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Retrospect and Prospect**

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Prehistoric cultures in Xinjiang: Retrospect and Prospect

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Abstract

Archaeological researches in Xinjiang in the last century have revealed that the region was a crossroad of cultures as early as prehistory, but it is only in the last thirty years that its crucial importance has come to be recognized. From the 1980s an increasing number of studies have put forward cultural categories and spatial-temporal frameworks to organize Bronze Age and Iron Age remains in Xinjiang but due to several problems, such as scarce publications and scant reliable dating, there is still a lack of clear standards for establishing the cultural and temporal attributions of the sites. Nevertheless, the contribution given by debates among scholars on the subject is remarkable and needs to be evaluated in greater detail, in order to gain a clearer understanding of early Xinjiang.

This paper aims to be a qualitative study on the current research on Bronze Age and Iron Age cultures in Xinjiang. It provides a retrospective review of the studies on the subject with special reference to selected works since the 1980s, in the hope of enhancing the understanding of Xinjiang and Eurasian prehistory.

Acknowledgments: My thanks to Prof. Sabrina Rastelli for her methodological suggestions. I am also grateful to Prof. Liu Wensuo for having opened his personal library to me and for having shared with me precious information on the newest discoveries in Xinjiang.

Keywords: Xinjiang prehistory, Eurasian prehistory, Xinjiang Bronze Age and Iron Age

Introduction

A series of excavations conducted during the last century in Xinjiang brought to light remains that were ascribed to the prehistory. Since then, an increasing number of objects has enriched the Urumqi Regional Museum, which, besides the famous "Tarim mummies", currently hosts a rich collection of remains from the whole region¹.

Prehistoric sites in Xinjiang were key-points for east-west exchanges, but it is only in the last thirty years that their crucial importance has been recognized. Indeed, from the 1980's more systematic studies on Xinjiang prehistory were conducted, consequently diverging opinions among scholars on its main aspects quickly emerged. For instance, there have been different views on the chronological division of prehistory in Xinjiang: while some experts believe in the existence of a Bronze Age and an Iron Age², others only conceive the idea of an early and a later period³, and others do not accept the existence of the Iron Age and insist that most of the remains belonged to the Bronze Age⁴. Further disagreements have occurred over the grouping of major sites, and, although their chronology and cultural context of many remain often uncertain, relevant progress in the research on prehistory in Xinjiang are represented by the studies of Debain-Francfort⁵, Chen & Hiebert⁶ Mei⁷, Chen⁸ and Han⁹. Their works propose five

¹ The Urumqi Regional Museum, founded in 1953, hosts most of the ancient naturally embalmed corps found in the southern part of Xinjiang, and different objects, mostly pottery vessels, stone and metal items, and textiles. The collection, among others includes painted pottery from Hami and Turfan, stone and metal implements from the whole Xinjiang region, plaques from Yanghai and Shanshan cemeteries, textiles from the oasis of the southern Tarim basin. Some of the artefacts showed in this paper are currently displayed in the Museum. Additionally, interesting material is stored in the Xinjiang Institute of archaeology in Urumqi city, such as the olive-shaped jars from Qiemu'erqieke village, wooden implements and anthropomorphic figurines from Gumugou cemetery and pieces from Niya, Hami, Turfan and the Yili river region. A high number of "integrative" museums, built close to the most important ancient sites, host local artefacts, which are also of high interest.

² See G. Chen, "Several problems on the very ancient cultures in Xinjiang", *Xinjiang Wenwu*, no. 1 (1985): 27-38; G. Chen, "New ideas on the Neolithic cultures in Xinjiang", *Kaogu*, no. 4 (1987): 343-351; G. Chen, "On the Bronze Age and Early Iron Age cultures of Xinjiang", *Kaogu*, no. 4 (1990): 366-374; G. Chen, "Prehistoric cultures in Xinjiang", *Xibei Minzu Yanjiu*, no. 2 (1994): 101-111; G. Chen, "Discussion on Xinjiang Archaeology", *Tulufan xue Yanjiu*, no. 1 (2002): 16-30; J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions* (Oxford: Archaeopress, 2000).

³ See B. H. Wang, "A preliminary analysis of the archaeological cultures of the Bronze Age in the region of Xinjiang", *Xinjiang shehui kexue*, no. 4 (1985): 50-61; K. Chen, and T. H. Hiebert, "The Late prehistory of Xinjiang in relation to its neighbors", *The Journal of World Prehistory* 9, no. 2 (1995): 243-300.

⁴ T. Shui, "A comparative study of the Bronze Age cultures in Xinjiang", *Guoxue Yanjiu*, no. 1 (1993): 489.

⁵ C. Debain-Francfort, "Archéologie du Xijiang des origines aux Han" Première partie ["Archaeology of Xinjiang from the origin to the Han dynasty" First part], *Paléorient* 14, no. 1 (1988): 5-29; C. Debain-Francfort, "Archéologie du Xijiang des origines aux Han" IIème partie ["Archaeology of Xinjiang from the origin to the Han dynasty" Second part], *Paléorient* 15, no. 1 (1989): 183-213.

⁶ Chen, and Hiebert, "The Late prehistory of Xinjiang in relation to its neighbors", (1995): 243-300.

major temporal-cultural frameworks (Tables 1, 2), which are reviewed in this paper in association with the excavation report of each site, if present.

Table 1. Frameworks Proposed by Scholars for Cultural Groups in the Bronze Age

	FRANCFORT	CHEN-HIEBERT	MEI JIANJUN	CHENG GE	HAN JIANYE
ALTAY MOUNTAINS		Qiemu'erqieke (Kan'erzi - A'erkate - Mulei nan Wulaboshuiku - Adongquele A'ersate)	Qiemu'erqieke		Qiemu'erqieke I
YILI VALLEY -TACHENG REGION			Gongliu Aga'ersen (Sazi Weixiao)	Weixiao	Laokeke Sa'erbulake Akebucaogou Tacheng Daxigou
NORTHERN TIANSHAN MOUNTAINS - TURFAN-BARKOL	Halahezhou Nanwan (Lanzhouwanzi - Kuisu - Kaersang) Sidaogou Mulei	Aidinghu (Subeixi - Biyougu Kageqiake - Yinyailake)	Halahezhou Nanwan (Lanzhouwanzi - Shirenzi - Ka'ersang - Yanchi) Sidaogou (Banjiegou) Shuinchang	Halahezhou Nanwan (Lanzhouwanzi - Kuisu - Shirenzi - Junmachang - Yanchi - Ka'ersang) Akesu (Halayu'ergun)	Halayu'ergou Liangzhongfang Shuinchang Ka'erzang Xigonggou
SOUTHERN TIANSHAN MOUNTAINS	Xintala (Quhui) Haladun	Haladun (Aketala - Wengoloke Kuluketala - Dawuoleke - Akesu Halayu'ergun - Kujukejin Akereke - Akebulake Bogedaqing)	Xintala (Quhui) Haladun	Xintala (Quhui)	Quhui Xintala Haladun
EAST XINJIANG	Wupu (Kezi'erqueqia Lafuqiakoe - Yanbulake)	Yanbulake (Yamansukuang Lafuqiakoe - Wubashuiku Haladun)	Wupu Tianshanbeitu Yanbulake (Lafuqiakoe)		
EASTERN TARIM BASIN	Gumugou	Gumugou	Gumugou	Gumugou	Lop Nur
PAMIRS HIGHLANDS	Aketala (Kuluketala - Halayu'ergun)		Suletnag'ba Aketala (Halayu'ergun)	Aketala	Xiabandi
NORTHERN KUNLUN MOUNTAINS					Niya

Source: Author

Table 2. Frameworks Proposed by Scholars for Cultural Groups in the Iron Age

	FRANCFORT	CHEN-HIEBERT	MEI JIANJUN	CHENG GE	HAN JIANYE
ALTAY MOUNTAINS	Qiemu'erqieke (Fuyun Kaketuohai - Tu'erhong - Qinghe - Habeh - Jiemunai - Bu'erjin - A'erkate)			Qiemu'erqieke	Qiemu'erqieke II
YILI VALLEY -TACHENG REGION	Saka (Gongnaisi - Gongliu) Mound tombs culture (Xiatai Zhongyangchang - Heishantou Yimuchang - Dacootan)	Saka (Xiangbaobao - Heishanxi Tiemulike - Zhongyangchang Yimuchang - Tieliegaishan Nulasai - Yuantoushan Dacootan)	Tiemulike (Sudunbulake Zhongyangchang - Nulasai Yimuchang - Heishantou) Xiatai	Yili river and Pamir highlands culture (Tiemulike - Xiatai Boma - Yimuchang Zhongyangchang - Anjihai Heishantou - Alafubai Suodunbulake - Xiangbaobao)	Qitai Dashiou; Suodunbulake M32; Q'erzaihai M7
NORTHERN TIANSHAN MOUNTAINS - TURFAN-BARKOL		Sidaogou (Banjiegou Hungqijiecheng - Asitana Shirenzi - Ke'ersang Lanzhouwanzi - Kuisu)	Alagou I (Dongfengchang) Alagou II Dalongkou (Dacootan)	Subeixi (Yanghai - Sangeqiao Aidinghu - Jiaohu - Guoxi Alagou - Chaiwupu - Wulapo Sidaogou - Dalongkou Nanshan)	Wangjiagou, Sidaogou, Halahezhou, Yanghai, Yinyayilake; Mulei nanqu; Dalongkou M5; Chaiwupu; Aidinghu M20; Yanghai cim 2 M239; Subeixi; Asitana; Wulapo; Shanghuxiang M3
SOUTHERN TIANSHAN MOUNTAINS	Chawuhugou (Qunbake)	Chawuhugou (Alagou - Narenke - Halamodun) Qunbake	Chawuhugou Qunbake Baozidong	Chawuhugou (Quanbake Baozidong - Abuhihan Zagunyuoke - Ya'erhugoubei Yinyayilake - Kageqiakoe)	Chawuhugou; Hanbuqihan; Xintala T3-4; Baleqi'er M206; Kemu'ertu'er M27; Mazafutang; Haladun; Akerekechengbo; Karega'yi M15; Qunbake; Shanghuxiang M3
EAST XINJIANG			Hanqigou Miao'ergou	Yanbulake (Miao'ergou Wubashuiku - Laboqiakoe Wupu - Hanqigou)	Lafuqiakoe; Yanbulake; Wupu M151; Aisikexia'er M1
EASTERN TARIM BASIN					
PAMIRS HIGHLANDS	Xiangbaobao	Saka (see above)	Xiangbaobao	Yili river and Pamir highlands culture (see above)	Xiangbaobao M10 Xiabandi cim 2 M18 Wenguloke Kuluketala Dewoleke Aketala
NORTHERN KUNLUN MOUNTAINS	Shanpula		Zahongluke (kerya?)	Shanpula Zahongluke (Juwei)	

Source: Author

⁷ Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 2000.

⁸ Chen Ge conducted several researches on the topic, and although the most recent one, G. Chen, "Discussion on Xinjiang Archaeology," *Tulufan xue Yanjiu*, no. 1 (2002): 16-30, is taken in higher consideration, the others have been also used in this paper.

⁹ J. Han, "Traditions and chronological frameworks of the Bronze Age and early Iron Age cultures in Xinjiang," *Xinjiang Wenwu*, no. 3 (2005): 57-99.

