# THE XIA SHANG ZHOU DUANDAI GONGCHENG BAOGAO 夏商周斷代工程 報告 AND ITS CHRONOLOGY OF THE WESTERN ZHOU DYNASTY

## Edward L. Shaughnessy\*

Xia-Shang-Zhou duandai gongcheng zhuanjiazu 夏商周斷代工程專家組, ed., Xia-Shang-Zhou duandai gongcheng baogao 夏商周斷代工程報告. Beijing: Kexue, 2022.

## Abstract

The Xia-Shang Zhou Chronology Project was a five-year statesponsored project, carried out between 1995-2000, to determine an absolute chronology of the Western Zhou dynasty and approximate chronologies of the Xia and Shang dynasties. At the end of the five years, the Project issued a provisional report entitled Report on the 1996–2000 Provisional Results of the Xia-Shang Zhou Chronology Project: Brief Edition detailing its results. A promised full report was finally published in 2022: Report on the Xia-Shang Zhou Chronology Project. Although numerous discoveries in the more than twenty years between the publications of the Brief Edition and the Report have revealed that the Project's absolute chronology of the Western Zhou is fundamentally flawed, and some of the problems are acknowledged by the Report, still the Report maintains the Project's chronology without any correction. In the review, I present four of these discoveries, from four different periods of the Western Zhou, discussing their implications for the Project's chronology. I conclude with a call for some sort of authoritative statement acknowledging the errors in the report.

\*Edward Shaughnessy 夏含夷, University of Chicago; email: eshaughn@uchicago.edu

© The Author(s), 2024. Published by Cambridge University Press on behalf of The Society for the Study of Early China. This is an Open Access article, distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike licence (https://creativecommons.org/licenses/by-nc-sa/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the same Creative Commons licence is included and the original work is properly cited. The written permission of Cambridge University Press must be obtained for commercial re-use.



子曰:過而不改,是調過矣。

## The Master said: "To make a mistake but not to correct it, truly is what is called a mistake."

From 1995–2000, the study of ancient China in China was consumed with a project called the "Xia-Shang-Zhou Chronology Project" (夏商 周斷代工程). Under the leadership of the late Li Xueqin 李學勤 (1933-2019), it brought together some two hundred researchers from such various fields as ancient history, paleography, archaeology, and astronomy, and was sometimes claimed to be the largest humanistic project in China since the Siku quanshu 四庫全書 project of the 1770s. As a government-supported project, the Project's mandate was to produce within five years a precise chronology of the Western Zhou period, a relatively precise chronology of the Yinxu 殷墟 period of the Shang dynasty, and approximate chronologies of the earlier Shang and Xia dynasties. Late in the year 2000, the project released a provisional report entitled Report on the 1996–2000 Provisional Results of the Xia-Shang-Zhou Chronology Project: Brief Edition (夏商周斷代工程 1996-2000 年階段成果報告: 簡本).<sup>2</sup> The publication of this Brief Edition of the Project report prompted considerable discussion in the popular press,<sup>3</sup> but it seems that many scholars decided to await a promised full report before addressing the scholarly achievements and/or problems of the chronology project.4 They had a very long wait, but the full report—Report on the Xia-Shang-

4. I might note that I have previously published two general reviews devoted to the Project's results: Edward L. Shaughnessy, "Chronologies of Ancient China: A Critique of the 'Xia-Shang-Zhou Chronology Project,'" in *Windows on the Chinese World: Reflections by Five Historians*, ed. Clara Wing-chung Ho (Lanham: Lexington Books, 2008), 15–28, and Xia Hanyi 夏含夷, "'Xia Shang Zhou duandai gongcheng' shi nian hou zhi pipan: Yi Xi Zhou zhu wang zai wei niandai wei lizheng" "夏商周斷代工程"十年後之批判:以西周諸王在位年代為例證, in *Di si jie Guoji Hanxue huiyi lunwenji: Chutu cailiao yu xin shiye* 第四屆國際漢學會議論文集:出土材料與新視野 (Taipei: Academia Sinica, 2013), 341–80. I have also published a number of other more specific comments on the Project's conclusions, which I will mention at relevant places below.

<sup>1.</sup> Lunyu 論語, 15/30.

<sup>2.</sup> Xia-Shang-Zhou duandai gongcheng Zhuanjiazu 夏商周斷代工程專家組編, Xia Shang Zhou duandai gongcheng 1996–2000 jieduan chengguo baogao: Jianben 夏商周斷代工程1996–2000年階段成果報告:簡本 (Beijing: Shijie tushu chuban gongsi, 2000).

