of interest for Silk Road scholars. As is very evident from the above, though, one has to be aware of the fact that some Chinese historians want to use (and adapt) the history research about the Western Regions for political reasons. The influence this institution has on researchers in the border areas cannot be overestimated. Many scholars active at universities in Xinjiang and Gansu publish articles in its journal, *Zhongguo Bianjiang Shi-Di Yanjiu*, thus indicating that they have a political agenda in their research that aligns with the guidelines from Beijing.

The present head of the center is Li Sheng 厉声 (1949–). The former head, Ma Dazheng 马大正 (1938–), is still very active. His name is mentioned in, for instance,

^{163 &}quot;Zhongxin jianjie" 中心简介 (Brief introduction to the center), *The Research Center for China's Borderland History and Geography online*, http://chinaborderland.cass.cn/show_News.asp?id=754, (070505).

some modern Chinese scholars' work on Sogdians.

2 Gansu 甘肃

2.1 Archaeological Institutes and Museums

Dunhuang Yanjiuyuan 敦煌研究院 (Dunhuang Academy)

Apart from being responsible for the care, preservation, and exhibition of the Dunhuang grottoes, the Dunhuang Academy is also a center for Dunhuang research. This organisation's roots can be traced back to the Dunhuang Yishu Yanjiusuo (Dunhuang Art Institute), established in 1944. It got its present outlook and name in 1984. The main research is divided into the following four departments: Shiku Baohu Yanjiusuo 石窟保护研究所 (The Grotto Preservation Research Institute), Meishu Yanjiusuo 美术研究所 (The Archaeological Research Institute) and Wenxian Yanjiusuo 文献研究所 (The Documents Research Institute).

The Archaeological Research Institute's main responsibilities are to analyze, date, and study the development of the grottoes, statues, and murals, as well as to conduct excavations when new finds of ancient documents or caves are discovered. Among other tasks are the study of the history of West–East cultural interchanges.

The Documents Research Institute is in charge of the classification, research, and arrangement of the document finds from the caves, such as the Buddhist scripts, ancient literature, and documents related to ancient Dunhuang society and economy.

The Dunhuang Academy is the publisher of the scientific journal *Dunhuang Yanjiu* 敦煌研究 (Dunhuang Research). ¹⁶⁴ Fan Jinshi 樊锦诗 is the president of the Dunhuang Academy. ¹⁶⁵

^{164 &}quot;Dunhuang Yanjiuyuan jianjie" 敦煌研究院简介 (Brief introduction of the Dunhuang Academy), the Dunhuang Academy online, http://www.dha.ac.cn/jigoujianjie/main.htm, (070503).

¹⁶⁵ A few other names of persons working at the academy are Li Zuixiong, Wang Wanfu, Wang Xudong, Shi Pingting 施萍婷, and Yang Xiong 杨雄 (1948–).

In 1988 the Academy launched a team to study and excavate the northern parts of the Mogao grottoes area. This work continued during the five-year planning from 1996 and forward. According to an article on *Zhongguo Wang* (China Net), 243 caves were surveyed and excavated. The first reports showed that the caves primarily were used as accommodation for visiting monks, for meditation purposes or for funerals. Many fragments of documents were found and texts in no less than seven different languages could be seen on them: Han, Tibetan, Uighur, Sanskrit, the Western Xia language, Mongol, and Syrian. Most important was that texts of the last three languages were found for the first time in the area. There were also discoveries of pottery, Uighur wood block types, Persian silver coins, and coins from the Western Xia. A huge number of articles concerning these finds have been seen in the literature, thus the results from these Dunhuang excavations have occupied the interest of many researchers around China in recent years.

One very recent find mentioned in the Chinese press in 2006 might be quite important concerning current discussion on the spread of paper technology to Loulan and further westwards (as recently brought up, for instance, by Liu Wensuo 刘文锁¹⁶⁷), is the discovery of paper in the area from the Western Han dynasty. Fu Licheng, said to work as a curator at the Dunhuang museum, gave a statement in an article in the *People's Daily*, August 2006, about the new paper find. According to him, the piece of paper, that was discovered during restoration of a Western Han garrison near the Yumen Pass, was made

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¹⁶⁶ "Significant archaeological discovery at Mogao Grottoes, Dunhuang", *Zhongguo Wang*, http://www.china.org.cn/e-kaogu/2000/dunhuang.htm, (070503).

¹⁶⁷ Liu Wensuo 刘文锁 (1965–) has written about the spread of paper production technology and the dating of paper found in Loulan in "Loulan de jianzhi bing yong shidai yu zaozhi chuanbo" 楼兰的简纸并用时代 与造纸技术之传播 (The era of paper use in Loulan and the spread of paper production technology), *Bianjiang Kaogu Yanjiu*, 2004:5, pp 406–413. He has also written about the spread of silk production technology in "Lun Sichou jishu de chuanbo" 论丝绸技术的传播 (On the spread of silk technology), *Ou-Ya Xuekan* no 4, June 2004, pp 243–254. His dissertation from 2000 was entitled "Niya yizhi xingzhi buju chutan" 尼雅遗址形制布局初探 (First exploration of the structure and composition of the Niya site). Liu currently works at Zhongshan Daxue 中山大学 (Sun Yat-sen University) in Guangzhou, and his present research looks into the history of China–foreign relations and cultural interchanges.

in 8 BC, more than a hundred years before Cai Lun 蔡伦 succeded in his famous paper making. According to another article a week later (also in *People's Daily*), paper from this time period had been found before, but without text. On this new, 10-square-centimeter paper find, 20 distinct characters could be seen. It is therefore, if the dating is correct, quite an important discovery. ¹⁶⁸

Since the discovery of the Sogdian graves in Xi'an in the early 2000s, an increased interest in Zoroastrian traces can be seen also in Dunhuang archaeological research. Liu Yongzeng 刘永增 of the Dunhuang Yanjiuyuan Kaogu Yanjiusuo 敦煌研究院考古研究所 has found what he believes to be evidence for Zoroastrian burial customs in grave finds in the Mogao caves. He is also of the opinion that a new find in the corridor to Cave 196 indicates that Sogdians still resided in the Dunhuang area until some time between the Yuan and Qing dynasties. 169

Gansu Sheng Wenwu Kaogu Yanjiusuo 甘肃省文物考古研究所 (The Cultural Relics Archaeological Research Institute of Gansu Province, or Gansu Archaeological Institute)

The Cultural Relics Archaeological Research Institute got its name in 1986 when it parted from the Gansu Provincial museum and became a separate administration of its own. It was not until quite recently, though, in 2005, that the team literally moved from the museum to a new location in Lanzhou city. According to the provincial wenwuju's (The Cultural Relics Department under the Gansu provincial government) webpage, the

^{168 &}quot;Xi Han ma zhi xianshen Dunhuang - bi Dong Han 'Cai Hou zhi' zao 113 nian" 西汉麻纸现身敦煌-比东汉"蔡侯纸"早113年 (Paper from Western Han appears in Dunhuang – 113 years older than the Cai Lun paper from Eastern Han), *The People's Daily's overseas edition*, 20060815, *People's Daily online*, http://gs.people.com.cn/GB/channel164/200608/15/51079.html, (070505), and "New evidence suggests longer paper making history in China", *People's Daily online* August 9, 2006, http://english.people.com.cn/200608/09/eng20060809_291152.html.

¹⁶⁹ Liu Yongzeng, "Mogaoku di 158 ku de naguqi yu Suteren de sangzang xisu" 莫高窟第158窟的纳骨器 与粟特人的丧葬习俗 (The ossuary in Cave 158 at Mogao Grottoes and burial customs of the Sogdians), *Dunhuang Yanjiu* 2004:02, pp 13–18, 109–117.

institute has three research fellows, eight associate research fellows, and 11 middle-ranked professionals among the more qualified staff. Ten persons currently are of a rank such that they have the right to lead excavations. The management of the archaeologic research is divided into two divisions: the Lishi Yanjiushi 历史研究室 (Department for History Research) and the Shiqian Yanjiushi 史前研究室 (Department for Pre-historic Research). 170

2.2 Universities

2.2.1 Lanzhou Daxue 兰州大学 (Lanzhou University)

Lanzhou Daxue Dunhuangxue Yanjiusuo 兰州大学敦煌学研究所 (Institute of Dunhuang Studies, Lanzhou University)

The institute was founded in 1979 and is since 1999 divided into the following departments:

Dunhuang Wenxian Yanjiushi 敦煌文献研究室 (Department for Dunhuang Document Studies), Dunhuang Shiku Yishu Yanjiushi 敦煌石窟艺术研究室 (Department for Dunhuang Grottoes Art Studies), Zongjiaoxue Yanjiushi 宗教学研究室 (Department for Religion Studies), and Fojiao Yishu yu Wenhua Yanjiu Zhongxin 佛教 艺术与文化研究中心 (Research Center for Buddhist Art and Culture). In its care is also the Zhongguo Dunhuang Tulufan Xuehui Lanzhou Daxue Ziliao Zhongxin 中国敦煌吐鲁番学会兰州大学资料中心 (The Data Center of China Dunhuang Turfan Association, Lanzhou University).

The Institute has ten professors, five associate professors, and five teachers, and, according to its homepage, currently 19 doctoral candidates and 18 master's degree students.

The street of the Cultural Relics and Archaeological Institute of Gansu province), http://gsww.gov.cn/webpub/gsww/WBDW/1103849382214365.htm, (070430).

The scientific journal *Dunhuangxue Jikan* 敦煌学辑刊 (Journal of Dunhuang Studies) is edited and published by the institute. 171172

Professor Zheng Binglin 郑炳林 (1956–) is the Director of the Institute of Dunhuang Studies. He is also head of the Institute's research center for Buddhist art. His major field of study is Chinese history and religion, with a specialization in Dunhuang Buddhist history. ¹⁷³ He is also interested in historical geography research.

Wang Jiqing 王冀青 (1961–) is the head of the Data Center of the China Dunhuang Turfan Association. Wang has written several articles about the materials in Britain collected by Sir Aurel Stein. He has also studied the passport and permission papers given to Stein by the Qing dynasty authorities during his second expedition in Central Asia, and concludes (not surprisingly) that Stein did not have permission to excavate, buy artefacts, or take precious objects out of the country, though he did have permission to explore, observe, and study in the area. 175176

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^{171 &}quot;Lanzhou Daxue Dunhuangxue Yanjiusuo" 兰州大学敦煌学研究所 (Institute of Dunhuang Studies, Lanzhou University), *Lanzhou University online*: http://dhxyjs.lzu.edu.cn/html/intro/baseintro.htm, (070429). Professor Qi Chenjun 齐陈骏 (1936—) is head of the editorial department at *Dunhuangxue Jikan*.

¹⁷² Among the other scholars at the institute not mentioned here are Du Doucheng 杜斗城 (1951–), responsible for the Department for Religion Studies at the Institute, Lu Qingfu 陆庆夫 (1944–) head of the Institute's Department for Dunhuang Document Studies and writer of the book *Sichou zhi lu shi-di yanjiu* (History and geography research of the Silk Road), (Lanzhou Daxue Chubanshe, 1999), Ma De 马德 (1955–), Vice Director of the Institute of Dunhuang Studies and the Department for Dunhuang Document Studies.

^{173 &}quot;Zheng Bingblin, Lanzhou Daxue Dunhuangxue Yanjiusuo suozhang, jiaoshou, boshisheng daoshi" 郑 炳林, 兰州大学敦煌学研究所所长, 教授, 博士生导师 (Zheng Binglin, Director of the Institute for Dunhuang Studies at Lanzhou University, professor, supervisor for doctoral candidates), *Lanzhou University online*, http://dhxyjs.lzu.edu.cn/html/research/persons/zhengbl.htm.

^{174 &}quot;Lanzhou Daxue Dunhuangxue jigou shezhi" 兰州大学敦煌学机构设置 (The organizational set up of the Dunhuang Studies at Lanzhou University), http://dhxyjs.lzu.edu.cn/html/intro/baseset.htm, (070429) and this abstract page on the Internet have some additional brief information about him: http://www.wanfangdata.com.cn/qikan/periodical.Articles/dhxjk/dhxj2006/0602/060206.htm, (070429).

