

Chapter 9

Pedigree Relations Between Archaeological Cultures in the Northeast from Xia to Warring States Period



Abstract Chapter Nine focuses on the pedigree relationships of archaeological cultures in Northeast China from the Xia period to the Warring States period. First, based on the spatio-temporal framework, a cross-regional and cross-chronological comparative study of various archaeological cultures has been conducted from the perspective of identifying kinship ties among remains. It is found that archaeological cultures in Northeast China from the Xia period to the Warring States period can be divided into at least six distinct cultural systems: ① the Cultural System of Shuangtuozi culture Phase I → Shuangtuozi culture Phase II → Shuangtuozi culture Phase III → Shuangfang culture, ② the Cultural System of Machengzi culture → Xituanshan culture, ③ the Cultural System of Ping'anpu culture Phase II → Gaotaishan culture → upper Xiajiadian culture, ④ the Culture System of lower Xiajiadian culture (Southern Branch) → Tazhao culture Phase I & II → upper Zhangjiayuan culture, ⑤ the Cultural System of Xiaolaha culture → Gucheng remains → Baijinbao culture → Hanshu culture Phase II, ⑥ the Culture System of Xingcheng culture → Liutingdong culture. Archaeological cultures within each system share cultural continuity and belong to the same archaeological cultural pedigree. Secondly, according to the differences in the relationships between cultures in each geographical region, three “serial archaeological cultural regions” (the Nenjiang River basin, the Tumen River basin, and southern Liaodong) and two “sequential archaeological cultural regions” (the Liaoxi mountainous area and the northern Liaodong area) are identified, while the other two regions (the Liaoxi Plain and the West Songhua River basin) remain difficult to classify. Finally, based on differences in natural environment, cultural characteristics, historical context, and cultural background, two parallel cultural belts are delineated: one is the western “Greater Khingan Mountains – Yanshan Mountain Cultural Belt” centered on the Great Khingan Mountains and the Yanshan Mountains; the other is the eastern “Changbai Mountain – Qianshan Mountain Cultural Belt” centered on the Changbai Mountains and the Qianshan Mountains.

Constructing a spatio-temporal framework is the prerequisite and basis for pedigree research on archaeological cultures. The previous chapters construct the time–space framework of archaeological cultures from the Xia period to the Warring States period

in Northeast China. This framework is based on the chronological sequence in seven areas and the development stages of four periods, revealing the chronology of the cultural remains in the same area and the synchronic relations between the cultural remains in different areas (see Table 8.2). In other words, the ‘area’ in this framework is just a concept of physical geography, so it belongs to the category of ‘natural area’. The ‘stage’ and ‘phase’ in this framework suggest the time sequence of the cultural remains in the same area and the synchronic relations of the remains in different areas respectively. The current chapter aims to explore the internal connection between different cultures across time and space, so as to study the pedigree relations between them.

Pedigree relations refer to the kinship among the archaeological cultures of different time and space categories. Since “the term pedigree not only suggests inheritance and origin, but also communication, infiltration and borrowing of cultural factors among various archaeological cultures” (Zhang, 1986), the pedigree analysis could be carried out on both a longitudinal and horizontal basis: the former concerning inheritance or origin relation between different cultures in the same area or different areas, i.e. evolution from one culture to another or inheritance reversely; the latter focusing on communication, infiltration and borrowing between cultures of the same period, i.e. cultural interactions across areas, possible consequences of the interaction, and the identification of whether cultures were aggressive, vulnerable, or evenly matched.

The longitudinal inheritance, horizontal influence and regional migration among archaeological cultures would inevitably result in changes in the relationship between and patterns of different cultures within the same geographic area or in different areas. Therefore, the research on archeological pedigree should also present the patterns and features of cultural areas and zones that would possibly occur as the result of various cultural interactions.

9.1 Longitudinal Inheritance and Development: Differentiation of Six Cultural Systems

Through a thorough examination of 22 archeological remains hitherto identified and confirmed in the Northeast, at least six cultural systems can be established on the basis of chronology and the kinship revealed by pottery, without considering spatial restriction. Each of the systems consists of two or more cultural remains which exhibit the longitudinal inheritance relationship.

9.1.1 *The Cultural System from the Shuangtuozi Culture Phase I, II & III to the Shuangfang Culture*

The first and second phases of Shuangtuozi culture existed during the Xia and the early Shang periods. The third phase of this culture occurred in late Shang, and the Shuangfang culture lasted from the Western Zhou to the Warring States periods. These cultures were in chronological succession. The remains of the Shuangtuozi culture were found mainly at the southern end of the Liaodong Peninsula, while the Shuangfang culture covered the entire Liaodong (the east of Liaoning) area. The study on the pottery kinship revealed that the above-mentioned cultures were successive and inherited. Therefore, they can be categorized into the same cultural system.

Cultural factors distinctive of the Shandong Peninsula were detected on the pottery from the first and second phases of the Shuangtuozi remains. Typical artifacts or fragments of the Longshan culture in Shandong were found from the first phase of Shuangtuozi remains, such as broken legs of *ding* and *gui* tripods, vessel lids, vessels with three ring-shaped legs, bowls with ring feet or handles, and *dou* stemmed bowls (Fig. 4.2: 54, 55). Features typical of the Yueshi culture in Shandong were detected in the second phase of Shuangtuozi remains (Fig. 4.3: 24–40). Some scholars even proposed that they might be a local type of the archaeological culture in the Shandong Peninsula during the same period (Wang, 1995; Wu, 1993; Luan, 1997; Chen, 1989).

In fact, when examining the pottery artifacts as a whole, we found that the first and second phases of the Shuangtuozi culture had not given up their own traditions, let alone been conquered. For example, the indigenous flat-based pottery of the culture was always in a state of separation and borrowing with the tripods from foreign cultures. There was not any influential relationship in the real sense between them, let alone the emergence of a new type of pottery combining features of both cultural systems.

When external forces, especially the Yueshi culture, withdrew, the Shuangtuozi culture quickly recovered its indigenous elements and developed into the third phase. As can be seen on artifacts such as the plain-walled *yan* boiler, although elements distinctive of the Zhenzhumen culture in Shandong occasionally occurred in the third phase, their influence was rather weak. Instead, the majority of the third phase pottery artifacts evolved from the indigenous ancestors of the previous two phases. The evolution of the Shuangtuozi culture is evidently manifested in the typical pottery of this culture such as the *hu* pot, *weng* urn, *wan* bowl, *gui* tureen, etc. As for the *taodou* stemmed bowl, an artifact produced under the influence of cultures in Shandong, clear evolutionary traces between types can be detected on it (Fig. 9.1). It is evident that the third phase of the Shuangtuozi culture was in direct succession to the first two phases. It is mainly due to its weak influence and the inadequacy of archaeological excavations that only a small number of pottery artifacts, in quantity and typology as well, have been found from the first two phases of this culture.

The Shuangfang culture emerged later than the third phase of the Shuangtuozi culture. Judging by the category and shape, at least 14 types of the Shuangfang pottery

	<i>Hu</i> pot	<i>Weng</i> urn	<i>Wan</i> bowl	<i>Gui</i> tureen	<i>Dou</i> stemmed bowl
Shuangtuozi Culture Phase III	 1  2  12  13	 3  4  5  6  14  15  16  17	 7  8  18  19	 9  20	 10  11  21  22
Shuangtuozi Culture Phase II	 23	 24  25  26	 27		 28  29
Shuangtuozi Culture Phase I	 30  31	 32  33	 34  35	 36	 37  38

Fig. 9.1 Comparison chart of the kinship between pottery of the Shuangtuozi culture Phase I, II and III 1, 2, 4, 10, 17, 21 (92 Dazuizi) 3, 5, 6, 7, 8, 11, 12, 13, 15, 16, 18, 19, 22, 28, 29, 34, 35, 36 (87 Dazuizi) 9, 20 (Stone-lined tombs at Yujiatuotou) 14, 31, 32, 33 (Shuangtuozi) 23, 26 (No. 1 and 2 tombs at Dantuozi) 24, 25, 27 (Weng urn coffin tomb at Shangmashi) 30, 37 (Yujiacun remains) 38 (Laotieshan)

have had their origin traced back to the Shuangtuozi culture, which indicates a close kinship between the two cultures. Firstly, features of succession and evolution are clearly shown on such four categories of Shuangfang pottery as earless *hu* or *guan* pots, ring-footed *gui* tureens and *dou* stemmed bowls (Fig. 9.2). Additionally, either direct evolution from artifacts of the same type or a combination of techniques of two types has been identified on the other five categories of pottery such as the *hu* pot with horizontal handles and alms bowl mouth or flared mouth, and *guan* jar with saddle-shaped lug (Fig. 9.3). Therefore, the kinship study on the Shuangfang culture and the Shuangtuozi culture Phase III suggests that the former should be successor of the latter.

In short, the Shuangtuozi culture Phase I, II, III and the Shuangfang culture belong to the same cultural system and bear close kinship. The pottery characteristics of this system manifest as two features. First, the *weng* with a flat bottom, *guan* jar, *hu* pot, *wan* bowl and ring-footed *gui* tureen are representative artifacts, while tripods from the Longshan culture, Yueshi culture and Zhenzhumen culture in Shandong such as the *ding* tripod, *gui* tripod, and *yan* steamer are small in number. Second, the majority of pottery have plain walls. Only a few types such as the *hu* pot with horizontal handles or without handles, *weng* urn, and ring-footed *gui* tureen bear patches of incised bowstrings, grid patterns, dotted lines or raised ridge patterns. In addition, houses and tombs of this cultural system were mainly built of stones. The Shuangtuozi culture Phase I, II, and III during Xia and Shang periods displayed mainly stone-lined tomb cemeteries. By the time of the Shuangfang culture during the the West and the East Zhou periods, stone-lined tombs had been replaced by varied types, such as graves containing single stone coffins, those covered with slab stone blankets or built in the shape of stone sheds, and those in the form of earthen pits. Meanwhile, bronze weapons distinctive of this cultural system also emerged

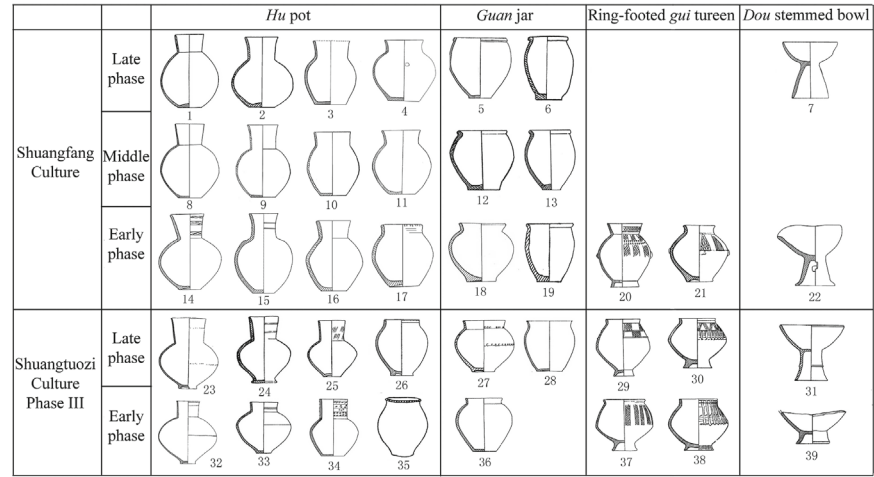


Fig. 9.2 Comparison chart of the kinship between pottery of the Shuangfang culture and the Shuangtuozi culture Phase III (1) 1 (Liangjiashan) 2, 5, 8 (Zhengjiawazi) 3, 4, 7 (Yinjiacun) 6 (Shangbu) 9, 10 (Shangmashi) 11 (Jinshantun) 12, 13 (Gongzhutunhousan) 14, 18, 21, 22 (Gangshang) 15 (Large stone covered tomb at Biliuhe) 16 (Huojiawobu) 17 (Loushang) 19 (Lijiaxiang in Fushun) 20 (Stone shed at Shuangfang) 29, 31, 33, 34, 39 (87 Dazuizi) 26, 28, 30, 35, 38 (Stone-lined tomb at Yujiatuotou) 24, 25, 37 (92 Dazuizi) 23, 27, 32, 36 (Shuangtuozi)

during this period, among which are spears with curved edges, swords with curved blades and cylindrical ridges, and axes with square sockets.

With the emergence of bronze weapons, the Shuangtuozi cultural system became more influential. By the time of the Western Zhou and Warring States periods, its distribution extended from the southern end of the Liaodong Peninsula to the entire Liaodong area. The scope of influence even spread to the mountainous area of Liaoxi, the Korean Peninsula and the West Songhua River basin (previously ‘the Second Songhua River basin’). It is worth noting that in this process of extreme expansion, this cultural system had also absorbed or incorporated some elements from other cultures. For example, some pottery artifacts of the Shuangfang culture appeared only in northern Liaodong, and were not found in southern Liaodong. Such pottery includes the *hu* vessel with vertical handles, *guan* jar with lugs or horizontal handles, *pen* vessel with lugs, and ring-footed bowl. According to their shapes and the cultural convention they bear, these artifacts can be identified as derivatives of the Machengzi culture which existed in the same area during the Xia and Shang periods (Fig. 4.24). Therefore, it is reasonable to infer that the Shuangfang culture evolved from the Shuangtuozi culture Phase III in southern Liaodong. Some elements of the Machengzi culture were incorporated in its development and expansion northwards to northern Liaodong. On these grounds, the Shuangfang culture could possibly be divided into two regional varieties: the southern and northern ones.