Some more recently published discoveries are also briefly analysed in the hope of providing a new perspective to the understanding of early cultures in Xinjiang.

Bronze Age and Iron Age Cultures In Xinjiang

In recent years, several frameworks for regional cultural distribution were proposed, and in most of them the remains are organized in roughly horizontal zones¹⁰.

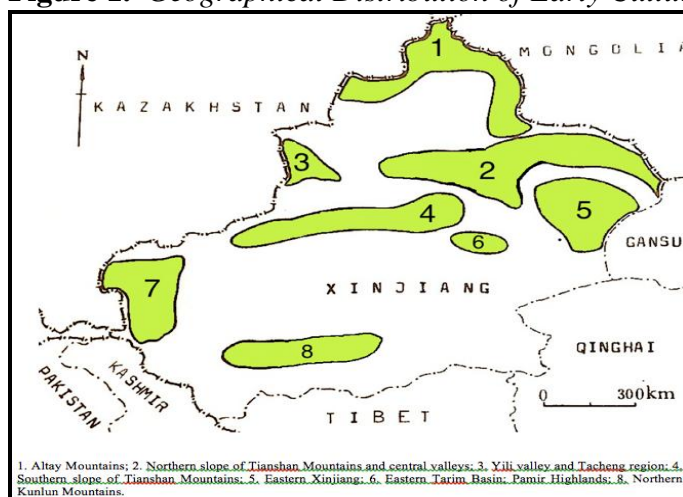
A different perspective for identifying patterns of spatial distribution of ancient cultures is provided by the "ecological approach" of Chen & Hiebert¹¹, which focuses on areas sharing ecological features. Considering its peculiar environment of harsh deserts surrounded by formidable mountains, Xinjiang was unlikely to be entirely suitable for human life. Large areas should have been uninhabited, while others, like the highlands and the desert basins oasis, were exploited for their environmental features. Sites located in the same ecological area shared the habitat as well as the materials. Since prehistoric evidence reflects the process of integration of human and environmental behaviours¹², the "ecological approach" identifies common backgrounds for remains in the same ecological environment and, by contrast, emphasises local variants. Although this approach deserves to be further studied, it falls outside the scope of this paper. Thus, for convenience of discussion, here prehistoric remains are organized into 8 regions: Altay, northern slope and central valleys of the Tianshan mountains, Yili river valley and Tacheng region, southern slope of Tianshan mountains, eastern Xinjiang, eastern Tarim basin, Pamirs highlands and northern Kunlun (Figures 1, 2).

¹⁰ See T. Shui, "A comparative study of the Bronze Age cultures in Xinjiang", *Guoxue Yanjiu*, no. 1 (1993): 447-490; J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions* (Oxford: Archaeopress, 2000); Z. An, "Cultural complexes of the Bronze Age in the Tarim Basin and surroundings areas," in *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia vol. 1*, ed. V. Mair (Washington DC: Institute for the Study of Man, 1998), 45-62.

¹¹ K. Chen, and T. H. Hiebert, "The Late prehistory of Xinjiang in relation to its neighbors", *The Journal of World Prehistory* 9, no. 2 (1995): 245-249.

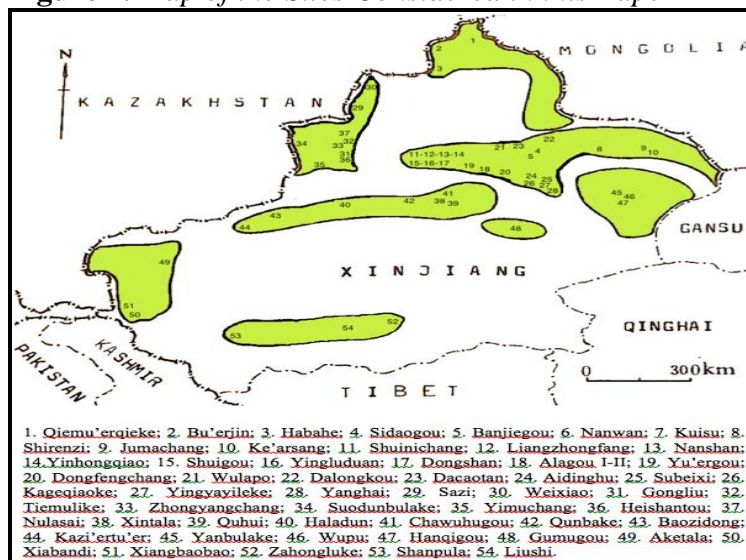
¹² The role of the environment as an active player in shaping ancient societies is analyzed in W. E. Boyd, and N. Chang, "Integrating social and environmental change in prehistory: a discussion of the role of landscape as a heuristic in defining prehistoric possibilities in NE Thailand," in *Terra Australis: Altered ecologies - fire, climate and human influence on terrestrial landscapes*, ed. S. Haberle, J. Stevenson & M. Prebble (Canberra: ANUE Press, 2010), 273-297.

Figure 1. Geographical Distribution of Early Cultures in Xinjiang



Source: Adapted from Z. An, "Cultural complexes of the Bronze Age in the Tarim Basin and surroundings areas," in *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia*, vol. 1, ed. V. Mair, (Washington DC: Institute for the Study of Man, 1998), 46, fig. 1.

Figure 2. Map of the Sites Considered in this Paper



Source: Adapted from Z. An, "Cultural complexes of the Bronze Age in the Tarim Basin and surroundings areas," in *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia*, vol. 1, ed. V. Mair (Washington DC: Institute for the Study of Man, 1998), 46, fig.1.

Qiemu'erqieke site, on the western slope of the Altay mountains, has been assigned to the Bronze Age¹³ or to the Iron Age¹⁴. According to the preliminary report¹⁵, however, it is clear that the site presents different phases. More

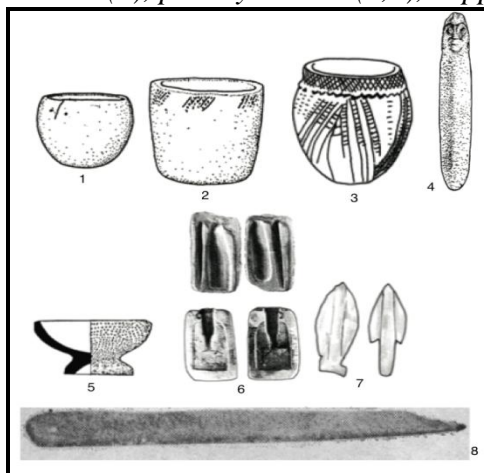
¹³ K. Chen, and T. H. Hiebert, "The Late prehistory of Xinjiang in relation to its neighbors," 243-300; J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*.

¹⁴ C. Debain-Francfort, "Archéologie du Xijiang des origines aux Han" IIème partie, 183-213; G. Chen, "Discussion on Xinjiang Archaeology", 16-30.

¹⁵ Xinjiang Wenwu Kaogu Yanjiusuo, "Summary of excavation at Qiemu'erqieke cemetery", *Wenwu*, no. 1 (1981): 23-32.

specifically, in the opinion of by Jia and Betts¹⁶, the site represents two periods: the earlier, Qiemu'erqieke I, was characterized by peculiar vessels, resembling those of the Afanasevo and Okunevo cultures, few pieces of bronze and casting moulds (Figure 3)¹⁷; the later phase, Qiemu'erqieke II, is very little known and presented high-necked vessels and some iron items. According to this information, remains of Qiemu'erqieke I should be assigned to the Bronze Age, while the later stage might have belonged to the Iron Age. On the basis of the discovery of Qiemu'erqieke-type stele in diverse funerary contexts, some scholars hypothesized a wider distribution of "Qiemu'erqieke culture"¹⁸. However, although some similarities with remains in Bu'erjin and Habahe occur, the insufficient information on the later phase, the lack of carbon-dating and anthropological examinations of Qiemu'erqieke contexts do not allow a secure geographical distribution of the culture. To this respect, the work currently in press by professor Kovalev dedicated to Qiemu'erqieke site will help to clarify some of the aspects of the cemetery and the culture¹⁹.

Figure 3. Grave goods from Qiemu'erqieke I: stone items (1,2,4) and casting moulds (6), pottery vessels (3,5), copper implements (7,8)



Source: Figs. 1-7: P. Jia and A. Betts, "A re-analysis of the Qiemu'erqieke (Shamirshak) cemeteries, Xinjiang, China," *The Journal of Indo-European Studies* 38, nos. 3, 4 (2010): 296, fig. 7; fig. 8: Xinjiang Wenwu Kaogu Yanjiusuo, "Summary of excavation at Qiemu'erqieke cemetery", *Wenwu*, no. 1 (1981): 27, fig. 8.

¹⁶ P. Jia and A. Betts, "A re-analysis of the Qiemu'erqieke (Shamirshak) cemeteries, Xinjiang, China," *The Journal of Indo-European Studies* 38, no 3 & 4 (2010): 275-317.

¹⁷ In the previous studies some bronze objects, including a knife and some arrowheads were assigned to the Bronze Age, however, when I was in Saint Petersburg Prof. Kovalev told me that only metal plaques, used to fix vessels can be attributed to the earlier in the stage of Qiemu'erqieke. A complete study on Qiemu'erqieke context, including this information will be soon published by him.

¹⁸ B. Wang, *Study of grassland stone stele on the Silk Road* (Urumqi: Xinjiang People's Press 1995).

¹⁹ A. Kovalev, *Earliest European in the heart of Asia: the Chemurchek cultural phenomenon* vol. 1 (Saint Petersburg: Book Antiqua, 2014); A. Kovalev, *Earliest European in the heart of Asia: the Chemurchek cultural phenomenon* vol. 2 (Saint Petersburg: Book Antiqua, 2015).

On the northern slope and in the valleys in the middle Tianshan range numerous sites have been unearthed, suggesting a long period of occupation of the area, from the Neolithic to historical times. Specifically, the currently available material shows that the valleys in the middle Tianshan Mountains were intensively inhabited during both the Bronze and Iron Ages, while on the northern slope the later period is poorly represented.

The Sidaogou site included houses and graves, representing two phases. Remains in T3-T5, dated by C14 to 1036-896²⁰, included pottery painted with triangles and net-like designs, few copper items and fragments of clay casting moulds²¹ (Figure 4.1, 2). Graves of the later phase, in T1-T2, were attributed by C14 to 700-300 BCE²² and contained painted pottery, some copper implements and decorations. Although there are diverging opinions on the assignment of the Sidaogou site to the Iron Age²³ or the Bronze Age²⁴, the latter attribution seems to be confirmed by the findings. Interestingly, Mei²⁵ and Han²⁶ hypothesized that the Sidaogou cemetery might have been in use during the Bronze Age and the Iron Age: actually, considering the C14-dating, this seems reasonable, nevertheless, given the total absence of bronze and iron in the context, further research is necessary to provide a reliable foundation for this hypothesis.

The Banjiegou site, severely damaged before the excavation, consisted in a settlement and several graves. The few recovered findings were stone implements and pottery fragments, one third of which was painted in black on a red slip with triangles and net-like designs (Figure 4.3). No metal was found²⁷. The site has been ascribed to the same cultural context as Sidaogou by most scholars because of the similarities of the pottery designs. Considering this and the geographical position of the two sites, it seems possible that Banjiegou could have been part of the "Sidaogou culture".