¹⁷⁵ Wang Jiqing, "Sitanyin di er ci Zhongya kaocha qijian suochi Zhongguo huzhao jianxi" 斯坦因第二次 中亚考察期间所持中国护照简析 (Brief analysis of the Chinese passport given to Stein during his second

2.2.2 Xibei Shifan Daxue 西北师范大学 (Northwest Normal University)

Wenxueyuan 文学院 (College of Liberal Arts)

The College of Liberal Arts at Northwest Normal University has a number of departments and research institutes that are related to Silk Road studies in one way or other. Most of them are quite new. They are as follows:

The Dunhuangxue Yanjiusuo 敦煌学研究所 (Institute for Dunhuang Studies) started in the 1980s. It quite recently, in 2003, received the right to confer the doctorate. The institute has three professors and two associate professors. Two persons are currently studying for a doctoral degree and four for a master's degree. The research conducted at the institute concerns the Dunhuang documents, especially those regarding the Dunhuang society and economy, the history and geography of the Hexi corridor, ancient development of the northwestern areas, and social decrees and regulations of the Sui-Tang-Five Dynasties era.

The Lishi Dili Yanjiusuo 历史地理研究所 (Research Institute of Historical Geography). This institute was established in 2004. The department has three professors and two associate professors. Four persons are now (spring 2007) studying for a master's degree and one for a doctoral degree. The most important research is currently on two topics: First, historical geography studies of the dry land areas (especially the historic

investigations in Central Asia), Zhongguo Bianjiang Shi-Di Yanjiu 1998:04, pp 69–76.

Wang has also written an article in which he discusses the origin of the term Dunhuangxue 敦煌学 (Dunhuang studies). Of course, study of the Dunhuang documents goes back to its first discovery, but what Wang examines is the date that the term "Dunhuang studies" itself came into use for the first time. Generally it is believed that the term was coined by the famous Chinese scholar Chen Yinke 陈寅恪, as he used it in a book published in 1930. Wang Jiqing however looks back into various books of the 1920s and 30s and finally gives credit to the Japanese scholar Ishihama Juntaro (Shibin Chuntailang 石滨纯太郎 in Chinese). He used the word no less than 15 times in a book published at Osaka University in 1925. Wang points out, though, that Chen Yinke was the first to introduce it in China. Wang Jiqing, "Lun 'Dunhuangxue' -ci de ciyuan" 论"敦煌学"一词的词源 (Discussion into the origin of the word "Dunhuangxue"), *Dunhuangxue Jikan* 2000:02, pp 110–132.

periods of desertification), and historical changes in the ecosystem as well as the relations between human settlements and the environment. Second, cultural geography studies regarding the northwestern areas development, agriculture and animal husbandry as well as the population changes and migration patterns in history.¹⁷⁷

The Shijie Yichan Yanjiu Zhongxin 世界遗产研究中心 (World Heritage Research Center) was established in 2002–2003 with the aim of providing a multi-disciplinary approach to the research about sites on, or about to enter, the world heritage list. Its establishment is part of a provincial government aim (and likely part of the same aim of the central government) to promote sites in China and to get them on the world heritage list. Since its start, the center has promoted the Tianshui Maijishan site as well as the idea of a joint application with other countries to get the Silk Road and its various sites (both in and outside China) on the list. 178

The Xibei Shi Yanjiusuo 西北史研究所 (The Research Institute for Northwestern History Studies) was established in 2002 (formerly called Department for Northwestern History Studies). It has about 20 researchers on its staff. Li Qingling 李清凌 (1944–) is head of the department.

The Northwest Normal University is the publisher of the journal *Sichou zhi Lu* 丝绸之路 (The Silk Road). It looks at the Silk Road research from a popular science perspective.

¹⁷⁷ "Lishi Dili Yanjiusuo" 历史地理研究所 (Research Institute of Historical Geography), The College of Liberal Arts, *Northwest Normal University online*, http://www.nwnu.edu.cn/wxy/orger.php?orgerid=21, (070503).

According to the statement of a government offical in the *People's Daily*, a joint application with China and some Central Asian countries is likely to occur within the next three to five years. Also mentioned in the same article is that the central government started a plan in 2006 to protect key relics sites along the Silk Road in Xinjiang. The government will invest 420 million yuan in preservation projects there. "China exclusive: China and Central Asian countries to seek status for ancient Silk Road", *People's Daily online*, http://english.people.com.cn/200608/04/eng20060804 289729.html, (070503).

¹⁷⁹ Xibei Shi Yanjiusuo 西北史研究所 (Research Institute of Nortwestern History Studies), College of Liberal Arts, *Northwest Normal University online*, http://www.nwnu.edu.cn/wxy/orger.php?orgerid=23, (070503).

3 Xinjiang 新疆

3.1 Archaeological Institutes and Museums

According to the Xinjiang Cultural Department's (Xinjiang Wenwu Ju's) organizational chart¹⁸⁰, there are two major state-run research facilities in the province: Xinjiang Weiwu'er Zizhiqu Wenwu Kaogu Yanjiusuo (Xinjiang Uighur Autonomic Region Research Institute of Archaeology and Cultural Relics) and Xinjiang Weiwu'er Zizhiqu Qiuci Shiku Yanjiusuo (Xinjiang Uighur Autonumous Region Qiuci Grottoes Research Institute).¹⁸¹

¹⁸⁰ "Xinjiang Weiwu'er Zizhiqu Wen Bo Jigou" 新疆维吾尔自治区文博机构 (Cultural & Museum Organisations in Xinjiang Uighur Autonomous Region), *Xinjiang Cultural Ministry online*, http://www.xjww.com.cn/jiugou.htm, (070219).

¹⁸¹ The Xinjiang Weiwu'er Zizhiqu Bowuguan (Xinjiang Uighur Autonomous Region Museum) also has staff employed for research studies (as is usually the case in major museums in China). Among them is Wang Bo 王博, the most productive writer. He has recently written a study on handmade pottery, typical for Bronze Age excavation sites in the Xinjiang oasis areas of the Talimu pendi (Tarim Basin) such as the Niya and Keliya cultures,"Xinjiang kaogu chutu shouzhi heiyi taoqi chutan" 新疆考古出土手制黑衣陶器 初探 (Primary synthesis study on handmade pottery with black coating unearthed in Xinjiang), Xiyu Yanjiu 2002:03, pp 41-49. This kind of pottery was first discovered in the 1920s (Wang Bo quotes Folke Bergman's newly translated book Archaeological Researches in Sinkiang about this) and Wang Bo describes the sites at which this pottery has been found until the most recent excavations, provides theories about how it was made, its use, its characteristics, and the patterns of its distribution. Other researchers are Aliya Tuolahazi 阿丽娅·托拉哈孜, who has written "Xinjiang Shanpula de cixiupin jiqi yishu" 新疆山普 拉的刺绣品及其艺术 (The embroderies and art of Shanpula, Xinjiang), Xiyu Yanjiu 2002:02, pp 94-98. The article concerns excavated embroideries in the Shanpula burial ground in the Luopu county and Aliya finds them to be testimonies of early cultural and technological interchanges between Ancient Rome. West Asia, Central Asia, and China. Israfel Yusuf (Yisilafei'er Yusufu) 伊斯拉菲尔·玉苏甫 and Aniwa'er Hasimu 安尼瓦尔·哈斯木 have written "Gulao de yueqi - konghou" 古老的乐器 — 箜篌 (Archaic musical instruments – the ancient harp), Xiyu Yanjiu 2001:02, pp 78-85. It is about the discoveries of two wooden musical instruments in Xinjiang that can fill in the blanks for the scientists and confirm the tales in ancient written records (and on painted frescoes) on the use of ancient harps, an instrument that apparently was spread from Southwest Asia to Egypt, Persia, and then through Central Asia into China.

Xinjiang Qiuci Shiku Yanjiusuo 新疆龟兹石窟研究所 (Xinjiang Qiuci Grottoes Research Institute)

The institute was established in 1985 to carry out research regarding the Kizil, Kumutala, Kizilgaha, Senmusaimu, Taitai'er, Mazhaboha, Tuohulake'aiken, and Wenbashi grottoes. According to the website China Culture.org it has published over a hundred articles in journals in and outside China. The Institute's research (as the name indicates) focuses on the Buddhist art and religious features in the grottoes.

The most productive writer on its staff is Huo Xuchu 霍旭初. In recent articles he has written about using new methods, like 14 C tests, to review and determine the periodization of the Buddhist caves in the Kizil grottoes and others¹⁸², made comparisons between the Buddhist art in a grotto found in 1999 in Kucha to that of the Mogao grottoes of Dunhuang¹⁸³, studied ten pieces of Chinese inscriptions in the above found grotto, and from that tried to deduce more about life during the Tang dynasty and the spread of Mahayana Buddhism in the south of Xinjiang¹⁸⁴, looked into the origin and functions of the musical instruments in the cave temples of the Western Regions,¹⁸⁵ and also made a study of the images of Vajrapānibalin (Buddha's warrior attendants) in the mural paintings of the Kucha grottoes.¹⁸⁶ He is often quoted by other scholars in China.

¹⁸² Huo Xuchu, "Kezi'er shiku niandai yanjiu he tan shisi ceding shuju de yingyong" 克孜尔石窟年代研究 和碳十四测定数据的应用 (Application of C 14 data in research on the date of the Kizil grottoes), *Xiyu Yanjiu* 2006:04, pp 43–53.

¹⁸³ Huo Xuchu, "Dunhuang Fojiao yishu de xichuan - cong xin faxian de Xinjiang A-ai shiku tanqi" 敦煌佛 教艺术的西传——从新发现的新疆阿艾石窟谈起 (Westward influence of Dunhuang Buddhist art based on A-ai Grotto, a newly discovered Buddhist cave in Xinjiang Uygur Autonomous Region) [sic], *Dunhuang Yanjiu* 2002:01, pp 26–33.

¹⁸⁴ Huo Xuchu, "A-ai shiku tiji kaoshi" 阿艾石窟题记考识 (A study of the Chinese inscription in Grotto Ai) [sic], Xiyu Yanjiu 2004:02, pp 50-59.

¹⁸⁵ Huo Xuchu, "Xiyu Fojiao shikusi zhong de yinyue zaoxing" 西域佛教石窟寺中的音乐造型 (Music model of the Buddhist cave temples in the Western Regions), *Xiyu Yanjiu* 2005:03, pp 69–78.

¹⁸⁶ Huo Xuchu, "Qiuci Jingang lishi tuxiang yanjiu" 龟兹金刚力士图像研究 (A study of the image of Vajrapānibalin [warriors] found in the Kucha grottoes), *Dunhuang Yanjiu* 2005:03, pp 1–7.

Liu Guorui 刘国瑞 has, together with Qu Tao of the Maijishan Grottoes Research Institute and Zhang Yuzhong of the Xinjiang Archaeological Institute, made a study of the recently discovered Buddha temple frescoes in the Dandanwulike site (situated in the Taklamakan Desert—the site was discovered by Sven Hedin 1896 and then excavated by Stein a few years later). Liu has also been involved in a study about bronzeware found in the eastern parts of Xinjiang. Through metal analysis of the bronze objects in question, the authors discovered close connections between the cultures of Xinjiang and Western Gansu. They believe their findings to be very important in our understanding of the spread of technology during the Bronze Age. Rei Jianjun 梅建军 (1962–), an important Beijing scholar affiliated with the University of Science and Technology, is one of the authors.

Peng Jie 彭杰 has written about the Tibetan, Turk, and Uighur influences on the Buddhist art in the Qiuci grottoes¹⁹⁰ as well as applied newly discovered iconographies and literature references to check earlier identifications of the Vairochana Buddha in one

¹⁸⁷ Liu Guorui, Qu Tao and Zhang Yuzhong, "Xinjiang Dandanwulike yizhi xin faxian de fosi bihua" 新疆 丹丹乌里克遗址新发现的佛寺壁画 (Buddha temple frescoes found in Xinjiang Dandanwulike site), *Xiyu Yanjiu* 2005:04, pp 52–63.

http://yjsy.ustb.edu.cn/web/Infomation/BD Detail.aspx?ID=210003.

¹⁸⁸ Mei Jianjun, Liu Guorui and Chan Xien, "Xinjiang dongbu diqu chutu zaoqi tongqi de chubu fenxi he yanjiu" 新疆东部地区出土早期铜器的初步分析和研究 (Preliminary analysis and research on early bronze ware excavated in the Xinjiang eastern area), *Xiyu Yanjiu* 2002:02, pp 1–10.

Mei Jianjun is director of the Institute of Historical Metallurgy and Materials at the University of Science and Technology in Beijing. He is one of the more influential scholars in China today regarding metal findings in Bronze Age archaeology. His research is currently focusing on the development of early bronze metallurgy in China as well as in the cultures of the Eurasian steppe. He is involved in the analyses of early metal objects found in excavations in Xinjiang and Northern China. He received his doctor's degree in archaeology at Cambridge University in 2000. "Bodao jianjie" 博导简介(Brief introduction to doctoral candidate advisors), *The University of Science and Technology's homepage*,

¹⁹⁰ Peng Jie, "Qiuci shiku yu Tujue, Huihu, Tubu wenhua" 龟兹石窟与突厥, 回鹘, 吐蕃文化 (Turk, Tibetan and Uighur culture in the Qiuci Grottoes), *Xinjiang Yishu Xueyuan Xuebao* 2004:01, pp 21–24.

of the Kizil caves¹⁹¹.