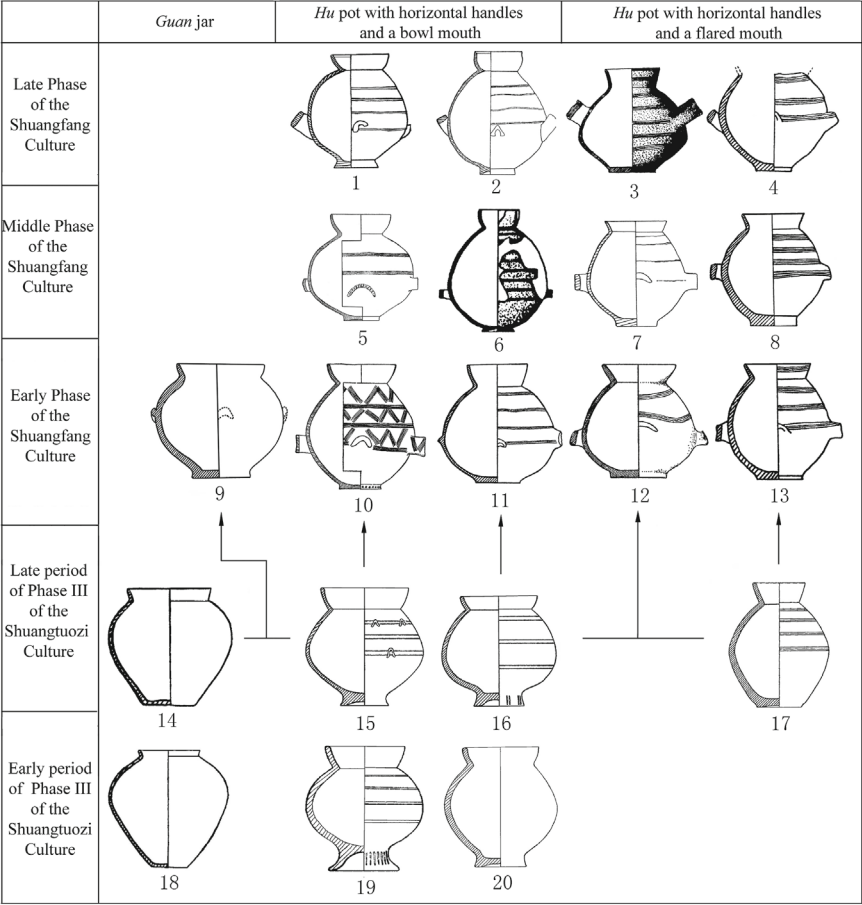


Fig. 9.3 Comparison chart of the kinship between pottery of the Shuangfang culture and the Shuangtuozi culture Phase III (2) 1, 2 (Shuangfang) 3, 6 (Fengchengdongshan) 4 (Zhujiagou) 5 (Chengxincun) 7 (Lijiatai) 8 (Douhutun) 9 (Bronze Short Sword Tomb at Shuangtuozi) 10 (Xifeng Fire Brigade) 11 (Erdaohezi) 12 (Dajiabang) 13 (Bajiagou) 14, 18 (92 Dazuizi) 15–17, 19, 20 (Stone-lined Tomb at Yujiatuotou)

9.1.2 The Cultural System from the Machengzi Culture to the Xituanshan Culture

Despite the geographical distance between them, the Machengzi culture and the Xituanshan culture bear a close relationship. The Machengzi culture in the northern part of Liaodong¹ can be traced back to the Xia and Shang periods while the Xituanshan culture in the West Songhua River basin can date back to the West and the East

¹ Liaodong is a region located to the east of the Liao River in China, and it refers to the southeastern part of Liaoning Province today.

Zhou periods. The two cultures are not only successive in time but share considerable commonalities in the type and style of their pottery. Such consistency is especially embodied in the transitional and evolutionary relationship between the pottery from the late Machengzi culture to the early Xituanshan culture.

First, in terms of type, the ceramic assemblages of the two cultures are identical. Both cultures cover a wide series of finds, such as: *hu* vessel, *guan* jar, *bo* bowl, *wan* bowl from the tombs, and *ding* and *li* tripods from the remains.

Second, the characteristics demonstrated on the pottery of the two cultures are basically the same. As noticed, the *hu* vessels of the two cultures cover a wide range of styles, from artifacts with no handles or with lugs, to those with vertical handles or with horizontal handles; the majority of their jars and bowls have horizontal handles and most of the *bo* bowls have lugs or even no handles at all. The same features can also be seen in their typical cooking vessels. For example, the *ding* and *li* tripods of the two cultures have either lugs or bridge-shaped handles. In addition, all of the pottery is plain ware, made out of either coarse sand or clay, with the overwhelming majority being reddish brown pottery made out of coarse sand.

Third, among the six typical categories of pottery mentioned above, an obvious transitional and evolutionary relation can be observed on at least 30 varieties of the pottery shared by both cultures (Figs. 9.4, 9.5, 9.6, and 9.7).

Apart from the kinship shown in the above pottery, the two cultures also share similarities in tomb form. In the Machengzi culture, tombs are mainly cave ones, with only a small number of stone-cist tombs buried outside the caves. Many dead were usually buried collectively inside a cave, mostly without any cist, with only a few exceptions. Meanwhile, in the Xituanshan culture, tombs are mainly stone-cist ones, either built with stacking stones or standing stone slabs.

When comparing the burial customs, the commonalities between the two cultures can be summarized in two aspects. One is the close association of the concept of burial with stone, as embodied in the use of either stone caves or stone-cists. Chronologically, cave tombs emerged first, then the cave tombs used for collective burials gradually evolved into stone-cist tombs for an individually body. Second, there are signs of cremation of the deceased to varying degrees.

Based on the above analysis, it may be concluded that the Xituanshan culture in the West Songhua River basin grew out of the Machengzi culture in the northern part of Liaodong. Although the locations of the cultures are dispersed, they belong to the same cultural system, the Machengzi Cultural System to be specific. This system was originally distributed in what is currently the northern part of Liaodong during the Xia and Shang periods, and later migrated to the West Songhua River basin during the West and East Zhou periods. However, during the migration, a small part of the culture system remained in its original area and merged into the Shuangfang culture from the southern part of Liaodong.

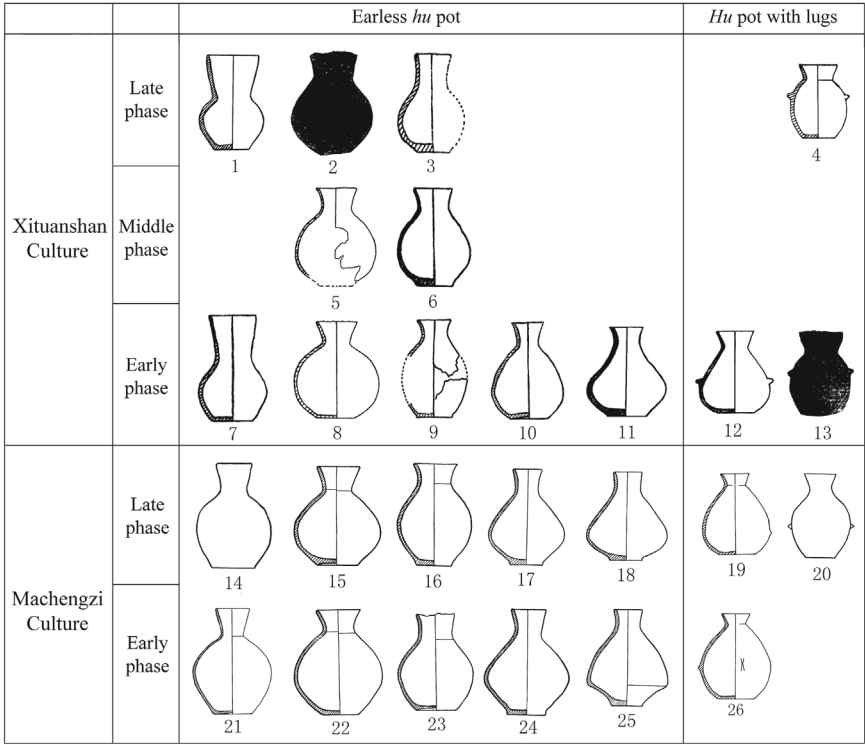


Fig. 9.4 Comparison chart of the kinship between earless *hu* pot and *hu* pot with lugs in the Machengzi culture and in the Xituanshan culture 1 (Liangbanshan 62M1:5) 2, 13 (Xituanshan 56M2:1, 56M1:1) 3 (Houshishan 76M 3:2) 4 (Large Tomb at the top of Saodagou Mountain) 5, 6, 8, 11, 12 (Xingxingshao AM 11:1, DM 15:2, BM 2:2, DM 12:1, DM 6:1) 7 (Dahaimeng F2: 18) 9, 10 (Wanbaoshan M1:2, M1:1) 14, 21 (Cave C at Shanchengzi M10:1, M 12:4) 15, 16, 22-24 (Cave A at Zhangjiabu M6:8, M20:8, M46:5, M8:4, M37:1) 17, 18, 25 (Cave C at Machengzi M14:6, M22:3, M6:2) 19, 26 (Xinbinlaocheng M4:1, M2:6) 20 (Unearthed from Cave C at Shanchengzi)

9.1.3 The Cultural System from the Ping'anpu Culture Phase II Through the Gaotaishan Culture to the Upper Xiajiadian Culture

The Ping'anpu culture Phase II can be dated back to the early Xia period while the Gaotaishan culture existed from the middle and late Xia period to the late Shang period. Both are distributed in the northern part of the Liaoxi (west of the Liao River) Plain with the Liuhe River basin as the center of the region. Despite the scant archaeological literature, the findings on the Ping'anpu culture Phase II, as valuable clues, have great implications for the study on the origin of the Gaotaishan culture and the genesis of tripods in the Liaoxi Plain.

		<i>Hu</i> pot with vertical handles	<i>Hu</i> pot with horizontal handles
Xituanshan Culture	Late phase	  	  
	Middle phase	 	   
	Early phase	  	   
Machengzi Culture	Late phase	  	   
	Early phase	 	  

Fig. 9.5 Comparison chart of the kinship between *hu* pot with vertical handles and *hu* pot with horizontal handles in the Machengzi culture and in the Xituanshan culture 1, 7, 13 (Dahaimeng 79T1②: 14, 80F6:8, 80T10⑤: 7) 2, 3, 8, 11, 12, 14, 15, 18, 19 (Xingxingshao 23:1, AM35:1, AM31:3, AM6:1, AM19:6, CM18:1, CM1:1, CM6:1, CM21:1) 4, 5 (Saodagou M4: 517, M18:558) 6 (Xiaotianshan M1:5) 9, 10, 16 (Xituanshan 50M16:2, M1:8, M10:3) 17 (Donglianggang M2:5) 20 (Cave B at Shanchengzi M1:3) 21-31 (Cave A at Zhangjiabu M3:3, M33:16, M28:3, M20:8, M6:8, M25:5, M50:3, M45:7, M28:3, M38:1, M45:1)

The Ping'anpu culture Phase II mainly produced two main types of artifacts. One is flat-bottomed pottery with the characteristics of the Neolithic cultural tradition in the Northeast of China; the other is leg fragments of the hollow feet of tripods. The former has vertical handles or lugs, which is different from its counterpart during the Neolithic Age. The latter is plain ware, quite similar in style to the feet of the *yan* steamers from the Yueshi culture in the Shandong Peninsula such as T162⑦:16 from the Yijiacheng site and H36: 9 and H5: 6 from the Zhaogezhuang site.² Similar finds were made in the Shuangtuozi culture Phase II in the Liaodong Peninsula.³ As noted, the hollow feet of a tripod from the Ping'anpu culture Phase II is likely to

² See Fig. 1.1: 6, and Fig. 1.3: 3, 8 in Luan, F. S. (1997). *Yueshiwenhua de fenqi he leixing* [The periodizations and types of Yueshi culture]. In *Haidai diqu kaogu yanjiu* [Archaeological research in Haidai region]. Jinan: Shandong daxue chubanshe.

³ See Fig. 1.2 in Cai, F. S. (1993). *Guanyu Piziwo de taoqi* [On the pottery of Piziwo]. *Liaohai wenwu xuekan*, 2.

