The Tombs of Peng ㈽ State and Related Questions
Paper for the Chicago Bronze Workshop, November 3-7, 2010

The discovery of the Western Zhou period’s Peng ㈽ State in Heng 横 River Valley in the south of Shanxi Province represents one of the most fascinating archaeological events of the last decade. Ruled by a lineage of Kui 鬼 (Gui 鬼) surname, Peng, supposedly, was founded by descendants of a group that, to a certain degree, retained autonomy from the Huaxia cultural and political community, dominated by lineages of Zi 子, Ji 姬 and Jiang 姜 surnames. Considering Peng’s location right to the south of one of the major Ji states, Jin 晋, and quite close to the eastern residence of Zhou kings, Chengzhou 成周, its case can be very instructive with regard to the construction of the geo-political and cultural space in Early China during the Western Zhou period. Although the publication of the full excavations’ report may take years, some preliminary observations can be made already based on simplified archaeological reports about the tombs of Peng ruler Cheng ㈽伯冉 and his spouse née Ji of Bi 畢姬. In the present paper, I briefly introduce the tombs inventory and the inscriptions on the bronzes, and then proceed to discuss the following questions:

- How the tombs M1 and M2 at Hengbei can be dated?
- What does the equipment of the Hengbei tombs suggest about the cultural roots of Peng?
- What can be observed about Peng’s relations to the Gui people 鬼方 and to other Kui/Gui-surnamed lineages?

1. General Information
The cemetery of Peng state has been discovered near Hengbei 橫北 village (Hengshui town, Jiang County, Shanxi 山西). The cemetery covers the area of ca. 35,000 m². During the 2004-2005 excavation season, the Institute of Archaeology of Shanxi Province uncovered the area of 8500 m² with 188 tombs and 21 horse-chariot pits. According to the most recent information, 1,326 tombs have been excavated until 2008. Most of them date to the Western Zhou period, whereas twenty seven tombs are of a later date. The excavation report has not yet been published. Two simplified reports on the excavations of two largest tombs published in 2006 allow for some preliminary observations.

Tombs numbered M1 and M2 represent the main focus of the Hengbei cemetery. They represent vertical-pit tombs with singular entry ramps. Inscriptions on the vessels found in

---

these tombs identify their occupants as the First-born of Peng and née Ji of Bi. The third large tomb with an entry ramp, M3, has been completely looted before the beginning of excavations, so that its occupant cannot be identified. Other tombs have been subdivided in four categories: large (4 x 5 m), medium large (3 x 4 m), medium (2 x 3 m), and small (1 x 2 m). 4 97 of the 188 tombs (52 %) are small. The numbers of the tombs of other categories have not yet been reported. 5

The tombs M1 and M2 are both oriented to the east and have the sloping entry ramps on their western side (26.65 and 22.3 m respectively). The bodies of the deceased were placed with the head directed to the west, i. e. heading the ramp. Both tombs are rectangular in cross-section and trapezoid in profile, so that the bottom is slightly larger than the mouth. The funerary furniture in each tomb includes the wooden chamber and two nested coffins guan 棺. The external guan in M1, occupied by née Ji of Bi, was covered with a shroud made of red silk and finely embroidered with large and small phoenix figures. Such shrouds, designated huangwei 荒帷, were mentioned in ritual handbooks Li ji, Yi li and Zhou li, but this is the first time as they have been witnessed archaeologically. 6 Each tomb contains disjointed pieces of one chariot. 7

In the M1, skeletons of three co-buried humans wrapped in reed mats have been found. They were placed inside the burial chamber on the eastern side of the coffin. In the M2, skeletons of four co-buried persons were found inside the burial chamber. Two of them were wrapped in mats, possibly made of bamboo, and had a lot of chariot decorations near their feet. The third skeleton has already rotten and its rests are said to lay over some bronze objects – possibly, also details of a chariot. The excavators suppose that he might be a chariot’s driver. The fourth skeleton belonged to a child.

The occupant of the M1 wore rich decorations made of jade, agate and bone. These included pendants and hair-dressing elements. Some jade objects were also found outside of the coffin. The ritual vessels were originally placed in a wooden cabinet with seven shelves located in the south-eastern corner inside the burial chamber. The pottery vessels were placed above the bronzes. The bronze objects include five ding 鼎-cauldrons, five gui 纔-tureens, one yan 無-steamer, one li 耳-tripod, one yu 盂-cauldron, two he 盪-kettles, two pan 盤-basins, one elongated hu 豕-flask with bail handle, one hu-flask with small lugs through which a cord could be threaded, and five yongzhong 甬鍾-shank bells. Pottery vessels include thirteen three-legged weng-jars 俎, three large-mouthed zun-jars 大口尊, five pottery gui-tureens with a high round foot and one li-tripod with notched ribs.

In the M2, horse-and-chariot decorations, small and larger tinkling bells, axes and halberds, clothing decorations made of bronze, bone and wood, as well as jade pendants were placed along the northern outer side of the coffin. Ritual objects were positioned along the western

---

5 On the aerial photograph of the cemetery, 9 other large tombs can be distinguished. One of them is constructed with an entry ramp (“Shanxi Jiang xian Hengshui Xi Zhou mu di”, color plate 5:1).
6 Cf. “Shanxi Jiang xian Hengshui Xi Zhou mu di”: 20, color plate 6:2. Previously, reed mats covering the inner coffin have been discovered and identified as huangwei (e. g. in tomb M8 at the cemetery of Ying state at Pingdingshan, cf. “Henan Pingdingshan Ying guo mudi ba hao mu fajue jianbao” 河南平頂山應國墓地八號墓，發掘簡報，Huaxia kaogu 7 (2007), 20-49.
7 In M1 they are placed loosely on the second-level earthen platform of the burial pit, partly directly atop the wooden chamber guo. In M2, the case and the wheels are placed on the second-level platform, other parts were found inside already collapsed guo (cf. “Shanxi Jiang xian Hengshui Xi Zhou mudi fajue jianbao,” 9, 11).
side between the outer coffin and the burial chamber in the following sequence from north to south: one pottery li-vessel, one bronze pan, two ding, one he, one shovel chan 鉼, one jade sceptre, one gui-tureen, one jue 角-goblet, one gu 角-goblet, one zun-jar with a bronze plate decoration put inside of it, one fresh-water mussel shell, one lacquer vessel, five bronze shank-bells, one carriage shaft, then again sixteen fresh-water mussels shells, and one yun-steamer with one you 船-pitcher placed inside of the latter. Beside the single pottery li, all other vessels in this set are made of bronze and count fifteen altogether. One other bronze ding was found near the north-western corner of the coffin, and another bronze plate decoration was found in the south-western corner.

Although the identification of the sex of the deceased has not been carried out, judging upon the burial inventories of the both tombs, the excavators identify the occupant of M2 as a male, and the occupant of M1 as a female.

2. The identity of the tombs’ occupants in the light of inscriptions

Several bronzes from the tomb M1 carry inscriptions:

![Image I. Objects from M1: ding M1:212, gui M1: 199, gui M1: 205.](image)

1. 彼作旅備鼎
The Elder of Peng made the treasured ding for travels for née Ji of Bi (ding-cauldron M1: 212 and four other ding in the set);

2. 彼作旅備鼎
The Elder of Peng made the treasured gui for travels for née Ji of Bi (gui-tureen M1: 199, reproduced on several other gui);

3. 賜甘又三年吉戊歲·益公爾伯再歷·右告令車旗·职能部门對揚公休·用作幫考章·再受萬年永寶用享.
This was the twenty-third year, the first auspiciousness, day wu-xu. Duke Yi praised the merits of Cheng, the Elder of Peng, and announced the command with the metal chariot and the banner.⁹ Cheng bowed his head to the ground extolling in response the beneficence of the Duke of Yi. [I, Cheng] use [this occasion] to make the

---


⁹ In the simplified report, the character after che (“chariot”) is transcribed as lű (“travel”, “stay afar”). The character is badly written, but it is recognizable as qi (“banner”) – a power insignia often offered to military commanders in combination with a chariot (e. g. Mu gui 牧簋, Jicheng #4343; for the similar calligraphy cf. Huan gui 欢簋, Jicheng #4199-4200, Shaanxi Fufeng Qiangjia 强家, MWZ; Fan-sheng gui 艾生簋 cover, Jicheng #4326, LWZ).
sacrificial vessel for my father. May I, Cheng eternally treasure and use it for offerings during ten thousand years! (gui-tureen M1: 205);

Image II. Objects from M2: ding M2: 57, gui M2: 62; he M2: 61.¹⁰

Tomb M2 has also yielded several inscribed bronzes:

爾伯作畢姬彝鼎·其萬年寶·
The Elder of Peng made the reverent ding for née Ji of Bi. Shall it be treasured during ten thousand years! (ding-cauldron M2: 57);

爾伯作畢姬彝鼎·其萬年寶用享·
The Elder of Peng Zhao made the reverent ding. Shall it be treasured and used for sacrifices during ten thousand years! (ding-cauldron, M2: 58)

唯五月初吉爾伯作寶鼎·其用享用考(季)于朕文考·其萬年永用·
In the fifth month, the first auspiciousness, The Elder of Peng Zhao made the treasured ding. Shall it be used for sacrifices and for displaying filial piety towards my cultivated deceased father! Shall it be eternally used during ten thousand years! (ding-cauldron, M2: 103).

XX made the treasured pan-basin. Shall it be eternally used during ten thousand years (pan-basin, M2: 65)

The First-born of Peng made a set of five ding-cauldrons and four gui-tureens for née Ji of Bi 畢姬. These objects were defined as lü 旅, i.e. objects “for travel.”¹¹ All of them were found in Tomb M1, occupied by a female. Accordingly, the occupant of M1 has been reasonably identified as Bi Ji. The First-born of Peng, who made several bronzes for Bi Ji, must be her husband. One inscription found in Bi Ji’s tomb identifies his name as Cheng 𠀧. During the Western Zhou period, rulers of states and their spouses were usually buried in tombs, arranged in pairs.¹² Hence, a male person buried by Bi Ji’s side in Tomb M2 must be Cheng. Tomb M2 has yielded one cauldron dedicated by the First-born of Peng to Bi Ji and designated as zun, “reverent.” Whereas objects “for travels” were made for living persons, “reverent” vessels were made for the deceased.¹³ This makes clear that Cheng outlived his wife. Cheng’s personal name does not appear in inscriptions on bronzes found in M2. At the same time, M2 has yielded several bronzes commissioned by First-born Zhao 翟 of Peng. Zhao dedicated one “reverent” ding to his deceased father and made another “reverent” ding

¹¹ Some authors regard lü as a special type of sacrifice, or translate it as “grand.” However, the definition lü appears on relatively small vessels which could be easily taken along on travels. It could be substituted by other words with the same meaning (for examples cf. Khayutina, Maria, “Royal Hospitality and Geopolitical Constitution of the Western Zhou Polity,” in T’oung Pao Vol. 96.1-3, 1-73, fn. 87).
¹³ For examples cf. Jicheng, passim.
without a specific dedication. Plausibly, Zhao was Cheng’s son and heir. This explains why Zhao’s bronzes appear in Tomb M2.  