²⁰ Shehui Xueyuan Kaogu Yanjiusuo, *C14 Radiocarbon dates in Chinese archaeology (1965-1991)* (Beijing: Wenwu chubanshe, 1991).

²¹ Xinjiang Weiyu'er Zizhiqu Wenhuating Wenwuchu, "The Sidaogou site in Mulei county Xinjiang", *Kaogu*, no. 2 (1982): 113-120.

²² Shehui Xueyuan Kaogu Yanjiusuo, *C14 Radiocarbon dates in Chinese archaeology (1965-1991)* (Beijing: Wenwu chubanshe, 1991).

²³ K. Chen, and T. H. Hiebert, "The Late prehistory of Xinjiang in relation to its neighbors", 272-274; J. Han, "Traditions and chronological frameworks of the Bronze Age and early Iron Age cultures in Xinjiang," 57-99.

²⁴ C. Debain-Francfort, "Archéologie du Xijiang des origines aux Han" *Primere partie*, 25.

²⁵ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 13.

²⁶ J. Han, "Traditions and chronological frameworks of the Bronze Age and early Iron Age cultures in Xinjiang," 57-99.

²⁷ G. Chen, "The Neolithic site at Banjiegou, Qitai county, Xinjiang." *Kaogu*, no. 6 (1981): 552-553.

Figure 4. Pottery Casting Mould (1) and Painted Pottery (2) from Sidaogou and Painted Pottery from Banjiangou (3)



Source: Figs. 1, 2: Xinjiang Weiyu'er Zizhiqu Wenhuating Wenwuchu, "The Sidaogou site in Mulei county Xinjiang," *Kaogu*, no. 2 (1982): 166, figs. 7-8; fig. 3: G. Chen, "The Neolithic site at Banjiegou, Qitai county, Xinjiang," *Kaogu*, no. 6 (1981): 533, fig. 3.

The Nanwan cemetery included more than 100 graves. However, only M66 and M95 have been briefly published²⁸. According to the descriptions, Nanwan burials were shaft-pits with wooden coffins, while the grave goods consisted of unpainted pottery vessels, few jars painted in black on a red slip, and some copper and bronze items. In M66 only two copper ornaments were found, while M95 was richer in metals, including copper and bronze implements and ornaments (Figure 5). Judging from the available material, the cemetery can be assigned to the Bronze Age.

The majority of scholars attributed diverse adjacent sites, such as Kuisu, Shirenzi, Junmachang and Ke'arsang, to the "Nanwan culture". However, the reports related to these remains are either brief or absent and, given the scarcity of information, it is difficult to propose a cultural affiliation.

Figure 5. Earrings from Nanwan M95



Source: X. He, "The n. 95 grave at Nanwan, Balikun county, Xinjiang," *Kaogu yu Wenwu*, no. 5 (1987): 7, fig.2.

Various sites were discovered in the 1990s in Shihezi city, but only brief descriptions of cemeteries in Shuinichang, Liangzhongfang, Nanshan, Yinhongqiao, Shuigou, Yangludian, Dongshan and two hoards in Hongoushan, Qingkuang are currently available.

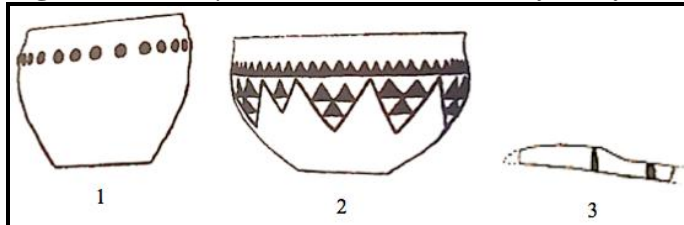
Cemeteries at Shuinichang and Liangzhongfang were severely damaged, however, archaeologists could still recover unpainted pottery vessels decorated on the upper part, similar to those found in the Karasuk contexts²⁹ (Figure

²⁸ X. Chang, "Brief report on the excavation of n. 66 grave at the Nanwan cemetery in Balikun county," *Xinjiang Wenwu*, no. 1 (1985): 4-16; X. He, "The n. 95 grave at Nanwan, Balikun county, Xinjiang," *Kaogu yu Wenwu*, no. 5 (1987): 6-8.

²⁹ S. V. Kiselev, *Ancient history of Southern Siberia* (Moscow-Leningrad: Nauka, 1951), 159.

6.1,2). Both cemeteries included a small number of copper objects³⁰ (Figure 6.3). No C14-dating is available for these sites, so archaeologists dated the cemeteries to 1000-700 BCE on the basis of the findings.

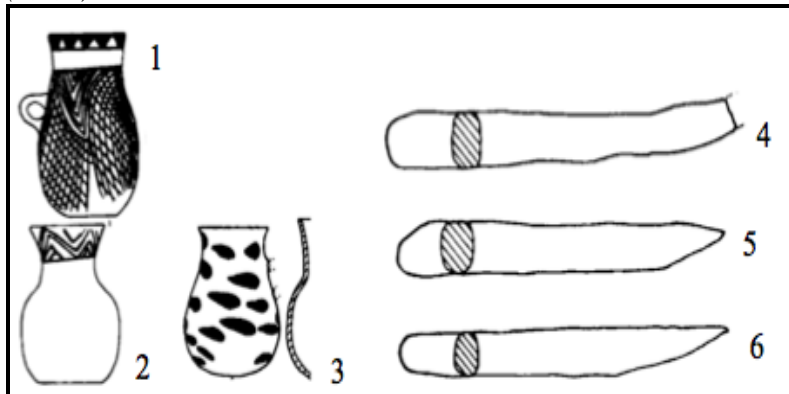
Figure 6. Pottery (1, 2) and a Bronze Knife (3) from Shuinichang Site



Source: Xinjiang Wenwu Kaogu Yanjiusuo, "Ancient tombs in Shihezi city," *Xinjiang Wenwu*, no. 4 (1994): 18, fig. 4.

Nanshan remains show peculiar burial rites, different from those of Shuinichang and Liangzhongfang: while in the latter the dead were placed on their side with bent legs, in Nanshan the posture was supine and extended. Pottery assemblage was distinct, consisting of painted handled pitchers and long-necked vessels. Bronze and iron knives and awls were also present in the Nanshan site (Figure 7). No C14-dating is available for this cemetery, which was dated by archaeologists to the Warring States period (475-221 BCE)³¹. However, given the features of the assemblages, the date may be slightly earlier.

Figure 7. Remains at Nanshan Site: Painted Pottery (1,2, 3) and Iron Knives (4,5,6)



Source: Xinjiang Wenwu Kaogu Yanjiusuo, "Ancient graves in Nanshan, Shihezi county, Xinjiang," *Wenwu*, no. 8 (1999): 42, fig. 8; 45, fig. 26.

³⁰ Xinjiang Wenwu Kaogu Yanjiusuo, "Brief report on the investigation at Shihezi city," *Xinjiang Wenwu*, no. 4 (1998): 54-64.

³¹ Xinjiang Wenwu Kaogu Yanjiusuo, "Ancient graves in Nanshan, Shihezi county, Xinjiang," *Wenwu*, no. 8 (1999): 46.

Summarizing, in the hoards near Shehezi, numerous bronze implements and zoomorphic decorations, suggest an advanced state of metallurgy³², but since there are neither sufficient information nor dating available, it is difficult to place them within a specific context. The same can be said about the cemeteries in Yinhongqiao, Shuigou, Yangludian, and Dongshan.

In the Shehezi area, the Shuinchang and Liangzhongfang cemeteries can be assigned to the Bronze Age³³, while Nanshan can be assimilated into a different cultural context and attributed to the Iron Age or slightly later. However, since very little information is available at present, it seems premature to establish any cultural attribution.

The Alagou site included two types of graves: the first type was a shaft-pit tomb with a pebble-lined chamber, while the second was a shaft-pit grave lined with wooden slabs and covered by wooden logs. The two types were called Alagou I and II respectively³⁴.

The grave goods in Alagou I included painted pottery vessels, bronze, iron and gold decorations, bone, agate and jade beads³⁵ (Figure 8.1-3). Carbon-dating placed the site between the middle and the late first millennium³⁶.

The settlement of Yu'ergou was assigned to the "Alagou I culture" by archaeologists on the basis of similar quality, colour and decorations of pottery³⁷, but, since the shape of many vessels is slightly different and no metal objects were found in Yu'ergou, this attribution is questionable (Figure 8).

Debain-Francfort and Mei put the site of Dongfengchang³⁸ within the Alagou I context because of the similarities in the burial practices and pottery items³⁹, the latter consisting of fully-painted handled-pitchers and high-necked vessels (Figure 8.6-8). The small number of iron items found in the Dongfengchang site and its carbon-dating (1300-600 BCE⁴⁰) support its affiliation with the "Alagou I culture", although it might have been slightly earlier than Alagou I site.

The Wulapo cemetery, near Urumqi, contained 46 graves. The assemblage included pottery vessels, copper and bronze implements and mirrors similar to

³² Xinjiang Wenwu Kaogu Yanjiusuo "General report on the investigation at Shihezi city," *Xinjiang Wenwu*, no. 4 (1998): 54-64.

³³ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 13.

³⁴ *Ibid.*, 17-18.

³⁵ Xinjiang Wenwu Kaogu Yanjiusuo, "On the remains in Yu'ergou and the cemetery in Alagou, Urumqi," *Kaogu*, no. 4 (2014): 19-35.

³⁶ Shehui Xueyuan Kaogu Yanjiusuo, *C14 Radiocarbon dates in Chinese archaeology (1965-1991)*, 1991.

³⁷ Xinjiang Wenwu Kaogu Yanjiusuo, "On the remains in Yu'ergou and the cemetery in Alagou, Urumqi," *Kaogu*, no. 4 (2014): 34.

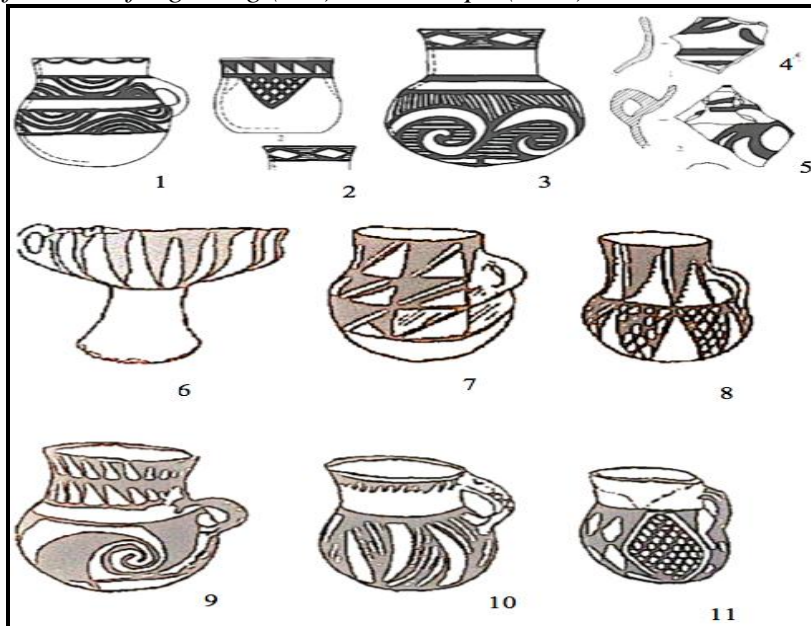
³⁸ Y. Zhang, "Archeological investigation and study of Alagou in the Tianshan mountains," *Xibei Shidi*, no. 3 (1987): 107-109.