Wang Jianling 王建林 has studied the Konghou (in the article's short English summary it is called Ghongqa and referred to as a zither). According to the author this particular instrument had its origin in Africa and later spread to, and developed in, Asia, and during this period evolved into a harp. (Konghou is traditionally referred to as an ancient harp). It was used in the Qiuci caves. ¹⁹² He has also written about the Buddhist priest Xuan Zang and his travels through the Qiuci areas in the seventh century. ¹⁹³

Zhao Li 赵莉, finally, has made a summary of the research regarding dating and eras of the different caves at the Kezi'er site. 194

Unfortunately, the Qiuci Grottoes Institute seems to have been involved in a major restoration project, initiated to attract more tourists to the area, that has damaged part of the remains under its care. In an article in the Chinese journal *Dushu* (Reading) 2005, the author, Shi An 石岸, heavily critizises the modernisation works at the Kizil (Qizil) Grottoes. He describes the way in which caves with no actual historical or contextual relations have been connected, how cement reinforcements have been used on unique and precious relics, and how a catastrophic restoration project probably has destroyed and prevented any studies of older, underlying layers of wall paintings. He also mentions that he personally, during a visit to the site in 2004, saw a bulldozer cut through a cave wall and that other bulldozers most likely have destroyed a huge number of artefacts during the construction of an artificial lake nearby. As if this were not enough, a

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¹⁹¹ Peng Jie, "Guanyu Kezi'er 17 kulushe na Foxiang de bu zheng" 关于克孜尔17窟卢舍那佛像的补证 (In support for the identification of the Vairochana Buddha in Kizil cave no.17), *Xinjiang Shifan Daxue Xuebao (Zhexue Shehui Kexue Ban*) 2004:01, pp 18–23.

¹⁹² Wang Jianling, "Qiuci konghou yuanyuan yu jiegou yanjiu" 龟兹箜篌渊源与结构研究 (Research on the origin and structure of the ancient Kuchan musical instrument Ghongqa [zither]), *Xinjiang Yishu Xueyuan Xuebao* 2004:02, pp 20–24.

¹⁹³ Wang Jianling, "Tang Xuan Zang Qiuci xing cheng luxian" 唐玄奘龟兹行乘路线 (Xuan Zang's Qiuci travel routes in the Tang Dynasty), *Xinjiang Difangzhi* 2005:03, pp 45–46.

¹⁹⁴ Zhao Li, "Kezi'er shiku fenqi niandai yanjiu zongshu"克孜尔石窟分期年代研究综述 (Summary of the research into the stages and dating of the Kezi'er grottoes), *Dunhuangxue Jikan* 2002:01, pp 147–156.

huge 50,000-square-meter swimming pole, said to be the largest in southern Xinjiang, has been built. Moreover, changes have been made at the surface of the grottoes and its surroundings that do not have any correlation to the local history; for instance, a laughing Buddha statue has been erected, belonging to a much later period and of a type common far eastwards in mainland China, and a coffee shop with typical Chinese building features has been constructed on the spot.¹⁹⁵

The institute is situated at the Kizil grottoes, near Kizil, about 70 km west of Kuqa in the Baicheng County.

Xinjiang Wenwu Kaogu Yanjiusuo 新疆文物考古研究所 (Xinjiang Research Institute of Archaeology and Cultural Relics)

The Xinjiang Archaeological Institute originated in the archaeological team of the Xinjiang Museum, receiving its present name in 1986. It is subordinate to the cultural ministry department of the province. The main tasks for the institute are to protect, survey, and undertake archaeological excavations and research on the cultural remains around the province. Staff at the institution numbers 52, divided among the Archaeology Department, the Department for Cultural Relics Protection, and the head office. 196 Idris Abdursul (Yidelisi Abuduresule) 伊弟利斯 阿不都热苏勒 is the present head of the institute 197,

¹⁹⁵ Shi An, "Bensang Qiuci" 奔丧龟兹 (Hasten home for the Qiuci funeral), *Dushu*, 2005:05, pp 37–46. See also Bruce G. Doar, "Mistaken identities?: Focus on cultural heritage protection in Xinjiang", *China Heritage Newsletter online*, no 3, September 2005, http://www.chinaheritagenewsletter.org/editorial.php?issue=003, where the present situation of the cultural heritage of Xinjiang as well as Shi An's article are discussed, (070411).

¹⁹⁶ Zhang Yuzhong, "Xinjiang Wenwu Kaogu Yanjiusuo jianjie" 新疆文物考古研究所简介, *Kaogu* 2002:06, p 96.

¹⁹⁷ Idris Abdursul has led some of the most important excavations and discoveries made in Xinjiang in recent years, among them the rediscovery of the Xiaohe tombs in the Lop Nor area. He has for example together with Zhang Chuan 张川 written about the typology and classification of paleolithic tools, and with Zhang Yuzhong 张玉忠 about the joint Chinese–French excavations at the sites of the old Keliya (Keriya) river system. See Zhang Chuan and Yidelisi Abuduresule, "Shiqi fenlei zhong de duochong huafen

and Wang Binghua 王炳华 (1935–) its former head. Professor Wang Binghua is considered to be one of the foremost scholars of the history of the Western Regions. Other archaeologists at the institute are: Chang Xi'en (常喜恩); Chen Liang 陈靓; Liu Xuetang 刘学堂 (1961–), who is one of the most frequent writers of the institute during the 2000s, publishing, among others, a study into the possible western origin of ancient copper mirrors found in Xinjiang¹⁹⁹, and an article about the origin, development, and decline of the ancient city of Jiaohe²⁰⁰; Lü Enguo 吕恩国, who recently (2006) has been involved in excavations of a "Han" (that is, Han Chinese) military fort from the Tang dynasty near Bositan village in Xinjiang. Lü Enguo is of the opinion that this discovery proves that the area was under the administration of the central authorities (Chang'an) in the Tang dynasty; ²⁰¹ Wu Yong 吴勇; and finally Zhang Yuzhong 张玉忠, who is the

yuanze" 石器分类中的多重划分原则 (The multi-classification concept in paleolithic tool's typology), *Wenwu Shijie* (World of Antiquity), 1999:01, pp 24–36 and Yidelisi Abuduresule and Zhang Yuzhong, "1993 nian yilai Xinjiang Keliya heliuyu kaogu shulüe" 1993 年以来新疆克里雅河流域考古述略 (Brief description of the archaeological studies since 1993 at Keriya river basin), *Xiyu Yanjiu* 1997:03, pp 39–42.

¹⁹⁸ Among the many articles written by Wang in recent years is one about Chinese research in Loulan since the days of Sven Hedin more than a hundred years ago. In the article he explains that it first was inhabited 4000 years ago, that its inhabitants early entered the Bronze Age, and that Loulan soon became an important link for economic and cultural exchange. He also stresses the need for more answers, for more clues into the religious and political life the people may have lived there. To show the diversity of Wang Binghua's articles, he has also written a study about recent findings in the Altay Mountains of about ten caves with ancient paintings. By analysing the hunting methods seen in the motives (they used spear and lance- not bow and arrow) he concludes that the paintings must be earlier than the Neolithic age and definitely not less than ten thousand years old. See Wang Binghua, "Chongxin faxian Loulan" (Discovering Loulan again), Wenming 2006:01, pp 8–9 and Wang Binghua, "Aleitaishan Jiushiqi shidai dongku caihui" 阿勒泰山旧石器时代洞窟彩绘 (Paleolithic coloured paintings in Altay Mountain caves), Kaogu yu Wenwu, 2002:03, pp 48–55.

¹⁹⁹ Liu Xuetang, "Lun Zhongguo zaoqi tongjing yuanyu xiyu" 论中国早期铜镜源于西域 (A Western origin hypothesis of the early copper mirror in China), *Xinjiang Shifan Daxue Xuebao (Zhexue Shehui Kexue Ban)* 1999:03, pp 112–119.

²⁰⁰ Liu Xuetang, "Lun Jiaohe cheng de xingqi gouzhu tese, fazhan he feiqi" 论交河城的兴起、构筑特色、发展和废弃 (The origin, structural character, development, and decline of Jiaohe city), *Bianjiang Kaogu Yanjiu* 2004:02.

²⁰¹ "Over 1,000-year-old military fort discovered in northwest China", People's Daily online,

Institute's deputy director.

3.2 Universities

3.2.1 Xinjiang Daxue 新疆大学 (Xinjiang University)

Apart from the writers previously described in the paper itself, Niu Ruji 牛汝极, affiliated to the Xinjiang University Research Center for Northwestern Ethnic minorities, is an important name. He has been published in *Xiyu Yanjiu*, *Dunhuang Yanjiu*, and *Dunhuangxue Jikan*. His articles are mainly focused on translations and transcriptions of ancient Buddhist and Nestorian texts. He has written, for example, about a manuscript found in the Mogao caves with texts in both the Syrian and Uighur languages²⁰² and a short yet comprehensive study about Uighur Buddhism and Uighur Buddhist manuscripts. Niu often refers to international sources in his texts.²⁰³

Ablikim Yousaf (Abulikemu Yasen) 阿布里克木·亚森 of the Xinjiang University has, together with Adili Hasim (Adili Hasimu) 阿地力·哈斯木 at the Xinjiang Normal University, done textual research on Sogdian loanwords in ancient Uighur literature, showing the close contacts between the two people in ancient times.²⁰⁴

Liu Yuxia 刘玉霞 has written about the music, dance and art of the Western Regions and how it came to influence Chinese culture during the Tang dynasty, which

http://english.peopledaily.com.cn/200608/23/eng20060823_295950.html, (070419), and "Remains of Hanstyle ancient city found in Xinjiang", *Zhongguo Wang*, http://www.china.org.cn/english/2006/Aug/178861.htm, (070419).

²⁰² Niu Ruji, "Mogaoku beiqu faxian de Xuyiwenliyawen Jingjiao – Huihuwen Fojiao shuang yu xieben zai yanjiu" 莫高窟北区发现的叙译文利亚文景教-回鹘文佛教双语写本再研究(Re-study of the bilingual manuscript of Nestorianism text in Syrian with a few lines of Buddhist writing in Uighur discovered at the Northern area of Mogao Grottoes [sic]), *Dunhuang Yanjiu* 2002:02, pp 56–63.

²⁰³ Niu Ruji, "Dunhuang Tulufan Huihu Fojiao wenxian yu Huihuyu Dazangjing" 敦煌吐鲁番回鹘佛教文献与回鹘语大藏经 (Dunhuang Turfan Uighur Buddhist documents), *Xiyu Yanjiu* 2002:02, pp 56–65.

²⁰⁴ Abulikemu Yasen and Adili Hasimu, "'Tujueyu Dacidian' deng wenxian zhong de Suteyu jieci" '突厥 语大词典'等文献中的粟特语借词(Sogdian loanwords in Diwanu LuBatit-Turk [The complete Turkish dictionary] and Uighur literature), *Xiyu Yanjiu* 2006:03, pp 85–89.

was relatively open to foreign influences. 205 206

3.2.2 Xinjiang Shehui Kexueyuan 新疆社会科学远 (Xinjiang Academy of Social Sciences)

One scholar is especially disinguishing himself among others at this institution, and that is the historian Qian Boquan 钱伯泉 (1937–). Professor Qian, who wrote the article on the origin of the name Taklamakan, has also written about Sasanid coins found in Turfan and their value and use by the government and people in the Gaochang Kingdom. The fact that the coin was used as currency in the Western Regions for over a hundred years is described by him as a "zhongwai huobi shi shang de yi ge qiji" 中外货币史上的一个奇迹 (miracle in the history of world currencies). Among the many other papers written by Professor Qian, I have seen several concerning the history of the people of the Pamirs. One article is about the migration and disappearance of the people of the Wusun state after its collapse in 179–178 BC. (The inhabitants of that state moved westward to the Yili River valley and later, until the early fifth century, to the Pamirs.)

²⁰⁵ Liu Yuxia, "Tangdai yishu yu Xiyu yue wu" 唐代艺术与西域乐舞 (Music and dance of the Western Regions and the art of the Tang dynasty), *Xiyu Yanjiu* 2002:04, pp 80–83.