<sup>3.</sup> Articles in the *Far Eastern Economic Review* and *New York Times* attracted considerable attention—and provoked considerable anger in China—by claiming that the Project was essentially an exercise in chauvinism or nationalism; see Bruce Gilley, "Digging Into the Future," *Far Eastern Economic Review* 163.29 (20 July 2000), 74–77, and Erik Eckholm, "In China, Ancient History Kindles Modern Doubts," *New York Times* 10 November 2000, A3.

Zhou Chronology Project (夏商周斷代工程報告)—has now finally been published, twenty-two years after the publication of the Brief Edition. The Report is considerably more detailed than the Brief Version (545 pages as opposed to the 118 pages of the Brief Edition) and includes a few minor revisions to the earlier conclusions. It also includes two Postscripts (後記), the first describing the process of the writing of the Report, and the second noting that in 2019 the Project office was closed and all of the supporting materials were sent to the Institute of Archaeology of the Chinese Academy of Social Sciences (中國社會科學院考古研究所) for storage. Now that the Project is definitively concluded, it should certainly be subject to a broad-ranging critical evaluation. Unfortunately, because the *Report* is divided almost evenly between textual evidence (including both traditional texts and paleographic texts) and archaeological evidence, the latter of which is well beyond my own expertise, this review will necessarily focus only on the chronology of the Western Zhou and the bronze inscriptional evidence used to support it. That this is the first substantive chapter in the *Report*, and the foundation on which the rest of the chronology is based, provides at least some rationale for such a limited focus.<sup>5</sup> I hope that others with greater expertise in the archaeological evidence and/or the earlier periods treated by the Project will evaluate those portions of the Report.

In addition to the various chronologies it proposed, the Project has also pointed with pride to its methodology of bringing together scholars from multiple disciplines to produce a scientific result. In 2002, shortly after the conclusion of the Project's research period, the project leader Li Xueqin made the following statement about the significance of its multi-disciplinary approach:

What the "Xia-Shang-Zhou Chronology Project" has done is something that no one has ever done before. Under socialist conditions, we have taken various disciplines, including natural sciences and the human

<sup>5.</sup> The chapter, entitled "Research on the Chronology of Western Zhou" (西周年代 學研究) is Chapter 2, after the "Introduction" (引言). It is followed by the following chapters: "Research on the Year of King Wu's Conquest of Shang" (武王克商年研究), "Research on the Chronology of the Late Phase of the Shang Period" (商代後期的年代 學研究), "Research on the Chronology of the Early Phase of the Shang Period" (商代 前的年代學研究), "Research on the Chronology of the Xia Period" (夏代年代學研究), "<sup>14</sup>C Measures and Research on the Chronological Tables of Xia Shang and Zhou" (夏商周 专本代的<sup>14</sup>C 測定與研究), and "Chronological Tables of Xia Shang and Zhou" (夏商周 年表). "Research on the Chronology of Western Zhou," is the second longest chapter, at 121 pages. The longest, at 149 pages, is "<sup>14</sup>C Measures and Research on the Dates of Xia Shang Zhou Archaeology."

and social sciences, which previously had no contact and lacked even a common language, and merged them together. I believe that this has not only guaranteed that we reached the desired goals of the Project, but that it has accumulated valuable experience for even more advanced cross-disciplinary and multi-disciplinary research in the future.<sup>6</sup>

I think we can let pass in silence the influence that "socialist conditions" may have had on the success of the Project, but I wonder whether the natural sciences, the social sciences, and the human sciences really do lack "even a common language." One thing that the scientific method certainly has in common across all of these different disciplines is the requirement that results be replicable when subjected to new data. We have been fortunate in the more than two decades since the publication of the Brief Edition that a considerable amount of new evidence has been unearthed with which to test the Project's conclusions, especially its absolute chronology of the Western Zhou. To the authors' credit, some of this new evidence is mentioned in the *Report*, including acknowledgment that some of the evidence is inconsistent with its findings. Nevertheless, the evidence has led to no revision in the chronology, and to the revision of only a single dated bronze vessel,7 the implications of which, as we will see, have not been considered by the *Report*. This evidence, in the form of newly unearthed bronze vessels, appeared between the years 2003 and 2013, and was fully published in the scholarly press before the final editing of the *Report*.<sup>8</sup> Below, I will consider five of these discoveries and their implications for the Project's chronology.

<sup>6.</sup> Li Xueqin 李學勤 and Guo Zhikun 郭志坤, *Ming jia yu ming bian: Shiji chu de duihua: Zhongguo gushi xunzheng* 名家與名編:世紀初的對話:中國古史尋證 (Shanghai: Shanghai Keji jiaoyu, 2002), 363.