3. The date of the Peng tombs

Comparing the bronzes from Hengbei to the objects from the cemetery of Jin rulers, the excavators conclude that Peng tombs M1 and M2 date between the tombs M32-33 and M91-92 in the cemetery of Jin State at Tianma-Qucun. Although these suggested comparisons date about mid-ninth century BC, the excavators surprisingly conclude that Peng tombs date to the end of the reign of the fifth Western Zhou king, Mu 穆 (956 - 923 BC) or slightly later. However, many factors indicate that Peng rulers’ tombs do not date that early. Rather, they were closed after the reign of King Gong 恭 (922-900 BC), i.e. during the first half of the ninth century BC. 

The excavators base themselves on the topology of Western Zhou bronzes proposed by Li Feng 李雋 in 1988. Accordingly, sets of bronzes in which vessels for liquors predominate, were current before the reign of King Gong. This shift of the focus from the liquor to the food vessels represents one of the manifestations of the so-called “ritual revolution” or “reform” dated by many scholars to the reign of King Gong or even later, towards 850 BC. The tomb M2 includes gu-goblets and jue-beakers that normally do not appear in post-reform assemblages. Thus, from the perspective of the sumptuary rules guiding the composition of the Peng inventories, 850 BC is their terminus ante quem. At the same time, the excavators rightly point out that the set of he-kettle and pan-basin becomes current starting from King Mu’s reign, thus supporting their argument that Peng tombs do not date earlier than that. This

---


16 The excavators of the Jin cemetery date M32-33 to the later part of the Middle Western Zhou period and M91-92 to the earlier part of the Late Western Zhou period. They suggest that the occupants of M33 (Jin-hou Boma 晉侯燮馬) and of M 91 (Jin-hou Xi-fu 晉侯喜父) were related as father and son (cf. “Tianma-Qucun yizhi Beizhao Jin hou mudi di san ci fajue,” 37-38). Furthermore, they identify Xi-fu with Jing-hou 靖 who, according to Sima Qian, ruled from 858 until 840 BC, i.e. during the time of King Li 劉 of Zhou (857-842 BC) (cf. Sima Qian, Shi jì, 14.512 (“Shi er zhuhou nianbiao” 十二諸侯年表).

17 I agree that, as Edward Shaughnessy suggests, King Mu’s reign did not last 55 years (cf. Shaughnessy, XXX). As of today, it is clear that King Mu reigned at least 34 years. 956 BC, regarded by Nivison and Shaughnessy as the initial year of King Mu, seems acceptable in light of currently available sources (cf. Shaughnessy, XXX). However, I am persuaded that the end date of King Mu’s reign has to be adjusted to 923 BC (cf. Li Xueqin 李學勤, “Lun Xi Zhou zhong qí zhi wan qí chu jinwen de zuhe” 論西周中期至晚期初金文的組合, Shehui kexue zhanxian 2000.4, 262-7).

18 I accept King Gong’s dates suggested by Li Xueqin (cf. fn. 17)

19 Another argument brought up by the excavators in favour of King Mu’s date concerns the phoenix images embroidered on the huangwei-shroud. They argue that similar phoenix shapes were current during the reign of King Mu. This is only partly correct. First, phoenix motives in decorations of bronzes were current also during the reign of King Gong and, in fact, they did not disappear completely even later (cf. Chen Gongruan, Zhang Changshou, “Yin Zhou qingtong rongqi shang niaowen de duandai yanjiu,” Kaogu xuebao 1984.3, 265-286). However, it is more important that the composition of the phoenix bodies on the huangwei does not find direct parallels in bird reliefs on the Western Zhou bronzes (cf. “Shanxi Jiang xian Hengshui Xi Zhou mudi di,” 20). Possibly, their iconography bases on some earlier, Shang prototypes modified by artisans not fully complying with the Shang-Zhou artistic standards.


is, however, obvious also from the shapes and decorations of individual bronzes in Peng’s assemblages.

Although he-kettles similar to these found in Peng tombs appear already during King Mu’s reign, their shape remains the same also during King Gong’s reign.22 Elongated hu-vases with vertical lugs through which a cord might have been threaded, were typical for the middle Western Zhou period.23 The ding-cauldrons in both M1 and M2 have relatively shallow bellies with flat bottom and thin cabriole legs. They have no other decorations but one or two high-relief ribbons below the rim (cf. Images I and II). This shape in combination with minimalist decorations is manifested in a number of vessels dated to the reign of King Gong.24 The shapes and decorations of the gui-tureens suggest King Gong’s or later date of Peng tombs the most strongly.

The gui-tureens with a square base, commissioned by Peng-bo for Bi Ji look the most archaic of all vessels in the tombs’ assemblages due to its square base (M1:199, Image III.A1). Tureens with square base were current during the early and middle Western Zhou periods and were cast later only occasionally, as a reminiscence of an ancient tradition.25

---

22 He M2: 61 is almost identical with Qiu Wei he 衛盉, Jicheng #9456, Shaanxi Qishan Dongjiacun 岐山縣董家村, 3rd year of King Gong. For images of vessels included in the Jicheng cf. Yin Zhou jinwen ji qingtongqi ziliao ku 殷周金文暨青銅器資料庫, http://www.ihp.sinica.edu.tw/~bronze/
23 Cf. Rawson, Vol. IIA, 74-5, Fig. 95.
24 Cf. Que Cao ding, Fifth year’s Wei ding 魏鼎 (Jicheng #2831-2, Shaanxi Qishan Dongjiacun, 5th year of King Gong), and others (for description and images cf. Rawson, Vol. IIB, 281-3.) Undecorated ding appear also earlier. However, earlier pieces usually have slender legs only slightly narrowing towards the bottom, whereas cabriole legs in combination with flat-bottomed body represent a relatively late feature.
footed gui are usually very massive and their surfaces of completely filled with zoomorphic and geometric patterns. In contrast, M1:199 manifests the same minimalism in decoration as the ding-cauldrons found in the both tombs at Hengbei. Such handles, attached to the body vertically and decorated with relief animal heads on the shoulders and having small pendants below become widespread from the beginning of King Gong’s reign and are typical for tureens cast during the ninth century BC (Image III.A2).  

The tureens M1: 212 commissioned by Peng-bo Cheng, as well as M2: 62 (not inscribed), have a ring foot supported by three small zoomorphic legs. Their bodies and covers are decorated with relief ribbons (wawen 亃文 ornament), widespread starting from the middle Western Zhou period. Additionally, M1: 212 has ornamental ribbons in the upper register of the body and on the periphery of the cover. Instead of handles, these tureens have small zoomorphic lugs pierced with rings. M2: 62 finds parallels in a number of standard vessels of King Gong’s reign (cf. Image III.B.2). The cover of M1: 212 has an elevated base (Image III.C1). Covers with elevated base occasionally appear on tureens cast during the first half of the ninth century BC (Image III.C2). Evidently, late art-historical features predominate in Peng tombs’ assemblages. Therefore, judging upon the art-historical criteria, they should not be dated previous to King Gong’s reign.

The inscription on the tureen M1:212 dates the grant of a chariot by Duke Yi 益公 to Peng-bo Cheng to the twenty-third year. As usually, it does not specify the year-count of which Western Zhou king does it use. Instead of being simply helpful for the dating of Peng’s tombs according to the chronology of the Western Zhou accepted by most western sinologists, this inscriptions calls for a revision of this convention.

26 E. g. Wei gui 衛簋, Jicheng #4209, Shaanxi Qishan Dongjiacun, King Mu’s or King Gong’s reign (the inscription does not indicate the year’s date, but other Qiu Wei’s inscriptions are standard for the reigns of these both kings).
27 The body M:199 is shaped in the same way as Qiu Wei gui 衛簋, Jicheng #4256, Shaanxi Qishan Dongjiacun, 27th year of King Mu. Although the event referred to in the inscription on the latter is dated to the end of King Mu’s reign, it is plausible that the vessel was cast already during the reign of King Gong, when the new, plain decorative style, became widespread. Qiu Wei gui stands in sharp contrast to Wei gui 衛簋, Jicheng # 4209, commissioned by the same person. The latter represents a typical vessel of King Mu’s reign, whereas Qiu Wei gui matches in style Qiu Wei’s bronzes made at the beginning of King Gong’s reign (e. g. Qiu Wei he 衛盉, Jicheng #9456 and Wei ding 衛鼎, Jicheng #2831-2).
28 Cf. Rawson, XXX.
29 Cf. Guai-bo gui 高伯簋 (Jicheng #4331, 9th year of King Gong); Xun gui 兩簋 (Jicheng #4321, Shaanxi Lantian Ancuxiang Sipocun 陝西省藍田縣安村寺坡村, 17th year of King Gong). The Sui gui 遂簋 (Jicheng #4207, Shaanxi, place unknown, MWZ) has also a similar body. Its inscription reports about the reception of the commissioner by King Mu. Usually, kings were not referred by name during their lifetime, thus, the vessel could be cast already during King Gong’s reign.
30 E. g. Shi Shi gui 施簋 (Jicheng #4216, Shaanxi Xi’an Chang’anqu, Mawangzhen Zhangjiapocun 陝西省西安 長安區馬王鎮張家坡村, MWZ (5th year of King Yi 炎 (865-858 BC), 861 BC, cf. Shaughnessy, Sources, 283); Chu gui 楚簋, Jicheng #4246, Shaanxi Wugong Sufangxiang Renbeicun 陝西省武功縣蘇坊鄉任北村, LWZ.
31 Some non-Zhou polities used their own calendars and, possibly, their rulers established their own year-counts (I discussed this in “The Western Zhou Notion of Time: Authority versus Autonomy,” paper read at the 11th International Conference on the History of Science in East Asia, 15-20 August 2005, Munich, and „Autonomie, Prestige und Kalender: Die Bronzeinschriften der frühchinesischen Fürstentümer Deng und Ruo aus IX-VI Jh. v.u.Z.,” talk in the graduate school “Forms of Prestige in Cultures of Antiquity” at the Ludwig-Maximilians-University of Munich, December 6, 2007). However, Duke Yi, who granted the chariot to Peng-bo, was a high royal official, it is unlikely that this event was not dated according to the royal calendar.
Duke Yi appears in bronze inscriptions dated to the 9th, the 12th, the 17th and the 20th years of
King Gong and in one inscription dated to the second year of King Yih (899/97-873). Yi 益, literally “Advantageous,” was not a name of a lineage, but was applied to individuals in
two ways. First, Yi was used as a posthumous temple name for ancestors of lineages from
the Western Zhou metropolitan area, e.g. Tong 直 or Shan 桁. Similarly to epithets Mu 慕 ("Reverent") or Wu 武 ("Martial"), Yi could be used as an honorific byname of some
distinguished persons during their lifetime. Persons with such bynames appear in bronze
inscriptions very seldom. This makes likely that inscriptions mentioning Duke Yi as a living
person and not as an ancestor refer to the same man. Dates indicated in many of these
inscriptions demonstrate that Duke Yi was active from the beginning of King Gong’s reign
until the first years of King Yih’s reign. The stylistic similarity of the vessels with inscriptions
mentioning Duke Yi but having no dates with other vessels of the same categories dating to
King Gong’s reign unequivocally suggests that all of them date to the same time (cf. Image IV;
for the dates of standard vessels of King Gong’s reign cf. Table I in Appendix).