²⁰⁶ Also Zhao Yuxia 赵玉霞, a graduate student at the School of Humanites of this university has, together with Professor Meng Nan 孟楠, written an article worth mentioning here. It is about the tradition of marriage alliances between families during Han, Wei-Jin, and Northern and Southern dynasties. I have not read the article in full, only the short summary, but it might be quite interesting to read as a complement to our understanding of the interactions between peoples on low and high society levels in history. The forming of political alliances between peoples and nations through marriages is abundant in Silk Road history. See Zhao Yuxia and Meng Nan, "Liang-Han Wei-Jin Nan-Bei Chao Xiyu ge minzu zhijian lianyin tansuo" 两汉魏晋南北朝西域各民族之间联姻探析 (Analysis and exploration of the forming of marriages between different ethnic groups during Former and Later Han, the Wei-Jin period, and the Northern and Southern Dynasties), *Xiyu Yanjiu* 2004:04, pp 9–14.

²⁰⁷ Qian Boquan, "Tulufan faxian de Shashan yinbi jiqi zai Gaochang Wangguo de wujia bizhi" 吐鲁番发现的萨珊银币及其在高昌王国的物价比值 (Sasanid coin found in Turfan and its specific value in the Gaochang Kingdom), *Xiyu Yanjiu* 2006:01, pp 29–37. The quotation is from p 29.

²⁰⁸ Qian Boquan, "Wusun de xiqian, kuosan he xiaoshi" 乌孙的西迁, 扩散和消失 (Westward migration, diffusion, and disappearence of the Wusun), *Xinjiang Shehui Kexue* 2006:05, pp 115–122.

Another article is about the Dashi kingdom in the Pamirs during the time of the Song dynasty. ²⁰⁹ Professor Qian has also written an article about the migration of Korean people to the Western regions in the Sui and Tang dynasties. ²¹⁰

Chen Guoguang 陈国光 has written about the spread of Islam into the Turfan area in the 10th to 15th centuries, what happened, and the reasons for it.²¹¹ He has as well looked into the question of when Islam for the first time entered the Xinjiang area.²¹²

Eli Gupur (Aili Wufu'er) 艾力·吾甫尔 has studied the origin of the Abudali tribe south of the Tianshan Mountains. He believes that they are ancestors to what he calls "Islam volunteers" from Central and Western Asia in the late 10th- early 11th century. ²¹³

Li Shuhui 李树辉 has written a number of articles in recent years mainly regarding Central Asian/Western Region history from the seventh to the ninth century. For example, he has looked at the formation of the Karakhanid state, ²¹⁴ Sogdian emigration eastwards as a result of the Arab expansion, and the religious influences of Monism and Zoroastrianism in the emigrants tracks²¹⁵. Apart from this, he has also

²⁰⁹ Qian Boquan, "Dashiguo shi yanjiu – Kalahan wangchao qianqi shi tanwei" 大石国史研究—喀喇汗王朝前期史探微 (A study on the history of the Dashi kingdom), *Xivu Yanjiu* 2004:04, pp 37–46.

²¹⁰ Qian Boquan, "Sui Tang shiqi xiyu de Chaoxianzuren" 隋唐时期西域的朝鲜族人 (Korean people in the Western Regions in the Sui and Tang Dynasties), *Xinjiang Daxue Xuebao (Zhexue Renwen Shehui Kexue Ban)* 2006:04, pp 60–64.

²¹¹ Chen Guoguang, "Yisilanjiao zai Tulufan diqu de chuanbo (10–15 shiji)" 伊斯兰教在吐鲁番地区的传播(10—15世纪) (The spread of Islam in the Turpan area [10th-15th century]), *Xiyu Yanjiu* 2002:03, pp 56–63.

²¹² Chen Guoguang, "Yisilanjiao chuanru Xinjiang de shijian wenti" 伊斯兰教传入新疆的时间问题 (The question of the entry of Islam into Xinjiang), *Xiyu Yanjiu* 2003:04, pp 76–82.

²¹³ Aili Wufu'er, "Xinjiang Abudaliren yuanyuan kao" 新疆阿布达里人渊源考 (The origin of the Abudali people in Xinjiang), *Xiyu Yanjiu* 2006:03, pp 64–70.

²¹⁴ Li Shuhui, "Kalahan wangchao de jianlizhe ji jianli shijian" 喀喇汗王朝的建立者及建立时间 (The time of the foundation of the Kara-Khanid kingdom and its founder), *Xiyu Yanjiu* 2004:04, pp 47–57.

²¹⁵ Li Shuhui, "Tangdai Suteren yimin juluo xingcheng yuanyin kao" 唐代粟特人移民聚落形成原因考 (About the formation of, and reasons for, migrating Sogdian tribes in the Tang dynasty), *Xibei Minzu Daxue Xuebao (Zhexue Shehui Kexue Ban)* 2004:02, pp 14–19.

written several articles on Uighur history. To mention just one of them, in an article in *Dunhuang Yanjiu* he provides information regarding the Uighurs and the Xi Zhou area (the former Gaochang state—it was renamed by the Chinese after the Tang conquest). Li studied a piece of late 8th century text found in Dunhuang, where the first Uighur khan to convert to Buddhism (called Huaixin Khan by the Chinese) is mentioned. By the surrounding text Li believes it is possible to see that Xi Zhou at that time was under the control of the Uighurs.²¹⁶ (This area was repeatedly controlled by either the Tibetans, Uighurs, or the Chinese in a long struggle during this period in Tang history).

Pan Zhiping 潘志平 has written a Sino-oriented and politically influenced article on the historic origins of the names "Turkestan", "East Turkistan" and "Uighurstan". In fact, he compares these names (among which the second one still is quite common in Western books) to the fictional Shangri-La. Moreover, those who use these names, he says, are "conducting national disrupt activities". The term East Turkestan (sometimes referred to as Chinese Turkestan) does exist though, and anyone who reads about the history of the Silk Road will frequently encounter this designation for the Xinjiang region. ²¹⁸

Tian Weijiang 田卫疆 who, among many other things has written about the political, religious, and economic situation of the Turfan area in the later Yuan and early Ming dynasties and how the commercial connections to the interior of China were

²¹⁶ Li Shuhui, "S.6551 jiangjingwen xiezuo niandai ji xiangguan shishi kao bian" S.6551讲经文写作年代 及相关史事考辨 (The date of Dunhuang MS: S.6551 and some related historical facts), *Dunhuang Yanjiu* 2003:05, pp 55–60.

²¹⁷ Pan Zhiping, "'Tujuesitan', 'Dongtujuesitan' yu 'Weiwu'ersitan" '突厥斯坦','东突厥斯坦''与'维吾尔斯坦' ("Turkestan", "East Turkestan" and "Uighurstan"), *Xiyu Yanjiu* 2004:03, pp 53–60.

²¹⁸ In Western articles on the Silk Road sometimes even the opposite occurs; a rejection of the Chinese term Xinjiang. In Jonathan Karam Skaff's work on the Sogdians "The Sogdian trade diaspora in East Turkestan during the seventh and eighth centuries", for example, is the use of the term East Turkestan specifically advocated by the author: "I will refer to the region as East Turkestan rather than Xinjiang to highlight its long history of cultural connections with West Turkestan that is obscured by modern political designations." "The Sogdian trade diaspora in East Turkestan during the seventh and eighth centuries", *Journal of the Economic and Social History of the Orient*, Dec 2003, vol 46, issue 4, p 477.

enhanced at that time.²¹⁹

Wu Fuhuan 吴福环, also of the Xinjiang Academy of Social Sciences, has together with Wei Bin at Xinjiang University written about ancient Chinese and foreign coins from the Silk Road. Though the information that can be retrieved from this article is quite interesting (and worthwhile reading for anyone curious about the subject), it gets clouded by the political bias so clearly expressed by the authors. They describe Xinjiang as always having been an integral part of China and give the reader the impression that the coin finds in the area clearly support this. That conclusion of course could be questioned, as money has a surprising capacity to travel from hand to hand over very vast areas. Just because ancient Chinese coins have been found in Xinjiang doesn't per se mean that Chinese people have been masters of the area in all times or even were there at the time the coins were in circulation. One must not forget either, as the authors also have noticed, that there are quite a number of foreign coins from Greece and Rome found in Xinjiang as well as in China proper. 220

Yin Qing 殷晴 at the same institution has written an article about the south land route of the Silk Road after the An Lushan rebellion and afterwards, explaining that the trade soon recovered despite the decline of the Tang dynasty. ²²¹

3.2.3 Xinjiang Shifan Daxue 新疆师范大学 (Xinjiang Normal University)

There are primarily two scholars who specially deserve to be mentioned here,

²¹⁹ Tian Weijiang, "Mingdai Tulufan diqu de shehui jingji he zongjiao wenhua" 明代吐鲁番地区的社会经济和宗教文化 (Social economy and religious cultures in the Turfan area in Ming Dynasty), *Xiyu Yanjiu* 2004:04, pp 23–29.

²²⁰ Wu Fuhuan and Wei Bin, "Sichou zhi lu shang de Zhongwai qianbi" 丝绸之路上的中外钱币 (Ancient Chinese and foreign coins on the Silk Road), *Xiyu Yanjiu* 2004:03, pp 17–24.

²²¹ Yin Qing, "Tang-Song zhiji xiyu nandao de fuxing – yu tian yushi maoyi de rechao" 唐宋之际西域南 道的复兴—于阗玉石贸易的热潮 (Revival of the Southern route of the Silk Road in the Western Regions in the Tang and Song Dynasties [sic]), *Xiyu Yanjiu* 2006:01, pp 38–50.

Hou Can 侯灿 and Wang Penghui 王鹏辉.²²²

Hou Can 侯灿 of the Xinjiang Normal University's history department, has produced a number of articles on the ancient city of Loulan in recent years. He has also himself led two archaeological expeditions to Loulan in the 1980s when he excavated seven Han dynasty (?) tombs within 5 km of the ancient town area. In recent articles Hou Can has brought up the problem of the location of the jurisdiction of the Western Regions during the Wei-Jin period, when it was situated either in Charklik or Loulan. He has also written several articles for the popular science journal *Sichou zhi Lu*. There he has given the readers insights into the ancient life and culture of Loulan. To mention another article, he celebrated the centenary of the Loulan discovery by writing an article in which he questioned the actual date of the discovery (and thus the centenary itself). Was it really made in 1900, and was it really Sven Hedin's servant Ördek who found

²²² Other scholars active at the Xinjiang Normal University that have written articles concerning the Silk Road are for instance Luan Rui 栾睿 of the Xinjiang Shifan Daxue Zhongwenxi, who has written several articles studying different Buddhist features in the Western regions and its eastward spread, and Wang Zheng 王征, who has studied the wall-paintings in the Qiuci grottoes and divided them into eight different categories depending on their style and date. Wang has previously written articles for the Qiuci Grottoes Institute. Luan Rui, "Beiting xi dasisuo fanying de Gaochang Huihu Fojiao tezheng" 北庭西大寺所反映的高昌回鹘佛教特征 (Buddhist features in Gaochang Uighur period reflected by the West Temple at Beiting), *Xiyu Yanjiu* 2004:01, pp 54–59, "Jiaohe Talin yu Mijiao dongjian" 交河塔林与密教东渐 (The Jiaohe pagoda forest and the eastward spread of Esoteric Buddhism), *Dunhuang Yanjiu* 2001:01, pp 77–81 and Wang Zheng, "Qiuci shiku bihua fengge yanjiu" 龟兹石窟壁画风格研究 (A research on the wall paintings' style in Qiuci Grottoes), *Xivu Yanjiu* 2006:04, pp 54–62.

²²³ Mallory and Mair, *The Tarim mummies*, p 165.

²²⁴ Hou Can, "Wei-Jin xiyuzhang shizhi Loulan shizheng – Loulan wenti bonan zhiyi" 魏晋西域长史治楼 兰实证—楼兰问题驳难之一 (The concrete evidence for the seat of jurisdiction of Clarklik under the superior chief of Western Region during Wei and Jing dynasties—argument on the question of charklik (Part I)) [sic], *Dunhuang Yanjiu* 2001:04, pp 105–111, and "Loulan yanjiu xiyi – Loulan wenti bonan zhier" 楼兰研究析疑—楼兰问题驳难之二 (Clearing up questions in Loulan research—arguments about Loulan problems (Part 2)), *Dunhuang Yanjiu* 2002:01, pp 66–72.

²²⁵ Hou Can, "Loulan yizhi de wenhua yicun" 楼兰遗址的文化遗存 (Cultural remains of the Loulan site), *Sichou zhi Lu* 2001:01, pp 74–78; "Loulanren yuangu huodong de xinxi" 楼兰人远古活动的信息 (Information on the ancient activities of the Loulan people), *Sichou zhi Lu* 2001:06, pp 56–58.

it?²²⁶ Sven Hedin himself, in his accounts, said that Ördek stumbled on some ruins in Mars that year while trying to return to the expedition with a forgotten shovel—he had apparently got lost in a sandstorm when he by chance found the ruins. But Hou Can, by reading the Hedin diaries, concludes that Ördek, though finding the remains of a Buddhist monastery, did not find the actual site of the city of Loulan. It was not until the Hedin expedition returned the year after, in pursuit of Ördek's discovery (Ördek was not present that time) that the true city of Loulan was found. Anyone who has read Hedin's own accounts of the event, of course, realizes that this is nothing new. But the article in itself is fascinating reading, and it is obvious from the many Chinese popular and scientific sources that Hou quotes, that there must have been quite an upsurge in the interest in Loulan and Silk Road history in China during the 1990s.