<sup>7.</sup> For this vessel, the *Yuan pan* 寰盤, see below. On p. 7, the *Report* states: "In conjunction with the results of research on the periodization of Western Zhou bronze vessels, and concerning such content as persons and events in inscriptions, we have undertaken systematic research and have demonstrated the reasonableness of our chart dating bronzes. Concerning some important bronze inscriptional evidence for which there are different ideas concerning to which king they belong, such as the *Jin Hou Su zhong* 晉侯蘇鐘, the *Shanfu Shan ding* 膳夫山鼎, etc., we have done extra research." In fact, the *Report* merely lists the date of the *Shanfu Shan ding*, indicating that it has an error of two days, but that such an error "should be allowed" (應該是允許的; p. 61), and the "extra research" on the *Jin Hou Su zhong* simply repeats what was said about it in the *Brief Edition*.

<sup>8. &</sup>quot;Postscript I" (後記【一】) indicates that the draft "Report" was completed in July, 2015, at which point the leaders of the Project had more than a year to comment on it. In December 2016 the "Report" was sent to the various expert committees for their comments. Finally, in November 2017 the final draft was sent to the press.

## The Lai pan 逨盤, Forty-second Year Lai ding 逨鼎, and Forty-third Year Lai ding 逨鼎

On 19 January 2003, peasants in Meixian 眉縣 county, Shaanxi, inadvertently opened a late Western Zhou cache containing twenty-seven bronze vessels, all of them inscribed. To their very great credit, the peasants immediately notified the local archaeological authorities, who excavated the cache. It was immediately hailed as one of the greatest discoveries of the new century-and indeed the new millennium, an evaluation not at all exaggerated.9 The cache belonged to the last Western Zhou generation or generations of the Shan 單 family, a family already well known from several earlier discoveries in the same vicinity. The centerpiece of the find was the Lai pan 逨盤,10 with a 373-character inscription providing a sketch history of all Western Zhou kings through the time of King Xuan 宣王, as well as a genealogy of the Shan family. In addition to the Lai pan, the cache also included two ding-caldrons with a 281-character inscription dated to a forty-second year of some reign and ten other *ding*-caldrons with a 316-character inscription dated to the forty-third year of the same reign. Both of the *ding* inscriptions are fully dated, that of the forty-second year dated "Forty-second year, fifth month, after the growing brightness, yimao (day 52)"(惟卌又二年五月既 生霸乙卯), and that of the forty-third year dated "Forty-third year, sixth month, after the growing brightness, *dinghai* (day 24)"(惟册又三年六月 既生霸丁亥). There is no question whatsoever that these two dates refer to the reign of King Xuan. However, no matter how one might interpret the date notations, everyone agrees that they are incompatible with the calendar of the years 796 and 795 B.C.E., the Forty-second and Forty-third years after his generally accepted first year of reign in 827 B.C.E..

I have been told that, early in 2003, after making a trip to Shaanxi to view the Shan-family bronzes, Li Xueqin gave a public lecture at Peking University to report on the discovery and its significance. When some-

<sup>9.</sup> See Shaanxi sheng wenwuju 陝西省文物局 and Zhonghua Shiji tan yishuguan 中 華世紀壇藝術館 eds., *Sheng shi jijin: Shaanxi Baoji Meixian qingtongqi jiaocang* 盛世吉 金:陝西寶鷄眉縣青銅器窖藏, (Beijing: Beijing chubanshe, 2003). For initial reports of the discovery in the scholarly press, see Shaanxi sheng Kaogu yanjiusuo, Baoji shi kaogu gongzuodui and Meixian wehuaguan, "Shaanxi Meixian Yangjia cun Xi Zhou qingtongqi jiaocang fajue jianbao" 陝西眉縣楊家村西周青銅器窖藏發掘簡報, *Wenwu* 2003.6: 4-42; Liu Huaijun 劉懷君 and Liu Junshe 劉君社, "Shaanxi Meixian Yangjia cun Xi Zhou qingtongqi jiaocang" 陝西眉縣楊家村西周青銅器窖藏, *Kaogu yu wenwu* 考古 與文物 2003.3: 3-12.