		<i>Guan</i> jars	<i>Wan</i> bowls	<i>Bo (pen)</i> bowls
Xituanshan Culture	Late phase	 1  2  3		 4  5
	Middle phase	 6  7  8	 9  10	 11  12
	Early phase	 13  14  15	 16  17	 18  19
Machengzi Culture	Late phase	 20  21  22	 23  24	 25  26
	Early phase	 27		 28  29

Fig. 9.6 Comparison chart of the kinship between *guan* jars, *wan* bowls and *bo* (pen) bowls in the Machengzi culture and in the Xituanshan culture 1, 2, 7 (Xituanshan 48-49M6, M14, M8) 3 (Langtoushan M109) 4, 8-11, 14-18 (Xingxingshao AM23:2, DM16:1, AM20:4, AM20:5, CM22:3, AM31:4, BM2:1, AM1:1, DM16:3, CM18:2) 5 (Xituanshan Children's Tomb) 6, 12, 13, 19 (Xituanshan 50M17:3, M14:5, M9:4, M19:3) 20, 26 (Cave B at Shanchengzi M7:7, Cave C M9:3) 21, 27 (Cave C at Machengzi M5:1, M6:1) 22, 24 (Xinbinniuxin Cave) 23, 25, 28 (Cave A at Zhangjiabu M6:1, M35:4, M41:6) 29 (Xinbinlaocheng M2:4)

		<i>Ding</i> tripods	<i>Li</i> tripods
Xituanshan Culture	Late phase	 1	 2
	Middle phase	 3  4	 5  6  7
	Early phase	 8  9  10	 11  12  13  14  15  16
Machengzi Culture	Late phase	 17  18  19	 20  21  22  23
	Early phase	 26  27	 28  29  30  31  32

Fig. 9.7 Comparison chart of the kinship between *ding* tripod and *li* tripod in the Machengzi culture and in the Xituanshan culture 1 (Dahaimeng 80T3③:12) 2, 7, 11 (Changsheshan 57F3:28, 63T8④:21, 63T19⑥:48) 3, 4, 6 (Zhushan F3:22, F3:4, F2:3) 5, 9 (Qianshan F2②:2, F3②:3) 8, 13 (Houshishan 76F3:1, 79 II T2③:58) 10 (Donglianggang M2:6) 12 (Laoheshen F1:2) 14-16 (Tuchengzi) 17, 26, 29 (Xinle SV74:49, T12:2, SV73:5) 18, 23, 25, 30, 32 (Shunshantun M9:3, H1:1, H1:2, F2:1, F1:1) 19-22, 24, 28, 31 (Wanliu 88H3:3, 88T30②:3, 86TG1②:11, 86H2:10, 88T26②:1, 88T11③:2, 86H2:10) 27 (Fushundongshan)

have been an imported cultural factor, most probably borrowing from the feet of the plain *yan* steamers from the early Yueshi culture through the Liaodong Peninsular.

Comparing the pottery from the Ping'anpu culture Phase II and the early Gaotaishan culture Phase I, more types of finds have been made from the latter. Apart from cylindrical *guan* jars with vertical handles, *pen* vessels with vertical handles, and bag-legged *yan* steamers discovered from the Ping'anpu culture Phase II, cylindrical *li* tripods and basin-shaped *li* tripods, both with vertical handles are also discoveries from the Gaotaishan culture Phase I. Therefore, it can be speculated that the two new styles of pottery of the latter culture may have been created by combining the features of cylindrical *guan* jars, *pen* vessels, and bag-legged *yan* steamers of the former culture. The emergence of the imported *li* tripods and the new styled *li* tripods in the Gaotaishan culture not only marks a new stage in the cultural history of the Liaoxi Plain, but also introduces a prosperous period of tripods in the Gaotaishan culture which is represented by plain *li* tripods and plain *yan* steamers. Therefore, the Ping'anpu culture Phase II can be viewed as the predecessor of the Gaotaishan culture.

However, no one could tell where the Gaotaishan culture had gone for a long period due to the scant archaeological discoveries concerning cultures beyond the Gaotaishan culture in the Liaoxi Plain. It was not until September 1990 that Zhongpei Zhang proposed that "the Upper Xiajiadian culture developed from the Gaotaishan culture" (Zhang, 1991) at the Bohai (or Bohai Sea) Rim Archaeology Seminar in Dalian. Later in October 1991, Yonggang Zhu raised the similar proposition in his paper submitted to the Eighth Annual Meeting of the Chinese Archaeological Society (Zhu, 1996). Their viewpoint still prevails nowadays.

The pottery assemblage of the Gaotaishan culture shares many commonalities with that of the Upper Xiajiadian culture. First, for example, they are all reddish-brown pottery made out of coarse sand, and produced through a unique **clay-collar-piecing method** (by sectioning a whole vessel into different clay collars for shaping and then piecing them together for firing). Second, due to the low temperature in the heat control, both assemblages show a loose texture. Third, almost all pottery is not decorated, but most of its surface is either polished or scraped. Fourth, great consistency can also be identified in the everted and overlapping lip on the rim, the straight belly/body of a *li* tripod, the lugs attached to the outer wall, and bridge-shaped ears of the pottery. Fifth, the similarities are also embodied in the type combination of pottery, which consists of *li* tripod, *yan* steamer, *ding* tripod, *guan* jar, *pen* vessel, dou stemmed bowl, cup, etc. Among these, tripods (*li* tripod, *yan* steamer, and *ding* tripod) of both cultures are not only similar in shape, but also share a similar development trajectory from the Gaotaishan culture to the Upper Xiajiadian culture (see Fig. 9.8). For example, their straight-bellied *li* tripods and the *yan* steamers may have the same ancestor, and the *li* and *ding* tripods, both with ring handles from the Upper Xiajiadian culture may have been created by combing features of the *guan* jars and flat-based *ding* tripods from the late Gaotaishan culture.

The Gaotaishan culture of the Xia and Shang periods was mainly distributed in the northern Liaoxi Plain while the Upper Xiajiadian culture in the West and the East Zhou periods mainly lived in the highlands of the Liaoxi Plain, to be specific, the

		<i>Li</i> tripod with lugs	<i>Li</i> tripod with ring handles, <i>guan</i> jar with ring handles, <i>ding</i> cauldron	<i>Yan</i> steamer
Upper Xiajiadian Culture	Late Phase	 	  	
	Middle Phase	 		
	Early Phase	 	 	
Gaotaishan Culture	Late Phase	 	  	
	Early Phase			

Fig. 9.8 Comparison chart of the kinship between tripod pottery in the Gaotaishan culture and in the upper Xiajiadian culture 1, 11 (Xiajiadian, Chifeng T7①:2, H5:15) 2-7, 10, 12 (Sacrificial pit in Longtoushan Area II, Hexigten Banner 1:6, T0803①:1, H11:3, T0902①:1, T0203②:4, Sacrificial pit 2:5, H70:1, H54:3) 8 (In front of Chifeng Mountain 98 (IV) H125④:2) 9 (Dajing ancient copper mine in Linxi F2:1) 13 (Unearthed from Longtoushan, Hexigten Banner) 14, 18, 20–22 (88 Ping'anpu H1012:1, H3075:1, T103④:7, H1018:3, H3052:5) 15, 19 (76 Donggaotaishan T1H1:3, 5) 16 (Unearthed from Jiguanshantun, Zhangwu) 17 (74 Donggaotaishan S7450)

basins of the Xar Moron River, Laoha River and Jiaolai River. As the two cultures are chronologically successive, the kinship between their pottery is obvious. Therefore, it can be assumed that the Ping'anpu culture Phase II might have developed into the Gaotaishan culture, then moved westward to the Xar Moron River basin under certain forces in the early Western Zhou. After the Upper Xiajiadian culture was born there in the mountainous region, it gradually expanded southwards to the Laoha River basin and Jiaolai River basin. In its process of travelling from east to west, this culture may also have absorbed factors from other cultures. A case in point is the *li* tripods with udder-shaped legs from the Upper Xiajiadian culture (Fig. 2.4: 3, 7), which are evident descendants of similar artifacts from the Weiyingzi culture (Fig. 2.2: 14) in Fuxin, Liaoning.

In conclusion, the Ping'anpu culture, the Gaotaishan culture and the Upper Xiajiadian culture should belong to the same cultural system, which may be referred to as

the Gaotaishan Cultural System. The most distinctive features of this system are the reddish-brown pottery made out of coarse sand, the everted and overlapping lip, the plain vertical handles, and the *li* tripods with plugs and a straight belly.

9.1.4 The Cultural System from the Lower Xiajiadian Culture (Southern Branch) Through Tazhao Culture Phase I & II to the Upper Zhangjiayuan Culture System

The lower Xiajiadian culture covers a wide range of areas, including the mountainous area of Liaoxi in Northeast China, and the northern region of North China to the south of Yanshan Mountain as well. The lower Xiajiadian culture can be categorized into two types, with Yanshan as the boundary, based on the regions and cultural connotations: the Southern Branch and Northern Branch. These names are used for convenience in subsequent narration.

The lower Xiajiadian culture (Southern Branch), distributed in the area south of Yanshan Mountain, is also called the Datuotou culture. Its development trend remains uncertain, for few related materials have been discovered. However, the latest report on the excavations from the Tazhao site in Fangshan district, Beijing, provided new clues for further understanding of the development of the lower Xiajiadian culture (Southern Branch). Based on the analysis of the report, the remains of Shang and Zhou periods unearthed at the Tazhao site can be divided into five phases, that is, five different cultures, which include Tazhao phase I and II, two newly discovered different archeological cultures; Tazhao phase III, the upper Zhangjiayuan culture; and phase IV and V, the Yan cultures in Western and Eastern Zhou periods respectively. The report also suggests that the first three phases are the same culture in three developmental stages based on their cultural relations (Beijing Municipal Institute of Cultural Relics, 1999). Mr. Zhang Zhongpei, in his preface to the report on *Zhenjiangying and Tazhao*, further affirmed Tazhao phase I, II, and III as the continuation of the lower Xiajiadian culture (Southern Branch) and confirmed that Tazhao phase III, namely the upper Zhangjiayuan culture, was identical to the Northern Yan culture during the reign of Shaogong. Consequently, the lower Xiajiadian culture (Southern Branch) was assumed to have developed into the Northern Yan culture represented by the upper Zhangjiayuan culture across Tazhao phase I and II and finally merged into the Yan culture of Western Zhou period in the reign of Shaogong (Zhang, 2005). This culture is referred to as the lower Xiajiadian culture (Southern Branch) for convenience in subsequent narration.

The leading direction in the development of the lower Xiajiadian culture (Northern Branch) still remains unclear, due to the limitations in the available materials and current knowledge, and thus it will not be addressed here.

9.1.5 *The Cultural System from the Xiaolaha Culture Through Gucheng Remains and the Baijinbao Culture to Hanshu Cultural System Phase II*

The Nenjiang River Basin nurtured the Xiaolaha culture, Gucheng remains, Baijinbao culture, and Hanshu culture phase II. They coexisted in the same geographical region and succeeded each other from the Xia period to the Western Han dynasty. Their pottery revealed the cultural characteristics in different stages and apparent evolutions between these successive cultures. Therefore, in the Nenjiang River Basin, the Xiaolaha culture in the Xia and the early Shang periods, the Gucheng remains in the late Shang period, the Baijinbao culture from the Western Zhou to the Spring and Autumn periods, and the Hanshu culture phase II from the Warring States period to the Western Han dynasty belong to the same cultural system (referred to as Xiaolaha Cultural System), with a relationship of inheritance and development.

During the Xiaolaha culture, the earliest culture in this region, flat-bottomed plain pottery was common, with nipple and vertical-shaped handles as well as platform bottoms (false ring feet). The basic types involved the flat-bottomed cylindrical *guan* jar, *weng* urn, *hu* vessel, and single-eared *bei* cup, as well as *wan* bowl with a platform bottom. Despite the current difficulty in finding the compatible remains of its earlier counterparts, it is apparent that the main component of this culture still retains much of the tradition of the Neolithic flat-bottomed cylindrical vessels in the Northeast. Therefore, no major changes have taken place in view of the overall pottery culture, though the occurrence of the plain pottery *li*-tripod like Baijinbao 86F3028:3 in the Xiaolaha culture period indicates the explicit difference from the previous Neolithic remains. Apart from the new shapes such as the *hu* vessel, *weng* urn, *wan* bowl, and *bei* cup, flat-bottomed vessels still make up the majority of the overall pottery shapes (Fig. 1.7).