³⁹ C. Debain-Francfort, "Archéologie du Xijiang des origines aux Han" *Ilème partie*, 193-195; J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 17-18.

⁴⁰ Y. Zhang, "Archeological investigation and study of Alagou in the Tianshan mountains", 110-111.

the ones from the context of Alogou I (Figure 8.9-11). Iron items were also found and, as noted by Mei⁴¹, none of them is associated with painted pottery. Although no C14-dating is available for Wulapo, it was attributed to the Iron Age, more specifically dated to second half of the first millennium BCE, because of its similarities with Alagou I⁴².

Figure 8. Painted Pottery from Alagou I (1-3), Yu'ergou (4,5). Pottery Vessels from Dongfengchang (6-8) and Wulapo (9-11)



Source: Figs. 1-5: Xinjiang Wenwu Kaogu Yanjiusuo, "On the remains in Yu'ergou and the cemetery in Alagou, Urumqi", *Kaogu*, no. 4 (2014): 30, fig. 23; 24, fig. 11; figs. 6-11: C. Debain-Francfort, "Archéologie du Xijiang des origines aux Han" IIème partie ["Archaeology of Xinjiang from the origin to the Han dynasty." Second part], *Paléorient* 15, no. 1 (1989): 195, fig. 16; 196, fig. 17.

Besides handmade unpainted pottery, the graves from Alagou II included large quantities of iron implements, and bronze, gold and silver zoomorphic decorations, whose style resembled that of the Saka culture. On this basis, Wang Binghua⁴³ dated the site to the first millennium BCE. Lacquer items were also recovered, suggesting the existence of connections between Alagou II and the Central Plain cultures⁴⁴.

⁴¹ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 19.

⁴² Ibid.

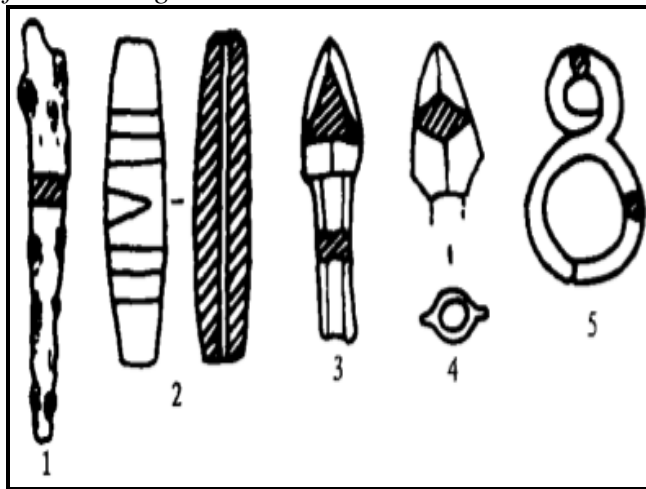
⁴³ B. H. Wang, "A brief report of the excavation of burials with wooden chambers at Alagou, Xinjiang," *Wenwu* [Cultural Relics], no. 1, (1981): 22; B. H. Wang, "Recherches historiques préliminaires sur les Saka du Xinjiang ancien" ["Preliminary historical research on Saka people in ancient Xinjiang"], *Arts Asiatiques*, no. 42 (1987): 31-44.

⁴⁴ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 18.

Summarizing, the two Alagou types were both present in the Alagou valley almost simultaneously, however, the archaeological evidences suggest that they belonged to two different cultural groups.

At the moment, the most representative site for the Iron Age in the northern slope of the Tianshan range is the cemetery of Dalongkou, characterized by shaft-pit tombs marked on the surface by mounds and enclosures. The pottery assemblage consisted of handled jars and pitchers, few of which were painted. Metal objects included copper and bronze implements, one iron awl and a silver earring. Etched beads were also recovered in the graves, suggesting contacts with the Baozidong and Khotan and Indian contexts⁴⁵ (Figure 9).

Figure 9. Iron (1), Bronze (3,4) and Silver Items (5) and a Etched Bead (2) from Dalongkou Context



Source: Xinjiang Wenwu Kaogu Yanjiusuo, "Ancient cemetery in Dalongkou, Jemusa'er county," *Kaogu*, no. 9 (1997): 43, fig.8.

Also located on the northern slope of the Tianshan Mountains, the cemetery of Daocaotan has not been fully reported yet. From the little information available, funerary goods were poor, consisting of fragments of pottery and four bronze arrowheads similar to those found at Dalongkou⁴⁶. Thus, it has been suggested an affiliation with these remains⁴⁷. Given the scarcity of archaeological evidence, further excavations should be conducted in order to have a clear picture of the Iron Age in this area.

In the Turfan Basin several sites were excavated, which, according to most scholars, share many significant cultural traits. Thus, they have been grouped

⁴⁵ A. Stein, *Innermost Asia: Detailed Report of Explorations in Central Asia, Kan-su and Eastern Iran* (Oxford: Clarendon Press, 1928): 110; L. T. Yablosky, "The material culture of the Saka and historical reconstruction" in *Nomads of the Eurasian Steppe in the Iron Age*, ed. J. Davis-Kimball, V. A. Bashilov and L. T. Yablosky, (Berekly: Zinat Press, 1995), 218, fig. 50.

⁴⁶ Xinjiang Wenwu Kaogu Yanjiusuo, "The rock-fill tombs discovered at Daccaotan, Miquan, Xinjiang," *Kaogu yu Wenwu*, no. 1 (1986): 36-38.

⁴⁷ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 22.

into a single culture variously named as Aidinghu culture⁴⁸, Gushi culture⁴⁹ or Subeixi culture⁵⁰. Following the main stream, in this paper it will be referred to as "Aidinghu culture". Major sites belonging to this tradition are the cemeteries in Aidinghu, Subeixi, Kageqiake, Yingyailake, and Yanghai⁵¹. The Aidinghu cemetery consisted of simple shaft-pit tombs, some of which were damaged. Grave goods included peculiar pottery handled jars, pitchers and cups painted in black on a red slip with triangles or vertical strips with net-like pattern inside⁵². The same designs were found on vessels recovered at the cemeteries in Yanghai, Kageqiake and Yingyailake⁵³. Metal objects, found in the cemeteries of Aidinghu, Subeixi and Yanghai⁵⁴, consisted of copper, bronze and iron implements, copper plaques, decorated with zoomorphic images and flower-like gold ornaments. Similar decorations were found in Alagou II, suggesting the existence of contacts between populations of the Tianshan valleys and the Turfan Basin (Figures 10, 11).

Figure 10. Zoomorphic Plaques from Aidinghu (1) after Y. Li & H. Liu 1982: 369, fig. 7; Subeixi (2), and Alagou (3,4)



Source: Fig. 1: Y. Li and H. Liu, "Ancient cemetery at Aidinghu, Tulufan, Xinjiang", *Kaogu*, no. 4 (1982): 369, fig. 7; fig. 2: Tulufan Wenwusuo, "Burials in Subashen, Shanshan county, Xinjiang" *Kaogu*, no. 1 (1984): 46, fig. 8; figs. 3,4: Chinese Museum of History, *Tianshan Gudao dongxifeng [East and West along the ancient Tianshan road]* (Beijing: Zhongguo shehui chubanshe, 2002), 34, 38.

⁴⁸ K. Chen, and T. H. Hiebert, "The Late prehistory of Xinjiang in relation to its neighbors," 264-265; J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 20.

⁴⁹ C. Debain-Francfort, "Archéologie du Xijiang des origines aux Han" IIème partie, 189.

⁵⁰ Chen Ge proposed to group the remains in the valleys and northern Tianshan mountains, Turfan basin and Barkol grassland into a single cultural group, named Subeixi culture. Since there are similarities among these remains, this hypothesis is interesting and needs to be object of further studies. See G. Chen, "Discussion on Xinjiang Archaeology," 16-30.

⁵¹ C. Debain-Francfort, "Archéologie du Xijiang des origines aux Han" IIème partie, 189-197; J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 19-20.

⁵² Y. Li and H. Liu, "Ancient cemetery at Aidinghu, Tulufan, Xinjiang," *Kaogu*, no. 4 (1982): 365-72.

⁵³ Xinjiang Wenwu Kaogu Yanjiusuo, "New result of archeological survey in Yanghai cemetery, Shanshan county, Xinjiang," *Kaogu*, no. 5 (2002): 3-7; H. Liu and Y. Zhang, "Investigation of the Yiyailake cemetery in Tuokexun county, Xinjiang," *Kaogu*, no. 7, (1985): 597-603; H. Liu, and Y. Zhang, "Ancient cemetery at Kageqiake, Tuokexun county, Xinjiang," *Kaogu*, no. 7 (1987): 597-603.

⁵⁴ The cemeteries of Kageqiake and Yingyailake were severely damaged and only several pottery vessels were found during the excavations.

Figure 11. *Flower-like Gold Ornaments. Aidinghu (1), Yanghai (2) and Alagou I (3)*



Source: Fig. 1: Y. Li and H. Liu, "Ancient cemetery at Aidinghu, Tulufan, Xinjiang," *Kaogu*, no. 4 (1982): 369, fig. 7; fig. 2: Xinjiang Wenwu Kaogu Yanjiusuo, "Brief report of the examination of ancient cemetery at Yanghai," *Xinjiang Wenwu*, no. 4 (1989): 39, fig. 6; fig. 3: B. H. Wang, "A brief report of the excavation of burials with wooden chambers at Alagou, Xinjiang", *Wenwu*, no. 1 (1981): 20, fig. 6.

The Subeixi cemetery presents two phases, an early and a later one, represented by M8 and M3 respectively⁵⁵: in M8 no metal artefacts were found, while M3 was rich of bronze, iron, and lacquer objects. By contrast, pottery in the two phases was similar and unpainted. The long occupation of the Subeixi site was also suggested by carbon-dating, which dated the early phase to 1422-1227 BCE and the later to 360-110 BCE⁵⁶. So, the Subeixi cemetery can be ascribed to the Bronze and Iron Ages.

Although some differences can be noticed, especially in the pottery decoration, remains in the Turfan Basin present clear similarities. Moreover, C14-dating available for Subeixi, Aidinghu, Kageqiake and Yingyayilake⁵⁷, allocated all of them within the range of the middle-late first millennium BCE⁵⁸. Thus, the attribution of the sites to the same Iron Age cultural group finds support.

In the Yili River valley and Tacheng region, the Bronze Age is represented by three briefly reported sites, namely Sazi and Weixiao cemeteries and the hoard at Gongliu. Pottery items and metal artefacts from Yili-Tacheng area resembled those of the Andronovo culture (ca. 2000-900 BCE) in Kazakhstan, suggesting close connections between the two areas⁵⁹ (Figure 12).

⁵⁵ Tulufan Wenwusuo, "Burials in Subashen, Shanshan county, Xinjiang", *Kaogu*, no. 1 (1984): 41-51; Xinjiang Wenwu Kaogu Yanjiusuo, "Brief report of the excavation of the cemetery I at Subeixi, Shanshan county Xinjiang", 1-13.