King Gong’s reign

Guai-bo gui (Jicheng #4331)

Yong yu (Jicheng #10322)

Xun gui (Jicheng #4321)

9th year

12th year

17th year

32 On Yi-gong’s roles cf. Shaughnessy, Edward L., “Newest Sources of Western Zhou History: Inscribed Bronze Vessels, 2000-2010,” distributed for this conference, fn. 38. For the reigns after King Gong, I accept the chronology suggested by Nivison and Shaughnessy.

33 Pre-Qin received texts never mention Yi lineage. Geographical descriptions from the Han period or later also do not render a place-name Yi, from which, theoretically, this lineage could derive its name.

34 An inscription commissioned by Captain Xun 師書 was dedicated to 烈且乙伯同益 km (Shi Xun gui 師書, Jicheng #4342, MWZ). Yi-bo 乙伯 represents a posthumous designation of the male “illustrious ancestor,” mixing up the Shang- and Zhou-style denominations of ancestors: according to the heavenly stems of the calendar and according to the birth sequence in a family. The other dedicatee referred by the surname Ji was a female. Tong appears as a name of a lineage and as a place-name in a number of inscriptions from central Shaanxi and the Zhou Plain area (cf. San-shi pan 散氏盤, Jicheng #10176, Shaanxi Fengyu 沛翔; Ji-fu hu 比父 霈, Jicheng #9721, LWZ, Shaanxi Fufeng Qijaicun 嗣家村). The Xun gui, commissioned by Captain Xun at a later date, calls the same ancestors 乙伯同益 (Xun gui, Jicheng 4323, Shaanxi Lantian Sipo 寺坡, MWZ). This makes evident that Tong was the name of the lineage of the Ji-surnamed woman, whereas Yi was her posthumous title.

Vessels commissioned by Jin 晋 and discovered in 1955 (cf. Jicheng #6013, Shaanxi Mei Lijiacun 鄺縣李家村, MWZ) were dedicated to the ancestor Yi-gong 益公. As the inscription on the Qiu pan 皮盤 from the hoard at Lijiacun discovered in 2003 make clear, Jin belonged to the Ji-surnamed Shan 軍 lineage residing in this place. He was active during the reigns of Kings Mu and Gong. The ancestor referred to in his inscriptions as Yi-gong should have been active during the reign of King Cheng. In the Qiu pan inscription his temple name has been changed to Gong-shu 公叔, “Duke’s Third-born.” Possibly, this change of the posthumous name is related to the fact that during the reigns of Mu and Gong, another person became famous under the byname Duke Yi.

According to the chronology of Western Zhou reigns suggested by David Nivison and Edward Shaughnessy, King Gong’s reign lasted from 917 to 900 BC. The controversial project of the periodization of the Three Dynasties has arrived at 922-900 BC dates for King Gong.37 In his paper submitted to the present conference, Professor Shaughnessy notes that Peng-bo gui added troubles to the study of the Western Zhou chronology. He considers again the possibility that Zouma Xiu pan dated to the 20th year and regarded as a standard vessel of King Gong’s reign, whereas Duke Yi, mentioned in the latter inscription, was a different person.38 However, the art-historical features of Xiu’s vessels support their attribution to middle Western Zhou period, whereas its date fits the reconstructed calendar of King Gong starting with 922 BC.39

---

36. This yu is fully covered with zoomorphic decorations in a way typical for King Mu’s period. Nevertheless, its inscription not only contains a date compatible with King Gong’s calendar, but also mentions several persons active during King Gong’s reign. Therefore, there is no doubt about its date.


38. Cf. Shaughnessy, “Newest sources,” fn. 38

39. In particular, it has thin handles, round in cross-section, characteristic for earlier basins (e.g. Jicheng #10048, Jicheng #10161, MWZ), whereas the handles of later pan are rectangular in cross-section. More important, Xiu commissioned a second vessel, Xiu gui 休簋 (Jicheng #3609, MWZ). Both pan and gui are dedicated to Xiu’s father Fu Ding 𢍁/wen kao ri Ding 文考曰丁, which makes evident that they were commissioned by the same person. This is a classic mid-Western Zhou tureen, most similar to the Qiu Wei gui (cf. Image III.A2).
The project’s results have already been criticized from various perspectives, and, for a number of reigns, they certainly need to be adjusted. However, its dates for King Gong appear plausible, since they can be verified by comparing inscriptions mentioning several individuals active at the court of King Gong. In some cases, these persons were active already at the end of the reign of King Mu, or at the beginning of the reign of King Yih. 900 BC as the last year of King Gong is verified by the inscriptions on the Shi Hu gui 師虎簋 and Hu gui 胡簋 dated to the first year of King Yih. The latest inscription mentioning Duke Yi, the Wang chen gui, dates from the “second year, third month, first auspiciousness, day geng-yin” that can be located as the 9th day of the third month of 898 BC. It is true that dates recorded in the dating formulas of the most fully dated inscriptions from King Gong’s reign are compatible with the royal calendar starting either from 917 or 922 BC. However, as suggested by the inscription on the Zouma Xi pan dated to the 20th year, King Gong’s reign lasted longer than eighteen years. The newly discovered Peng-bo Cheng gui reveals that King Gong’s reign included the 23rd year. This was the last year of King Gong’s reign that began in 922 BC.

Given that Peng-bo Cheng received a war chariot from Duke Yi during the 23rd year of King Gong, i.e. 900 BC, the Peng tombs roughly date from the first third of the ninth century BC.

---

40 They both date from the “initial year, sixth month, after the full moon” and two subsequent days: jia-xu (11) and yi-hai (12). They can be located as 21st and 22nd days of the 6th month of 899 BC, beginning with day bing-chen (53).

41 Basically, I believe that the four parts of the month referred to in the Zhou bronze inscriptions, chu ji, ji sheng po, ji wang and ji si po do not represent month’s quarters. Rather, I hold that the designation chu ji, “the first auspiciousness” referred to lucky days, normally within the first decade, whereas the term ji sheng po, “after the brightness was born” referred to the first half of the month before the full moon. The term ji wang, “after the full moon” referred to the first part of the second half of the month, whereas ji si po, “after the dying brightness”, referred to the end of the month (for this interpretation cf. Huang Shengzhang, XXX, this is also accepted by the “Project of the Periodization of the Tree Dynasties; cf. XXX). At the same time, it is true that days identified as chu ji are often found in the first week of the month. Thus, the “four-quarter theory” advanced by Wang Guowei and maintained by many contemporary scholars, has also its reasons (for details cf. Nivison, Shaughnessy).


43 The date of Zouma Xiu’s audience, “the twentieth year, first month, after full moon, day jia-xu (11) can be located in the first month of 903 BC as the 22nd day of the month.

44 It omits the month number and provides only the designation of the month’s part “the first auspiciousness” and the day ding-you (34). Such day can be located in the second, the fourth, the sixth and the eighth months of 900 BC.

45 Wang Zhankui has recently proposed an alternative date – 927 BC, and, at the same time, suggested that the reign lasted only until 903 BC. I compared these alternative periodisations of the bronze inscriptions and found out that Li Xueqin’s reconstruction fits better the reconstruction of the pre-Qin calendar proposed by Zhang Peiyu. In contrast, Wang Zhankui’s dates can be located in Zhang Peiyu’s calendar only by shifting several intercalatory months. On one hand, I can admit that during the Western Zhou times intercalary months could be inserted deliberately and not according to the rules current during the Han dynasty and used by Zhang Peiyu as the basis for reconstruction. On the other hand, given that Li Xueqin’s date allows for locating inscriptions in the reconstructed calendar without any manipulation, I am inclined to give preference to his hypothesis.

922 BC as the date of the beginning of King Gong’s reign conforms the reconstructed calendar of King Mu beginning with 956 BC as suggested by Shaughnessy. In his recent paper, he locates several newly discovered inscriptions dated to 24th, 27th and 30th years of King Mu in 933, 930 and 927 BC respectively (cf. Xia Hanyi 夏含宜, 从作册吳孟再看周穆王在位年數及年代問題). Other inscriptions dated to 2nd and 22nd years can also be easily located in the same calendar (XXX: Geng-yin ding). Xian zun, dated to the “34th year, 5th month, after the full moon, day wu-xu (55)” and very plausibly originating from King Mu’s reign, can be located as the 13th day of the 5th month of 928 BC. This appears slightly problematic, since it is assumed that the designation ji wang normally applied to the days after the 15th of the month. Nevertheless, if the commissioner of the vessel based on observation of the sky and not on the calculated calendar, his mistake is explainable. As far as inscriptions with the year number higher than 34 are unknown, it can be accepted that King Mu reigned from 956 until 928 BC.
4. Cultural roots of the Peng lineage

The inventory of the tombs of Peng-bo and Bi Ji includes all typical objects used by Zhou aristocracy in rituals of ancestral worship throughout the Zhou cultural sphere. These include vessels for cooking and serving meat and grain, for serving and drinking wine, and for performing the hand-washing ritual. Besides, tomb M1, occupied by a female, contains thirteen pottery urns *san zu weng* 三足盦 with squeezed globular bodies and three bulbous legs, narrowing towards the tips, as well as three pottery vases *da kou zun* 大口尊 with trumpet-like necks (cf. Image V). These vessels represent the most conspicuous objects in the burial inventory of Peng tombs and are therefore worthy of a close consideration.