The pottery in the period of the Gucheng remains can be divided into two types (Fig. 1.9). One type is represented by flat-bottomed pottery, whose major shapes, include the *guan* jar, *weng* urn, *hu* vessel, *bei* cup, and *wan* bowl, etc. The other type is characterized by the high-necked globular *li* tripods, with borders decorated in applique pattern and cord pattern. In comparison to the Xiaolaha culture, no change has been observed in the basic type of flat-bottomed pottery in the Gucheng remains, with the nipple and vertical shaped handles still prevalent, and a few even retaining the inherited style of the platform-based bottom. In particular, the shapes of the cylindrical *guan* jar, globular *weng* urn, *hu* vessel, *yu* vessel, and the *bei* cup with handles, etc. are inherited from of the Xiaolaha culture. This demonstrates that the Gucheng remains were derived from the Xiaolaha culture (Fig. 9.9). The major difference between these two cultures lies in the occurrence of the cord patterns and the comb patterns with geometric shapes and animal shapes in the flat-bottomed pottery of the Gucheng remains. The cord pattern may have been influenced by the surface decoration of the foreign globular *li* tripods with cord patterns, while the comb pattern may have been a new factor with local characteristics and prevalent in the subsequent Baijinbao culture. In addition, differences can be observed in the

shapes and sources of tripods, though only a small amount of pottery *li* tripods emerged, both in the Xiaolaha culture during the Xia to the early Shang periods and in Guchen remains during the late Shang period. Considering the shapes, the *li* tripod of the Xiaolaha culture was probably derived from the early stage of the Gaotaishan culture in Liaoxi Plain. Such *li* tripods had no impact on the decoration pattern of other pottery from the Xiaolaha culture in the Nenjiang River Basin, since no decoration was discovered on the surface. The pottery *li* tripod from the Gucheng remains was assumed to be a factor from the Weiyngzi culture in Liaoxi mountainous area, judging from the decoration and shapes. The cord pattern on the *li* tripods made a significant impact on the pottery of the Gucheng remains in the Nenjiang River Basin, which was embodied by the conversion of the cord pattern from the surface of *li* tripods into that of some flat-bottomed cylindrical *guan* jars.

In summary, two periods of the Xia to early Shang and the late Shang witnessed the successive influence and impact on the Nenjiang River Basin from two different *li* tripod cultures in the southern region. However, the majority of the pottery group still maintained the flat-bottom tradition. The direct influence of the foreign culture on the local culture was only manifested in the cord pattern in the late Shang period, with little influence on the shapes. Therefore, hardly any new shape can be detected within this period. The Xia-Shang period saw the main utilization of the traditional flat-bottomed pottery in the Nenjiang River Basin. The major change between the Xiaolaha culture and Gucheng remains was demonstrated in the periodical differences regarding the patterns and shapes of flat-bottomed pottery. The *li* tripods of the Xiaolaha culture and the Gucheng remains, with distinct origins, served as the significant age marker and proof of cultural transmission.

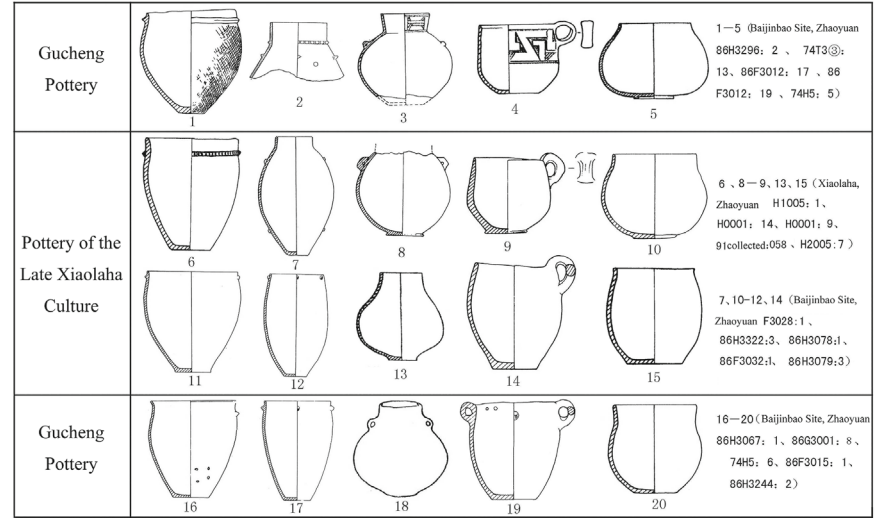


Fig. 9.9 Comparison chart of the kinship between pottery of the late Xiaolaha culture and Gucheng pottery

The emergence of the plain *li* tripods in the Xiaolaha culture was taken as an indicator of a new historical stage in archaeological culture in the Nenjiang River Basin. However, such foreign factor had little impact on the traditional local culture. When the globular *li* tripod with cord pattern was introduced in the period of the Gucheng remains, only its cord pattern was recognized and borrowed by the local culture. Actually, the realistic integration of the shapes didn't occur until the borrowed globular pottery *li* tripod with cord pattern incorporated with the local plain cylindrical *guan* jars with cord pattern. The incorporation generated two new shapes in the local area—the cylindrical *li* tripod with cord pattern and the plain cylindrical *li* tripod. It not only marked the official evolvement of the Gucheng remains into the Baijinbao culture, but also indicated the achievement of an epoch-making qualitative leap of the Nenjiang River Basin archaeological culture. As a consequence, the Nenjiang River Basin culture embarked on a new historical era with the *li* tripod as the main cookware.

Judging by the materials from the Baijinbao culture in the early stage, there was a very obvious inherited relation in the shapes of two pottery types between the *Weng* urn and *Hu* vessel and their counterparts in the Gucheng remains. It is explicit that some common geometric and animal comb patterns evolved from patterns of a similar type in the period of the Gucheng remains (Fig. 9.10). In particular, the conversion of the early cylindrical *li* tripods with either cord pattern or plain face can be detected at a glance by their shapes. The upper part was transformed from the flat-bottomed cylindrical *guan* jar and the lower part was borrowed from the bag-legged *li* tripod with globular belly. There were traces left at the joints of the two parts, which were reinforced with applique decoration in order to prevent breakage as well (Fig. 1.11).

The evolution of the pottery *li* tripod in the Baijinbao culture demonstrated the development of the techniques, which was reflected in the changes of its crotch from high to short, of its joint lines between belly and feet from visible to invisible, and of the workmanship from rough to exquisite. When the technique reached a relatively

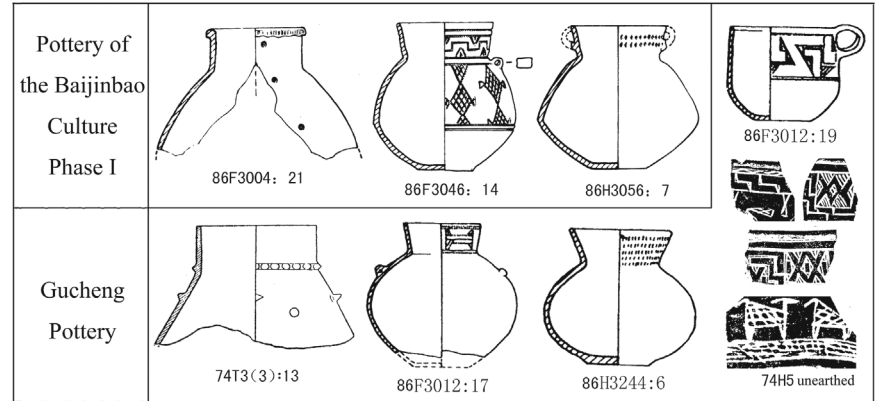


Fig. 9.10 Comparison chart of the kinship between Gucheng pottery and pottery of the early Baijinbao culture (All Samples Selected from the Baijinbao Site in Zhaoyuan, Heilongjiang)

high level after a considerably long period of time, the inventors launched another revolution in their own technique of pottery making during the Spring and Autumn period and the Warring States period. They took the initiative to adopt a new craft, with which three short udder-shaped legs, instead of three bag-shaped legs, were made under the straight-belly *guan* jar, resulting in the pottery *li* tripod. This change in the technique of pottery making shows that the Baijimbao culture actually evolved into the second phase of the Hanshu culture.

In terms of the artifact shape, the crotch of pottery *li* tripods from the Baijimbao culture is generally high. As such, the pottery legs found in the site are shaped like steamed buns and are relatively short. The crotch of pottery *li* tripods in Phase II of the Hanshu culture is generally low, so the supporting pottery legs unearthed in the site are solid trumpet shaped and high. It should be noted, regarding the differences in crafting techniques between the Hanshu culture Phase II and Baijimbao culture, that the most obvious distinction is in the crotch position. However, judging from the overall shape of the pottery *li* tripods in the Hanshu culture, Phase II was still a kind of straight bellied tubular *li* tripod without ears, which could be classified into two types of *li* tripods with cord pattern and plain *li* tripods (Fig. 9.11).

In addition, the pottery unearthed from the tombs of the Baijimbao culture bear similarities to those of the Hanshu culture Phase II. This kind of commonality is not only reflected in the similarity of their main types of artifacts, but also in the obvious progressive evolution relationship between many artifact types. Taking as an example the *hu* pot, the coexistence of at least 7 types throughout the two cultures can be revealed, with clear presentation of their evolutions (Fig. 9.12).

Based on the above analysis, a conclusion can be easily drawn that the Xiaolaha culture, the Gucheng Remains, the Baijimbao culture and the Hanshu culture Phase II are four interrelated archaeological cultures, derived from the Nenjiang River Basin successively. These four cultures succeed each other in one continuous line and belong to the same cultural system. The culture of this system, featuring the long-term utilization of flat-bottomed pottery, was influenced by pottery *li* tripods without ears from the Weiyingzi culture, and high-collared *hu* pots with a cup mouth and the *hu* pots with a straight mouth from the Gaotaishan culture in Xia and Shang periods. Therefore, in addition to the comb patterns, this cultural system is characterized by the existence of a large number of cord patterns; the popularity of earless cord-patterned *li* tripods and plain *li* tripods with a straight body; and the prevalence of high-collared *hu* pots with a cup mouth and with a straight mouth (trumpet-mouthed *hu* pots should be external factors), most earless or few with vertical ears.

9.1.6 The Culture System from the Xingcheng Culture to the Liutingdong Culture

Both the Xingcheng culture and the Liutingdong culture were distributed in the Tumen River Basin. The former was in the Xia and Shang periods, while the latter

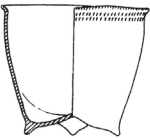
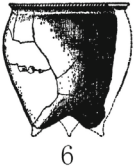
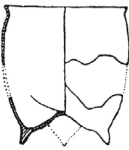
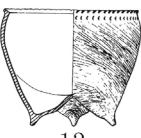
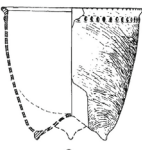
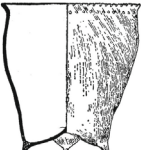
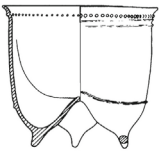
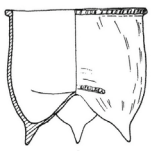
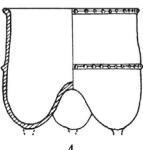
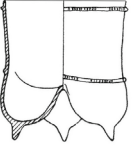
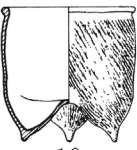
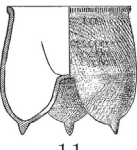
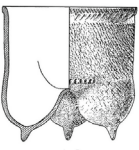
	Plain <i>li</i> tripod	<i>Li</i> tripod with cord pattern
Hanshu Culture Phase II	 1  6  7	 13  8  14
Baijinbao Culture	 2  3  4  5	 10  11  12

Fig. 9.11 Comparison chart of the kinship between pottery *li* tripod unearthed from sites of the Baijinbao culture and the Hanshu culture Phase II 1, 2, 8, 13 Xiaolaha (F0002:1, 92H1003:1, T121②:19, F0001:17) 3-5, 10-12 Baijinbao (86F3008:3, 86F3006:1, 86H3342:2, 86F3021:1, 74H1:63, 74F1:1) 6 Houqikeshu (Collected) 7 Hatugangzi (H1:28) 9 Wolong (84F103) 14 Hanshu (F104:45)

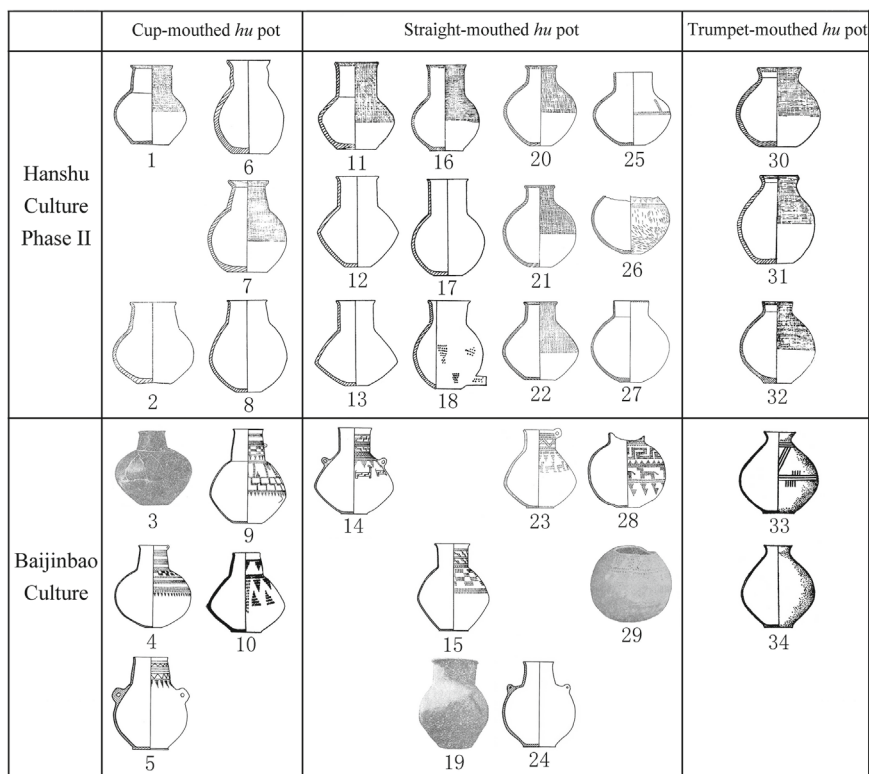


Fig. 9.12 Comparison chart of the kinship between pottery *hu* pot unearthed from sites of the Baijinbao culture and the Hanshu culture Phase II 1 (M107:90) 2 (85M101:1) 3, 33, 29, 34 (60M1:2, 81M3:1, 81M1:1, 81M1:2) 4, 5, 9, 14, 23, 15, 24 (01M63:8, 01M61:101M35:3, 01M35:1, 85M8:1, 01M63:12, 01M60:4) 6 (M214:7) 7, 21 (M207:3, 1) 8, 12, 13, 17 (Collected from Houtumu) 10, 19 (62M2:35, 60 Collected) 11, 16 (M133:36, 14) 18 (M205:2) 20 (M219:2) 22 (M159:1) 25 (M127:1) 26 (M184:1) 27 (M108:16) 28 (Collected from Niuweibagang) 30 (M145:5) 31 (M125:8) 32 (M141:52) (2, 3, 33, 29, 34 Unearthed from Xiaodengke, 8, 12, 13, 17 Collected from Houtumu, 4, 5, 9, 14, 23, 15, 24 Unearthed from Erkeqian, 28 Collected from Niuweibagang, 10, 19 Unearthed from Dongshantou, and the rest unearthed from Pingpang cemetery)

was from the Western Zhou to the Warring States periods. From the perspective of the kinship among pottery, the Liutingdong culture developed from the Xingcheng culture, so they may belong to the same cultural system (the Xingcheng culture system for short).