4 Jilin 吉林

4.1 Jilin Daxue 吉林大学 (Jilin University)

Though outside the geographical area of this brief survey of important institutions in the Silk Road research field, this particular university deserves special attention here. By looking at the list of new dissertations published annually in *Zhongguo kaoguxue nianjian* 中国考古学年鉴(Yearbook of Chinese archaeology) it is clear that there are only a few universities allowed to confer doctoral degrees in archaeology in China. Three of them are situated in Beijing (Peking University, Chinese Academy of Social Sciences, and University of Science and Technology). One is in Jilin province, namely the Jilin University's Research Center for Chinese Frontier Archaeology. This center is therefore one of China's key universities in the archaeology field. As it is also mainly focusing its research on the border areas in north, northeastern, and northwestern China, it is of special interest for Silk Road scholars.

²²⁶ Hou Can, "Chengqing yi ge shishi – gu Loulan cheng shi Aierdike faxian de ma?" 澄清一个事实—古 楼兰城是艾尔迪克发现的吗? (To clarify a fact—was it Ördek who discovered the ancient city of Loulan?), *Sichou zhi Lu* 1999:01, pp 61–63.

Jilin Daxue Bianjiang Kaogu Yanjiu Zhongxin 吉林大学边疆考古研究中心 (Research Center for Chinese Frontier Archaeology of Jilin University)

The founding of the Research Center for Chinese Frontier Archaeology goes back to 1986 and the start of the Department for Northern China Archaeology (Zhongguo Beifang Kaogu Yanjiushi). Its main focus was on archaeology in Inner Mongolia as well as in the northeastern and northwestern border areas. In 1998 the university was equipped with China's first DNA laboratory. Very early on, this laboratory got its first major mission: to investigate the ethnicity of the ancient mummies found in Xinjiang. The university center got its present name in 1999.

The research at the Chinese frontier archaeology center is divided between four departments: Shiqian Kaogu Yanjiushi 史前考古研究室 (Department of Prehistoric Archaeology), headed by Zhao Binfu 赵宾福, Lishi Kaogu Yanjiushi 历史考古研究室 (Department of Historical Archaeology), lead by Wei Cuncheng 魏存成 (1945–), Renleixue Yanjiushi 人类学研究室 (Department of Anthropology), run by the head of the entire research center, professor Zhu Hong 朱泓, and finally Kaogu DNA Shiyanshi 考古DNA实验室 (Laboratory for DNA Archaeology), directed by Zhou Hui 周慧.²²⁷

²²⁷ "Zhongxin jianjie" 中心简介 (Introduction of the center), *Research center for Chinese frontier archaeology online*, http://bjkg.com/company.asp, and "Zuzhi jigou" 组织机构 (Organizational structure), ibid., http://bjkg.com/company1.asp, (070504).

Bibliography

- "15 academic achievements conferred Xia Nai Archaeological Prize". *People's Daily online* 24 February, 2006,
 http://www.archaeologynews.org/link.asp?ID=66881&Title=15%20academic%20 achievements%20conferred%20Xianai%20Archaeological%20Prize, (070604).
- "A remarkable rediscovery: The Xiahe Tombs". (*China Pictorial*, June 2, 2005), *Zhongguo Wang* 中国网 (China Net), http://www.china.org.cn/english/features/Archaeology/130815.htm, (070510).
- Abulikemu Yasen 阿布里克木·亚森 and Adili Hasimu 阿地力·哈斯木. "'Tujueyu Dacidian' deng wenxian zhong de Suteyu jieci" '突厥语大词典'等文献中的粟特语借词 (Sogdian loanwords in Diwanu LuBatit-Turk [The complete Turkish dictionary] and other documents), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2006:03, pp 85–89.
- Aili Wufu'er 艾力·吾甫尔. "Xinjiang Abudaliren yuanyuan kao" 新疆阿布达里人渊源 考 (The origin of the Abudali people in Xinjiang), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2006:03, pp 64–70.
- Aliya Tuolahazi 阿丽娅·托拉哈孜. "Xinjiang Shanpula de cixiupin jiqi yishu" 新疆山普拉的刺绣品及其艺术 (The embroideries and art of Shanpula, Xinjiang), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2002:02, pp 94–98.
- An Zhimin 安志敏. "Cultural complexes of the Bronze Age" in *The Bronze Age and*early Iron Age peoples of Eastern Central Asia, ed. Victor H. Mair, vol 1, pp 45—62.
- ——. "Shilun Zhongguo de zaoqi tongqi" 试论中国的早期铜器 (On early copper and bronze artifacts in China), *Kaogu* 考古 (Archaeology) 1993:12, pp 1110–1119.

- Andersson, J.G. "An early Chinese culture". *Bulletin of the Geological Survey of China*, no 5. Peking: Geological Survey of China, 1923.
- Barber, Elisabeth Wayland. The mummies of Ürümchi. London: Macmillan, 1999.
- Beckwith, Christopher I. The Tibetan empire in Central Asia: A history of the struggle for great power among Tibetans, Turks, Arabs and Chinese during the early Middle Ages. New Jersey: Princeton University Press, 1987.
- Bergman, Folke. Archaeological researches in Sinkiang. Stockholm: Thule, 1939.
- "Bianjiang Kaogu Yanjiu Zhongxin, Guowai Kaogu Yanjiu Zhongxin" 边疆考古研究中心、国外考古研究中心 (Research Center for Frontier Archaeology and Research Center for Foreign Archaeology), *CASS Institute of Archaeology online*, http://www.kaogu.cn/cn_kaogu/show_News.asp?id=19, (070505).
- "Bodao jianjie" 博导简介 (Brief introduction to doctoral candidate advisors), *The University of Science and Technology online*, http://yjsy.ustb.edu.cn/web/Infomation/BD_Detail.aspx?ID=210003.
- Cai Jingbo 蔡静波 and Yang Dongyu 杨东宇. "Shilun Tang-Wu dai biji xiaoshuo zhong de hushang xingxiang" 试论唐五代笔记小说中的胡商形象 (On the image of foreign traders in literary sketches of the Tang and Five dynasties), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2006:03, pp 93–96.
- Chen Chien-wen (Chen Jianwen) 陈建文. "Further studies on racial, cultural, and ethnic affinities of the Yuezhi" in *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, ed. Victor H. Mair, vol 2, pp 767–784.
- Chen Guoguang, 陈国光 "Yisilanjiao chuanru Xinjiang de shijian wenti" 伊斯兰教传入

- 新疆的时间问题 (The question of the entry of Islam in Xinjiang), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2003:04, pp 76–82.
- ——. "Yisilanjiao zai Tulufan diqu de chuanbo (10–15 shiji)" 伊斯兰教在吐鲁番地区的传播(10—15世纪) (The spread of Islam in the Turpan area (10th-15th century)), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2002:03, pp 56–63.
- Chen Liang 陈靓. "Xinjiang Shihezi Nanshan shiduimu rengu de zhongxi yanjiu" 新疆石河子南山石堆墓人骨的种系研究 (A racio-typological study of the human skulls from the stone cemetery at South Mountain, Shihezi city, Xinjiang), *Kaogu yu Wenwu* 考古与文物 (Archaeology and Cultural Relics) 2002:01, pp 69–80.
- Chen Xiaolu 陈晓露. "Cong bamianti Fota kan Jiantuoluo yishu zhi dongzhuan" 从八面 体佛塔看犍陀罗艺术之东传 (Eastward spread of Gandhara art seen in octagonal stupas), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2006:04, pp 63–72.
- "China exclusive: China and Central Asian countries to seek status for ancient Silk Road", *People's Daily online*, http://english.people.com.cn/200608/04/eng20060804_289729.html, (070503).
- Coonan, Clifford, "A meeting of civilisations: The mystery of China's Celtic mummies", *The Independent online*, 28 August 2006,

 http://news.independent.co.uk/world/asia/article1222214.ece, (070509).
- Cui Yinqiu 崔银秋 et al. "Xinjiang Luobo nuo'er diqu Tongqi Shidai gudai jumin mtDNA duotaixing fenxi" 新疆罗布诺尔地区铜器时代古代居民mtDNA多态性分析 (Mitochondrial DNA polymorphism analysis of ancient inhabitants of Xinjiang Lop Nor district during the Bronze Age), *Jilin Daxue Xuebao (Yixue Ban)* 吉林大学学报 (医学版) [Journal of Jilin University (Medicine edition)] 2004:04, pp 650–652.

- Jan Romgard, "Ancient Human Settlements in Xinjiang and the Early Silk Road Trade" Sino-Platonic Papers, 185 (November, 2008)
- "Department of Prehistoric Archaeology", *CASS Institute of Archaeology online*, English version, http://www.kaogu.cn/en_kaogu/show_News.asp?id=165, (070430).
- "Department of Shang and Zhou Archaeology", *CASS Institute of Archaeology online*, English version, http://www.kaogu.cn/en_kaogu/show_News.asp?id=165, (070430).
- Doar, Bruce G. "Mistaken identities?: Focus on cultural heritage protection in Xinjiang", *China Heritage Newsletter online*, no 3, September 2005, http://www.chinaheritagenewsletter.org/editorial.php?issue=003, (07411).
- "Dunhuang Yanjiuyuan jianjie" 敦煌研究院简介 (Brief introduction of the Dunhuang Academy), the Dunhuang Academy online, http://www.dha.ac.cn/jigoujianjie/main.htm, (070503).
- "Expert: Name of China's largest desert misinterpreted", *People's Daily online*, http://english.people.com.cn/200508/18/eng20050818 203332.html, (070210).
- "Experts: East–West exchanges began 5,000 years ago", *People's Daily online*, http://english.people.com.cn/200212/18/eng20021218 108694.shtml, (070509).
- Fiskesjö, Magnus, and Chen Xingcan. *China before China*. Stockholm: Museum of Far Eastern Antiquities, 2004.
- Fitzgerald-Huber, Louisa G. "Qijia and Erlitou: The question of contacts with distant cultures", *Early China* 22, (1995), pp 17–67.
- Gansu Archaeological Institute 甘肃省文物考古研究所. "Xibu diqu kuashengqu xiezuo kaogu zuotanhui jiyao" 西部地区跨省区协作考古座谈会纪要 (Summary of the symposium on trans-provincial cooperation in the Western areas), *Kaogu yu Wenwu* 考古与文物 (Archaeology and Cultural Relics) 2004:02, p 76.
- "Gansu Sheng Wenwu Kaogu Yanjiusuo gaikuang" 甘肃省文物考古研究所概况

- Jan Romgard, "Ancient Human Settlements in Xinjiang and the Early Silk Road Trade" Sino-Platonic Papers, 185 (November, 2008)
- (Survey of the Cultural Relics and Archaeological Institute of Gansu province), http://gsww.gov.cn/webpub/gsww/WBDW/1103849382214365.htm, (070430).
- "Genetic testing reveals awkward truth about Xinjiang's famous mummies", (AFP),

 **Khaleej Times online,

 http://www.khaleejtimes.com/DisplayArticle.asp?xfile=data/todaysfeatures/2005/

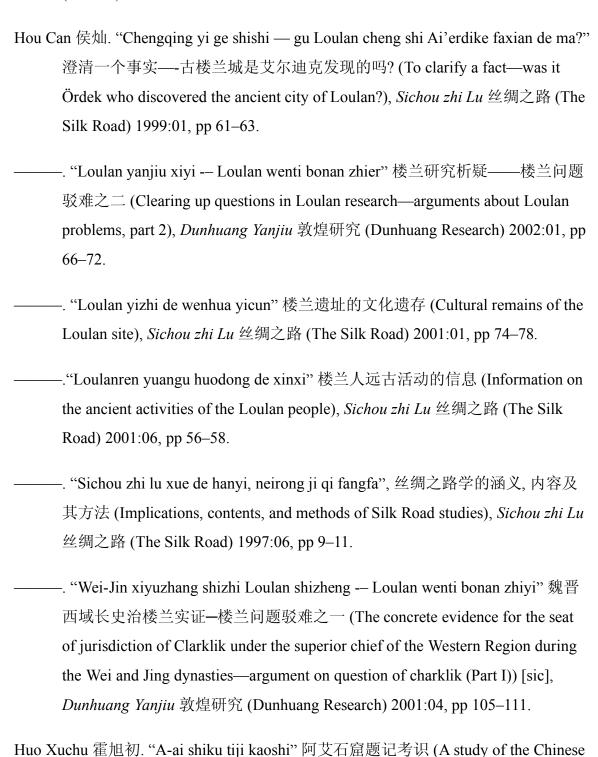
 April/todaysfeatures April37.xml§ion=todaysfeatures, (070430).
- "Guji Zhengli Yanjiusuo" (Research Institute for the Arrangement of Ancient Books),