Image V. Pottery vessels from Hengbei M1: a) *da kou zun*; b) *san zu weng*; c) *li* with notched ribs; d) *dou*-like *gui* on a high foot.

*San zu weng*-urns have been found in a small number of tombs of the Jin aristocracy at the Tianma-Qucun cemetery, normally one piece in a tomb. The occupants of these tombs were

---

46 Note that the liquor usually defined as “wine” in the sinological literature in fact was a kind of beer (cf. Höllmann, XXX).
These vessels display a development from earlier, nearly egg-shaped, to later, horizontally-squeezed specimens (Table II).

<table>
<thead>
<tr>
<th>Tianma-Qucun</th>
<th>Hengbei</th>
<th>Zhouyuan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st stage (M6136), EWZ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd stage (M6049) E-MWZ</td>
<td>M113</td>
<td></td>
</tr>
<tr>
<td>3rd stage (M7093), MWZ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th stage (M7113), MWZ (King Gong’s reign)</td>
<td>M1</td>
<td></td>
</tr>
<tr>
<td>M92, LWZ (mid-ninth c. BC)</td>
<td></td>
<td>Qijiacun M16, LWZ</td>
</tr>
</tbody>
</table>

Table II. Three-legged weng in tombs of Western Zhou period

This typology provides an additional support for the early ninth century date of the tomb M1 at Hengbei. Beside Tianma-Qucun and Hengbei, squeezed san zu weng have been found recently in a tomb at Lijiacun, Fufeng, Shaanxi. Obviously, this vessel type was not typical for the Zhou metropolitan area and, quite certainly, was associated with a migrant, possibly, also a female. In absence of other direct parallels of the Western Zhou period, the source of the squeezed san zu weng in the tombs of Jin and Peng states cannot be revealed directly.

48 The correlation between the occurrence of the san zu weng and the sex of tombs’ occupants has been already noticed (cf. Falkenhausen, *The Chinese Society*, p. 212, with reference to Chen Fangmei 2002).
Nevertheless, admitting that the development from the earlier towards the later form of the san zu weng took place within one culture, it is reasonable to retrace the origin of the egg-shaped three-legged urns.

One pottery and one bronze san zu weng have been discovered also in the Tomb M113 at Qucun, supposedly occupied by the spouse of the ruler of Jin buried in the adjacent tomb M114, together with a bronze double-handed jar shuang er guan 雙耳罍. These tombs represent the earliest burials of Jin rulers discovered so far. The excavators date them to the edge of the Early and Middle Western Zhou periods, i.e. to the first half or the middle of the tenth century BC.  

As Lothar von Falkenhausen comments, both san zu weng and shuang er guan “were established among the farmers and pastoralists, both sedentary, who flourished in the transitional zone between the agricultural core of China and the Central Eurasian steppes (Shaanxi, Southern Inner Mongolia, and northern Shaanxi). The archaeological cultures associated with these populations go back to the Late Neolithic and the Early Bronze Age – many centuries before any part of this area came under the control of polities governed by lineages of the Ji clan, and before any indications of urban civilization, an aristocratic rank order, or ancestral ritual ever became locally manifest.”

Von Falkenhausen further suggests that, “since bronze specimens of these vessel types have never been found in the cultures where their ceramic prototypes originated, the two specimens from Tomb 113 were made at Jin foundries in imitation of ceramics the tomb occupant brought from her home. <…> Neither san zu weng nor shuang’ er guan fulfilled a function that could not have been easily accomplished by established vessel types of the Zhou ceramic repertoire. This suggests that their significance in Zhou contexts was symbolic rather than utilitarian and increases the likelihood that they served to signify their possessors’ ethnic origin.”

Comparing the idiosyncratic pottery from the Hengbei and Tianma-Qucun cemeteries, it can be suggested that the da kou zun, possibly, also fulfilled this symbolic function. In the tomb Tianma-Qucun M92, occupied by a female, identified by excavators as the spouse of Jin-hou Xi-fu, buried in the adjacent tomb M91, a san zu weng has been found in combination with a da kou zun. These both vessels were prominently placed separately outside of the inner coffin on the eastern, left-hand side of the deceased, whereas all other ritual vessels were placed in front of the foot side of the coffin. These tombs have been dated to mid-ninth c. BC, i.e. only slightly later than the tombs of Peng rulers. In the tomb Tianma-Qucun M2, occupied by the spouse of the next ruler of Jin, a da kou zun occupies a similarly prominent place. Looking back at pre-Zhou periods, it can be noticed that both san zu weng and da kou zun (together or without shuang er guan) belong to pottery repertoires of several cultures of
the northern zone, some of which continued to exist during the Western Zhou period (cf. Map I).

<table>
<thead>
<tr>
<th>Baotou</th>
<th>Xuanhua</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhukaigou</td>
<td>Datuotou</td>
</tr>
<tr>
<td>Zhungeer</td>
<td>Taiyuan</td>
</tr>
<tr>
<td>Shenmu</td>
<td>Yudaobe</td>
</tr>
<tr>
<td>Liulin</td>
<td>Dongxiafeng</td>
</tr>
<tr>
<td>Zhengzhou</td>
<td>Xian</td>
</tr>
</tbody>
</table>

Map I. *San zu weng* and *da kou zun* in Zhukaigou and related cultures

It is recognized by many scholars that the *san zu weng* originated and represented one of the most distinctive vessel types of the Zhukaigou culture. This culture, named after

---


56 For the identification of the pocket-legged *san zu weng* as a standard Zhukaigou type cf. Su Bingqi 苏秉琦, *Zhongguo wenming qiyuan xintan* (Xianggang: Shangwu, 1997), 49-52. Su suggests that pocket-legged pottery *li* tripod of the Central Plain emerged as a mixture of the Yangshao pointed-bottomed *ping* bottle and the *san zu weng* from Ordos, thus being a product of cultural exchange between the emerging Chinese and the northern steppe cultures (ibid, 50). Yang Zemeng suggests that *san zu weng* was developed in Zhukaigou on the base of *weng* from Hushan 虎山 culture in Haidai 岐海 region of Inner Mongolia, as well as pointed-bottomed *ping* and round-bottomed *jia* vessels from the local Labakou 萊口 culture, contemporary to late Yangshao culture (cf. Yang Zemeng 揚澤蒙, “Zhukaigou wenhua yu yu zhoulin diqu kaoguxue wenhua de guanxi” 朱開溝文化因素分析及與周邊地區考古學文化關係, *Haidai kaogu* (2) – Zhong Ri Daihai diqu kaocha yanjiu baogao ji 岐海考古(二): 中日岱海地區考古研究報告集, ed. by Tian Guangjin 田廣金 et al, (Beijing: Kexue, 2001), 411-453, esp. 423).
Zhukaigou site in Yijinhuoluo 伊金霍洛 banner, Yikezhao 伊克昭 County of Inner Mongolia, occupied since ca. 20th until 13th c. BC.

Image VI. Zhukaigou pottery: a) shuang er guan; b) jia with hollow legs; c) li with snake design; d) li; e) da kou zun; f) high-footed dou; g) san zu weng.57

The origin of the Zhukaigou culture is debatable, but, it is plausible that it developed on a local Ordos base under the strong influence of migrants from Gansu and Qinghai who brought along their native Qijia 齐家 (22-18 cc. BC) culture, characterized, in particular, by one-, two-, and three-handled guan jars and pocket-legged li, jia, and he vessels.58 The Zhukaigou influence has been traced in the south and south-east in northern parts of Shaanxi and in Luliang Mountains 呂梁山 reaching Jinzhong 晉中 in Shanxi. Its traces have been found until

57 Source: Yang Zemeng, “Zhukaigou wenhua,” 414-5, img. 1, 2 (rearranged by the author of the present paper).
58 For a short introduction to the Zhukaigou culture cf. Linduff, Katheryn M., Bunker, Emma C., and Wu En, “An Archaeological overview,” Ancient Bronzes of the Eastern Eurasian Steppes from the Arthur M. Sackler Collections (New York Arthur M. Sackler Foundation 1997), 21-22; for a detailed analysis cf. Wu En Yuesitu 烏思斯圖, Beifang caoyuan kaogu xue wenhua yanjiu 北方草原考古學文化研究 (Beijing: Kexue, 2007), 61-93; Yang Zemeng, “Zhukaigou wenhua,” 411-453. Zhukaigou pottery includes some specimens common with the Kexingzhuang 村莊 culture distributed along Wei River in central Shaanxi, including the jia with three pocket-like hollow legs spaced apart from each other (cf. Fitzgerald-Huber, Louisa G., “Qijia and Erlitou: The Question of Contacts with Distant Cultures,” Early China 20 (1995): 17-67, 31; for a jia of this type and a li of Kexingzhuang type cf. Image VI e and d). However, it is unlikely that Zhukaigou was founded by migrants from Wei river area (Fitzgerald-Huber, ibid, 33), whereas the direct influence from Gansu and Qinghai is undeniable (Linduff et al, ibid, 21, Wu En, ibid, 86). For the most detailed analysis of Qijia factors in the Zhukaigou culture and criticism of the Keshengzhuang origin theory cf. Ma Mingzhi 馬明志, “Hetao diqu Qijia wenhua yicun de jieding ji qi yi yi – jian lun xibu wenhua dong jin yu beifang biandi wenhua de juhe licheng” 河套地區齊家文化 遺存的界定及其意義——兼論西部文化東進與北方邊地文化的聚合歷程, Wenbo 2009.5, 16-24. Ma argues that 1-4 periods of the Zhukaigou cemetery yield exclusively Qijia materials, e. g. the site of Zhukaigou was founded by the western migrants. The specific “Zhukaigou culture” manifests itself only starting from the 5th period. Ma suggests that the local roots of this new culture are represented by Dakou 大口 culture (regarded by others as part of the Zhukaigou culture), characterized, in particular, by the egg-shaped san zu weng. For the purpose of the present study it suffices to make sure that the san zu weng emerged in Ordos and were not brought from regions further apart.
Yinshan 陰山 Mountain Range in Inner Mongolia and even in the southern Baikal region in the north, until Helan 贺蘭 Mountains near Yinchuan 銀川 (Gansu) in the west, and until Zhangjiakou 張家口 area in northern Hebei in the east. The Zhukaigou society was sedentary and practiced agriculture and stock raising. It learned bronze-casting technology in ca. 18th c. BC, possibly, from the Qijia and Siba 四壑 (20-16 cc. BC) cultures of Gansu and Qinghai. Since ca. 14th c. BC, it established close relationships with the Shang culture. The most typical forms of the Zhukaigou pottery include large 鳥 with snake design and the san 革 weng, Da kou 鼻 with relatively high, trumpet-like neck also belongs to its inventory (cf. Image VI c, e, g).