The pottery of the Xingcheng culture and the Liutingdong culture is characterized by plain surfaces without patterns, with flat-bottomed pottery as the majority. The most common artifacts are mainly slant-bellied *guan* jars, straight-bellied *guan* jars, bulging-bellied *guan* jars, *bo* bowls, *wan* bowls, and *pen* basins, etc. The only difference lies in the amounts of the artifacts unearthed, with more bulging-bellied *weng* urns in the Xingcheng culture, and a smaller number of ring footed bowls and *dou*

stemmed bowls in the Liutingdong culture. However, although yet to be found, it can be inferred that there were bulging-bellied *weng* urns between the late Shang period and Western Han dynasty, based on the remaining existence of bulging-bellied *weng* urns with cylindrical ears in the Tuanjie culture of the Han dynasty in the Tumen River Basin. Comparing the common pottery of the two cultures, it is obvious that at least nine types of pottery from four categories came from the same successive line, with their clear evolution (Fig. 9.13).

What needs to be explained is that the tradition of the flat-bottomed cylindrical vessels in the archaeological culture of the Tumen River Basin formed at the beginning of the Neolithic Age. Such tradition remained till the West and East Han Dynasties based on the pottery in the Tuanjie culture after the Warring States period, with no evidence of the tripod pottery found from the Xia to the Warring States periods. Therefore, compared with other areas, the Tumen River Basin might be a relatively closed area with little external influence on its cultural development. However, the Liutingdong culture evolved into the local Tuanjie culture in the West and East Han

		Slant-bellied <i>guan</i> jar	Straight-bellied <i>guan</i> jar	Bulging-bellied <i>guan</i> jar	<i>Bo</i> bowl (<i>wan</i> bowl, <i>pen</i> vessel)
Pottery of the Liutingdong Culture	Late Phase	 1 2 9 10	 3 4 11 12		 5 6 7 8 13
	Early Phase	 14 15 18 19	 16 17 20 21	 22	 23 24 25 26
Pottery of the Xingcheng Culture	Late Phase	 27 28	 29 30	 31	 32 33 34
	Early Phase	 35 36 41 42	 37 43 44	 38 45	 39 40 46 47 48

Fig. 9.13 Comparison chart of the kinship between pottery of the Xingcheng culture and the Liutingdong culture 1, 8 Xinguang, Yanji 2, 9, 10 Daliudaogou, Hunchun 3, 6, 11 Beishan Cemetery, Hunchun 4, 12, 13 Jincheng, Wangqing 5, 16, 23 Shiyan, Tumen 7 Xinxingdong, Hunchun 14, 18, 22, 24, 26 Yinghua, Hunchun 15 Lower Xin'anlv 17, 19 Liutingdong, Yanji 20 Jingu, Yanji 21, 25 Nanshan, Longjing 27–48 Xingcheng, Helong

Table 9.1 Evolution of five archaeological cultural systems in Northeast China from the Xia to Warring States period and comparison of their temporal and spatial relations

period	stage	the Western Block (the Greater Khingan Mountains – Yanshan Mountain Cultural Belt)			the Eastern Block (the Changbai Mountain – Qianshan Mountain Cultural Belt)			
		the Nenjiang River Basin	the Liaoxi mountainous area	the Liaoxi Plain	the southern part of Liaodong	the northern part of Liaodong	the West Songhua River	the Tumen River Basin
the East and the West Zhou periods	the Warring States period	the Hanshu culture Phase II			the Shuangfang culture (late stage)		the Xituanshan culture (late stage)	the Dongtinghu culture (late stage)
	the West Zhou to the Spring and Autumn periods	the Baijinbao culture	the Upper Xiajiadian culture		the Shuangfang culture (early and middle stage)		the Xituanshan culture (early and middle stage)	the Dongtinghu culture (early stage)
the Xia and the Shang periods	the late Shang period	Ancient City Remains		the Gaotaishan culture (late stage)	Shuangtuozi culture Phase III	the Machengzi culture (late stage)		the Xingcheng culture (late stage)
	the Xia to the early Shang periods	the Xiaolaha culture		the early stage of Gaotaishan culture	Shuangtuozi culture Phase II	the Machengzi culture (early stage)		the Xingcheng culture (early stage)
cultural system		① the Xiaolaha cultural system	② the Gaotaishan cultural system	③ the Shuangtuozi cultural system	④ the Machengzi cultural system	⑤ the Xingcheng cultural system		

Dynasties, while another branch eventually departed from its origin, traveling westward to the West Songhua River Basin, and it formed the remains represented by M1 of the Huangyuquan Zhushan mountain in the early Han Dynasty (Fig. 7.6). The revelation of this phenomenon not only shows that the archaeological culture of Tumen River Basin had a certain impact on the outside world during the peak of its development, but also affirms Mr. Qiao Liang’s assumption in the early 1990s that “the source of such remains as M1 of the Huangyuquan Zhushan mountain may be tracked in the Changbai mountain area to the east of Jichang area⁴” (Qiao, 1993).

The confirmation of the above six cultural systems is a definition of the kinship between archaeological cultures and the people who created them. From the distribution area of the six cultural systems, the archaeological cultures of five are mainly confined in the Northeast of China, except the lower Xiajiadian culture system (South Branch) in the north of North China to the south of Yanshan mountain. Table 9.1 demonstrates the development and the space–time relationship of the other five.

9.1.7 Other Cultural Remains in the Mountainous Region of Liaoxi

Among the seven kinds of archaeological culture (remains) with local characteristics found in the Liaoxi mountainous area, only the upper Xiajiadian culture has been confirmed as the successor of the Gaotai Mountain culture. For the remaining six

⁴ It refers to the current surrounding area of Jilin City and Changchun City.

archaeological cultures including the Lower Xiajiadian Culture (North Branch), it is difficult to identify their respective origins and their cultural inheritance. Therefore, in order to clarify the problem and facilitate further research, this book will only focus on the analysis and discussion of their respective cultural structures or the sources of different cultural elements, rather than the identification of the longitudinal cultural inheritance and cultural systems in the absence of more evidence.

The lower Xiajiadian culture (North Branch) is characterized by the cord-patterned *yan* steamer, zun-styled *li* tripod, plain bulging-bellied *li* tripod and plain *bu*-styled *li* tripod. The origin of this culture is complex, as it not only inherited the local cultural elements of the Hongshan-Xiaoheyan cultural system (such as the *zun* wine vessel, *bo*-shaped *ding* cauldron, and shallow *dou* stemmed bowl), but also absorbed cultural elements of Hougang Phase II represented by the cord pattern from the Central Plains (such as the cord-patterned *yan* steamer without waistline, cord-patterned middle-mouthed *guan* jar with a deep belly, cord-patterned deep-bellied *pen* vessel with lugs). A new artifact type was also observed, upon the integration of these two cultural elements (such as the zun-styled *li* tripod). In addition, some elements of the Erlitou culture from the Central Plains (such as the *gui* tripod and *jue* cup) could be found. As for the development direction, some scholars believe that this culture may be partly integrated into the subsequent Weiyngzi culture (Guo, 1987). However, the comparison between their artifacts reveals its differences from the Weiyngzi culture. Firstly, their cord patterns are not the same. Most of the cord patterns in the Weiyngzi culture were scratched and unclear. Secondly, the shapes are very different, with the cylindrical plain *li* tripod rarely seen, and are incomparable to other pottery. In addition, the Weiyngzi culture mainly features brown pottery mixed with sand. This is the primary difference between the pottery in the two cultures. Therefore, judging by the current artifacts, the location of the lower Xiajiadian culture (North Branch) is an issue that requires further exploration and discussion.

The connotation of the Weiyngzi culture is vague, with different views put forward on the cultural characteristic, time, stage and distribution in recent years. This book defines the time range of the Weiyngzi culture as the late Shang period. The area was centered on the Dalinghe River Basin and Xiaolinghe River Basin, since few similar remains were found in the surrounding areas. The basic artifact type is represented by a batch of remains unearthed from the rear tombs of Kazuo, including Phase III remains of the Pingdingshan site at Fuxin and Phase III remains of the Xiangyangling site at Yixian County, with the bronze dagger with curved edge excluded.

Quite a few scholars believe that the Weiyngzi culture incorporated elements of three different cultures during its formation. Besides inheriting part of the local Lower Xiajiadian culture (North Branch), it also absorbed the representative cultural element of flower-rimmed *li* tripods with cord pattern from the Zhukaigou culture in the western Great Wall area and other elements from the Gaotaishan culture in the eastern area. The main component of the Weiyngzi culture reflects the characteristics of Gaotaishan culture. For example, the high-collared *li* tripods of the Weiyngzi culture, which were previously assumed to have been introduced from the west, may have actually developed from the high-collared *ding* tripods of the Gaotaishan

culture, as they exhibit similar applique patterns. From the high-collared *ding* tripods of the Gaotaishan culture excavated in Zhanggutai, Zhangwu County (Fig. 3.6: 9), to the high-collared *ding*-style *li* tripods with applique patterns of the Weiyngzi culture unearthed in nangoumen, Kazuo County (Fig. 3.6: 3), then to H201:1 high-collared applique-patterned *li* tripods of the Weiyngzi culture unearthed in Pingdingshan, Fuxin County (Fig. 2.2: 21), a clear culture evolution process can be observed. Therefore, with more artifacts unearthed in the future, it is possible to prove that the Weiyngzi culture is a sub-type of the Gaotaishan culture. It is also reasonable to speculate that the Weiyngzi culture was later integrated into the Upper Xiajiadian culture of the Western Zhou to the Spring and Autumn periods during the westward migration of the Gaotaishan culture. The *li* tripods with bag-shaped feet of the Upper Xiajiadian culture thus probably evolved from the Weiyngzi culture. These inferences remain to be validated by further studies.

East of Nulurhu Mountain, in the area of the Dalinghe River basin and Xiaolinghe River basin, the 'Linghe Remains' are located. The 'Linghe Remains' stand for a culture appearing later than the Weiyngzi culture. The representative artifacts of the Linghe Remains are curved-blade bronze daggers, but no tri-leg pottery has been found. The Linghe Remains reflect a period spanning from the Western Zhou period to the arrival of Yan culture of the late Warring States period. Findings of the Linghe Remains are mainly flat-bottomed pottery. However, due to the heterogeneous nature of the pottery and the lack of systematic excavation reports, no consensus has yet been reached regarding the origin of the Linghe Remains. One proposal relates the Linghe Remains to the Weiyngzi culture, but the distinctions between the two reflected by their different types of representative pottery and the short bronze daggers argue the contrary. In general, some of the artifacts indicate a relation between these remains and the contemporaneous archaeological sites of the Upper Xiajiadian culture, the Shuiquan Remains and the Jingzigou Remains. Some other artifacts reflect the influence from the Central Plains culture. To be specific, the bronze *ge* dagger axes and the stemmed bronze arrow heads with double wings are both of the Central Plains style. Also, the *hu* vessels, which are double-lugged and bulge-bellied, resemble the *hu* vessels of the Yuhuangmiao culture (the Jundushan culture) in Hebei Province in terms of shape and style (Yang, 2004). The prominent part of the remains, including lip-folded tube-belly pots, high-necked plain pots, and curved-blade bronze daggers, indicate a close relationship with the Shuangfang culture of the same era in the Liaodong area. This group of artifacts reflect the influence of the Shuangfang culture after it expanded northward and westward since the Western Zhou period and finally reached this place. However, in the area between the Linghe Remains and that of the Shuangfang culture, no remains of the West and the East Zhou periods have been discovered yet. Therefore, further evidence from field archaeology in this area is required to demystify the relationship between the Linghe Remains and the Shuangfang culture.