 The College of Liberal Arts' webpage,

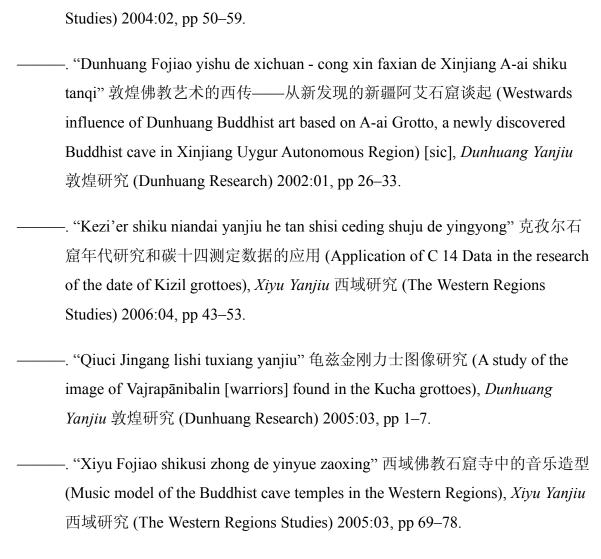
 http://www.nwnu.edu.cn/wxy/orger.php?orgerid=26, (070503).
- Guo Wu 郭物. "Xinjiang Tianshan diqu gongyuanqian yiqian ji de kaoguxue wenhua yanjiu" 新疆天山地区公元前一千纪的考古学文化研究 (On the archaeological cultures distributed in the region of Tianshan Mountain in the 1st millennium BC), http://www.eurasianhistory.com/data/articles/k02/1385.html, (070502).
- "Han-Tang Kaogu Yanjiushi" 汉唐考古研究室 (Research Department of Han to Tang Archaeology), CASS Institute of Archaeology online

 http://www.kaogu.cn/cn_kaogu/show_News.asp?id=18, (070505).
- He Dexiu 何德修. "Mummies from the Zaghunluq site in Chärchän County", in *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, ed. Victor H. Mair, vol 1, pp 169–174.
- Hedin, Sven. Den vandrande sjön. Stockholm: Albert Bonniers förlag, 1937.
- ——. Sidenvägen. Stockholm: Albert Bonniers Förlag, 1936.
- Hiebert, Fredrik T. "Central Asians on the Iranian plateau", in *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, ed. Victor H. Mair, vol 1, pp 148–161.
- "History of establishing the center", Peking University Center for research on ancient

Chinese history online, http://www.pku.edu.cn/academic/zggds/english/index.htm, (070426).



Jan Romgard, "Ancient Human Settlements in Xinjiang and the Early Silk Road Trade" Sino-Platonic Papers, 185 (November, 2008)



- Idilisi 伊弟利斯 and Li Wenying 李文瑛. "Shouhu Da Loulan" 守护大楼兰 (Guarding the Great Loulan), *Zhongguo Wenhua Yichan* 中国文化遗产 (China Cultural Heritage) 2005:05, pp 30–53.
- Idilisi Abuduresule 伊弟利斯·阿不都热苏勒 and Zhang Yuzhong 张玉忠. "1993 nian yilai Xinjiang Keliya heliuyu kaogu shulüe" 1993 年以来新疆克里雅河流域考 古述略 (Brief description of the archaeological studies since 1993 at the Keriya River basin), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 1997:03, pp 39–42.

Idilisi et al. "2002 nian Xiaohe mudi kaogu diaocha yu fajue baogao" 2002 年小河墓地

- Jan Romgard, "Ancient Human Settlements in Xinjiang and the Early Silk Road Trade" Sino-Platonic Papers, 185 (November, 2008)
- 考古调查与发掘报告 (Investigation and excavation of the Xiaohe cemetery in 2002), *Xinjiang Wenwu* 新疆文物 (Xinjiang Cultural Relics) 2003:02, pp 8–46.
- ——. "Xinjiang Luobupo Xiaohe mudi 2003 nian fajue jianbao" 新疆罗布泊小河墓 地2003年发掘简报 (A brief excavation report on Xiaohe graveyard 2003, located in Luobupo, Xinjiang), *Wenwu* 文物 (Cultural Relics) 2007:10, pp 4–43.
- "Introduction to the Institute of Archaeology, CASS", CASS Institute of Archaeology online, http://www.kaogu.cn/en_kaogu/show_News.asp?id=157, (070422).
- "Introduction to 'Eurasian Studies'", The Department for History Studies on China–
 Foreign Relations online Eurasian pages:
 http://www.eurasianhistory.com/english.htm, (070606).
- Israfel Yusuf (Yisilafei'er Yusufu) 伊斯拉菲尔·玉苏甫 and Aniwa'er Hasimu 安尼瓦尔·哈斯木. "Gulao de yueqi konghou" 古老的乐器 箜篌 (Archaic musical instruments—the ancient harp), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2001:02, pp 78–85.
- "Int'l co-op in archaeology welcomed in Xinjiang", *Zhongguo Wang* (China Daily March 12, 2004), http://www.china.org.cn/english/international/90073.htm, (070530).
- Jarring, Gunnar. "The Toponym Takla-makan", in *Turkic Languages*, ed. Lars Johansson, vol 1, pp 227–240. Wiesbaden: Harrassowitz, 1997.
- Kuzmina, E.E. "The Tarim Basin people and pastoralists of the Asian steppes", in *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, ed. Victor H. Mair, vol 1, pp 63–93.
- Ji Xianlin 季羨林. Foreword to the book *Xinjiang gushi gudai Xinjiang jumin jiqi* wenhua 新疆古尸—古代新疆居民及其文化 (The ancient corpses of Xinjiang), edited by Wang Binghua, as quoted and translated by Victor Mair, available on eurasianhistory.com online: "Xinjiang gushi gudai Xinjiang jumin ji qi wenhua",

http://www.eurasianhistory.com/data/articles/c03/547.html, (070513).

- Kamberi, Dolkun. "A century of Tarim archaeological exploration (ca 1886–1996)", in *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, ed. Victor H. Mair, vol 2, pp 785–811.
- Karam Skaff, Jonathan. "The Sogdian trade diaspora in East Turkistan during the seventh and eighth centuries", *Journal of the Economic and Social History of the Orient*, Dec 2003, vol 46, issue 4, pp 475–524.
- Lalueza-Fox et al. "Unravelling migrations in the steppe: Mitochondrial DNA sequences from ancient Central Asians", *Biological Sciences*, May 2004, vol 271, issue 1542, pp 941–947.
- "Lanzhou Daxue Dunhuangxue jigou shezhi" 兰州大学敦煌学机构设置 (The organizational set-up of Dunhuang Studies at Lanzhou University), http://dhxyjs.lzu.edu.cn/html/intro/baseset.htm, (070429).
- "Lanzhou Daxue Dunhuangxue Yanjiusuo" 兰州大学敦煌学研究所 (Institute of Dunhuang Studies, Lanzhou University), *Lanzhou University online*, http://dhxyjs.lzu.edu.cn/html/intro/baseintro.htm.
- "Li Jinxiu" 李锦绣 (Li Jinxiu), CASS Institute of History online, http://ich.cass.cn/UserInfo.asp?UserID=69, (070506).
- Li Jinxiu 李锦绣. "'Tongdian Bian fang dian''Tuhuoluo' tiao shiliao laiyuan yu 'Xiyu tuji'" '通典·边防典' '吐火罗'条史料来源与'西域图记' (The historical sources of the entry "Tochari" in Tong Dian Bian Fang Dian [Frontier defense volume of the "Comprehensive Manual"] and Xiyu tuji [An illustrated book of the Western Regions]), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2005:04, pp 25–34.
- Li Shuhui 李树辉. "Kalahan wangchao de jianlizhe ji jianli shijian" 喀喇汗王朝的建立

Jan Romgard, "Ancient Human Settlements in Xinjiang and the Early Silk Road Trade" Sino-Platonic Papers, 185 (November, 2008)

者及建立时间 (The time of the foundation of the Kara-Khanid kingdom and its founder), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2004:04, pp 47–57.

- ——. "S.6551 jiangjingwen xiezuo niandai ji xiangguan shishi kao bian" S.6551讲经文写作年代及相关史事考辨 (The date of Dunhuang MS: S.6551 and some related historical facts), *Dunhuang Yanjiu* 敦煌研究 (Dunhuang Research) 2003:05, pp 55–60.
- ——. "Tangdai Suteren yimin juluo xingcheng yuanyin kao" 唐代粟特人移民聚落形成原因考 (About the formation of, and reasons for, migrating Sogdian tribes in the Tang dynasty), *Xibei Minzu Daxue Xuebao (Zhexue Shehui Kexue Ban)* 西北民族大学学报(哲学社会科学版) [Journal of Northwest University for Nationalities (Philosophy and Social Science edition)] 2004:02, pp 14–19.
- Li Shuicheng 李水城. "A discussion of Sino-Western cultural contact and exchange in the second millenium BC based on recent archaeological discoveries", *Sino-Platonic Papers*, 97, December 1999), http://sino-platonic.org/abstracts/spp097 sino western.html, (070517).
- ——. "Ancient interactions in Euroasia and Northwest China: Revisiting J.G. Andersson's legacy", in *Bulletin of the Museum of Far Eastern Antiquities* 75, Stockholm: Museum of Far Eastern Antiquities, 2003, pp 9–30.
- "Li Xiaocong" 李孝聪 (Li Xiaocong), *Peking University online*, http://www.pku.edu.cn/academic/zggds/002/002.htm, (070426).
- Liang Junyan 梁俊艳. "Kunshan zhi yu he 'yushi zhi lu'" 昆山之玉和"玉石之路 (The jade of the Kunlun Mountains and "The Jade Road"), *Xinjiang Difangzhi* 新疆地方志 (The Xinjiang Local Gazette) 2002:02, pp 59–60.

Lin Meicun 林梅村. "Gaochang huoxianjiao yiji kao" 高昌火祆教遗迹考 (On the

Jan Romgard, "Ancient Human Settlements in Xinjiang and the Early Silk Road Trade" Sino-Platonic Papers, 185 (November, 2008)

historical traces of Zoroastrianism in Gaochang), *Wenwu* 文物 (Cultural Relics) 2006:07, pp 58–67, and *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2003:03, pp 9–15.

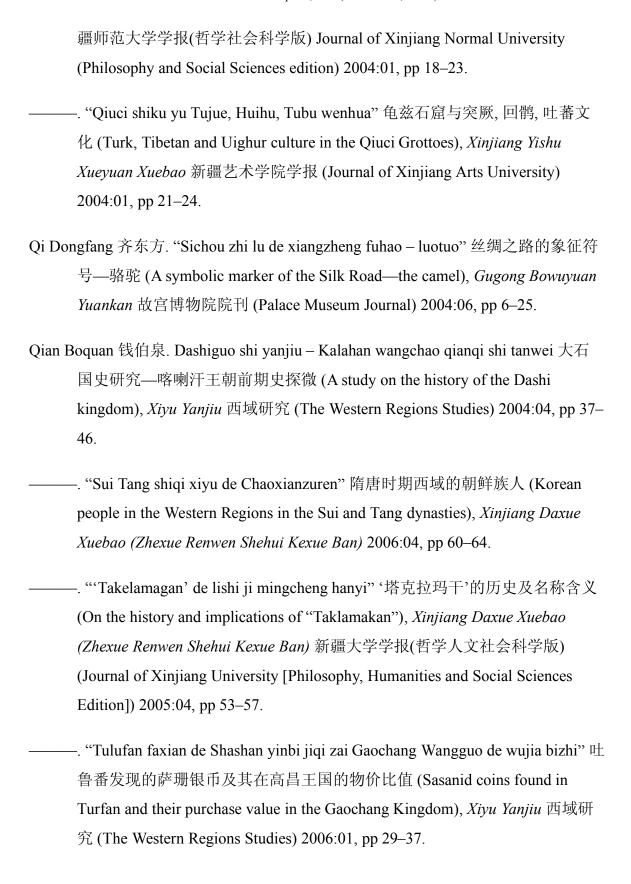
- ——. "Leikeke shoujipin zhong de wu jian qiantuoluoyu wenshu" 勒柯克收集品中的 五件犍陀罗语文书 (Five Gandhari documents in the Le Coq Collection), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2004:03, pp 72–82.
- ——. "Qilian and Kunlun: The earliest Tokharian loan-words in ancient Chinese", in *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, ed. Victor H. Mair, vol 1, pp 476–482.
- ——. "Tuhuoluoren de qiyuan yu qianxi" 吐火罗人的起源与迁徙 (The origin and migrations of the Tocharians), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2003:03, pp 9–23.
- "Lishi Dili Yanjiusuo" 历史地理研究所 (Research Institute of Historical Geography),
 The College of Liberal Arts, *Northwest Normal University online*,
 http://www.nwnu.edu.cn/wxy/orger.php?orgerid=21, (070503)
- "Lishi yange" 历史沿革 (Evolution history), *Center for Research on Ancient Chinese History online*, http://www.pku.edu.cn/academic/zggds/001/002.htm, (070426).
- Liu Guorui 刘国瑞, Qu Tao 屈涛, and Zhang Yuzhong 张玉忠. "Xinjiang Dandanwulike yizhi xin faxian de fosi bihua" 新疆丹丹乌里克遗址新发现的佛寺壁画 (Buddhist temple frescoes found in Xinjiang Dandanwulike site), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2005:04, pp 52–63.
- Liu Xiaorong 刘小荣. "'Sichou zhi lu' shang de Xila wenhua" "丝绸之路"上的希腊文化 (Greek culture on the Silk Road), *Lishi Jiaoxue* 历史教学 (History teaching) 2001:09, pp 20–24.
- Liu Xinru 刘欣如. "Migration and settlement of the Yuezhi-Kushan: Interaction and