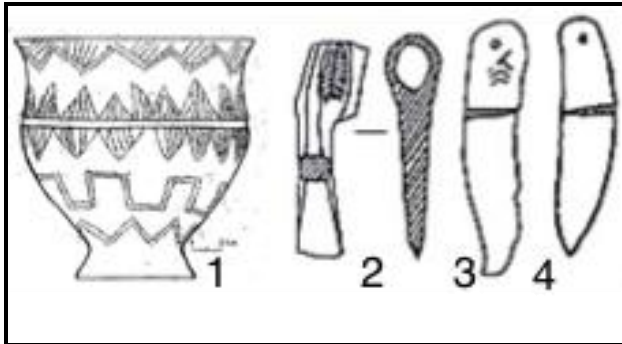
⁵⁶ Shehui Xueyuan Kaogu Yanjiusuo, *C14 Radiocarbon dates in Chinese archaeology (1965-1991)*.

⁵⁷ Ibid.

⁵⁸ As seen, the exception is of the early phase of Subeixi site.

⁵⁹ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 14.

Figure 12: *Andronovo-type Pottery (1) from Sazi Cemetery, Tuoli County and Bronze and Copper Objects from Gongliu Hoard (2-4)*



Source: Fig. 1: J. Zhou and W. Li, "Ancient burials at Sazi village, Tuoli county," *Xinjiang Wenwu*, no. 2 (1996): 389, fig. 6; figs. 2-4: B. Wang, and Z. Cheng, "A group of bronze artifacts unearthed in Gongliu county," *Xinjiang Wenwu*, no. 8 (1989): 95, fig. 2.

Remains attributed to the Iron Age, such as those of Tiemulike⁶⁰, Zhongyangchang⁶¹ and Suodunbulake⁶², have been considered as representing one cultural group named "Tiemulike culture". These sites all included unpainted pottery vessels and bronze anthropomorphic artefacts, similar to those from the Saka contexts⁶³ (Figure 13). C14-dating for Tiemulike and Suodunbulake cemeteries placed the remains into the range of 770-200 BCE⁶⁴, which roughly corresponds to the period of the Saka occupation of the Yili River valley⁶⁵. Thus, the "Tiemulike culture" might have been a local variant of the Saka's. The local character of the Tiemulike group is suggested by the discovery of the Nulasai copper mining and smelting centre, which offers evidence of local metallurgy. It was C14 dated to 900-400 BCE⁶⁶ and at present there is no evidence of an earlier exploitation. However, the site has not yet been fully excavated and its context is still fairly vague.

Other sites yielding iron objects were excavated in the Yili-Tacheng area, namely Yimuchang, Heishantou, but no reports have been published yet. The

⁶⁰ Xinjiang Wenwu Kaogu Yanjiusuo, "Tiemulike cemetery, Xinyuan, Xinjiang", 59-66; S. Li, "Typological study on the bronze objects found in Aga'ersen, Yili river valley," *Bianjiang Kaogu Yanjiu*, no. 2 (2014): 99-110.

⁶¹ Xinjiang Wenwu Kaogu Yanjiusuo, "Stone cist tomb at Zhongyangchang, Gongnaisi, Xinyuan, Xinjiang," *Kaogu yu Wenwu*, no. 2 (1985): 21-6.

⁶² Xinjiang Wenwu Kaogu Yanjiusuo, "Ancient cemetery at Suodunbulake in Chabucha'er county", *Xinjiang Wenwu*, no. 2 (1995): 1-19.

⁶³ C. Debain-Francfort, "Les Saka du Xinjiang avant le Hans (20av-220ap): critères d'indentification" ["Saka people in Xinjiang before the Han period: criteria of identification"], in *Nomades et sédentaires en Asie centrale: apports de l'archéologie et de l'ethnologie : actes du Colloque franco-soviétique Alma Ata (Kazakhstan) 17-26 octobre 1987*, ed. Henri-Paul Francfort (Paris : Centre National de la Recherche Scientifique 1990), 81-95.

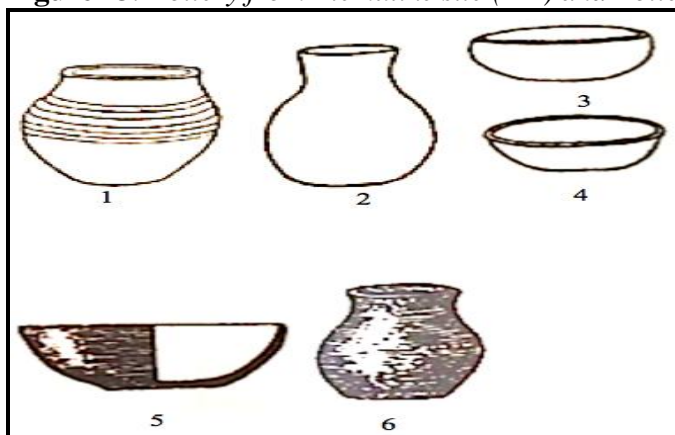
⁶⁴ Shehui Xueyuan Kaogu Yanjiusuo, *C14 Radiocarbon dates in Chinese archaeology (1965-1991)*.

⁶⁵ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 21-22.

⁶⁶ Shehui Xueyuan Kaogu Yanjiusuo, *C14 Radiocarbon dates in Chinese archaeology (1965-1991)*, 1991.

little information provided by the brief descriptions available suggests their assignment to the Iron Age⁶⁷.

Figure 13: Pottery from Tiemulike site (1-4) and Pottery of the Saka Culture (5, 6)



Source: figs. 1-4: T. Shui, "A comparative study of the Bronze Age cultures in Xinjiang," *Guoxue Yanjiu*, no. 1 (1993): 473, fig. 12; figs. 5,6: M. G. Moshkova, *Steppe zone of the Asiatic part of the URSS in the Scytho-Sarmatian time* (Moscow: Hayka, 1992), 354, fig. 4.

Regarding the prehistory in the southern slope of Xinjiang most of the scholars agree that the Bronze Age is represented by the remains in Xintala, Quhui and Haladun, while the cemeteries of Chanwuhugou, Qunbake and Boazidong should be assigned to the Iron Age.

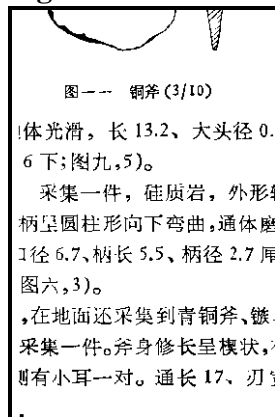
The Xintala remains present two phases, an earlier one (T3-4), where no metals were found, and a later stage (T1-2), in which evidence of early metallurgy is shown by some copper items, arrowheads, awls, and a bronze socketed axe of the Andronovo-type⁶⁸ (Figure 14). Interestingly, Han placed the remains of Xintala within the Iron Age context, on the basis of the pottery characteristics⁶⁹. The site of Quhui has been assigned to the late Xintala culture: although no metal was found there, this attribution is supported by similar painted pottery vessels.

⁶⁷ X. Chang, "Investigation of the Neolithic site at Junmachang, Yiwu," *Xinjiang Wenwu*, no. 1 (1986): 14-15; G. Chen, "A preliminary research on early cultures in Xinjiang", *Zhongya Xuekan*, no. 4, (1995): 5-72; Y. Zhang, "The discovery and study of the tombs in the Yili valley", *Xinjiang Wenwu*, no. 3 (1989): 11-22.

⁶⁸ *Xinjiang Wenwu Kaogu Yanjiusuo*, "Excavation of the Xintala site, Heshuo, Xinjiang", *Kaogu*, no. 5 (1988): 399-407.

⁶⁹ J. Han, "Traditions and chronological frameworks of the Bronze Age and early Iron Age cultures in Xinjiang," *Xinjiang Wenwu*, no. 3 (2005): 57-99.

Figure 14. *Bronze Socketed Axe from Xintala Site*



Source: After Xinjiang Wenwu Kaogu Yanjiusuo, "Excavation of the Xintala site, Heshuo, Xinjiang", *Kaogu*, no. 5 (1988): 403, fig. 11.

In the Haladun site a fairly large assemblage of painted pottery and polished stone was found. The absence of metal items led some scholars to assign the settlement to the Neolithic period ⁷⁰. By contrast, others placed it within the late II millennium BCE, in the Bronze Age context, on the basis of the similarities of the stone objects (especially the crescent-shape knives) with those of the Chust culture (ca.1500 BCE) ⁷¹.

The Chawuhugou site consisted of five cemeteries containing about 2000 graves ⁷². The 600 burials excavated so far revealed distinctive funeral materials, suggesting that Chawuhugou site was a regional cultural centre. Cemeteries in Chawuhugou are rich of copper and bronze implements, weapons, mirrors and decorations, while iron knives, awls and rings were found only in cemeteries I, II and III (Figure 15). Cemeteries I and II were C14 dated to 1000-400 and 800-380 respectively, while two carbon-dating for cemeteries IV and V put them within the range of 753- 1 BCE⁷³.

Despite the relative internal chronology, the Chawuhugou context shows homogeneity with respect to the burial structures, which were shaft-pits marked on the surface with stone piles and/or enclosures, and to pottery, which

⁷⁰ W. Huang, *Report of the archaeological excavations in Xinjiang (1957-1958)* (Beijing: Wenwu chubanshe, 1983).

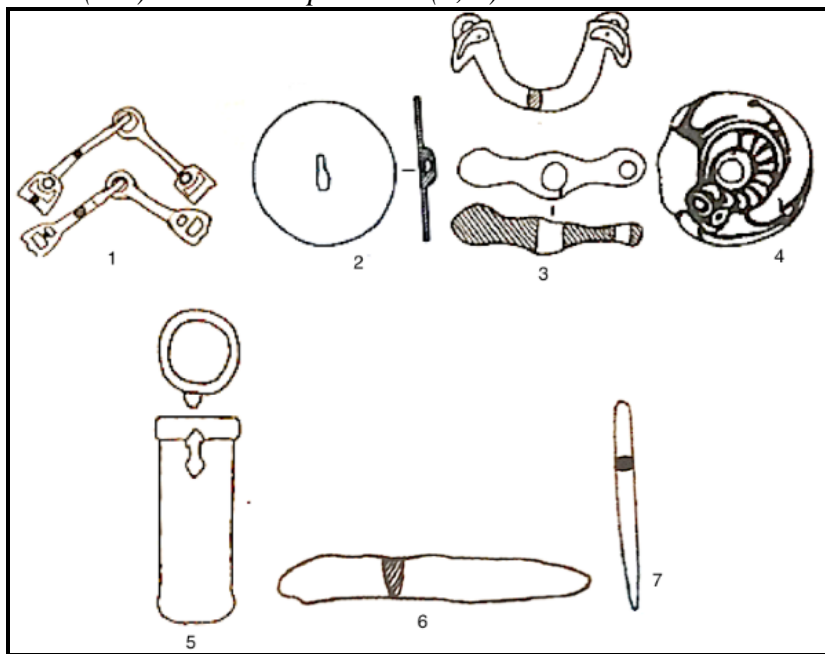
⁷¹ K. Chen, and T. H. Hiebert, "The Late prehistory of Xinjiang in relation to its neighbors," 269.