<sup>10.</sup> I here maintain the transcription of the *Report, lai* 迹, even though I personally prefer to read the graph as *qiu* 迹, following Chen Jian 陳劍, "Ju Guodian jian shi du Xi Zhou jinwen yi li" 據郭店簡釋讀西周金文一例, *Beijing daxue Guwenxian yanjiu zhongxin jikan* 北京大學古文獻研究中心集刊 2 (2001), 378–96.

one in the audience asked about the incompatibility of the dates with the calendar of King Xuan's reign and what this might mean for the Xia Shang Zhou Chronology Project, Li responded that the Project's charter was to reconstruct the chronology of China before the year 841, the first year of the Gong He 共和 interregnum between the reigns of King Li 厲  $\Xi$  and King Xuan,<sup>11</sup> and therefore this question did not fall under the Project's purview. It might have been a convenient solution to avoid this problem, but it is hardly a very satisfying solution, especially since it is related to a whole series of other fully dated late Western Zhou bronzes that have posed problems for most scholars of Western Zhou chronology. To its credit, the *Report* acknowledges the problem, first regarding the two *Lai ding*, and then also of their relationship with one of the other fully dated bronzes.

The date on the *Forty-second-Year Lai ding* probably cannot be simply regarded as having a mistaken character, since the two *Lai ding* inscriptions both mention a Shi Yu 史淢, who is also seen on the *Yuan pan* 實盤. The "Xia Shang Zhou Chronology Project" had previously put this latter vessel in King Li's reign, but based on the *Lai ding* this is incorrect. The *Yuan pan*'s date is:

Twenty-eighth year, fifth month, after the full-moon, gengyin (day 27).

This date is compatible with the dates of the two *Lai ding*. However, they are all mutually contradictory with the *Yu Hu ding* 虞虎鼎, which was mentioned above as a "standard" for King Xuan's reign. (77)

Despite this, the *Report's* Table 2–9, "Dates of Western Zhou Bronze Inscriptions," simply changes the date of the *Forty-Second-Year Lai ding* from *yimao* 乙卯 (day 52) to *yichou* 乙册 (day 2). Similarly, Table 2–9 also changes the date recorded in the *Yuan pan* 衰盤, from "Twenty-eighth year, fifth month, after the full moon, *gengyin* (day 27)" to *gengwu* (day 17) (82). Even if this Table did not contradict the *Report's* own statement that "The date on the *Forty-Second -Year Lai ding* probably cannot be simply regarded as having a mistaken character," the cavalier manner of simply changing data that do not fit with the conclusions of the Project should ring alarm bells for all readers. The *Report* states "These matters

<sup>11.</sup> The person in the audience to raise this question was Li Ling 李零, professor of Chinese at Peking University, who recounted this to me personally shortly after the event. The *Report* makes the same point as made by Li Xueqin. On p. 10, it states "The Xia Shang Zhou Chronology Project took the first year of Gong He, i.e., 841 B.C.E., as its starting point. For this reason, the scope of the Western Zhou chronology portion began with King Wu's conquest of Shang and ended with King Li; regarding Gong He and later, we only did some verification work [驗證性的工作]."

possibly reflect that the calendar of this period of King Xuan's reign had some sort of problem, for which there is currently still no means of giving a satisfactory explanation; our method of changing the day-dates is only a temporary measure" (這些可能反映宣王這一時期曆法存在某種問 題,目前尚沒有給出滿意的解釋,這裡採用改動千支的辦法,只是暫時 的措施) (77). If it were indeed only "a temporary measure," it would be one thing; however, the *Report*, twenty-two years in the making, is final.

What is more, while the date of the Yuan pan is compatible with the calendar required by the two *Lai ding*, just as the *Report* states, it too is strictly incompatible with a calendar of King Xuan's reign beginning in 827 B.C.E.. It was for this reason that the Brief Edition had dated the vessel to 850 B.C.E., the twenty-eighth year of a putative thirty-seven-year reign of King Li beginning in 877 B.C.E., even though most artistic and historical criteria would suggest a very late Western Zhou date for the vessel (and for its companion piece, the Yuan ding 寰鼎; Jicheng #2819). The appearance of a court officer named Shi Yu 史演 in both the Yuan pan inscription and also in both Lai ding inscriptions shows beyond doubt that this earlier dating of the Yuan pan was mistaken, and the Report now corrects it. However, the date of the Yuan pan is significant for other reasons. As I have pointed out in a number of studies,<sup>12</sup> not only is its date compatible with the dates of the two *Lai ding*, it is also compatible with the dates of a whole series of late Western Zhou bronze vessels with high year numbers, the artistic and historical criteria of which would suggest a King Xuan date, but the full date notations of which are incompatible with King Xuan's traditional regnal calendar. These include most notably the Shanfu Shan ding 膳夫山鼎 (Jicheng #2825; dated to a thirty-seventh year), for which the Report claims to have done "extra research,"<sup>13</sup> but includes also the Pan Ju Sheng hu 番匊生壺 (Jicheng #9705; dated to a twenty-sixth year), Guo You Cong ding 斟攸从鼎 (Jicheng #2818; dated to a thirty-first year), the Bo Da Zhu Zhui ding 伯大祝追鼎 (Mingtu #2396; dated to a thirty-second year), and the Bo Kuifu xu 伯窺父盨 (Jicheng #4438; dated to a thirty-third year). The Report continues to date all of these vessels to the reign of King Li, even though the Brief Edition had to invent a wholly new chronology for King Li (beginning his first year