West of the Nulurhu Mountain, in the basin areas of the Xar Moron River, Laohahe River, and Jiaolaihe River existed the Upper Xiajiadian culture spanning from the Western Zhou period to the Spring and Autumn period, which evolved from the Gaotaishan culture after the latter moved westward.

Later remains of the early and mid-Warring States period in this area include the Shuiquan Remains and Jinggouzi Remains (including the Tiejianggou Remains). Judging from the available materials, these two kinds of remains not only share commonalities (similar artifacts, such as double-eared *guan* jars, stacked lip *guan* jars, etc.), but also have individual characteristics (for example, the absence of bulging *weng* urns and *li* tripods in the Shuiquan Remains and the absence of horn-handled *guan* jars in Jinggouzi Remains). Regarding the two types of remains, it is unclear whether they belong to the same culture or different cultures. Their respective origins are also unclear, although the influence from the late period of the Linghe Remains in the east can be seen in both types of remains. Since some artifacts with features of local cultures (clearly not Yan culture artifacts) are found in the remains of the Yan culture (Zheng, 2005), which arrived in this area in the late Warring States period, it is possible that these artifacts with local cultural features belong to the two types of remains. Therefore, one conjecture is that the two types of remains may have been integrated into the later Warring States Yan culture.

The Wudaohezi Remains of Lingyuan City, which is also noteworthy, was roughly contemporaneous with the late stage of the Linghe Remains, the Jinggouzi Remains as well as the Shuiquan Remains. Regarding this type of remains, only one cemetery of 11 tombs was identified. Burial goods of these tombs include bronze ware only, with no pottery having been found (Liaoning Provincial Institute of Cultural Relics and Archaeology, 1989). These bronze wares are of diverse styles, including the Central Plains style (the willow-shaped sword, the *ge* dagger ax with a long *hu* dewlap of three fastening holes, and the chariot accouterments), the Northern Steppe style (the triangular, human-shaped and linked-bead shaped pendants, horse-shaped plates and the bull-shaped gold plates) as well as the style of the Linghe Remains (the ray-shaped frontlets). The Wudaohezi Remains is considered to be representative remains of the late Shanrong culture in the northern Hebei province by some researchers (Jin & Wang, 2001). Some other researchers believe that these tombs are similar, in terms of the tomb system and burial customs, with the Xianbei tombs of the Donghu ethnic groups in Wangong Township and Dalai Nur District, which are dated to a later age than the Wudaohezi Remains (Zhu, 1997). Still, others argue that these remains should not be attributed to any currently known culture in Liaoxi and its neighboring areas (Wang, 2004). That is, the questions concerning the source and whereabouts of the Wudaohezi Remains are still unanswered.

In conclusion, regarding the archaeology in Northeast China from the Xia period to the Warring States period, few questions concerning the remains and cultures discovered in the mountainous area of Liaoxi have been clarified, although the excavation work in this area had the earliest start, with the most exposed materials and research results. Except for the Upper Xiajiadian culture, the attribution of the other cultures and the relationship among them are all unclear. Therefore, for a long time, the mountainous area of Liaoxi will remain the focus and sticking point of the archaeological work in Northeast China.

9.2 Communication and Expansion: An Analysis of the Cultural Landscape during the Xia, Shang, and Zhou Periods

If we investigate the communication between archaeological cultures in terms of four periods, namely, the Xia to early Shang period, the late Shang period, the Western Zhou to Spring and Autumn period, and the Warring States period, we can distinguish two different communication patterns. During the first two periods, communication among cultures is mainly manifested as relatively stable and equal exchanges between neighboring cultures. Whereas in the last two periods, the communication pattern features the expansion of strong cultures and the migration of weak cultures, and the penetration of cultures from faraway.

9.2.1 *Communication and Influence from Cultures Outside the Region in the Xia and Shang Periods*

The Xia to the early Shang period is a critical transitional stage for the archaeological cultures in Northeast China. One significant sign of this stage is the introduction and spread of the three-legged pottery from the cultures outside this area. However, different regions were affected by different cultures.

The cultures in the mountainous area of Liaoxi were influenced by the Central Plains and evolved into the Lower Xiajiadian culture, represented by cord-patterned *yan* steamers and basins and *li* tripods in the style of the *zun* wine vessel. The cord-patterned *yan* steamers and basins indicate a foreign origin (Fig. 2.1: 13, 14, 17–20), while the *zun*-styled *li* tripods are of a distinctive shape, exhibiting an integration of foreign and local styles, resulting from a collision between cultures (Fig. 2.1: 3, 4). Therefore, the Lower Xiajiadian culture is a result of influence of the culture in the Central Plains on the local culture, and the integration of the two cultures has been realized through accepting some foreign cultural elements.

The southern part of Liaodong area was mainly under the influence of the contemporaneous cultures from the Shandong peninsula. This influence is reflected by the Shuangtuozi culture Phase I, which combined the Longshan culture from Shandong, typified by the tri-legged artifacts like the *ding* cauldron and *gui* tripod, and the local culture, which featured flat-bottomed pottery (Fig. 4.2: 54, 55). Moreover, the Shuangtuozi culture further developed into its second phase, exhibiting a coexistence of the local flat-bottomed pottery and the typical artifacts of the Yueshi culture in Shandong, the plain *yan* steamers and pottery with raised ridge patterns (Fig. 4.3: 24–40). The remains of the Shuangtuozi culture Phase I and II manifest as a coexistence of foreign culture and local culture with no newly developed artifacts, which indicates that they have shown rejection or resistance in dealing with foreign cultures. This stubborn cultural character and tenacious sense of xenophobia may have stopped both the Longshan culture and the Yueshi culture from the Shandong

Peninsula from replacing the two phases of the Shuangtuozi culture and occupying the southern part of the Liaodong Peninsula. It is precisely this persevering spirit of self-development that has maintained the flat-bottomed pottery such as urns, jars and pots and rejected three-legged cookers from the Xia period to the Warring States period.

The Remains of Ping'anpu culture Phase II lies in the Liaoxi Plain, between the Lower Xiajiadian culture and the Shuangtuozi culture Phase I and II. Although it is geographically close to the Lower Xiajiadian culture, the foot tip of a tripod discovered in the remains tells another story. It is likely from the plain pottery *yan* tripod, a steaming vessel, indirectly spread from the Yueshi culture in Shandong through the Liaodong Peninsula, rather than from the Lower Xiajiadian culture, as its characteristics are solid feet and patterns. (Fig. 3.1: 12, 17) Upon their arrival, the exotic style of the plain tripods was incorporated with the local traditional flat-bottomed pottery, resulting in the plain *li* tripod with a cylindrical belly, the plain basin-style *li* tripod and the small plain pottery *li* tripod of the early Gaotaishan culture (Fig. 3.2: 19; Fig. 3.3: 34–37, 39). This incorporation indicates that both the remains of Ping'anpu culture Phase II from Xia to the early Shang period and the remains of the early Gaotaishan culture maintained a positive attitude to foreign cultures. They not only accepted cultural elements, but also integrated the elements into their own pottery. In this regard, it is as inclusive as the Lower Xiajiadian culture in the west, but different from the Shuangtuozi culture Phase I and II in the south.

Although all of the above three archaeological cultures, located in the frontier area of the south part of the Northeast, possessed tripods simultaneously, only the Gaotaishan culture transmitted the tripod vessels further northward and eastward to the Xiaolaha culture and the early Machengzi culture. Consequently, these two inland archaeological cultures from the Xia to the early Shang period (Fig. 1.7: 1; Fig. 5.6: 28, 29, 35–38, 40) were discovered with tripod vessels similar to the plain *li* tripod of the Gaotaishan Culture. In the west, the Lower Xiajiadian culture of the same period, despite having the most advanced technology and culture, failed to have evident impact on the other cultures in the Northeast, although it extended toward the North China region, south of Yanshan. Instead, it incorporates the plain *li* tripod from the Gaotaishan culture (Fig. 2.1: 5, 6). In the south, the Shuangtuozi culture Phase I and II have long been confronted with the culture from the Shandong Peninsula. It did not engage in expanding its culture to the northern region. When the two representative archaeological cultures in the frontier area, actively or passively focused on competing with the cultures of the Central Plains and Shandong at the same time, the Gaotaishan culture had the opportunity to influence and penetrate the east, north, and west cultures.

The spread of the tripod vessels in the Northeast of the Xia to early Shang period can be attributed to three stages: from outside cultures to the Northeast, further spreading between cultures of this area, and the passing down of an evolved type from one culture to another. In the first stage, the *yan* tripod with cord pattern in Central Plains cultural area and the plain *ding* tripod, *gui* tripod, and *yan* tripod in the Shandong cultural area were directly passed into the Lower Xiajiadian culture in the mountainous area of Liaoxi and the Shuangtuozi culture phase I and phase

II in the southern part of Liaodong. In the second stage, the plain *yan* tripod of the Shandong Yueshi culture was transmitted by the Shuangtuozi culture phase II to the Ping'anpu culture phase II in the north of the Liaoxi Plain. Finally, the early stage of the Gaotaishan culture passed down a developed type of plain pottery *li* tripod to the Machengzi culture (early period) in the northern part of Liaodong, the Xiaolaha culture in the Nenjiang River Basin, and the Lower Xiajiadian culture in the mountainous area of Liaoxi. To conclude, the tripod pottery was spread around Northeast China by a succession of transmission, similar to a domino effect.

Xingcheng culture is the only exception out of the cultures in the Northeast that has not been discovered with tripod vessels in the Xia to early Shang period. The reason why it was not affected by other cultures may be due to its remote location in the isolated Tumen Valley area.

The cultures in Northeast China demonstrate new distribution and developing patterns in the late Shang period.

The Shuangtuozi culture Phase I and II had evolved into its third phase in the southern part of Liaodong. As the Yueshi culture from Shandong had declined in this period and the newly emerged Zhenzhumen culture had limited influence, the local traditional culture gained the opportunity of rapid restoration and development. The Shuangtuozi culture Phase III had surpassed the other cultures of the same period as indicated by the remains and excavated materials of this stage. However, from the perspective of cultural exchanges, little evidence of its impact on other cultures or the other way around has been found.

In the of Liaoxi, the Weiyngzi culture came after the Lower Xiajiadian culture. When looking at the artifact assemblage of this culture, quite a few cultural factors can be detected from the Gaotaishan culture in the eastern region (Fig. 3.6: 1–5). These factors suggest that the Gaotaishan culture (the late stage) still maintained its strong influence on the western region at this stage. Meanwhile, the tendency of its eastward expansion is more obvious. Its eastward influence in this stage was also stronger than that from Xia to early Shang period. This enhancement in influence is confirmed by the discovery of more typical Gaotaishan cultural artifacts, such as the *li* tripods, *yan* tripods, *hu* jars, and *wan* bowls in the pottery assemblage in the late stage of the Machengzi culture than in its early stage (Fig. 5.3: 78, 80).

Moreover, in this period, the Weiyngzi culture, active in the basin areas of the Dalinghe River and the Xiaolinghe River, exerted great influence on the northern Nenjiang River Basin, replacing the Gaotaishan culture which previously heavily influenced it. The Weiyngzi culture transmitted the relics represented by the *li* tripod with a bulging belly and cord patterns northward to the Gucheng Remains in Nenjiang River Basin (Fig. 1.9: 1, 2). It also played a crucial role in changing the appearance of the Gucheng Remains and facilitating the formation of the Baijinbao culture in the later stage. On the other hand, a small number of pottery *ding* cauldrons in the assemblage of the late Gaotanshan culture indicates that besides shedding influence on the Machengzi culture, it also absorbed some cultural elements from the latter during their interactions.

The Xingcheng culture in the Tumenjiang River Basin, as in the previous stage, had only completed the internal changes of the same archaeological culture, but had not yet interacted with external cultures.

In these two periods, the Xia to early Shang period and the late Shang period, each culture had its relatively fixed developing area. That is, the culture succession of these two stages was completed in the same area. The culture exchange and interaction were mainly manifested as one-way or two-way influence between adjacent cultures. Some cultures, such as the Gaotaishan culture, were more active and proactive in the process of cultural exchanges and spread during this period with a strong influence on the cultures in the surrounding areas, especially the Machengzi culture in the eastern area. Nevertheless, its influence was still limited in general, as it did not change the local cultural traditions in the areas under its influence, let alone the overall culture distribution structure in the Northeast. With the background of the relative stability of the cultural structure and the relative balance of the power development in the Xia and Shang periods, the Gaotaishan culture can be regarded as a relatively active culture during this period, but not a superior one.

9.2.2 Cultural Expansion, Migration and Substitution in the Western Zhou and Eastern Zhou Periods

From the Western Zhou period to the Warring States period, the layout of the cultures in the southern part of Northeast China had undergone two major changes. One change resulted from the rapid expansion of the Shuangfang culture in the Liaodong area from the Western Zhou period to the Spring and Autumn period, and the other from the northward advance of the Yan culture in the Central Plains during the Warring States period.