- interdependence of nomadic and sedentary societies", *Journal of World History* Fall 2001, vol 12, issue 2, pp 261–292.
- "Liu Xinru" 刘欣如 (Liu Xinru), *Institute of World History online*,
 http://worldhistory.cass.cn/english/txt/renyuan_txt_all/liuxinru_face.htm.
- Liu Xuetang 刘学堂."Lun Jiaohe cheng de xingqi gouzhu tese, fazhan he feiqi" 论交河 城的兴起、构筑特色、发展和废弃 (The origin, structural character, development, and decline of Jiaohe city), *Bianjiang Kaogu Yanjiu* 2004:02, online, http://www.eurasianhistory.com/data/articles/k01/781.html.
- ——. "Lun Zhongguo zaoqi tongjing yuanyu xiyu" 论中国早期铜镜源于西域 (A Western origin hypothesis of the early copper mirror in China), *Xinjiang Shifan Daxue Xuebao* (*Zhexue Shehui Kexue Ban*) 新疆师范大学学报(哲学社会科学版) Journal of Xinjiang Normal University (Philosophy and Social Sciences edition) 1999:03, pp 112–119.
- Liu Xuetang 刘学堂 and Guan Ba 关巴. "Xinjiang Yili hegu shiqian kaogu de zhongyao shouhuo" 新疆伊犁河谷史前考古的重要收获 (Important results of the prehistoric archaeology of the Xinjiang Yili River valley), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2002:04, pp 106–108.
- Liu Xuetang 刘学堂, Tuo Huti 托呼提, and Alifu 阿里甫. "Xinjiang Nileike xian Bietebasitao muqun quanmian fajuehuo zhongyao chengguo" 新疆尼勒克县别特巴斯陶墓群全面发掘获重要成果 (Important results from the comprehensive excavation in the pottery tomb cluster in Bietebasitao, Nilka county, Xinjiang), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2004:01, pp 106–108.
- Liu Yongzeng 刘永增. "Mogaoku di 158 ku de naguqi yu Suteren de sangzang xisu" 莫高窟第158窟的纳骨器与粟特人的丧葬习俗 (The ossuary in Cave 158 at Mogao Grottoes and burial customs of the Sogdians), *Dunhuang Yanjiu* 敦煌研究 (Dunhuang Research) 2004:02, 13–18, 109–117.

- Liu Yuxia 刘玉霞. "Tangdai yishu yu Xiyu yue wu" 唐代艺术与西域乐舞 (Music and dance of the Western Regions and the art of the Tang Dynasty), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2002:04, pp 80–83.
- Luan Rui 栾睿. "Beiting xi dasisuo fanying de Gaochang Huihu Fojiao tezheng" 北庭西大寺所反映的高昌回鹘佛教特征 (Buddhist features in Gaochang Uighur period reflected by the West Temple at Beiting), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2004:01, pp 54–59.
- ———. "Jiaohe Talin yu Mijiao dongjian" 交河塔林与密教东渐 (The Jiaohe pagoda forest and the eastward spread of esoteric Buddhism), *Dunhuang Yanjiu* 敦煌研究 (Dunhuang Research) 2001:01, pp 77–81.
- "Luo Xin" 罗新 (Luo Xin), Peking University online, http://www.pku.edu.cn/academic/zggds/002/011.htm, (070426).
- Ma Zhefei. "Loulan mausoleum remains lost", *People's Daily online*, 030324, http://english.people.com.cn/200303/24/eng20030324 113909.shtml, (070510).
- Mair, Victor H., ed., *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, vols 1 and 2. Washington, D.C., and Philadelphia, Penn.: The University of Pennsylvania Museum Publications, 1998.
- Mallory, J.P., and Victor H. Mair, *The Tarim mummies: Ancient China and the mystery of the earliest peoples from the West*. London: Thames & Hudson, 2000.
- Mei Jianjun. "Qijia and Seima-Turbino: The question of early contacts between Northwest China and the Eurasian steppe", in *Bulletin of the Museum of Far Eastern Antiquities* 75, Stockholm: Museum of Far Eastern Antiquities, 2003, pp 31–54.
- Mei Jianjun 梅建军, Liu Guorui 刘国瑞, and Chan Xien 常喜恩. "Xinjiang dongbu diqu chutu zaoqi tongqi de chubu fenxi he yanjiu" 新疆东部地区出土早期铜器的初

步分析和研究 (Preliminary analysis and research on early bronzeware excavated in the Xinjiang eastern area), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2002:02, pp 1–10.

- "New evidence suggests longer papermaking history in China", *People's Daily online*, August 9, 2006, http://english.people.com.cn/200608/09/eng20060809_291152.html.
- Niu Ruji 牛汝极. "Dunhuang Tulufan Huihu Fojiao wenxian yu Huihuyu Dazangjing" 敦 煌吐鲁番回鹘佛教文献与回鹘语大藏经 (Dunhuang Turfan Uighur Buddhist documents), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2002:02, pp 56–65.
- ——. "Mogaoku beiqu faxian de Xuyiwenliyawen Jingjiao Huihuwen Fojiao shuang yu xieben zai yanjiu" 莫高窟北区发现的叙译文利亚文景教-回鹘文佛教双语写本再研究 (Re-study of the bilingual manuscript of Nestorianism text in Syrian with a few lines of Buddhist writing in Uighur discovered at the northern area of Mogao Grottoes [sic]), *Dunhuang Yanjiu* 敦煌研究 (Dunhuang Research) 2002:02, pp 56–63.
- "Over 1,000-year-old military fort discovered in northwest China", *People's Daily online*, http://english.peopledaily.com.cn/200608/23/eng20060823_295950.html, (070419).
- Pan Zhiping 潘志平. "'Tujuesitan', 'Dongtujuesitan' yu 'Weiwu'ersitan'" '突厥斯坦', 东'突厥斯坦"与 '维吾尔斯坦' ("Turkestan", "East Turkestan", and "Uighurstan"), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2004:03, pp 53–60.
- Peng Jie 彭杰. "Guanyu Kezi'er 17 kulushe na Foxiang de bu zheng" 关于克孜尔17窟 卢舍那佛像的补证 (In support of the identification of the Vairochana Buddha in Kizil cave no.17), *Xinjiang Shifan Daxue Xuebao (Zhexue Shehui Kexue Ban*) 新



- Jan Romgard, "Ancient Human Settlements in Xinjiang and the Early Silk Road Trade" Sino-Platonic Papers, 185 (November, 2008)
- ——. "Wusun de xiqian, kuosan he xiaoshi" 乌孙的西迁, 扩散和消失 (Westward migration, diffusion, and disappearance of the Wusun), *Xinjiang Shehui Kexue* 新疆社会科学 (Social Sciences in Xinjiang) 2006:05, pp 115–122.
- ———. "Wusun he Yuezhi zai hexi de gudi ji qi xi qian de jingguo" 乌孙和月氏在河西的故地及其西迁的经过 (The motherland of the Wusun 乌孙 and the Rouzhi [Yuezhi] 月氏 in the Hexi Corridor and their migration westward [sic]),

 Dunhuang Yanjiu 敦煌研究 (Dunhuang Research) 1994:04, pp 104–112.
- "Remains of Han-style ancient city found in Xinjiang", *Zhongguo Wang* 中国网 (China net), http://www.china.org.cn/english/2006/Aug/178861.htm, (070419).
- Renfrew, Colin. "The Tarim Basin, Tocharian, and Indo-European origins", in *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, ed. Victor H.

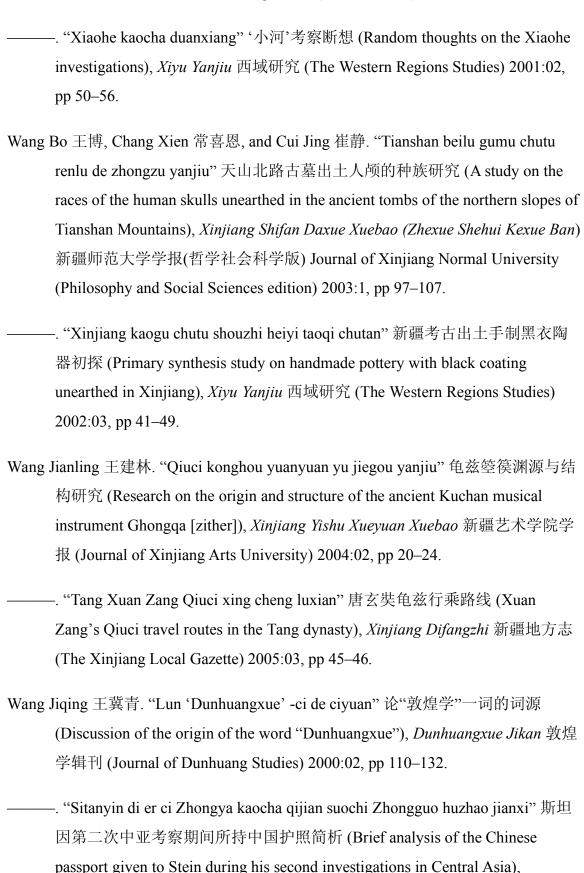
 Mair, vol 1, pp 202–212.
- "Research Center for Frontier Archaeology and Center for Foreign Archaeology", CASS

 Institute of Archaeology webpage,

 http://www.kaogu.cn/en_kaogu/show_News.asp?id=162.
- "Research Department of Han to Tang Archaeology", *CASS Institute of Archaeology webpage*, http://www.kaogu.cn/en_kaogu/show_News.asp?id=163.
- "Shang-Zhou Kaogu Yanjiushi" 商周考古研究室(Department of Shang and Zhou Archaeology), CASS Institute of Archaeology online,

 http://www.kaogu.cn/cn_kaogu/show_News.asp?id=17, (070505).
- Shi An 石岸. "Bensang Qiuci" 奔丧龟兹 (Hasten home for the Qiuci funeral), *Dushu* 读书 (Reading) 2005:05, pp 37–46.
- Shui Tao 水涛. "On the relationship between the Tarim and Fergana Basins in the Bronze Age", in *The Bronze Age and early Iron Age peoples of Eastern Central Asia*, ed. Victor H. Mair, vol 1, pp 162–168.

- ——. "Xiyu shiqian wenming fazhan de ruogan lilun wenti" 西域史前文明发展的若干理论问题 (Some academic problems on the progress of prehistoric civilization in the Western Regions), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2005:04, pp 44–51.
- "Significant Archaeological Discovery at Mogao Grottoes, Dunhuang", *Zhongguo Wang* 中国网 (China Net), http://www.china.org.cn/e-kaogu/2000/dunhuang.htm, (070503).
- "Specialists get training to save the Silk Road", *People's Daily online* 18 May, 2006, http://english.people.com.cn/200605/18/eng20060518 266720.html, (070610).
- Sylwan, Vivi. Woollen textiles of the Lou-lan people. Stockholm: Thule, 1941.
- Thornton, Christopher P., and Theodore G. Schurr. "Genes, language and culture: An example from the Tarim basin", *Oxford Journal of Archaeology*, Feb 2004, vol 23, issue 1, pp 83–106.
- Tian Weijiang 田卫疆. "Mingdai Tulufan diqu de shehui jingji he zongjiao wenhua" 明 代吐鲁番地区的社会经济和宗教文化 (Social economy and religious cultures in the Turfan area in the Ming dynasty), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2004:04, pp 23–29.
- Wan Xueyu 万雪玉. "Kangjuguo di wang bian" (Distinguishing the distant Sogdian states) 康居国地望辨, *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2002:01, pp 49–55.
- Wang Binghua 王炳华. "Aleitaishan Jiushiqi shidai dongku caihui" 阿勒泰山旧石器时代洞窟彩绘 (Paleolithic coloured paintings in Altay Mountain caves), *Kaogu yu Wenwu* 考古与文物 (Archaeology and Cultural Relics) 2002:03, pp 48–55.
- ——. "Chongxin faxian Loulan" 重新发现楼兰 (Discovering Loulan again), Wenming 文明 (Civilization) 2006:01, pp 8–9.