<sup>12.</sup> The most important of these would be Xia Hanyi, "'Xia Shang Zhou duandai gongcheng' shi nian hou zhi pipan," but see too Xia Hanyi, "Ci ding mingwen yu Xi-Zhou wanqi niandai kao" 此鼎銘文與西周晚期年代考, *Dalu zazhi* 大陸雜誌 80.4 (1990), 16–24; "Shang bo xin huo *Da Zhu Zhui ding* dui Xi Zhou duandai yanjiu de yiyi" 上博新獲大祝追鼎對西周斷代研究的意義, *Wenwu* 2003.5, 45–47; "42 nian 43 nian liangge Yu Lai ding de niandai" 42 年 43 年兩個吳 來鼎的年代, *Zhongguo lishi wenwu* 2003.5, 49–52.

<sup>13.</sup> See note 8 above.

in 877 B.C.E. instead of 878 B.C.E., as one reading of the *Shi ji* 史記 would seem to suggest), and even though some of the dates do not match even this calendar. For instance, for the date of the *Shanfu Shan ding*, "37th year, first month, first auspiciousness, *gengxu* (day 47)," Table 2–9 of the *Report* indicates that the day in question was two days prior to the beginning of the first month. In a previous comment on the dates of the *Jin Hou Su zhong* 晉侯蘇鐘, the *Report* says that discrepancies of one or two days "should be allowed" (61). This would seem to be a very slippery slope, almost as bad as arbitrarily changing terms of full-date notations.

The *Report* includes a discussion of the *Yu Hu ding* 虞虎鼎, the inscription of which shows that it is securely dated to the reign of King Xuan, and the eighteenth-year full date of which is consistent with his traditional regnal calendar starting in 827. It then states:

In addition, the Xi Jia pan 今甲盤 and Guoji Zi Bai pan 虢季子白盤, which past scholars all agree should be dated to the reign of King Xuan, are separately dated to the fifth and twelfth years, and their dates are consistent. Thus, that King Xuan's first year was 827 B.C.E. is credible, and there is also no reason to doubt that Gong He's first year was 841 B.C.E.. (57)

What this comment leaves out is that the two *Lai ding* and the *Yuan pan*, not to mention the *Shanfu Shan ding* and all of the other vessels with high-year full-date notations, are not consistent with this calendar. I might point out that an alternative explanation has been available in the scholarly literature, in both English and Chinese, since at least 1990.<sup>14</sup> None of this scholarship is mentioned in the *Report* even though the thesis has been repeatedly confirmed by newly appearing vessels—and readily published in two of the most authoritative scholarly journals in China.<sup>15</sup>

<sup>14.</sup> The possibility that King Xuan employed two different regnal calendars was first suggested in David S. Nivison, "The Dates of Western Chou," *Harvard Journal of Asiatic Studies* 43.2 (1983), 527; a translation of this study was published in Zhu Fenghan 朱鳳瀚 and Zhang Rongming 張榮明 eds., *Xi Zhou zhu wang niandai yanjiu* 西周諸 王年代研究, (Guiyang: Guizhou Renmin chubanshe, 1998), 380–87, which, it might be noted, was published under the auspices of the Xia-Shang-Zhou Chronology Project. For my own, more detailed, presentation of the evidence, see "Ci ding mingwen yu Xi-Zhou wanqi niandai kao," which was also reprinted in Zhu Fenghan and Zhang Rongming, ed., *Xi Zhou zhu wang niandai yanjiu*, 248–257, and *Sources of Western Zhou History: Inscribed Bronze Vessels* (Berkeley: University of California Press, 1991), 147–52. This is not the place to revisit this hypothesis, though it suffices to say that the hypothesis has been repeatedly confirmed by all newly discovered evidence from the reign of King Xuan (and perhaps that of King Yih 懿王, as well; see below, note 42).