Earlier Zhukaigou san 革 weng found in Inner Mongolia, northern Shaanxi, Shanxi and in Hebei, are large, egg-shaped and have relatively small legs. They were often used as containers for infant burials. Later Zhukaigou specimens have shallower and wider, nearly globular bodies (Image VII). Similar nearly globular san 革 weng were found on the Xinhua 新華 site in Shenmu 神木 in the north of Shaanxi.

![Zhukaigou, Xiguan, Dakou, Yudaobe, Shenmu, Lijaya, Youyao, Baiyan](image)

**Table III. Northern san 革 weng and their Dongxiafeng counterparts**

The earliest find of the san 革 weng to the east from the Great Bend of the Yellow River was made in Yudaobe 延court River Valley, Fenyang 汾陽 County, Shanxi, on the south-eastern foot of Lüliang 岳梁 Mountains. They are almost identical to these found in Shimao 石峁,
Further to the south, egg-shaped san zu weng have been found on settlements of the Dongxiafeng culture in southwestern Shanxi. This is particularly noteworthy, since its eponym site Dongxiafeng is located in Xia County on the Yuncheng Plain only forty kilometers to the south-west from Hengbei. More than thirty other sites spread over Yuncheng Plain and in the south of Fen River Plain have been identified as Dongxiafeng settlements. The excavators attempted a suggestion that Dongxiafeng represented the ruins of the capital of the Xia Dynasty (Xia xian 夏墟). Dongxiafeng culture emerged on a local substrate under the strong influence of the Henan Erlitou culture, but also incorporating some elements of cultures distributed farther north. The san zu weng, having no local antecedents, are reasonably recognized as Zhukaigou elements. Some scholars have argued that, despite their northern origin, these vessels became well established in the Dongxiafeng culture and, therefore, that spouses of Jin rulers at Tianma-Qucun who had such objects in their tombs were "princesses of the Xia people." At the same time, jars categorized as da kou zun have been often found on Dongxiafeng sites. Leaving aside the question about the historicity of the Xia dynasty, it is reasonable to consider whether the san zu weng and da kou zun appearing in Tianma-Qucun and Hengbei could not be rooted in the area of Yuncheng during the Western Zhou period.

However, although the san zu weng are frequent in Erlitou phases of Dongxiafeng, their never appear on Erlitou sites more to the south. Therefore, they did not become incorporated in the "Xia" culture. Moreover, they disappeared from Dongxiafeng as soon as Henan Erligang culture spread over southwestern Shanxi. Besides, only egg-shaped, but no nearly globular san zu weng have been found in this area during pre-Shang and Shang periods (cf. Table 64).

For this argument cf. Yang Zemeng, “Zhukaigou wenhua,” 423. The simplified report on the excavations in Shimao is not available to me.


66 Xian xian Dongxiafeng, 140-141.

67 Cf. Thorp, Robert L., “Erlitou and the Search for the Xia,” Early China 16 (1991), 1-38, esp. 7; Li Weiming 李輝明, “Zai lun Dongxiafeng leixing” 再論東下馮類型, Zhongyuan wenwu 1997.2, 23-31. Although Erlitou features are manifested in the Dongxiafeng the most strongly, it also displays influences from Taosi and Kexingzhuang cultures, as well as from the early Shang culture.


70 In the remains of the Erlitou-II and Erlitou-III phases at Dongxiafeng, egg-shaped weng (which not necessary were all san zu weng, but, possibly, also included species without legs) make 4 and 8.4% of all pottery vessels. In the Erligang-I phase, their number decreases only slightly (4.9%), but in the Erligang-II phase, they appear only seldom (1.8%) (for numbers and a detailed analysis cf. Qin Xiaoli, “Jin xian diqi Erlitou wenhua dao Erligang wenhua de taoqi yanbian yanjiu” 晉西南地區二里头文化到二里岗文化的陶器演變研究, Kaogu 2006.2, 56-72, esp. 63, table III).
Therefore, the continuity between Dongxiafeng san zu weng and those from Tianma-Qucun or from Hengbei cannot be confirmed.

Table III. *Da kou zun* shapes

---

73 The Dongxiafeng san zu weng differ from their northern prototypes by legs grouped very close to each other. This, certainly, reflected on the stability of the vessel. Hence, egg-shaped weng with flat bottom have been developed in this culture. Some of them are nearly globular. Their profile is comparable with that of the late Zhukaigou san zu weng, but the legs are missing. Besides, forms of egg-shaped weng developed in Dongxiafeng display small knobs on the opposite sides of their waist, which never appear in northern specimens. These features are also absent in san zu weng found in Tianma-Qucun and in Hengbei.

Large jars categorized as da kou zun are typical for both Dongxiafeng and Henan Erlitou, and, moreover, for the early Shang Erligang culture. However, their shapes differ from both the northern da kou zun from Dakou, Shenmu and Yudaohe, and from later vessels from Tianma-Qucun and Hengbei (cf. Table III). Although they, possibly, experienced some influence from Zhukaigou forms at the same time as the san zu weng appeared at Dongxiafeng, it was not significant. Therefore, it cannot be demonstrated that the da kou zun appearing at Tianma-Qucun and in Hengbei had roots in the Yuncheng area.

In contrast, san zu weng were still present and further developed in many cultures identified in northern Shaanxi and Shanxi and dated to the Shang period. First of all, they remained among their standard pottery types in the late Zhukaigou culture, which moved to Yan’an area in Shaanxi. This vessel type was also adopted in the Lijiaya 李家崖 culture, manifesting itself along the north-eastern part of the Great bend of the Yellow River, i.e. in northern Shaanxi and northern Shanxi during ca. 13-10 cc. BC. San zu weng were also among the typical objects of the Youyao 游邀 and Baiyan 白燕 cultures in the upper flow of Fen River in Shanxi. All latter cultures developed under Zhukaigou influence. On the other hand, they maintained closer relationships with the Shang. Especially in elite tombs of Lijiaya culture, such Shang ritual bronze vessels as ding, gui, yan, jia, gu, you, jue, hu, he, pan and bu 鬲 were regularly found. Nevertheless, Lijiaya people retained its own cultural identity, which manifests not only in pottery, but also in bronze daggers, knives, axes and other objects that are usually found in the same burials.

---

75 Erlitou-II and Erlitou-III phases at Dongxiafeng, da kou zun make 5.9 and 12.1%, in Erligang I and II – 11.4 and 11.1 % respectively (cf. Qin Xiaoli, “Jin xinan diqu Erlitou wenhua dao Erligang wenhua,” 63, Table III).
76 In the da kou zun from Shenmu, the relationship between the neck and the body is almost 1:2, whereas in Erlitou counterparts it is only 1:5-1:7. The rim of the zun from Shenmu, Yudaohe and Dakou is wider as shoulders. The Dongxiafeng develop a relatively high open neck only during V-VI periods. At the same time, the egg-shaped san zu weng are witnessed in Erligang only starting from the IV period. It is therefore possible that the later change of the Dongxiafeng da kou zun was influenced by the encounter with the Zhukaigou culture. Similar shape appears in the second part of the lower Erligang period in the ruins of the Shang city in Zhengzhou, Henan. During the consequent, early upper Erligang period, da kou zun with remarkably slim body and trumpet-like neck has been witnessed several times on the latter site. However, the later development of the Erligang da kou zun demonstrates that this shape was not firmly established in the Shang repertoire.
77 The site of Zhukaigou was abandoned in 13th c. BC. Earlier, it has been suggested that the Zhukaigou people moved from Ordos either to the north, or to the south, where they founded Lijiaya culture. In 2002, typical Zhukaigou pottery has including san zu weng has been found in Xiguaqucun 西瓜渠村, Ansai County, Shaanxi, seventy km to the north from Yan’an (cf. Lü Zhirong 吕智荣, “ShaanxiAnsai xian Xiguaqucun yizhi shijue jianbao” 陕西安塞县西瓜渠村遗址试掘简报, Huxia kaogu 2007.2, 10-17). This find indicates that during the Shang period, the Zhukaigou culture coexisted with younger cultures Lijiaya and Xicha 西岔.
78 Many Lijiaya object types, including li, ping, gui and, particularly, san zu weng were based on Zhukaigou prototypes. Moreover, both Zhukaigou and Lijiaya people employed the same construction methods. Therefore, some scholars believe that Lijiaya was founded by Zhukaigou people who moved south in 13th c. BC (for references cf. Wu En, Beifang caoyuan, 158). This is, however, not evident, especially because it has been established now that the Zhukaigou culture did not cease to exist with the abandonment of the Zhukaigou site. At the same time, doubts have been raised whether the latter site is suitable as the typesite of this culture.
In 2004, a survey of the Gaohong site of the Lijiaya culture revealed many stumped-earth foundations of buildings, indicating that it was an important settlement and, possibly, a political center. The foundations were constructed during the middle Shang period, but the site, possibly, lasted until the middle Western Zhou period. This site, located deep in Lüliang Mountains in Liulin County, Shanxi, lays atop a steep hill surrounded from three sides by a bend of Sanchuan (Qinglong) River. Similarly to the Lijiaya eponym site, it represented a natural fortress. The Yellow River can be reached by Sanchuan Valley in about 25 km to the west, or by a mountain road in only five km to the north. Objects discovered in Gaohong display many similarities not only in shapes, but also in ornaments.

Table IV. Gaohong pottery in comparison to Hengbei vessels.

<table>
<thead>
<tr>
<th>Forms</th>
<th>Gaohong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Da kou zun</td>
<td><img src="image1" alt="Image" /></td>
</tr>
<tr>
<td>Weng</td>
<td><img src="image2" alt="Image" /></td>
</tr>
<tr>
<td>Gui</td>
<td><img src="image3" alt="Image" /></td>
</tr>
<tr>
<td>Ornaments</td>
<td><img src="image4" alt="Image" /></td>
</tr>
</tbody>
</table>

83 This zun was collected in Hejiazhuang, Loufan County, Shanxi. This site, located to the east from Taiyuan, is earlier than Gaohong.