⁷² Xinjiang Wenwu Kaogu Yanjiusuo, "Brief report of the excavation in 1986 of the cemetery IV at Chawuhugou, Hejing county Xinjiang," *Xinjiang Wenwu*, no. 1 (1987): 1-9; Xinjiang Wenwu Kaogu Yanjiusuo, "The excavation of the cemetery II at Chawuhugou, Hejing county, Xinjiang," *Xinjiang Wenwu*, no. 4 (1989): 12-33; Xinjiang Wenwu Kaogu Yanjiusuo [Xinjiang Institute of Archaeology], "Brief report of the excavation of the cemetery I at Chawuhugou, Hejing county Xinjiang", *Xinjiang Wenwu*, no. 4 (1992): 11-64; Xinjiang Wenwu Kaogu Yanjiusuo [Xinjiang Institute of Archaeology], "Brief report of the excavation of the cemetery V at Chawuhugou, Hejing county Xinjiang", *Xinjiang Wenwu*, no. 2 (1992): 15-30; Xinjiang Shehui Xueyuan Kaogu Yanjiusuo Xinjiangdui, "Report on the excavation of the cemetery II at Chawuhu pass, Hejing county Xinjiang", *Kaogu*, no. 6 (1990): 511-518.

⁷³ Shehui Xueyuan Kaogu Yanjiusuo, *C14 Radiocarbon dates in Chinese archaeology (1965-1991)*.

was red and handmade. The most common vessels were spouted jugs with a single handle, handled cups and jars, painted in black or dark-red on a red slip. On this basis, the Chawuhugou cemeteries have been considered one cultural group, which, according to some scholars, included the Qunbake site⁷⁴.

Figure 15. *Metal Objects from the Chawuhugou Context: Copper and Bronze Items (1-5) and Iron Implements (6, 7)*



Source: Figs.

1,3,6: Xinjiang Wenwu Kaogu Yanjiusuo, "Brief report on the excavation in 1987 of the cemetery IV at Chawuhugou pass, Hejing county, Xinjiang", *Xinjiang Wenwu*, no. 4 (1988): 18; fig. 2, 7, 13, 14, 20: Xinjiang Wenwu Kaogu Yanjiusuo, "Brief report of the excavation of the cemetery I at Chawuhugou, Hejing county Xinjiang," *Xinjiang Wenwu*, no. 4 (1992): 54; fig. 4, 5, 40, 42, 59, after Xinjiang Wenwu Kaogu Yanjiusuo, "Brief report of the excavation in 1986 of the cemetery IV at Chawuhugou, Hejing county Xinjiang," *Xinjiang Wenwu*, no. 1 (1987): 6, fig. 6.

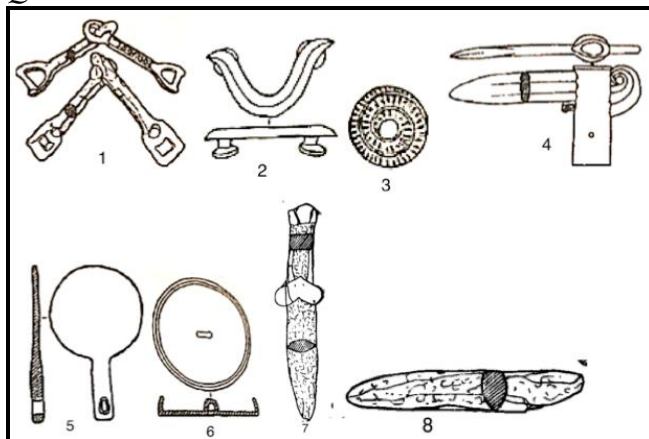
Three cemeteries discovered in Qunbake present indeed strong similarities with the Chawuhugou remains. Despite minor differences in the burial manners and in a small number of red-painted pottery vessels⁷⁵, the assemblage of spouted jugs with single handle, cups and jars with one or two handles paralleled the ones in Chawuhugou. Regarding metal findings, the Qunbake cemeteries included copper, bronze and iron items⁷⁶. Among them, implements and decorations resembled those of Chawuhugou, while copper handled mirrors were found only in Qunbake (Figure 16).

⁷⁴ C. Debain-Francfort, "Archéologie du Xijiang des origines aux Han" IIème partie, 183-213; G. Chen, "Western Region in prehistoric period" in *Xiyu Tongshi* [History of the Western Region], ed. T. Yu (Zhengzhou: Zhengzhou Guji Chubanshe 1996), 18.

⁷⁵ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 17.

⁷⁶ Xinjiang Shehui Xueyuan Kaogu Yanjiusuo Xinjiangdui, "A brief report of the second and third excavations of ancient tombs at Qunbake, Luntai, Xinjiang," 684-703.

Figure 16. *Copper and Bronze Items (1-6) and Iron Weapons (7,8) from Qunbake Cemeteries*



Source: Figs. 1-5,7,8: Xinjiang Shehui Xueyuan Kaogu Yanjiusuo Xinjiangdui, "A brief report of the second and third excavations of ancient tombs at Qunbake, Luntai, Xinjiang," *Kaogu*, no. 8 (1991): 701; fig. 14; fig. 6: Xinjiang Shehui Xueyuan Kaogu Yanjiusuo Xinjiangdui, "A preliminary report on the first excavation of ancient tombs at Qunbake, Luntai, Xinjiang," *Kaogu*, no. 11 (1987): 993, fig. 10.

The Baozidong site is located in the eastern part of Tianshan mountains, close to the Pamir highlands, thus the discovery of the items possessing characteristics of both the southern Tianshan region and the Saka culture in Kazakhstan (ca. mid-I millennium BCE) may not surprise: while the pottery vessels' style was close to that of Chawuhugou, the etched beads link the Baozidong cemetery to the Saka context⁷⁷ (Figure 17). The mixed assemblage of Baozidong, which also included bronze, iron and gold, has generated disagreement over its cultural attribution: it was assigned to the Saka horizon or the Chust culture⁷⁸, to the Chawuhugou culture⁷⁹ and also considered as a separate cultural group⁸⁰.

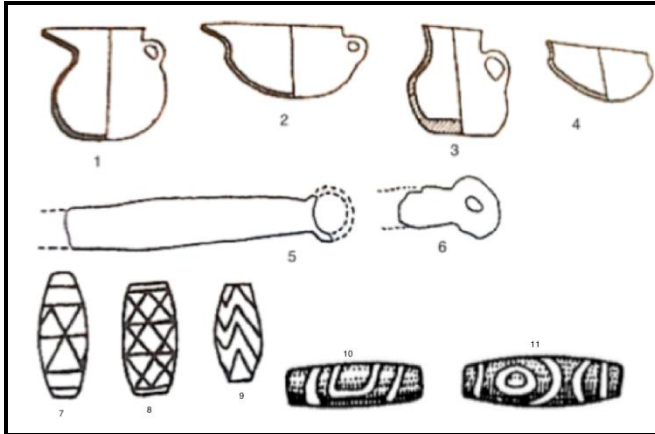
⁷⁷ L. T. Yablosky, "The material culture of the Saka and historical reconstruction" in *Nomads of the Eurasian Steppe in the Iron Age*, 218, fig. 50.

⁷⁸ T. Shui, "A comparative study of the Bronze Age cultures in Xinjiang," 474-476.

⁷⁹ G. Chen, "Western Region in prehistoric period," 18.

⁸⁰ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 15.

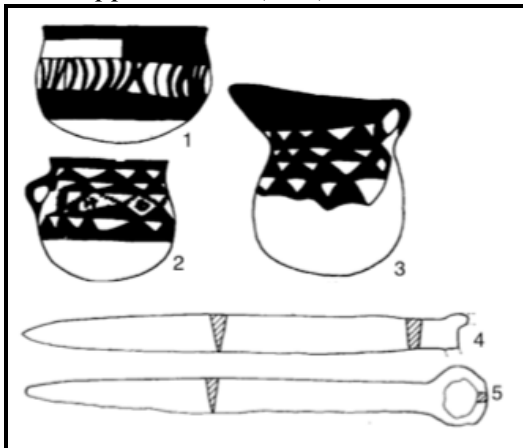
Figure 17. Grave Goods from Baozidong Cemetery: Pottery (1-4), iron Knives (5,6) and Etched Beads (7-9). Beads from Saka Culture Contexts (10,11)



Source: Figs. 1-6: B. Wang and X. Chang, "The investigation and excavation of the ancient tombs at Baozidong, in Wensu county," *Xinjiang Wenwu*, no. 2 (1986): 5; fig. 8, 7, figs. 10- 12: L. T. Yablosky, "The material culture of the Saka and historical reconstruction," in *Nomads of the Eurasian Steppe in the Iron Age*, ed. J. Davis-Kimball, V. A. Bashilov and L. T. Yablosky (Berekly: Zinat Press, 1995), 218, fig. 50.

The cemetery of Kazi'ertu'er, presents strong similarities with the one at Baozidong, especially concerning pottery types and metal objects. By contrast, the large quantity of painted pottery in Kazi'ertu'er is distinctive⁸¹ (Figure 18). Since many findings have not been studied yet, at the moment it is premature to propose an affiliation with the Baozidong site.

Figure 18. Grave Goods from Kazi'ertu'er Cemetery: Painted Pottery (1-3) and Copper Knives (4, 5)

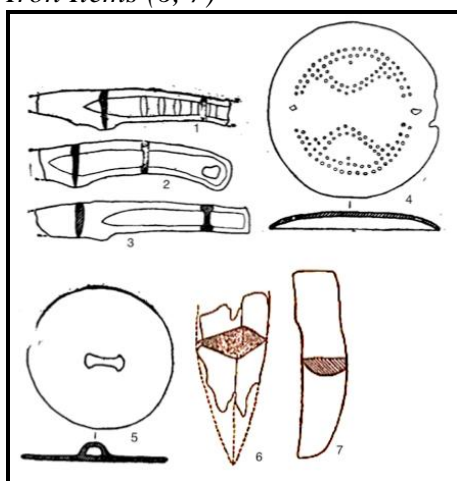


Source: Xinjiang Wenwu Kaogu Yanjiusuo, "Report of the first excavation in Kezi'ertu'er cemetery, Baicheng county, Xinjiang," *Kaogu*, no. 6 (2002): 21, fig. 15; 21, fig. 14; 24, fig. 17.

⁸¹ Xinjiang Wenwu Kaogu Yanjiusuo, "Report of the first excavation in Kezi'ertu'er cemetery, Baicheng county, Xinjiang," no. 6 (2002): 14-30.

Located in the eastern part of Xinjiang, Yanbulake cemetery has been generally considered a distinctive cultural centre⁸², attributed to the Bronze Age⁸³ or the Iron Age⁸⁴. According to the burial practices and structures, the cemetery included at least three types of graves. From all of them large quantities of copper and bronze implements and ornaments were recovered, as well as painted and unpainted vessels, including handled pitchers, footed handled cups and long-necked jars, some of which resembled those found in Gansu⁸⁵. By contrast, a few iron items were found only in graves of the first type, suggesting the existence of two phases within the Yanbulake context (Figure 19). C14-dating to 1700-1000⁸⁶ also indicates that the Yanbulake site was used for several hundreds years, allowing its assignment to the Bronze Age and the Iron Age.

Figure 19. *Remains from Yanbulake Cemeteries. Bronze Objects (1-5) and Iron Items (6, 7)*



Source: Xinjiang Weiyu'er Zizhiqu Wenhuating Wenwuchu, "The Yanbulake cemetery in Hami, Xinjiang," *Kaogu Xuebao*, no. 3 (1989): 344, fig. 23; 348, fig. 26.