<sup>15.</sup> See Xia Hanyi, "Shang bo xin huo *Da Zhu Zhui ding* dui Xi Zhou duandai yanjiu de yiyi," which was published in the journal *Wenwu* 文物; and Xia Hanyi, "42 nian 43 *footnote continued on next page* 

#### The Lu gui 親簋 and Zuoce Wu he 作冊吳盉

The June 2006 issue of Zhongguo lishi wenwu 中國歷史文物 reported that the National Museum of China had just purchased a fully dated mid-Western Zhou bronze vessel with an inscription that commemorates the appointment of one Lu 親 to be Supervisor-in-Chief of the Horse (zhong sima 家司馬), equivalent to commander-in-chief of the Zhou army.<sup>16</sup> It seems clear, as the *Report* states, that this Lu should be identified with the Sima Jingbo Lu 司馬井伯親 who is mentioned in the inscription of the Shi Yun gui gai 師瘨簋蓋 (Jicheng 8.4283) as Shi Yun 師瘨's guarantor at court (73), and from this it is clear too that he is also the same individual who is mentioned by the name of Sima Jingbo  $\overline{\exists}$ 馬井伯 or simply Jingbo 井伯 in numerous other mid-Western Zhou vessels. The Report contains an appendix entitled "Table of Relations Between Bronze Vessels Seen in the List of Bronze Inscriptions Dates" (附錄二:列入金文曆譜的青銅器繫聯表) illustrating eleven such vessels in which some version of his name appears.<sup>17</sup> Most of these are firmly dated to the reign of King Gong 共王, though there are two vessels dated to the reign of King Gong's father, King Mu 穆王, and one dated as late as the first year of the reign of King Yih 懿王, King Gong's son. The first of these is the Lu gui, which is ornamented with the facing long-tailed birds that are typical of King Mu's reign, and which is dated to a twenty-fourth year. There is a consensus, shared by the Report, that it dates to the reign of King Mu; for the *Report*, this is 953 B.C.E.. The latest is the *Shi* Hu gui 師虎簋 (Jicheng 8.4316), which bears a date notation that seems to require that it date to the first year of the reign of King Yih 懿王, King Gong's son, which the Report dates to 899 B.C.E.. Thus, there is a firm evidential basis that Sima Jingbo Lu's career at court spanned the latter part of the reign of King Mu, the entirety of that of King Gong, and even into the opening years of King Yih, just as the *Report* maintains.

I would not disagree with any of the identifications made in this "Table of Relations Between Bronze Vessels Seen in the List of Bronze Inscriptions Dates," or even with the assignments of the dates to years of reign of King Mu, King Gong, and King Yih. However, the *Report* seems not to take into account the problem the *Lu gui* poses for its dating of

nian liangge Yu Lai ding de niandai," published in the journal Zhongguo lishi wenwu 中國歷史文物.

<sup>16.</sup> Wang Guanying 王冠英, "Lu gui kaoshi" 親簋考釋, Zhongguo lishi wenwu 2006.3, 4–6; Li Xueqin 李學勤, "Lun Lu gui de niandai" 論親簋的年代, Zhongguo lishi wenwu 2006.3, 7–8; Xia Hanyi 夏含夷, "Cong Lu Gui kan Zhou Mu Wang zai wei nianshu ji niandai wenti" 從親簋看問穆王在位年數及年代問題, Zhongguo lishi wenwu 2006.3, 9–10.

<sup>17.</sup> Xia Shang Zhou duandai gongcheng zhuanjiazu, ed., Xia Shang Zhou duandai gongcheng baogao, unnumbered page prior to p. 131.

King Mu's reign. The *Report*, as did the *Brief Version* before it, accepts one traditional view, that King Mu reigned for fifty-five years. Since the *Lu gui* commemorates Sima Jingbo Lu's appointment as Supervisor-in-Chief of the Horse, once again equivalent to commander-in-chief of the Zhou army and presumably an adult with some experience and maturity, in the twenty-fourth year of King Mu's reign, and since the *Shi Hu gui* has him still active at court in the first year of King Yih, according to the chronology of the *Report* he would have had to be active for fifty-four years (according to their chronology: from 853 to 899 B.C.E.). As I suggested, only partially in jest, in a review of the Project made fifteen years ago:

This is the equivalent of suggesting in a contemporary Chinese context that Peng Dehuai 彭德懷 (1898–1974), who was defense minister in 1958, or even that Lin Biao 林彪 (1907–1971), who replaced him in the following year, would have still been active in the military in 2006. Even without considering that the average life span in antiquity was certainly far less than it is today (though, admittedly, the ancients did not have to fear airplane crashes), this is simply unimaginable.<sup>18</sup>

All jesting aside, good arguments have been made that while King Mu certainly enjoyed a lengthy reign, with evidence that it lasted at least thirty-four years, the life-span of Sima Jingbo Lu shows that the tradition that King Mu reigned fifty-five years is simply unreasonable. However, the *Report* seems not to have considered this implication of the *Lu gui*'s dating, even though it was thoroughly discussed in the issue of *Zhongguo lishi wenwu* 中國歷史文物 in which the *Lu gui* was first made public.<sup>19</sup>