85 Tian Jianwen 田建文 makes this observation based on images of li vessels, occasionally published in newspapers where the nomination of the Gaohong site for “ten greatest archaeological discoveries of 2006” has been announced (cf. Tian Jianwen, “Lingshi Jijie Shang mu yu Shanxi Shang dai wan qi kaoguxue wenhua” 灵石祭祀商墓与山西商代晚期考古学文化, Zhongyuan wenwu 2009.1, 39-61, esp. 42).

with the objects from the tomb M1 at Hengbei (cf. Table IV). Therefore, it is plausible that the pottery from M1 had its prototypes in the Lijiaya culture.\textsuperscript{87}

In sum, this survey demonstrates that, although inhabitants of the south-western Shanxi, where Peng state was located during mid-Western Zhou period, maintained contacts with cultures of the north during pre-Shang and Shang periods, they did not firmly incorporate the san zu weng in their own repertoire of pottery. Also the northern variant of the da kou zun was not adopted in the south. By the end of the Shang period, the area of Yuncheng was integrated in the Shang sphere culturally and, most likely, politically. Therefore, Peng was not an old local lineage cherishing his own cultural tradition since pre-Shang times. More plausibly, it migrated from Lüliang Mountains to the south during the Western Zhou period prior to King Gong’s reign.\textsuperscript{88} This supports that in tombs of ruling lineages of Jin and Peng states, these objects fulfilled symbolic functions.

At the same time, these functions were different in Jin and Peng. In Jin, exotic objects clearly emphasized the cultural roots of their owners, women from neighbouring polities.\textsuperscript{89} Although at Hengbei, the san zu weng and da kou zun have been also found in a tomb of a female, she was not a migrant from the north. As the bronze inscription from the both M1 and M2 suggest, the woman buried there was née Ji of Bi, the spouse of Peng-bo Cheng (M1: 199, 212; M2: 57). Bi was a Ji-surnamed lineage descending from Bi-gong Gao and closely related to the Zhou royal house.\textsuperscript{90} Nevertheless, there is no doubt that the san zu weng, numbered thirteen, and the da kou zun, numbered three, are intentionally emphasized in the set of her funerary equipment. Although no definitive explanation to this phenomenon can be suggested until the report on the excavations of other elite tombs at the Hengbei cemetery of is published, it can be tentatively supposed that in this context, objects of the non-Zhou ritual repertory were used to symbolize not just the identity of their owner, but the cultural roots of Peng state.

This hypothesis faces apparently contradicting evidence: the lack of these types of vessels in the Tomb M2, supposedly occupied by Peng-bo Cheng. It would be logical to expect that the tomb of the ruler of Peng state would yield even more idiosyncratic objects than the tomb of his spouse. This was evidently not the case. However, this is not the single irregularity that

---

\textsuperscript{87} In particular, the Hengbei san zu weng seem to derive from Gaohong guan jars with narrow rim and wide shoulders, to which pocket-like legs of the type also witnessed in Gaohong were attached. Moreover, both Hengbei san zu weng and Gaohong guan are decorated with two registers of ribbons filled with comb-patterned triangles. Similar pattern is also seen on a Gaohong dou-like gui on a high foot. Its shape is very similar to the gui from Hengbei M1. Dou-like gui were widely distributed in northern cultures of Shanxi. They also appear occasionally in Shang tombs. However, comparable standard Shang gui have much shorter and wider feet. The high-footed dou-like gui of the north were, possibly, related to high-footed dou of Qijia culture (cf. Image VI.f), incorporated in the Zhukaigou repertoire and adopted later in cultures influenced by the latter.

\textsuperscript{88} Until the cemetery of Hengbei is published, the date of its migration cannot be revealed.

\textsuperscript{89} It is noteworthy that on the cemetery of the Jin elites at Tianma-Qucun, da kou zun sometimes occur without san zu weng in tombs, occupied by males. Hence, it is not unlikely that the san zu weng, as storage vessels, were associated primarily with females, whereas the da kou zun, as vessels for beverages, could be used by persons of both sexes.

\textsuperscript{90} Bi was listed as one of the sixteen states defined as “King Wen’s zhao generation” in the Zuo zhuan (cf. Yang Bojun, Chunqiu Zuo zhuan zhu (Xinhua shudian, 1981), 421 (Xi: 24)). Some commentators assume that the founder of Bi was King Wen’s son, but this cannot be verified. Sima Qian stated that Bi-gong Gao had the same surname as the Zhou (Bi公高與周同姓) (cf. Sima Qian, Shi ji (Zhonghua shuju, 1959, rpt. 1973), “Wei shijia” (44), p. 1835). Theoretically, the Bi branch could split from the Ji clan at an earlier date. In any case, Bi lineage was closely related to the Zhou royal house. In particular, the Duke of Bi, possibly, the son of Bi-gong Gao, was a confidant of King Cheng and King Kang (cf. Shang shu: “Gu ming”, “Kang-wang zhi gao”, “Bi ming!”).
Peng-bo Cheng’s tomb displays. The tomb M1 is slightly smaller and contains less ritual objects than M2. Most noteworthy, M1 included five bronze ding and five bronze gui, whereas M2 included only three bronze ding and one bronze gui. As the excavators note, it is unusual that a tomb of a wife is furnished more richly than that of her husband. Although, considering the specific cultural situation of the Peng-Bi marital alliance, such speculation comes to mind rapidly, I do not believe that Bi Ji had higher ritual status than Peng-bo. It is more fruitful to look for the reasons of the puzzling ritual degradation of Peng-bo in the political dynamic of 10-9 cc. BC.\(^91\)

5. Peng state and the Kui/Gui clan

The lineage name Peng in bronze inscriptions was written in two ways: with the determinative “hand” and with the determinative “roof.”

The first form appears in earlier, the second – in later inscriptions. In both cases the lineage name Peng appears together with the surname Gui. Possibly, the Peng lineage modified the written form of its name at some point. At the same time, it is also possible that it split in branches, and the new branch became a slightly different designation.\(^92\)

The surname of Peng lineage appears, as usual, only in designations of its female members. Written as 鬳, consisting of the phonetic gui and the “woman” determinative, it is usually transcribed as “Kui.” In surnames, “woman” determinative emphasized that the referred person was a woman, but otherwise, the same surname could be written with a different determinative, or without a determinative.\(^93\) Wang Guowei suggested that the surname Kui/Gui 姬/嬻 derived from the name of Gui 鬳 people, and that Hui/Kui/Tui 姬/嬻 were variants of the same surname.\(^94\)

Gui people 鬳方, residing in the north, was often mentioned in Shang oracle bone inscriptions as important rivals of the Shang.\(^95\) According to delivered sources, Shang King Wu-ding 武丁 led a war against the Gui and was able to bring them to obedience after three years.\(^96\) Later on, Zhou leader Ji Li 季历 (the father of the future King Wen) fought Gui-Rong peoples of the Western Luo 西落鬼戎 on the orders of Shang King Wu Yi 武乙 and captured “twelve kings of the Di” 二十翟王.\(^97\) During the reign of King Kang, Zhou warlord Yu 盂 attacked the Gui

\(^91\) This discussion goes beyond the scope of this conference paper.
\(^92\) It is noteworthy that earlier inscriptions were commissioned in connection to marriages between Peng women and men from Shaanxi, whereas latter ones were related to marriages concluded in Shandong. This may signify a political re-orientation of the Peng lineage, or the foundation of a new branch lineage in the east, or even the relocation of the whole lineage to the east.
\(^93\) In particular, the character 嬻 in a woman’s name should be read not fei (“concubine”), but Ji 己 (cf. Wang li 王莉, Jicheng #645, LWZ, dedicated by the king to Fan Ji 番姬; other inscriptions confirm that 嬻(己) was the surname of Fan and several other lineages). Similarly, in the name of Second-born née Zi of Kai 摽仲姬(子), the character 嬻 should be read as Zi 子 (cf. Hai gui 杭簋 in Liu Yu 刘雨, Yan Zhibin 延志斌 (eds.), Jin chu Yin Zhou jinwen jilu er bian (Beijing: Zhonghua shuju, 2010, hereafter Jinchu-2), Nr. 425.
\(^94\) Cf. Wang Guowei 王国维, “Guifang Xianyun kao” 鬳方先云考, Guantang jilin 助堂集林, XXXX
\(^95\) XXXX
\(^96\) Cf. Zhu shu ji nian, Wu Ding: 32-34, XXXX, Hou Han shu, 87.2870 (“Xi Qiang zhuan” 西羌傳).
\(^97\) Zhu shu ji nian, Wu Yi: 35, XXXX, Hou Han shu, 87.2871.
again and brought back a rich booty: several thousands prisoners, more than one hundred war chariots, several hundred oxen, dozens of sheep and many horses. There is no later references to the Gui people, which, possibly means that after Yu’s campaign, it ceased to exist as an entity and split in smaller groups.

Supposedly, “Red Di” peoples of the Spring and Autumn period descended from the Gui people. The “Zheng yu” chapter of the Guo yu mentions “Di of the Kui surname” among “western states” in one group together with Yu, Guo, Jin, Rui, and Wei. All of them were located in southern Shanxi or in adjacent areas of Henan. The same passage lists also “northern states” including Lu, Luo, Quan, Xu, and Pu. According to the commentary of Wei Zhao, they also belonged to “Red Di” group and shared Kui surname. During this time, they inhabited Taihang Mountains separating Shanxi from Hebei. Many scholars believe that Kui/Gui-surnamed Peng represented another group of Red Di and a descendant of the Gui people.

At the same time, many authors suspect Lijiaya to be the culture of the Gui or Gong peoples mentioned in Shang oracle bones. In absence of written evidence, this guess could not yet be verified. The connection between Lijiaya and Gui-surnamed Peng lineage provides a hold for the hypothesis about the relationship between the Lijiaya culture and the Gui people. Nevertheless, there are still many missing links between Guifang, Lijiaya and Peng.