For the Wupu cemetery only the report of two graves (M151, M152) is available. Wupu burials yielded handmade pottery jars, cups and long-necked

⁸² Z. An, "Cultural complexes of the Bronze Age in the Tarim Basin and surroundings areas," 47.

⁸³ C. Debain-Francfort, "Archéologie du Xijiang des origines aux Han" IIème partie, 183-213; K. Chen, and T. H. Hiebert, "The Late prehistory of Xinjiang in relation to its neighbors", 259-264; J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*.

⁸⁴ G. Chen, "On the Bronze Age and Early Iron Age cultures of Xinjiang", *Kaogu*, no. 4 (1990): 368; J. Han, "Traditions and chronological frameworks of the Bronze Age and early Iron Age cultures in Xinjiang," 57-99.

⁸⁵ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 12; C. Thorthon and T. Shurr, "Genes, language and culture: an example from the Tarim basin," *Oxford Journal of Archaeology*, 23, no. 1 (2004): 88.

⁸⁶ Shehui Xueyuan Kaogu Yanjiusuo, *C14 Radiocarbon dates in Chinese archaeology (1965-1991)*.

vessels, few of which were painted in black on a red slip. Some copper decorations were also recovered. C14-dating places it around 1100 BCE, thus it can be assigned to the Bronze Age⁸⁷.

The Hanqigou cemetery shows strong similarities with the Yanbulake site with respects to burial practices and pottery forms, but it yielded unpainted pottery and no iron items were found there. However, on the basis of one C14-dating⁸⁸, Mei put the Hanqigou cemetery within the Iron Age context and speculated that it might have developed from the Yanbulake later phase⁸⁹.

Two groups of graves in the Gumugou cemetery are located on the eastern rim of the Tarim basin. Here, early evidence of copper use is represented by two small copper fragments and traces of bronze cutting tools on wooden poles⁹⁰. Gumugou site was C14-dated to 1800 BCE⁹¹ and can be ascribed to the early Bronze Age. Gumugou type I and Qiemu'erqieke type I in Altay city share some cultural traits, especially concerning the burial structures and the typology of grave goods. Nevertheless, maybe because of the use of different materials, wood and stone respectively, scholars are reluctant to accept the connection between the two contexts. Attempts to link Gumugou to the northern regions were made by Han Kangxin, who found similarities between skulls from cemetery I and those from Afanasievo's graves, thus he speculated that Gumugou people were migrants from the highlands⁹².

Pamir highlands have been little investigated and only three major sites have been reported so far. Findings recovered on the surface of the Aketala site were initially assigned to the Neolithic or Chalcolithic, on the basis of the high number of stone implements⁹³. The attribution to the Bronze Age, suggested by Debain-Francfort⁹⁴ and supported by Mei⁹⁵ and Chen⁹⁶, was motivated by the discovery of some copper fragments and one knife (Figure 20). Although some items are distinctive, such as the Chust culture-type crescent-shaped knife, the lack of stratigraphic and archaeological contexts, not provide reliable basis to consider Aketala site a cultural centre.

⁸⁷ Xinjiang Wenwu Kaogu Yanjiusuo, "Burials 151 and 152 at Wupu, in Hami, Xinjiang", *Xinjiang Wenwu*, no. 3 (1992): 1-13.

⁸⁸ Shehui Xueyuan Kaogu Yanjiusuo, *C14 Radiocarbon dates in Chinese archaeology (1965-1991)*, 1991.

⁸⁹ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 22-23.

⁹⁰ B. H. Wang, "A preliminary analysis of the archaeological cultures of the Bronze Age in the region of Xinjiang", 51-52.

⁹¹ Shehui Xueyuan Kaogu Yanjiusuo, *C14 Radiocarbon dates in Chinese archaeology (1965-1991)*.

⁹² K. Han, "Anthropological Characteristics of the Human Skulls from the Ancient Cemetery, Gumugou, Xinjiang," *Kaogu Xuebao*, no. 3 (1986): 361-384.

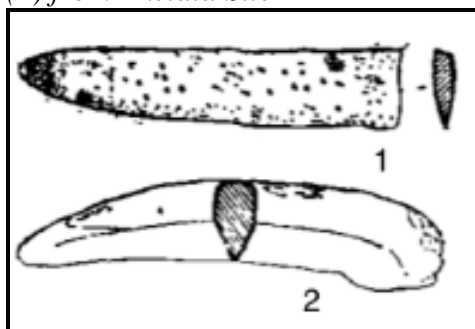
⁹³ Tulufan Wenwusuo [Tultural Institute of Turfan], "Burials in Subashen, Shanshan county, Xinjiang," *Kaogu*, no. 1 (1984): 41-51.

⁹⁴ C. Debain-Francfort, "Archéologie du Xijiang des origines aux Han". Primere partie, 5-29.

⁹⁵ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 9.

⁹⁶ G. Chen, "Discussion on Xinjiang Archaeology," *Tulufan xue Yanjiu*, no. 1 (2002): 16-30.

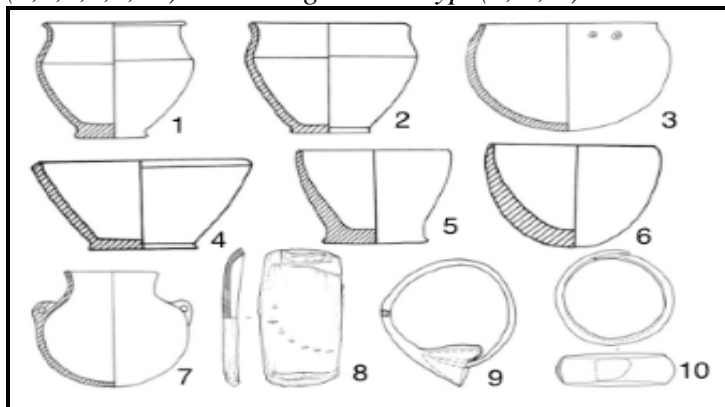
Figure 20. *Copper Knife (1) and Chust Culture Crescent-shaped Stone Knife (2) from Aketala Site*



Source: Xinjiang Wewu'er Zizhiqu Bowuguan Kaogudui, "Investigation in the Neolithic sites at Aketala etc., Shufu county, Xinjiang," *Kaogu*, no. 2 (1977): 107, fig. 2.

The Xiabandi cemetery AII was excavated in 2004 and, basing on the findings, archaeologists identified two phases. The early phase was represented by graves containing flat-bottomed jars with contracted neck, trumpet-shaped earrings and wide-band-shaped bracelets, similar to those of the Andronovo horizon. Distinctive objects of the later phase were the round-bottomed vessels, which resembled the ones found in the Xiangbaobao cemetery (900-400 BCE)⁹⁷ (Figure 21). On this basis, archaeologists dated the early phase to 1500-1300 BCE and the later to 600 BCE. Little research has been conducted on the remains and at present no iron has been reported. Nevertheless, judging from the findings, the Xiabandi cemetery might have been used during the Bronze Age as well as the Iron Age.

Figure 21. *Grave Goods from Xiabandi context of the Andronovo-type (1,2,4,5,9,10) and Xiangbaobao-type(3, 6, 7)*

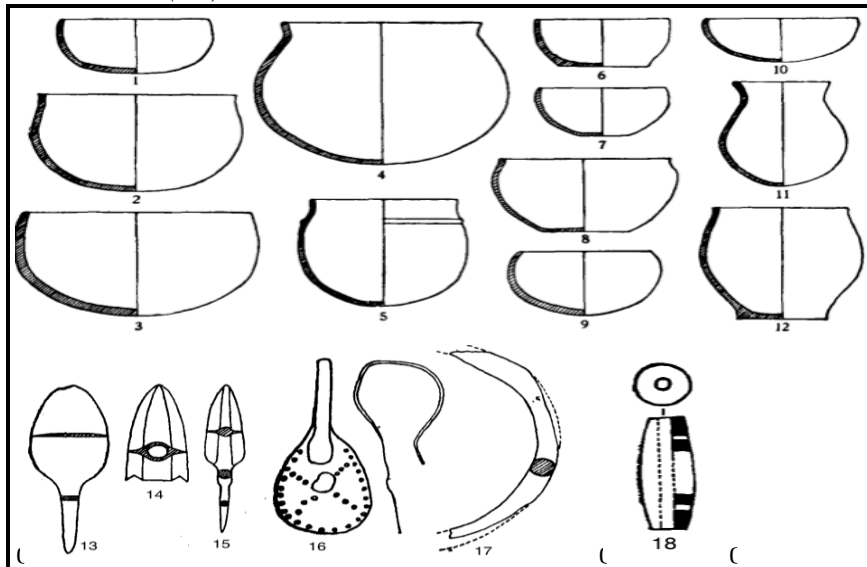


Source: Y. Wu, "On the Bronze culture of Xiabandi cemetery in Kashi, Xinjiang," *Xiyu yanjiu*, no. 2 (2012): 41, fig. 3.

⁹⁷ Y. Wu, "On the Bronze culture of Xiabandi cemetery in Kashi, Xinjiang," *Xiyu yanjiu*, no. 2 (2012): 41, fig. 3.

The Xiangbaobao cemetery⁹⁸ showed two different burial practices: cremation and inhumation. From the cremation-type burials very few objects were recovered: a copper ring, a piece of iron and several fragments of pottery and bones. These graves were assigned to the Iron Age. The inhumation-type graves contained pottery vessels, similar to the ones from the Tajikistan part of the Pamirs⁹⁹, copper, bronze, iron and gold ornaments and implements. Etched beads of the Saka type were also recovered (Figure 22). The second group of Xiangbaobao graves, the richest recovered so far in the Xinjiang Pamirs region, was C14-dated to 900-400 BCE¹⁰⁰, it should be ascribed to the Iron Age.

Figure 22. *Funerary goods from Xiangbaobao cemetery: pottery vessels (1-12), bronze implements (13-15), gold plaque (16), iron bracelet (17) and etched bead (18)*



Source: Xinjiang Wenwu Kaogu Yanjiusuo, "On ancient cemetery in the Pamir Plateau," *Kaogu Xuebao*, no. 2 (1981): 207, fig. 13; 208, fig. 14; 210, fig. 15.

The region to the north of Kunlun Mountains has been little investigated. Until a few years ago, only its later phase was known, because of the discovery of two sites, Zahongluke and Shanpula, both ascribed to the Iron Age¹⁰¹. In the Zahongluke graves well-preserved desiccated corps, covered by distinctive

⁹⁸ Xinjiang Wenwu Kaogu Yanjiusuo, "On ancient cemetery in the Pamir Plateau," *Kaogu Xuebao*, no. 2 (1981): 199-216.

⁹⁹ A. N. Bernshtam, *Historical-Archaeological essay on the Central Tian Shan and Pamir-Altai Mountain Regions* (Moscow: Akademii Nauk SSSR, 1952), 311.

¹⁰⁰ Shehui Xueyuan Kaogu Yanjiusuo, *C14 Radiocarbon dates in Chinese archaeology (1965-1991)*.