The problems of the *Report*'s treatment of King Mu's reign begin, but do not end, with the *Lu gui*. It simply notes that the full-date notation of the *Lu gui* is consistent with the calendar of 853 B.C.E., and is consistent also with the dates of three other fully dated inscriptions (the *Qiu Wei gui* 裘衛簋 [*Jicheng* #4256], the *Hu gui gai* 虎簋蓋 [*Mingtu* #5399–5400], and the *Xian gui* 鮮簋 [*Jicheng* #10166]) dated to the twenty-seventh, thirtieth, and thirty-fourth years of King Mu's reign. The *Report* does not mention in this context, though it does mention just below it, another fully dated vessel that appeared only in 2011: the *Zuoce Wu he* 作册误盉 (73–74).<sup>20</sup>

<sup>18.</sup> Shaughnessy, "Chronologies of Ancient China," 24.

<sup>19.</sup> Xia Hanyi, "Cong Lu Gui kan Zhou Mu Wang zai wei nianshu ji niandai wenti."

<sup>20.</sup> The vessel is now in the National Museum of China. It was first published in Zhu Fenghan 朱鳳瀚, "Jianlun yu Xi Zhou niandaixue youguan de jijian tongqi" 簡論 與西周年代學有關的幾件銅器, in XInchu jinwen yu Xi Zhou shi 新出金文與西周史, ed. Zhu Fenghan (Shanghai: Shanghai Guji, 2011), 45-51. A study devoted to just this footnote continued on next page

The Report's discussion of this piece is extremely unclear. First, the transcription of the inscription (no rubbing or photograph of the inscription is provided) mistakenly writes its date as "Thirtieth year, fourth month, after the dying brightness, renwu (day 19)"(惟卅年四曰既死霸壬 午); the "lunar-phase notation" jisiba 既死霸 "after the dying brightness" should be *jishengba* 既生霸 "after the growing brightness," as it is in the later Table 2–9, "Dates of Western Zhou Bronze Inscriptions." The Report then concludes its discussion of the piece's date by saying "We can try to place the inscription's date in King Mu's thirtieth year (947 B.C.E.); that year already has the Hu gui gai 'Thirtieth year, fourth month, first auspiciousness, *jiaxu* (day 11),' the first day of the month being *bingyin* (day 3), so that *jiaxu* would be the ninth day and *renwu* would be the seventeenth day"(銘文曆日可試排於穆王三十年(公元前 947 年),該 年已有虎簋蓋"惟卅年四日初吉甲戌,"其月丙寅朔,甲戌九日,壬午十七  $\exists$ ), which is in fact where Table 2–9 places it. However, neither here nor in Table 2–9 does the *Report* note that *jishengba* "after the growing brightness" cannot possibly be the seventeenth day of a lunar month, coming after the full moon as it would. Thus, the date of the Zuoce Wu he is absolutely inconsistent with the chronology for King Mu given by the Report, and its statement that it "can try to place the inscription's date" can only be regarded as a sleight of hand attempt to avoid admitting this.<sup>21</sup>

vessel in the same publication is Xia Hanyi 夏含夷, "Cong Zuoce Wu he zai kan Zhou Mu wang zaiwei nianshu ji niandai wenti" 從作冊吳盉再看周穆王在位年數及年代問題, 71-78.

<sup>21.</sup> There is no way to know whether writing the lunar-phase notation here as *jisiba* 既死霸 "after the dying brightness" instead of as jishengba 既生霸 "after the growing brightness" was an inadvertent slip or an intentional obfuscation. In "Cong Zuoce Wu he zai kan Zhou Mu wang zaiwei nianshu ji niandai wenti," I show that the date of the Zuoce Wu he is fully compatible with that of the Hu gui gai 虎簋蓋 for the year 927 B.C.E., a chronology also compatible with the dates of the Lu gui (933 B.C.E.) and Qiu Wei gui 裘衛簋 (930 B.C.E.). For a more detailed discussion of the relationships among these dates, see Xia Hanyi 夏含夷, "Ruhe liyong Xi Zhou tongqi mingwen suo zai 'Jishengpo' he 'Jiwang' yuexiang jizai yu manyue qianhou riqi de guanxi lai tuiding tongqi zhi jian de guanxi"如何利用西周銅器銘文所載"既生霸"和"既望"月相記載與滿月前後日期的 關係來推定銅器之間的關係, Qingtongqi yu jinwen 青銅器與金文1 (2017), 60-71. This is not to mention the Report's treatment of the Xiao Yu ding 小盂鼎. On p. 72, the Report mentions that the Da Yu ding 大盂鼎 contains a year-notation of "twenty-third year," and that at the same time it was unearthed (in the 1840s), there was unearthed another ding-caldron, which however was subsequently lost. It also mentions that a photograph was published in Chen Mengjia 陳夢家 "Xi Zhou tongqi duandai" 西周銅器斷 代, of an intact rubbing of the inscription, while Luo Zhenyu 羅振宇 Sandai jijin wencun 三代吉金文存 shows rubbings cut into pieces. The Xiao yu ding inscription mentions offerings made to "Zhou Wang, Wu Wang, and Cheng Wang" (周王、武王、成王), for which reason it is normally regarded as dating to the reign of King Kang 康王. The Report goes on to say: "The end of its inscription has 'It was the king's twenty-fifth footnote continued on next page