Most Lijiaya settlements have been dated to the Shang period. Although some scholars suggest that these settlements, e.g. Gaohong, were occupied also during the Western Zhou period, this should be confirmed more definitively. From the inscription on the Yu ding, it can be seen that Guifang practiced cattle breeding, especially oxen and sheep. They were definitively not nomads, since oxen are not suitable for mobile pastoralism. Thus, they possibly resided on in valleys of rivers or in foothills of mountains, and did not move around except for leading their sheep to summer pastures. Hence, the Guifang way of life basically corresponded to that of Lijiaya people, who resided in settlements in foothills of mountains, breed horses, sheep, oxen and pigs. The Gui possessed a developed technology permitting to equip their troops with such number of chariots. Parts of horse-and-chariot complex, possibly, imported from the Shang, have been found only in one tomb of Lijiaya culture in Linshuyu, Baode County in the north of Shanxi province. It is not clear whether this people developed chariory and constructed roads permitting transportation along swampy river valleys during the Western Zhou period.

Admitting that lineages of Kui/Gui surname, including Peng, descended from Gui people, it is reasonable to look whether they maintained contacts to each other during the Western Zhou period. The evidence of such contacts may support the hypothesis about their common origin;

---

98 Cf. Xiao Yu ding 小孟鼎, Jichen #2839, Licun 禮村, Mei 鄂 County, Shaanxi, EWZ.
100 Cf. Wei Zhao 韋昭, comm., Guo yu (Beijing: Shangwu, 1935), 16.183 (“Zheng yu”)
101 Cf. Wei Zhao 韋昭, comm., Guo yu, 16.183; Chen Pan, Chunqiu dashibiao, 6.555b.
102 Cf. e.g. interview with Song Jianzhong in Li Shanghong 李尚弘, „Shanxi Jiang xian: Xi Zhou Peng guo.”
104 Cf. Wu En, Beifang caoyuan, 143.
although, considering that the availability of epigraphic and archaeological materials represents a matter of luck, their absence will not necessarily prove the contrary.

Other lineages of Kui/Gui surname appearing in bronze inscriptions include Hu 房 and Fu 復:

The location of Fu is not clear. One late Western Zhou inscription informs that it intermarried with Man 曼-named Deng 郤 state located in Han 漢 River valley near Xiangfan 襄樊 city in Hubei. There is no witnesses about contacts between Fu and Peng.

Many scholars localize Hu in Huai 淮 River Valley, in Fuyang 阜陽 County in eastern Anhui. Later transmitted texts mention Hu states of Ji 祁 and Gui 歸 surnames. Gui, plausibly, was another form of the Kui/Gui surname. According to a Western Zhou inscription, Hu led a war against the Zhou during the reign of King Mu 穆 (956-918). In this text, Hu was referred to as Rong 戎. Hence, it was distinguished from the main population of the Huai River area, usually referred to as Yi 夷. This may be related to the fact that the Hu migrated to this area from the north.

A recently discovered inscription indicates that another Hu state could be located on the Central Plain:

工作懋仲宫，在十月又二月生霸吉庚寅。子賜懋仲 ……牲大牢，乙巳，懋仲連芮伯族 侯子。子賜白金錐，用作父丁鼎彝。史
The king made a palace for the Second-born of Rong. In the tenth month and second month, after the brightness was born, on auspicious geng-jin, [I, the] Son, congratulated the Second-born of Rong with one jade tablet and one Great lao of sacrificial animals. Second-born of Rong hosted the First-born of Rui and the son of Hu-hou. [I, the] Son, was granted [one] lue of white metal. [I] used it for making this large sacrificial cauldron for Father Ding. Secretary.

According to this inscription, rulers of Hu and Rui traveled together. This would be understandable if they resided not far from each other. Rui was a Ji-named state located in Ruicheng County in the south-west of Shanxi, i. e. close to Peng. It is worthy to consider

105 Cf. e. g. Chen Pan, Chunqiu dashibiao, “Hu,” 5.456b-59b, esp. 459a; Li Feng, Landscape and Power, 96. According to the Zuo zhan, it was conquered by King Ling of Chu 楚楚王, whose main target was Cai 臧 (cf. Zuo zhan, XXX). This supports the localization of Hu in Anhui.

106 Cf. Chen Pan, Chunqiu dashibiao, 5.457a-b. Chen Pan points out that sources disagree, whether the Hu were “brothers” or “affinal relatives” of the two Ji 祁. He admits that there were two Hu states with different surnames, and that the surname of Hu in Fuyang was Ji. On the other hand, it is possible that during the Spring and Autumn period, Gui-named Hu took on Ji surname, thus turning into “step brothers” of the major Zhou clan.


108 Shaughnessy calls Hu “a member of the Huay Yi confederation” and translates rong 戎 in Hu’s designation, not as an ethnonym, but in the sense of “belligerent.” However, although the definition “Rong” was more often applied to northern and western peoples, there was also a distinction between Yi, Rong and Man peoples residing in Huai River area (for further arguments cf. Khayutina, Maria, “Marital Alliances and Affinal Relatives (sheng 王 and hungou 爲) in the Society and Politics of Zhou China in the Light of Bronze Inscriptions,” forthcoming in Early China.

109 Cf. Zi fang ding, in Jinchu-2, 318. One exemplar of this inscription is on a vessel acquired by the Baoli Museum in Beijing. Another vessel with an identical inscription is said to be found in Shandong and is kept in a private collection. The inscription is very irregular. The vessel is dated roughly to the early Western Zhou period, but it can also date later.
whether this Hu, which could also sound Fu, did not correspond to Pu referred to in the *Guo yu*. Considering its location, it is likely that this Hu was closely related to Peng.

In 1978, a hoard of bronzes made during the later part of the middle Western Zhou period has been discovered in Wugong County of Shaanxi. It contained six tureens commissioned by Third-born of Hu 許叔 and his spouse née Ji of Hu 許姬 for their daughter the First-born née Kui/Gui 伯姫.\(^{110}\) as well as four tureens commissioned by Chu 楚.\(^{111}\) The latter was, most likely, the husband of the Kui/Gui-surnamed woman. His inscription informs about a reception offered to him by the Zhou king. It is noteworthy that the person who accompanied Chu to the royal palace, was Second-born Peng-fu 仲卿父, a member of Peng lineage.\(^{112}\) If, similarly to Ji-surnamed lineages, Kui/Gui-surnamed Peng and Hu maintained regular contacts, it is not unlikely that Second-born of Peng, rotating around the Zhou king, acted as a match-maker for his distant relatives and neighbours and arranged marital alliances in the Zhou metropolitan area.

Although there was a Kui-surnamed Hu in southern Shanxi, it is still possible that Hu residing in Anhui represented a branch of the former lineage that belonged to the network of Kui-surnamed groups. The evidence to this point is very subtle and puzzling. Recently, a bell commissioned by Second-born Yan of Hu 仲衍\(^{113}\) has been discovered in Wujun 五郡, Fufeng, Shaanxi. The Wujun hoard counts twenty seven bronze objects, including bells, ritual vessels and ladles, weapons, and decorations for horses and chariots. Unlike most hoards, discovered on the Zhou plain, it does not represent storage of ritual equipment of a temple. Rather, these objects were put together in order to be used as funeral equipment, or were once removed from a tomb and provisionally buried for their safety.


\[^{111}\] Cf. *Chu gui* 楚簋 (*Jicheng* #4246, Renbeicun 任北村, Wugong 武功, Shaanxi).

\[^{112}\] This was the same person as Master of Ceremonies Peng-fu 仲卿父, mentioned in the inscription on the Wang gui 翼簋 (*cf. Jicheng* #4272).

\[^{113}\] The bells have some differences in shapes and decorations. The set can be subdivided into two groups of two and three pieces respectively. They could have been commissioned at different times by different persons and put together in a set of five in accordance with their owner’s status. In the three-piece part, only one bell had a cast inscription. It was slightly smaller than two other bells of the same size (49 cm vs. 49.7 cm), and had thicker walls, but its decorations were made more finely in comparison to the other two. Its inscription was placed not on the most visible front panel or on the striking panel, but on the side of its shank, as if its commissioner did not dare to display his contribution more openly. Earlier, the lid of a tureen commissioned by the same person was found (*Hu Yan gui* 許衍簋, *Jicheng* #3804, LWZ, Fufeng, Shaanxi).
Image VII. *Da kou zun* and guion a high foot from Wujun

The person whose identity they had to display, most plausibly belonged to a branch of Ji-surnamed Shao lineage descending from Diao-sheng. It is noteworthy, that this hoard includes two large bronze *da kou zun*-jars with trumpet-like necks and ribbons of comb-patterned triangles around their bellies. This is the first time than bronze *da kou zun* of this type have been found (Image VII). It has been suggested above that the *da kou zun* played a symbolic role in the tombs of Peng and Jin states. Considering their uniqueness, it is likely that in Wujun, their function was similar. Besides, the hoard includes two *dou-like* tureens on high foot. With such features, the objects from Wujun stay in sharp contrast to the mainstream bronze craftsmanship of the Zhou plain, but, at the same time, display many parallels to the objects from Hengbei. Nevertheless, if the whole set of Wujun objects had something to do with the identity of a certain person, the latter was not a man from Shanxi or further north. The hoard includes twelve elongated sword-like *mao*-spearheads (Image VIII).


\textsuperscript{114} Sources: 1-3 redrawn from “Shaanxi Fufeng Wujun,” 25, img. 43; 4-8 from Li Jianmin 黎建民, “Xi Zhou shiqi de qingtong mao” 西周時期的青銅矛, *Kaogu* 1997.3, 70-79, esp. 71-72; 9-10 from Jianling chutu Dong
Their shape is untypical for central Zhou states. With the length varying between 36.3 and 34.7 cm, they are more than ten cm longer than standard spearheads of this period. \(^{115}\) A comparable spearhead was found once in a Western Zhou tomb at Linzi in Shandong where the capital of Qi state was located. More spearheads sharing features with weapons from Wujun can be found among Spring and Autumn period’s finds from Anhui and Hubei. Thus, on one hand, the objects from Wujun display a connection to the Kui/Gui-surnamed Peng, and, on the other hand, to Kui/Gui-surnamed Hu and Anhui. The coincidence of these factors can be explained, if the owner of the Wujun bronzes was related to Hu through his mother or wife, whereas Hu and Peng shared the same culture and displayed their identity using the *da kou zun* wine jars.

**Concluding remarks**

In this paper, I have focused on only three of many questions raised by the discovery of Peng tombs. At least one of them, concerning the date of Peng tombs, could be resolved with great confidence. The comparison with other mid-Western Zhou bronzes, especially related to the person of Duke Wu, reveals that the King Mu reign’s date suggested by excavators is too early. Peng-bo Chen’s tureen dates to the 23\(^{rd}\) year of King Gong, which, in its turn, verifies that King Gong reigned twenty three years from 922 to 900 BC.