- Jan Romgard, "Ancient Human Settlements in Xinjiang and the Early Silk Road Trade" Sino-Platonic Papers, 185 (November, 2008)
- Zhongguo Bianjiang Shi-Di Yanjiu 中国边疆史地研究 (China's Borderland History and Geography Studies) 1998:04, pp 69–76.
- Wang Penghui 王鹏辉. "Shiqian shiqi Xinjiang de huanjing yu kaoguxue yanjiu" 史前时期新疆的环境与考古学研究 (Prehistoric Xinjiang: Environment and archaeology), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2005:01, pp 44–50.
- ——. "Xinjiang shiqian shiqi kaoguxue yanjiu xianzhuang" 新疆史前时期考古学研究现状 (Current conditions of prehistoric archaeology in Xinjiang), *Huaxia Kaogu* 华夏考古 (Huaxia Archaeology), 2005:02, pp 51–61 and 78.
- "Wang Xiaofu" 王小甫 (Wang Xiaofu), *Peking University online*, http://www.pku.edu.cn/academic/zggds/002/004.htm.
- Wang Xiaofu 王小甫. "Si lu shi yi zhang wang" 丝路是一张网 (The Silk Road is a net), *Shengming Shijie* 生命世界 (Life World) 2005:2, p 27.
- ——. "Qidan jianguo yu Huihu wenhua" 契丹建国与回鹘文化 (The foundation of the Khitan state and Uighur culture), *Zhongguo Shehui Kexue* 中国社会科学 (Social Sciences in China) 2004:4, pp 186–202.
- ——. "'Heidiao zhi lu' zhiyi gudai Dongbeiya yu shijie wenhua lianxi zhi wo jian" '黑貂之路'质疑—古代东北亚与世界文化联系之我见 (Doubts over the "Sable Road"—my views of the links between Northeast Asia and the world culture in ancient times), *Lishi yanjiu* 历史研究 (Historical Research) 2001:03, pp 81–90.
- Wang Zheng 王征. "Qiuci shiku bihua fengge yanjiu" 龟兹石窟壁画风格研究 (Research on the style of the wall paintings in the Qiuci Grottoes), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2006:04, pp 54–62.
- "Who safeguards China's ancient cultural heritage?", *Zhongguo Wang* 中国网 (China Net), http://www.china.org.cn/english/travel/94342.htm.

- Wilkinson, Endymion. *Chinese history: A manual*. Cambridge, Mass., and London: Harvard University Press, 2000.
- Wood, Frances. *The Silk Road: Two thousand years in the heart of Asia*. Berkeley and Los Angeles: University of California Press, 2002.
- Wu Fuhuan 吴福环 and Wei Bin 韦斌. "Sichou zhi lu shang de Zhongwai qianbi" 丝绸之路上的中外钱币 (Ancient Chinese and foreign coins on the Silk Road), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2004:03, pp 17–24.
- Wu Yong 吴勇. "Xinjiang Kashi Xiabandi mudi kaogu fajue xin shouhuo" 新疆喀什下 坂地墓地考古发掘新收获 (New results of the archaeological excavations at Xiabandi Graveyard in Kashgar), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2005:01, pp 109–113.
- "Xibei Shi Yanjiusuo" 西北史研究所 (Research Institute of Northwestern History Studies), College of Liberal Arts, *Northwest Normal University online*, http://www.nwnu.edu.cn/wxy/orger.php?orgerid=23, (070503).
- Xie Chengzhi 谢承志 et al. "Xinjiang Chawuhugou gudai jumin xianliti DNA xulie duotaixing fenxi" 新疆察吾呼沟古代居民线粒体DNA序列多态性分析 (Analysis of Mitochondrial DNA from the ancient tombs of Chawuhu), *Jilin Daxue Xuebao (Lixue Ban)* 吉林大学学报 (理学版) [Journal of Jilin University (Science Edition)] 2005:04, pp 538–540.
- "Xi Han ma zhi xianshen Dunhuang bi Dong Han 'Cai Hou zhi' zao 113 nian" 西汉麻 纸现身敦煌:比东汉"蔡侯纸"早113年 (Paper from Western Han appears in Dunhuang 113 years earlier than the Cai Lun paper from Eastern Han), *The People's Daily overseas edition*, 20060815, *People's Daily online*, http://gs.people.com.cn/GB/channel164/200608/15/51079.html. (070505).

[&]quot;Xinjiang Research Institute of Archaeology and Cultural Relics",

- Jan Romgard, "Ancient Human Settlements in Xinjiang and the Early Silk Road Trade" Sino-Platonic Papers, 185 (November, 2008)
- http://www.chinaculture.org/gb/en_focus/2005-09/13/content_72769_2.htm.
- "Xinjiang Weiwu'er Zizhiqu Wen Bo Jigou" 新疆维吾尔自治区文博机构 (Cultural and museum organisations in Xinjiang Uighur Autonomous Region) *Xinjiang Cultural Ministry online*, http://www.xjww.com.cn/jiugou.htm, (070219).
- "Xinshiqi Kaogu Yanjiushi" 新石器考古研究室 (Department of Prehistoric Archaeology), CASS Institute of Archaeology online,
 http://www.kaogu.cn/cn_kaogu/show_News.asp?id=16, (070505).
- Xu Longguo. Ph.D. thesis, *Chinese Academy of Social Sciences' Institute of Archaeology online*, http://www.kaogu.cn/en_kaogu/show_News.asp?id=154, (070422).
- Yang Xiaoping et al. "Hydrological changes and land degradation in the southern and eastern Tarim Basin, Xinjiang, China", *Land Degradation and Development* 2006:17, pp 381–392.
- Yin Qing 殷晴. "Tang-Song zhiji xiyu nandao de fuxing yu tian yushi maoyi de rechao" 唐宋之际西域南道的复兴—于阗玉石贸易的热潮 (Revival of the southern route of the Silk Road in the Western Regions in the Tang and Song dynasties [sic]), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2006:01, pp 38–53.
- "Yu Taishan" 余太山 (Yu Taishan), *Institute of History online*: http://ich.cass.cn/UserInfo.asp?UserID=66, (070506).
- Zhang Chuan and Yidelisi Abuduresule. Shiqi fenlei zhong de duochong huafen yuanze 石器分类中的多重划分原则 (The multi-classification concept in the typology of paleolithic tools), *Wenwu Shijie* (World of Antiquity), 1999:01, pp 24–36.
- "Zhang Guogang" 张国刚 (Zhang Guogang). *Tsinghua University online* http://166.111.106.5/xi-suo/lsx/eng/faculty/zhangguogang.html, (070608).

- "Zhang Guogang jiaoshou" 张国刚教授 (Professor Zhang Guogang), *Tsinghua University online*, http://166.111.106.5/xi-suo/lsx/teacher/zhangguogang.html, (070608).
- Zhang Hongchi 张鸿墀 and Yidelisi 伊弟利斯. "Yuansha gucheng zhi mi: Zhongfa liang guo zhuanjia dui Yuansha gucheng de kaogu faxian" 圆沙故城之谜—中法两国 专家对圆沙故城的考古发现 (The mystery of the ancient Yuansha city: Experts of the two countries China and France on the archaeological discoveries of the ancient Yuansha city), *Pami'er* 帕米尔 (The Pamirs) 2006:04, pp 104–107.
- Zhang Hongzhi 张鸿墀. "Zhong-Fa lianhe zai Keliya heliuyu kaogu wancheng tianye diaocha" 中法联合在克里雅河流域考古完成田野调查 (Allied Chinese-French accomplish archaeological field examinations at Keliya River valley), *Xinhua online* 2005 12 21, http://www.xj.xinhuanet.com/2005-12/21/content_5869491.htm, (070510).
- Zhang Ruimin and Kong Xudong. "New thinking on origin of the Silk Road", Xinjiang Ribao 8 January, 2002, as translated by Zhang Tingting and published online on Zhongguo Wang, http://www.china.org.cn/english/2002/Jan/25113.htm, (070517).
- "Zhang Xiqing" 张希清 (Zhang Xiqing), Peking University Center for Research on Ancient Chinese History online,

 http://www.pku.edu.cn/academic/zggds/002/001.htm, (070426).
- "Zhang Xushan jiaoshou" 张绪山教授 (Professor Zhang Xushan), *The History Department of Tsinghua University online*, http://166.111.106.5/xisuo/lsx/teacher/zhangxushan.html, 070608).
- Zhang Yuzhong 张玉忠. "Jinnian Xinjiang kaogu xinshouhuo" 近年新疆考古新收获 (New achievements in Xinjiang archaeology in recent years), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2001:03, pp 108–111.

- ——. "Xinjiang Wenwu Kaogu Yanjiusuo jianjie" 新疆文物考古研究所简介, *Kaogu* 考古 (Archaeology) 2002:06, p 96.
- Zhao Li 赵莉. "Kezi'er shiku fenqi niandai yanjiu zongshu" 克孜尔石窟分期年代研究 综述 (Summary of the research into the stages and dating of the Kezi'er grottoes), *Dunhuangxue Jikan* 敦煌学辑刊 (Journal of Dunhuang Studies) 2002:01, pp 147–156.
- Zhao Yuxia 赵玉霞 and Meng Nan 孟楠. "Liang-Han Wei-Jin Nan-Bei Chao Xiyu ge minzu zhijian lianyin tansuo" 两汉魏晋南北朝西域各民族之间联姻探析 (Analysis and exploration of the forming of marriages between different ethnic groups during Former and Later Han, the Wei-Jin period and the Northern and Southern Dynasties), *Xiyu Yanjiu* 西域研究 (The Western Regions Studies) 2004:04, pp 9–14.
- "Zheng Bingblin, Lanzhou Daxue Dunhuangxue Yanjiusuo suozhang, jiaoshou, boshisheng daoshi" 郑炳林, 兰州大学敦煌学研究所所长, 教授, 博士生导师 (Zheng Binglin, Director of the Institute for Dunhuang studies at Lanzhou University, professor, supervisor for doctoral candidates), *Lanzhou University online*, http://dhxyjs.lzu.edu.cn/html/research/persons/zhengbl.htm.
- Zhongguo kaoguxue nianjian 2003 中国考古学年鉴 2003 (Yearbook of Chinese Archaeology 2003). Beijing: Wenwu Chubanshe 文物出版社, 2004.
- "Zhongguo Shehui Kexueyuan Shijie Lishi Yanjiusuo" 中国社会科学院世界历史研究 所 (Chinese Academy of Social Sciences Institute of World History), *Institute of World History online*, http://worldhistory.cass.cn/chinese/chinese index.htm#.
- "Zhongguo Shehui Kexueyuan yanjiuyuan: Liu Xinru" 中国社会科学院研究员:刘欣如
 (Chinese Academy of Social Sciences research fellow: Liu Xinru), *Chinese***Academy of Social Sciences online,
 http://www.cass.net.cn/y 09/y 09 06/y 09 06 02/y 09 06 02 59.htm.

- Jan Romgard, "Ancient Human Settlements in Xinjiang and the Early Silk Road Trade" Sino-Platonic Papers, 185 (November, 2008)
- "Zhongwai Guanxi Shi Yanjiushi jianjie" 中外关系史研究室简介 (Brief introduction to the Department for History Studies on China-Foreign Relations), *The Institute of History online*, http://ich.cass.cn/Article_Show2.asp?ArticleID=268.
- "Zhongxin jianjie" 中心简介 (Brief introduction to the center), *Research Center for China's Borderland History and Geography online*, http://chinaborderland.cass.cn/show News.asp?id=754, (070505).
- "Zhongxin jianjie" 中心简介 (Introduction of the center), *Research Center for Chinese Frontier Archaeology online*, http://bjkg.com/company.asp, and "Zuzhi jigou" 组织机构 (Organizational structure), *ibid.*, http://bjkg.com/company1.asp, (070504)

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