¹⁰¹ T. Shui, "On the relationship between the Tarim and Ferghana basins in the Bronze Age" in *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia vol. 1*, ed. V. Mair, (Washington DC: Institute for the Study of Man, 1998), 166; K. Han, "The physical anthropology of the ancient populations of the Tarim Basin," in *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia vol. 2*, ed. V. Mair, (Washington DC: Institute for the Study of Man, 1998), 563.

tattoos were found¹⁰². The grave goods were simple, consisting of wooden artefacts, plain pottery vessels, few copper objects and fragments of iron. The context was reported to be C14-dated to ca. 1000 BCE¹⁰³. However, a closer look at the reports reveals that the two cemeteries in Zahongluke village represent at least three different phases, from 1500 BCE to 600 AD, the earlier being characterised by the absence of metal and wide use of wood for producing all kinds of objects¹⁰⁴.

The Shapula cemetery contained more than 50 graves, divided into single and group burials¹⁰⁵. Funerary objects included handmade pottery similar to those of Xiangbaobao cemetery, bronze and iron tools. It was dated to 200 BCE and ascribed to the Iron Age¹⁰⁶.

The Liushi cemetery represents the only Bronze Age site discovered so far in the southern rim of the Tarim Basin. It was dated by the archaeologists to 1000 BCE¹⁰⁷. The graves were all stone-enclosed earthen pits and contained unpainted, round and flat-bottomed pottery cups and handled jars, copper and bronze implements, decorations, mirrors, and stone beads (Figure 23). The cemetery yielded some iron and gold items (figure 22.6). The style of the pottery decorations and the metal ornaments resembled those from Saka contexts. Thus, the attribution of the Liushi site to the Bronze Age is questionable.

¹⁰² D. He, "A brief report on the mummies from the Zaghunluq site in Charvhan county," in *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia vol. 1*, ed. V. Mair, (Washington DC: Institute for the Study of Man, 1998), 169-174.

¹⁰³ T. Shui, "On the relationship between the Tarim and Ferghana basins in the Bronze Age" in *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia vol. 1*, ed. V. Mair, (Washington DC: Institute for the Study of Man, 1998), 166.

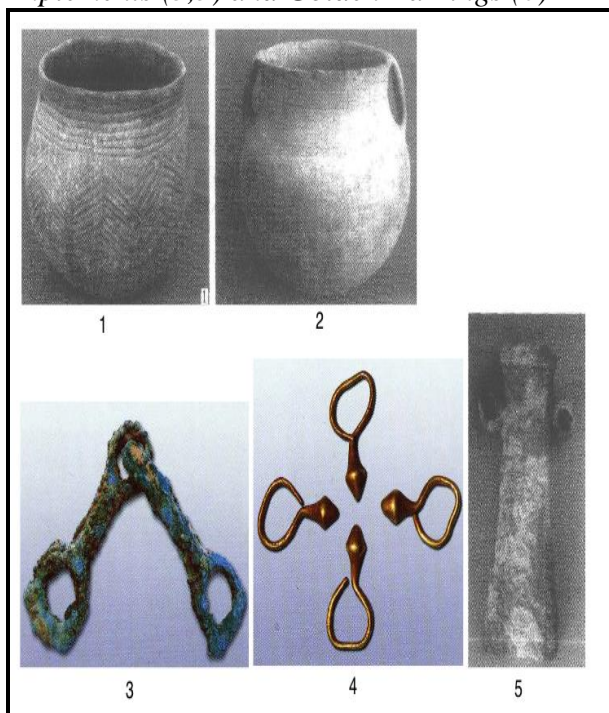
¹⁰⁴ Xinjiang Wenwu Kaogu Yanjiusuo, "Report of the excavation of the n. 1 cemetery in Zahongluke village, Qiemo county, Xinjiang," *Kaogu Xuebao*, no. 1 (2003): 89-136; Xinjiang Bowuguan Kaogubu "Preliminary report of the excavation of the n. 2 cemetery in Zahongluke, Qiemo county", 1-21.

¹⁰⁵ W. Liu, "The burial system in Shapula cemetery" *Xiyu yanjiu*, no. 3 (2002). 50-55

¹⁰⁶ K. Han, "The physical anthropology of the ancient populations of the Tarim Basin", 563.

¹⁰⁷ Xinjiang Shehui Xueyuan Kaogu Yanjiusuo Xinjiangdui "Bronze Age cemetery at Liushi, Yutian county, Xinjiang", *Kaogu*, no. 7 (2006): 31-40.

Figure 23. *Grove Good from Liushi Cemetery: Pottery Vessels (1, 2) Copper Implements (3,5) and Golden Earrings (6)*



Source: Xinjiang Shehui Xueyuan Kaogu Yanjiusuo Xinjiangdui, "Bronze Age cemetery at Liushi, Yutian county, Xinjiang," *Kaogu*, no. 7 (2006): 40, figs. 1, 6, 3; 36, figs. 2, 3.

Very little has been researched in the southern part of the Tarim Basin and although it is clear that Bronze Age people occupied the area, the information is still insufficient to trace a geographical distribution as well as a cultural context for the remains.

Discussion

Divergences of opinions among scholars on the chronological and cultural attribution of the remains reflect the fact that the prehistory of Xinjiang, as a field of study, is still at its beginning, and numerous challenges remain to be overcome. However, some considerations on the current state of the research can be made.

First, as Wang Binghua¹⁰⁸ suggested, although opinions on dates and cultural attributions often differ, the existence of two periods, Bronze Age and Iron Age, roughly dated to 2000-1000 BCE and 1000- 200 BCE respectively, can be established.

Second, several sites, such as Qiemu'erqieke, Sidaogou, Subeixi, Yanbulake and Xiabandi, seem to have been in use for several centuries, thus they may represent both the Bronze Age and Iron Age (Table 3). The

¹⁰⁸ B. H. Wang, "A preliminary analysis of the archaeological cultures of the Bronze Age in the region of Xinjiang," *Xinjiang shehui kexue*, no. 4 (1985): 50-61.

hypothesis of Hanqigou being the developed phase of Yanbulake, suggested by Mei¹⁰⁹, should be further investigated. In general, micro-scale research on single areas should be encouraged in order to identify traces of the internal development of the site: these detailed studies could be useful when data are re-examined in the broader context of Eurasian prehistory.

Table 3. *Temporal-cultural Framework for the Remains Analyzed in this Paper*

	Bronze Age	Iron Age
ALTAY MOUNTAINS	Qiemu'erqieke I: Abahe - Bu'erjin	Qiemu'erqieke II
YILI VALLEY -TACHENG REGION	Weixiao	Tiemulike: Zhongyangchang – Suodunbulake – Nulasai
	Gongliu	Heishantou
		Yimuchang
NORTHERN TIANSHAN MOUNTAINS – TURFAN-BARKOL	Sidaogou: Banjiegou	Sidaogou
	Nanwan: Kuisu – Shirenzi – Junmachang – Ke'arsang (?)	Alagou I: Yu'ergou – Dongfengchang – Wulapo (?)
		Alagou II
	Shuinichang, Liangzhongfang	Nanshan, Yinhongqiao (?)
SOUTHERN TIANSHAN MOUNTAINS	Aketala: Quhui	Dalongkou: Dacatan
	Haladun	Chawuhugou: Qunbake
EAST XINJIANG	Baozidong: Kazi'ertu'er	
	Yanbulake	Yanbulake
EASTERN TARIM BASIN	Wupu	Hanqigou
	Gumugou	
PAMIRS HIGHLANDS	Aketala	Xiangbaobao
	Xiabandi All	Xiabandi Al
NORTHERN KUNLUN MOUNTAINS		Zahongluke
	Liushi	Shanpula

Source: Author

Third, according to the available material, northern and eastern Xinjiang, including the Tianshan range and Hami Basin, were inhabited earlier than their western and southern counterparts. In those regions early cemeteries, such as those of Qiemu'erqieke, Gumugou, Xintala, Yanbulake, present clear affiliations with northern populations of western Siberia and with Bronze Age cultures in Gansu. Gumugou burials present similarities with the ones of the Afanasevo horizon, while some funerary rites and grave goods in Qiemu'erqieke site resemble those of the Okunevo cultures. Andronovo-type bronze socketed axes and incised potteries were found in the Xintala site, while the S-shaped decorations on vessels at the Yanbulake cemetery are similar to those of Gansu Siba (2000-1600 BCE) and the Xindian culture (1500-1000 BCE). This material supports the hypothesis of nomadic populations from the north migrating to Xinjiang in the III-I millennium BCE, and the thesis that, at the same time, "technological knowledge" moved from China heartland to the north-westernmost side of the country.

¹⁰⁹ J. Mei, *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighboring Regions*, 22.

Conclusion: New Approaches and New Perspectives

Judging from the current state of the research on prehistoric Xinjiang, the main current problems are the lack of clear standards for establishing archaeological cultures within the context of prehistoric Xinjiang¹¹⁰, on one side and the failure in re-examining micro-scale research in the wider Eurasian context, on the other.

Therefore, in the light of this study and considering the directions for future research, some major issues need to be emphasized:

1. The paleoenvironment, essential for arranging a safe ecological context for prehistoric cultures, is too little documented;
2. The establishment of a secure temporal framework is hampered by the low number of C14 analyses. Relative chronologies are also difficult to formulate, due to the lack of stratigraphic studies¹¹¹;
3. Excavation reports are not regularly published and are often concise, neglecting pictures and drawings, preventing in some cases the correct interpretation of the remains. Scarcity of information also involves Stone Age remains depriving the research on the Bronze and Iron Ages of reliable bases;
4. Archaeological research is impacted by the “methodological weakness” detected by Roberts and Linden¹¹²: despite being in theory based on the combination of several data, archaeological cultures have been often defined according to a single category of evidence, namely pottery for later prehistory. Discoveries in Xinjiang revealed a general scarcity of pottery, compared to other cultures, and in some cases, such as in Gumugou cemetery, no pottery was found. So, although it is clear that pottery alone cannot be the basis for identifying cultural groups in Xinjiang, an alternative is still to be found.
5. Because of the peculiar position of Xinjiang, prehistoric remains should be properly re-evaluated in the broader context of Eurasia. It is evident that nomad populations of Central Asia and western Siberia greatly contributed to the spread of cultural and technological innovations through different kinds of relationships with local people. The involvement of Xinjiang cultures in this system of connections is demonstrated by the presence of Afanasevo, Okunevo Andronovo cultural remains in the region. However numerous “missing links” still hamper the understanding of the scale, patterns, and mechanisms of these interactions, as well as the directions of the spread of cultural and

¹¹⁰ This observation was made in 1998 by An Zhimin in Z. An, "Cultural complexes of the Bronze Age in the Tarim Basin and surroundings areas," in *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia vol. 1*, ed. V. Mair, (Washington DC: Institute for the Study of Man, 1998), 46-47.

¹¹¹ Remains recovered by chance or during quick salvage excavations often lack of archaeological and stratigraphic contexts.

¹¹² B. W. Roberts and M. V. Linden, *Investigating Archaeological Cultures: material culture, variability, and transmission* (Berlin: Springer 2011), 8.

technological innovations. To this respect communication and exchange of material among scholars from China, Russia and the rest of the world should improve, overcoming nationalistic sentiments and language barriers.

Despite the extraordinary scholarly effort in studying the complicated context of Xinjiang prehistory, much more is still to be learned: a multidisciplinary approach should be adopted, on one hand, while indigenous developments and external influences need to be equally investigated on the other. In doing so, a closer collaboration among scholars should be encouraged.

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