Regarding the cultural roots of Peng, it could be demonstrated that Peng unlikely grew on a local substrate in south-eastern Shaanxi. It was not a descendant of the political and cultural entity occupying the Plain of Yuncheng during pre-Shang and Shang periods. Rather, it had genetic connections to non-Zhou peoples residing further to the north. Of many northern cultures, in which *san zu weng* and *da kou zun* vessels were current, Peng’s relations to the gaohong variant of the Lijiaya culture seem to be quite strong. However, until the publication of both Hengbei cemetery and Gaohong city, this observation cannot be verified.

The last question about the relationships between Peng, Guifang, and other Kui/Gui surnamed lineages cannot be answered with any certainty in absence of a really “hard evidence.” Nevertheless, the subtle indications revealed by now call for further investigations in this direction.

---

<table>
<thead>
<tr>
<th>Months</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>King Gong (922-900 BC)</td>
<td>922</td>
<td>921</td>
<td>920</td>
<td>919</td>
<td>918</td>
<td>917</td>
<td>916</td>
<td>915</td>
<td>914</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>10</td>
<td>40</td>
<td>39</td>
<td>8</td>
<td>37</td>
<td>7</td>
<td>36</td>
<td>5</td>
<td>35</td>
<td>4</td>
<td>34</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>34</td>
<td>4</td>
<td>33</td>
<td>3</td>
<td>32</td>
<td>1</td>
<td>31</td>
<td>60</td>
<td>59</td>
<td>Jue Cao ding: 7/10/2?</td>
<td>28</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>28</td>
<td>58</td>
<td>27</td>
<td>57</td>
<td>27</td>
<td>56</td>
<td>25</td>
<td>55</td>
<td>24</td>
<td>53</td>
<td>23</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>22</td>
<td>52</td>
<td>21</td>
<td>51</td>
<td>21</td>
<td>50</td>
<td>20</td>
<td>49</td>
<td>19</td>
<td>48</td>
<td>17</td>
<td>47</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>46</td>
<td>Wei ding: 5/1/1/47 (2nd)</td>
<td>16</td>
<td>55</td>
<td>15</td>
<td>55</td>
<td>14</td>
<td>44</td>
<td>13</td>
<td>43</td>
<td>12</td>
<td>42</td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>40</td>
<td>10</td>
<td>39</td>
<td>9</td>
<td>38</td>
<td>8</td>
<td>38</td>
<td>7</td>
<td>37</td>
<td>7</td>
<td>36</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>36</td>
<td>6</td>
<td>35</td>
<td>5</td>
<td>34</td>
<td>3</td>
<td>33</td>
<td>2</td>
<td>32</td>
<td>1</td>
<td>Jue Cao ding: 7/10/2?</td>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>60</td>
<td>30</td>
<td>59</td>
<td>29</td>
<td>58</td>
<td>27</td>
<td>57</td>
<td>26</td>
<td>56</td>
<td>25</td>
<td>55</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>54 Wei ding: 9/1/4/17, the 27th</td>
<td>24</td>
<td>54</td>
<td>Ji gui: ?/3/1/57(4th)</td>
<td>23</td>
<td>53</td>
<td>22</td>
<td>51</td>
<td>21</td>
<td>50</td>
<td>Guai-bo gui: 9/9/7/51 (2nd)</td>
<td>19</td>
<td>49</td>
</tr>
<tr>
<td>Months</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>--------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>10</td>
<td>913</td>
<td>18</td>
<td>48</td>
<td>17</td>
<td>47</td>
<td>16</td>
<td>45</td>
<td>15</td>
<td>43</td>
<td>42</td>
<td>43</td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td>11</td>
<td>912</td>
<td>12</td>
<td>41</td>
<td>11</td>
<td>41</td>
<td>10</td>
<td>40</td>
<td>9</td>
<td>39</td>
<td>38</td>
<td>37</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>12</td>
<td>911</td>
<td>6</td>
<td>35</td>
<td>5</td>
<td>Zou gui 走盪 12/3/3/27 (23rd)</td>
<td>35</td>
<td>4</td>
<td>34</td>
<td>3</td>
<td>33</td>
<td>2</td>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>910</td>
<td>30</td>
<td>60</td>
<td>29</td>
<td>59</td>
<td>28</td>
<td>58</td>
<td>27</td>
<td>57</td>
<td>26</td>
<td>55</td>
<td>25</td>
<td>54</td>
</tr>
<tr>
<td>14</td>
<td>909</td>
<td>24</td>
<td>53</td>
<td>23</td>
<td>53</td>
<td>22</td>
<td>52</td>
<td>22</td>
<td>51</td>
<td>21</td>
<td>50</td>
<td>19</td>
<td>49</td>
</tr>
<tr>
<td>15</td>
<td>908</td>
<td>18</td>
<td>48</td>
<td>17</td>
<td>47</td>
<td>16</td>
<td>46</td>
<td>16</td>
<td>45</td>
<td>15</td>
<td>44</td>
<td>14</td>
<td>44</td>
</tr>
<tr>
<td>16</td>
<td>907</td>
<td>13</td>
<td>42</td>
<td>12</td>
<td>41</td>
<td>11</td>
<td>40</td>
<td>10</td>
<td>39</td>
<td>9</td>
<td>Shi Shan pan: 16/9/21/ (13th)</td>
<td>39</td>
<td>8</td>
</tr>
<tr>
<td>17</td>
<td>906</td>
<td>37</td>
<td>7</td>
<td>36</td>
<td>5</td>
<td>35</td>
<td>4</td>
<td>33</td>
<td>3</td>
<td>33</td>
<td>2</td>
<td>32</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>905</td>
<td>31</td>
<td>60</td>
<td>29</td>
<td>59</td>
<td>28</td>
<td>57</td>
<td>27</td>
<td>56</td>
<td>26</td>
<td>56</td>
<td>56</td>
<td>26</td>
</tr>
<tr>
<td>19</td>
<td>904</td>
<td>55</td>
<td>25</td>
<td>55</td>
<td>24</td>
<td>53</td>
<td>23</td>
<td>52</td>
<td>21</td>
<td>51</td>
<td>20</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>20</td>
<td>903</td>
<td>49</td>
<td>Zouma Xiupan 走馬休盤 20/1/3/11 (22th)</td>
<td>19</td>
<td>49</td>
<td>19</td>
<td>48</td>
<td>17</td>
<td>47</td>
<td>16</td>
<td>45</td>
<td>15</td>
<td>44</td>
</tr>
<tr>
<td>21</td>
<td>902</td>
<td>13</td>
<td>43</td>
<td>13</td>
<td>42</td>
<td>12</td>
<td>41</td>
<td>11</td>
<td>40</td>
<td>9</td>
<td>39</td>
<td>8</td>
<td>38</td>
</tr>
<tr>
<td>22</td>
<td>901</td>
<td>7</td>
<td>37</td>
<td>7</td>
<td>36</td>
<td>6</td>
<td>36</td>
<td>5</td>
<td>35</td>
<td>4</td>
<td>33</td>
<td>3</td>
<td>32</td>
</tr>
<tr>
<td>23</td>
<td>900</td>
<td>2</td>
<td>Shen gui 獨盪 ?/1/1/4 (3rd)</td>
<td>31</td>
<td>Peng-bo Cheng gui 恭伯再盪 23y/?/1/34, (4th)</td>
<td>30</td>
<td>Hu gui 走盪 ?/4/2/34 (5th)</td>
<td>60</td>
<td>30</td>
<td>59</td>
<td>59</td>
<td>58</td>
<td>57</td>
</tr>
<tr>
<td>Months</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>--------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>King Yi (989 - ?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 899</td>
<td>26</td>
<td>55</td>
<td>25</td>
<td>54</td>
<td>24</td>
<td>53</td>
<td>Shi Hu gui 1/6/3/11, (21th) Hu gui 1/6/3/12, (22th)</td>
<td>23</td>
<td>53</td>
<td>22</td>
<td>52</td>
<td>21</td>
<td>51</td>
</tr>
<tr>
<td>2 898</td>
<td>20</td>
<td>50</td>
<td>19</td>
<td>49</td>
<td>18</td>
<td>48</td>
<td>17</td>
<td>57</td>
<td>16</td>
<td>56</td>
<td>16</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>3 897</td>
<td>15</td>
<td>45</td>
<td>14</td>
<td>43</td>
<td>13</td>
<td>42</td>
<td>11</td>
<td>41</td>
<td>10</td>
<td>40</td>
<td>10</td>
<td>40</td>
<td>9</td>
</tr>
<tr>
<td>4 896</td>
<td>39</td>
<td>9</td>
<td>Shi Yun gui 4283 (?) 2/3/1/15, (7th)</td>
<td>38</td>
<td>7</td>
<td>37</td>
<td>6</td>
<td>35</td>
<td>5</td>
<td>34</td>
<td>4</td>
<td>34</td>
<td>3</td>
</tr>
<tr>
<td>5 895</td>
<td>33</td>
<td>3</td>
<td>33</td>
<td>2</td>
<td>31</td>
<td>1</td>
<td>30</td>
<td>59</td>
<td>29</td>
<td>58</td>
<td>28</td>
<td>57</td>
<td>27</td>
</tr>
<tr>
<td>6 894</td>
<td>57</td>
<td>27</td>
<td>56</td>
<td>26</td>
<td>55</td>
<td>24</td>
<td>54</td>
<td>23</td>
<td>53</td>
<td>22</td>
<td>52</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>7 893</td>
<td>51</td>
<td>21</td>
<td>50</td>
<td>20</td>
<td>50</td>
<td>19</td>
<td>49</td>
<td>18</td>
<td>47</td>
<td>17</td>
<td>46</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>8 892</td>
<td>45</td>
<td>Mu gui 7/13/2/51, (7th)</td>
<td>15</td>
<td>44</td>
<td>14</td>
<td>44</td>
<td>13</td>
<td>43</td>
<td>13</td>
<td>42</td>
<td>11</td>
<td>41</td>
<td>10</td>
</tr>
</tbody>
</table>

1. This inscription fits if there were two first months.
2. Can also be 9th, 11th, or 13th month.
3. If, as suggested, Shi Shan pan is a Gong-wang period’s vessel, this should be the first month of the 16th year.
4. Day ding-mao on the beginning of the first month of the year can be found in Gong-wang’s calendar only once during the 23rd year.
5. This date appears in the inscription dated to 1st year of [King Yi] while referring to previous events.