During the Western Zhou period to Spring and Autumn period, the Shuangfang culture, which evolved from the third phase of Shuangtuozi culture in the south part of Liaodong, reached its developmental peak. With the most advanced bronze weapons of that time such as the curve-edged spear and the curved-edged sword, the Shuangfang culture launched a large-scale expansion, boosting its central activity areas from the south end of the Liaodong Peninsula to the entire Liaodong Region within a short period of time. The peripheral areas under its influence covered almost half of the Northeast China and the adjacent Korean Peninsula on the east.

The Shuangfang culture reached the following areas and had great influence on its traditional culture there. Judging from the available materials, from the Western Zhou period to the early and mid-Warring States period there were a large number of curve-edged bronze swords and pottery *guan* jars with thick lips and a cylindrical belly (Fig. 3.7: 1, 12, 11, 22; Fig. 2.8) in the Linghe Remains located in the mountainous area of Liaoxi, separated by the Liaoxi Plain, far away from Liaodong. These artifacts are the same or similar to those of the Shuangfang culture. A small number of such artifacts were also found in the Shuiquan Remains of the early and middle Warring

States period, and in the upper Xiajiadian culture in the west of the Nulurhu Mountain from the Western Zhou period to the Spring and Autumn period (Fig. 2.9: 3–5, 10, 11). In addition, the stone assembly unit of a curved-edged bronze dagger has been found in the remains of the Hanshu culture phase II during the Warring States Period in the Nenjiang basin (Archaeology Specialty, Department of History, Jilin University, 1982). Pottery and bronze wares resembling those of the Shuangfang culture were also found in the Xituanshan remains in the West Songhua River basin from the Western Zhou period to the Warring States Period (Fig. 6.9: 1, 2, 5, 6, 9, 10; Fig. 6.11). It was shown that the Xinyanli Phase I type and the Xinyanli Phase II type remains appeared on the Korean Peninsula as early as in the Xia and Shang periods (Wang, 1993b). They are closely related to the Shuangtuozi Phase I, II and III culture in the south part of the Liaodong (Wang, 1993a, b). In the West and the East Zhou periods, both the spinning-top-shaped pottery of Xinyanli Phase III and the pottery *hu* pot of the Upper Meisongli were closely related to their counterparts of the Shuangfang culture. In addition, the curve-edged bronze daggers found in Jingudong, Longxingli, and Xipudong on the Korean Peninsula show similar shapes to the curve-edged sword of the Shuangfang culture (Jin, 1983).

Shuangfang culture is viewed as an influential culture dating from the Western Zhou to the Spring and Autumn period. Its expansion directly led to the occurrence of the following two events. First, the Machengzi culture, distributed in the northern Liaodong during the Xia and Shang periods, was under great pressure due to the northward advance of the Shuangfang culture. It was then forced to move northward to the West Songhua River basin, where it evolved into the Xituanshan culture which existed from Western Zhou to the Warring States periods. A small number of elements of the Xituanshan culture were integrated into the Shuangfang culture. Second, the Gaotaishan culture, prevalent during the Xia and Shang periods, was forced to move westward from the northern Liaoxi Plain to Xar Moron River basin in the mountainous region of Liaoxi. It then evolved into the upper Xiajiadian culture there and later expanded to the Laoha River and Jiaolai River basin.

A certain relationship exists among the expansion of the Shuangfang culture, the migration of the Machengzi culture and the Gaotaishan culture, and the changes of culture pattern in the southern Northeast. First, the expansion of the Shuangfang culture directly led to the changes of culture pattern in northern Liaodong and the Liaoxi Plain. Second, the northward movement of the Machengzi culture and the westward movement of the Gaotaishan culture successively led to the change of culture pattern in West Songhua River basin and the mountainous region in Liaoxi. Thus, there might be a certain causal link among culture expansion, culture migration and culture patterns. The link is similar to a domino effect when one event initiates a succession of similar events.

If the rapid expansion of the Shuangfang culture from Western Zhou to the Spring and Autumn period for the first time led to the change of pattern in archaeological culture in southern Northeast, then the northward movement of the Yan culture in the Central Plains during the Warring States period led to the second major change of culture pattern in this area.

During the early and middle Warring States period, a small amount of Yan culture flowed into the Northeast. However, due to its limited impact, these culture factors didn't influence the local traditional culture too much. Even those which existed in the mountainous region of Liaoxi during early and middle Warring States period, such as the Shuiquan Remains, the Jinggouzi Remains and the late phase of the Linghe Remains, developed rather independently with little influence from the Yan culture. However, in the late period of the Warring States, a general of Yan named Qin Kai defeated Donghu, set up five commanderies, constructed the Great Wall and migrated Yan people to the Northeast for farming and guarding. These led to a great number of Yan people moving to the vast region in the southern part of the Northeast. This intrusion of the Yan culture not only directly caused the disappearance of the local traditional culture, but also realized culture substitution by fighting. Eventually, the southern regions along Yanbei Great Wall⁵ officially became part of the territory of Yan State.

Based on the findings of previous archaeological investigations and surveys, the west stretch of Yanbei Great Wall was from Chifeng, Aohan, Naiman, Kulun to Fuxin (Tong, 1982). The east stretch started from Fuxin, passing through Zhangwu, Faku, Kaiyuan, Xinbin and moving east into Democratic People's Republic of Korea according to the research conducted by historians and geologists (Li, 1982). The living areas of the Yan people had previously been generally confined south of Yanbei Great Wall. From the current archaeological findings, however, the living areas of the Yan people should be larger than that, with the evidence that ancient sites dating back to the late period of the Warring States having been found outside the Yanbei Great Wall in Erlong Lake in Lishu county, Jilin province (Siping Museum et al., 1988). Moreover, there were spacious areas where the Yan culture dating back to the late period of the Warring States was found. In mountainous regions of Liaoxi, there was a complete cultural substitution, while in Liaoxi Plain, the situation is not clear as no evidence of the Yan culture was found there. In Liaodong, where the Shuangfang culture was distributed, some elements of the Yan culture was found, but they were only a cultural penetration or integration rather than a complete substitution of the Shuangfang culture which was considered as the leading culture in Liaodong. For example, in M12, situated in Yinjia village, Lüshun county and M1 to M4, situated in Benxi Shangbu village, the Yan-style *dou* stemmed bowls and Yan-style *guan* jars (Fig. 4.28: upper left and upper right), typical of the late period of the Warring States, were excavated. However, goods unearthed from the same tomb, namely *guan* jars, *hu* pots, *dou* stemmed bowls, and bronze swords from the Shuangfang culture Phase III, were larger in number. This phenomenon indicated that during the late period of the Warring States, the Shuangfang culture in Liaodong was not completely substituted by the Yan culture. Instead, the Yan culture had been integrated with the local culture. The exact time that the culture in Liaodong was replaced by the Central Plains culture was during the later period when the Han (Nationality) cultures prevailed. This can be proven by the Han culture remains unearthed from Yinjia village in Lüshun county (Institute of Archaeology, Chinese Academy of Social Sciences, 1996).

⁵ The stretch of the Great Wall built along the northern border of the state of Yan.

Compared with the southern area, the Nenjiang River basin in the north and the Tumen River basin in the east were in a totally different situation during the West Zhou and East Zhou periods. Under no influence of cultural expansion nor cultural migration from the southern part during Western Zhou and Spring and Autumn periods, these two regions had successfully completed the transitions and transformations in the same timeline from the Gucheng Remains and the Xingcheng culture (late period) in Xia and Shang periods to the Baijimbao culture and the Liutingdong culture (early period). The transformations were achieved by the evolution of ceramic making and usage.

Apart from that, when the Yan culture moved northward and replaced the local culture in the south during the Warring States periods, the archaeological cultures in Nenjiang River Basin and Tumen River basin still achieved further development.

The Baijimbao culture along the Nenjiang River Basin, prevailing from the West Zhou to the Spring and Autumn periods, first transitioned to the early and middle periods of the Hanshu culture Phase II in the Warring States period. Then during the late period of the Warring States, it developed into the late period of the Hanshu culture Phase II represented by the late Pingyang cemetery and Dadao Sanjiazhi cemetery. The Liutingdong culture along the Tumen River Basin first transitioned from the early period (from West Zhou to the Spring and Autumn periods) to the late period (the Warring States period), and later it developed into the Tuanjie culture after the Warring States period and remains in the west regions represented by the M1 in Huangyuquan Zhushan mountain.

These new archaeological remains, further developed and then evolved from the Xiaolaha culture and the Xingcheng culture under the conditions of certain activities like fishing and hunting, and the conditions of a closed physical geographical environment, did not decline but developed further during the West Han and the East Han dynasties. It was even advanced enough to compete with the Qin and the Han cultures in the Central Plains at that time. While the reason why the Yan, the Qin and the Han cultures in the Central Plains did not reach here and take complete control was that the local cultures here were always full of vitality and connected with strong blood ties that they had survived from the Xia period through the Warring States period hitherto.

To conclude, based on variations in patterns as well as ways of interacting in different periods, the archaeological culture in the Northeast from the Xia to the Warring States period can be divided into two different situations of the Xia and the Shang periods and the West and the East Zhou periods. The cultural patterns in the Xia and the Shang periods featured a stable interaction with other cultures and a continuous development in the same region. Meanwhile, the culture pattern in the West and the East Zhou periods showed expansion, migration and substitution among different systems in the south and a continuous evolution and development in the same region in the north and east.

9.3 The Division of Two Cultural Regions and Two Cultural Belts

9.3.1 *The Division of Serial Archaeological Cultural Regions and Sequential Archaeological Cultural Regions*

The development of archaeological cultures, to a large extent, determines the variations in cultural relationships in every physical geographical region. As the relationship might be continuous or substitute, various cultural regions were formed.

When comparing the seven physical geographical regions used to establish the chronological timeline of archaeological cultures in various regions and the pedigree relationships of six archaeological culture systems shown in four development stages during the Xia to the Warring States period, the relationships between each physical geographical regions in terms of archaeological cultures can be easily seen.

Firstly, the Nenjiang River basin, the Tumen River basin, and southern Liaodong belong to the same physical geographical region as they displayed the same features in archaeological culture. The cultures in the above regions were in chronological order and belonged to the same culture system. For instance, the Xiaolaha culture in the Nenjiang River basin, the Gucheng remains, the Baijinbao culture and the Hanshu culture Phase II were in chronological order and were considered as having been transformed by and developed from each other based on the research on the relationship of the pottery unearthed in these regions. The same situations could be seen between the Xingcheng culture in the Tumen River basin and the Shuangtuozi culture Phase I, II and III, and the Shuangfang culture. The archaeological cultures in these physical geographical regions developed from the same origin, no matter how large the number and how fast or slow the rate of evolution. In other words, the archaeological cultures in these three geographical regions were from the same group of people in the same areas but in different developing periods. Therefore, it could be named 'serial archaeological cultural regions'.

Secondly, the northern Liaodong and the Liaoxi mountainous area. The commonness of the two areas is that the archaeological cultures distributed in the same physical geographical region are only chronologically related instead of belonging to the same cultural system. For example, the relics of the Xia and the Shang periods unearthed in northern Liaodong belong to the Machengzi culture of the Machengzi culture system, while the Shuangfang culture of Shuangtuozi culture system of the West and the East Zhou periods is superimposed on this culture. Although the two cultures have chronological succession, they do not belong to the same cultural system. The same is true of the Lower Xiajiadian culture, the Weiyingzi culture, the Upper Xiajiadian culture, the Shuiquan relics, the Jinggouzi relics, the Linghe relics, the Yan culture and other relics in the Liaoxi mountainous area. Because the archaeological culture contained in the above two geographical regions presents an alternation of different cultures in chronological order. In other words, the archaeological cultures contained in the two geographical regions should be the remains

of different people in the same place with chronological relationship. In order to distinguish from the previous “serial archaeological cultural region”, it can be called “sequential archaeological cultural region”.

Because in the West Songhua River basin and the Liaoxi Plain, only one archaeological culture has been found, it is difficult to determine which type of archaeological cultural region they should belong to. For example, in the West Songhua River basin, only the Xituanshan culture of the West and the East Zhou periods was found, but not cultural relics of the Xia and the Shang periods. Although it can be proved that the predecessor of the local Xituanshan culture should be the Machengzi culture in the Xia and the Shang periods in northern Liaodong, before finding and confirming the remains in the West Songhua River basin of the Xia and the Shang periods, it is still impossible to determine whether the West Songhua River basin is a “serial archaeological cultural region” or a “sequential archaeological cultural region”. Because once the Xia and the Shang periods remains in this area are found to be the same as those in the Machengzi culture, this region should be a “serial archaeological cultural region”, otherwise, it should be a “sequential archaeological culture region”. The same is true with the Liaoxi Plain.

The division of “serial archaeological cultural region” and “sequential archaeological culture region” should have universal significance. The reasons for the formation of “serial archaeological cultural region” and “sequential archaeological culture region” are mainly related to whether the archaeological culture has undergone expansion or migration. The method of distinguishing “serial archaeological cultural region” and “sequential archaeological culture region” is to make a comparative study of the temporal and spatial relationships and genealogical relationships of various archaeological cultures in the same region or several different regions.

9.3.2 *The Division of the Greater Khingan Mountains–Yanshan Mountain Cultural Belt and the Changbai Mountain–Qianshan Mountain Cultural Belt*

By comparing the spatial locations of different cultural regions and the different cultural systems contained in each cultural region against the background of natural environment, cultural characteristics and historical traditions, it is often possible to divide them into larger cultural blocks composed of different “cultural regions”. They are called “cultural belts” to be distinguished from “cultural regions”.

On the issue of how to divide the blocks of archaeological culture in the pre-Qin period in Northeast China, Prof. Zhang Zhongpei was the first to put forward the understanding that “the railway region from Harbin to Shenyang should be the middle zone that divides Northeast China into two regions of facing the hinterland of Asia and facing the sea” (Zhang, 1997). Later, on the basis of this view, Mr. Qiao Liang put forward more specifically that the northeast China can be divided into “the west of the

northeast China with the Greater Khingan Mountains and their extension as the axis” and “the east of the northeast China with the Changbai Mountains and their extension as the axis” (Qiao, 1993). From the perspective of this book, the above two opinions are not only reasonable, but also still correct. For the convenience of writing, “the west of the northeast China with the Greater Khingan Mountains and their extension as the axis” is referred to as “the Greater Khingan Mountains–Yanshan Mountain Cultural Belt”, and “the east of the northeast China with the Changbai Mountains and their extension as the axis” is referred to as the “Changbai Mountain–Qianshan Mountain Cultural Belt”. The explanations on the division of these two cultural belts are as follows:

First of all, from the perspective of the natural environment and cultural regions, the “Greater Khingan Mountains–Yanshan Mountain Cultural Belt” in the West should mainly rely on the Greater Khingan Mountains and the Yanshan Mountains, and take the central and western regions of the Northeast plain as the activity frontier area. The three cultural regions of the Liaoxi mountainous area, the Liaoxi Plain and the Nenjiang River Basin should belong to this part; the “Changbai Mountain–Qianshan Mountain Cultural Belt” in the East should mainly rely on the Changbai Mountains and the Qianshan Mountains, and take a small part of the narrow section in the east of the Northeast plain as the activity frontier area. The four cultural regions, namely, the southern part of Liaodong, the northern Liaodong, the West Songhua River basin and the Tumen River Basin, should belong to this part.

Secondly, from the perspective of the main characteristics of cultural connotation, the Gaotaishan cultural system and the Xiaolaha cultural system, as well as the lower Xiajiadian culture, the weiyngzi culture, the Jinggouzi relics, etc. included in the “Greater Khingan Mountains–Yanshan Mountain Cultural Belt” in the west, generally take the *li* tripod as the main cooker (the *ding* tripod is the cultural factor from the East), and most of them have cord patterns. Earth pit tombs are the main form of burials (with few sarcophagus tombs), and the typical burial objects are pottery pots with a straight or cup-shaped mouth, most popularly, with vertical-shaped handles. The Shuangtuozi culture system, the Machengzi culture system and the Xingcheng culture system included in the “Changbai Mountain–Qianshan Mountain Cultural Belt” in the east generally have the *dou* stemmed bowl, as well as the *guan* jar and the *ding* tripod as main cooking utensils (the *li* tripod is a cultural factor from the West), without cord patterns. Stone-lined tombs, cave tombs, sarcophagus tombs, large stone covered tombs, stone sheds and other stone-structured tombs have been popular successively. The trumpet-mouthed *hu* pot and the bowl-mouthed *hu* pot are the most characterized burial objects, mostly with horizontal ears and lugs.

Third, from the perspective of cultural traditions and cultural relations with Chinese mainland, the “Greater Khingan Mountains–Yanshan Mountain Cultural Belt” in the west has maintained close contacts with the Central Plains since the Neolithic age, and the contacts were even more closely from the Xia to the Warring States period. Since the cultural belt is connected with the “inland facing” part or the “Asian hinterland facing” part through the land passage in the Liaoxi area and the Northern and southern Yanshan area, they can be regarded as the same large cultural plate as a whole. The “Changbai Mountain–Qianshan Mountain Cultural Belt” in the

east has maintained frequent cultural exchanges with Shandong Peninsula through the Bohai Strait and Liaodong peninsula since the Neolithic age, which is still the case from the Xia to the Warring States period. Since this part is always connected with the “ocean facing” part in the south through waterway, they can be regarded as the same large cultural plate as a whole.

Finally, from the point of view of the activity boundary between the eastern and western blocks or the frontier area contested by the two cultural belts, a rough boundary can be drawn according to the opinion of “along the Harbin-Shenyang Railway” put forward by Prof. Zhang Zhongpei. However, combined with the understanding of this book, this boundary seems to be divided into three sections from south to north. The south section can be divided by Xialiao River-Xiushui River, the middle section can be divided by the connecting line between Harbin and the estuary of the Dongliao River, and the north section can be divided by the Hulan River and its northward extension. These three sections are connected to form the theoretical dividing line between the “Greater Khingan Mountains–Yanshan Mountain Cultural Belt” in the west and the “Changbai Mountain–Qianshan Mountain Cultural Belt” in the east (Fig. 9.14). However, it should be noted that what is given here is only a rough range. The actual situation may be a relatively narrow and long zone of northeast-southwest direction with this line as the central axis.

In short, the division of the above two cultural zones is not only feasible, but also necessary and meaningful. In particular, the close connection between the two cultural belts and the six cultural systems has a very important reference value and beneficial enlightenment for further revealing the internal relationship between the archaeological cultural regions in northeast China during the Xia to the Warring States period and the different groups of people later formed and found in the literature.

- Chen, G. (1989). Yangtouwla leixing yanjiu [Study on the types of Yangtouwla]. In *Kaoguxue wenhua lunji* [Anthology of archaeological culture 2]. Beijing: Wenwu chubanshe.
- Guo, D.S. (1987). Shilun weiyingsi leixing [A study on the Weiyingsi remains]. In *Kaoguxue wenhua lunji I* [Anthology of archaeological cultures 1] (pp.79–98). Beijing: Wenwu chubanshe.
- Institute of Archaeology, Chinese Academy of Social Sciences ed. (1996). *Shuangtuozi yu Gangshang: Liaodong shiqian wenhua de faxian he yanjiu* [Shuangtuozi and Gangshang: Discovery and research of Liaodong prehistoric culture]. Beijing: Kexue chubanshe.
- Jin F.Y. & Wang J.H. (2001). Shanrong wenhua suohan yan yu zhongyuan wenhua yinsu zhi fenxi [Analysis of elements of Yan culture and central plains culture among the Shanrong culture]. *Kaogu Xuebao*, 1, 43–72.
- Jin, F. Y. (1983). Lun Zhongguo dongbei diqu han quren qingtong duanjiande wenhua yicun [On the cultural relics of bronze daggers with curved blades in Northeast China] (Fig. 19, 1–3). *Kaogu xuebao*, 1, 39–54.
- Li, D. F. (1982). Dongbei jingnei Yanqin changchengkao [An investigation of Yanqin Great Wall in the Northeast]. *Heilongjiang wenwu ziliao congkan*, 1.
- Liaoning Provincial Institute of Cultural Relics and Archaeology. (1989). Liaoning Lingyuanxian Wudaohezi zhanguomu fajue jianbao [Tombs in the Warring State periods in Wudaohezi in Lingyuan County in Liaoning Province]. *Wenwu*, 2, 52–61, 105.
- Luan, F. S. (1997). Yueshiwenhua de fenqi he leixing [The periodizations and types of Yueshi culture]. In *Haidai diqu kaogu yanjiu* [Archaeological research in Haidai region]. Jinan: Shandong daxue chubanshe.
- Qiao, L. (1993). Ji-Chang diqu Xituanshan wenhua zhihou de jizhong gudai yicun [Remains of the post-Xituanshan cultures in the Jilin-Changchun district]. *Liaohai Wenwu Xuekan*, 2.
- Siping Museum et al. (1988). Jilinsheng Lishuxian Erlonghu Guchengzhi diaocha jianbao [Report of the survey on the Erlonghu City site in Lishu Jilin]. *Kaogu*, 6, 507–512.
- Tong, Z. C. (1982) Dongbei lishi he kaogu zhong de jige wenti [Several issues in northeast history and archaeology]. In *Dongbei kaogu yu lishi* [Northeast Archaeology and History] (Vol. 1). Beijing: Wenwu chubanshe.
- Wang L.X. (2004). Liaoxiqu xia zhi zhanguo shiqi wenhua geju yu jingji xingtai de yanjin [The evolution of cultural patterns and economic patterns from the Xia to the Warring States period in Liaoxi]. *Kaogu Xuebao*, 3, 243–270.
- Wang, Q. (1995). Shilun Shandong longshan wenhua guojia yicun leixing [On Guojia Village types of Longshan culture in Shandong Province]. *Kaogu*, 1, 50–62; Wu, Y.X. (1993). Yueshiwenhua difang leixing chutan [A preliminary study on the local types of Yueshi Culture]. In *Kaoguxue wenhua lunji* [Anthology of archaeological culture 3]. Beijing: Wenwu chubanshe.
- Wu, Y.X. (1993). Yueshiwenhua difang leixing chutan [A preliminary study on the local types of Yueshi Culture]. In *Kaoguxue wenhua lunji* [Anthology of archaeological culture 3]. Beijing: Wenwu chubanshe.
- Wang, W. (1993a). Shang Zhou shiqi Liaodongbandao yu Chaoxian Datongjiang liuyu kaoguxue wenhua de xianghuguanxi [The Interrelationship between the Liaodong Peninsula and the Archaeological Culture of the Datong River Basin in North Korea during the Shang and Zhou Dynasties]. In *Qingguoji-Jilin daxue kaoguzhuanye chengli ershi zhounian kaogu lunwenji* [The Collection of Green Fruits-Collection of Archaeological Essays on the 20th Anniversary of the Establishment of the Archaeology Department of Jilin University] (Fig. 8). Beijing: Zhishi chubanshe.
- Wang, W. (1993b). Xia Shang Zhou shiqi Liaodongbandao he Chaoxianbandao xibeibu de kaoguxue wenhuaxulie jiqi xianghuguanxi [The archaeological cultural sequence and interrelation of Liaodong Peninsula and Northwestern Korean Peninsula during Xia, Shang and Zhou Periods]. In *Zhongguo kaoguxue luncong* [Chinese archaeology essays]. Beijing: Kexue chubanshe.
- Yang J.H. (2004). Zailun Yuhuangmiao wenhua [Re-analysis on the Yuhuangmiao culture]. In *Bianjiang kaogu yanjiu*, 2 [Frontier Archaeology Research] (Vol. 2). Beijing, Kexue Chubanshe.
- Zhang, Z. P. (1986). *Zhongguo beifang kaogu wenji (bianhouji)* [Anthology of archaeology in Northern China] (afterword). Beijing: Wenwu chubanshe.

- Zhang, Z. P. (1997). Heilongjiang kaoguxue de jige wenti de taolun – 1996nian 8yue 24ri zai “Bohai wenhua yantaohui” shang de fayan [Discussion on several issues of Heilongjiang archaeology—Speech at the ‘Bohai Culture Seminar’ on August 24, 1996]. *Beifang wenwu*, 1, 6–12.
- Zhang, Z.P. (1991). Liaoning Guyicun de fenqu biannian ji qita ---“Huanbohai kaogu” xueshu taolunhui shang de fayan [Speech at the Bohai rim archaeology: Division, chronicles and others of ancient remains in Liaoning]. *Liaohai Wenwu Xuekan*, 1.
- Zhang, Z.P. (2005). Xilamulunhe diqu kaoguxue wenhua jiqi zai zhongguo de lishidiwei [Archaeological culture in Xilamulun River valley & its historical significance in China]. In *Zhongguo kaoguxue jiushiniandai de sikao* [Reflections on China archaeology in 1990s]. Beijing: Wenwu chubanshe.
- Zheng, J. L. (2005). Zhanguo yanmu de feiyanwenhua jiqi lishi beijing [The non-Yan culture and its historical background of the Yan tombs in the Warring States Period]. *Wenwu*, 3, 69–75.
- Zhu Y. G. (1997). Daxiaolinghe liuyu hanquren duanjian yicun de kaoguxue wenhua ji xiangguan wenti [The archaeological culture and related issues of remains containing short swords with curvy blades along the Dalinghe and Xiaolinghe River basin]. In *Neimenggu Wenhua Kaogu Wenji* [The archaeological culture and related issues of remains containing short swords with curvy blades along the Dalinghe and Xiaolinghe River Basin] (Vol. 2). Beijing: Zhongguo dabaike quanshu chubanshe.
- Zhu, Y. G. (1996). Lun gaotaishan wenhua jiqi yu liaoxi qingtong wenhua de guanxi [On the relationship between the Gaotaishan Culture and Liaoxi Bronze Culture] in *Proceedings of the Eighth Annual Conference of the Chinese Archaeological Society*. Beijing: Wenwu chubanshe.

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