#### Jue Gong gui 覺公簋

In 2007, Zhu Fenghan 朱鳳瀚 published another vessel, which he referred to as *Yao Gong gui* 現公簋 (*Mingtu* #4954),<sup>22</sup> but which the *Report* refers to as *Jue Gong gui* 覺公簋. As Professor Zhu notes, this is a very early Western Zhou vessel, the inscription of which commemorates the transfer of Tangbo 湯伯, presumably from Tang 湯 (also written as 唐), to be lord of Jin 晉. Although the vessel was looted and thus is lacking in provenience details, it doubtless came from the cemetery of Jin lords at Tianma-Qucun 天馬曲村, Shanxi, which had suffered looting in the years immediately prior to the vessel's appearance. The inscription is short, but very significant.

覺公作妾姚簋,遘于王令湯伯侯于晉。唯王廿又八祀。 🛚

Jue Gong makes for his wife Yao (this) *gui*-tureen, meeting with the king commanding Tangbo to be lord in Jin. It is the king's twenty-eighth year.

22. Zhu Fenghan 朱鳳瀚, "Yao Gong gui yu Tang Bo hou yu jin" 現公簋與唐伯侯于 晉, Kaogu 考古 2007.3, 64–69. For better photographs of the vessel and its inscription, see Zhu Fenghan, "Jianlun yu Xi Zhou niandaixue youguan de jijian tongqi," 33–38. For a discussion in English, see Edward L. Shaughnessy, "Newest Sources of Western Zhou History, Inscribed Bronze Vessels, 2000–2010," in *Imprints of Kinship: Studies of Recently Discovered Bronze Inscriptions from Ancient China*, ed. Edward L. Shaughnessy (Hong Kong: Chinese University of Hong Kong Press, 2017), 133–88, at 135–40.

year' (惟王年又五祀), the rubbing in the Sandai jijin wencun shows a vertical stroke in the middle of the graph  $\pm$ , causing some scholars to suspect that it should read sa  $\pm$ 'thirty'. However, on careful inspection of the rubbing, that vertical stroke does not exist (providing a note that the rubbing is in the Fu Sinian Library 傅斯年圖書館 of Academia Sinica, expressing thanks to that library). Wu Shifen 吳式芬's Jungu lu jijin 據古錄吉金 hand-drawing of the beginning of the inscription reads 'it was eighth month, after the full moon, on *jiashen* (day 21)' (惟八月既望在甲申), which is consistent with the later 'on the next day yiyou (day 22)' (于若翊日乙酉), but in the rubbing the characters 在甲申 are hard to recognize, and the middle part of the rubbing is missing a great many characters, so that there might have been other *ganzhi* 干支 day designations. For this reason, here we provisionally put the Xiao Yu ding aside and do not deal with it." If the year-date is "twenty-fifth year," it is incompatible with the Report's dates for King Kang's twenty-fifth year, i.e., 996 B.C.E.. If the date is instead "thirty-fifth year," as recent scholarship suggests is the case, then it would be even more inconsistent with the chronology of the *Report*. But for the Project simply to set aside this evidence is hard to reconcile with standard scholarly ethics. For recent scholarship concerning the Xiao Yu ding, see Maria Khayutina, "The Beginning of Cultural Memory Production in China and Memory Policy of the Zhou Royal House During the Western Zhou Period" Early China 44 (2021), 19–108; Xia Hanyi 夏含夷, "Cong Zeng Gong Qiu bianzhong mingwen chongxin kaolü Da Yu ding he Xiao Yu ding de niandai"從《曾公求編鐘》銘文重 新考慮《大盂鼎》和《小盂鼎》的年代, in Zhang Changshou Chen Gongrou xiansheng jinian wenji 張長壽、陳公柔先生紀念文集, ed. Li Feng 李峰 and Shi Jingsong 施勁松 (Shanghai: Zhong-Xi shuju, 2023), 373-83.

As Professor Zhu demonstrated, this Jue Gong gui is a very early Western Zhou vessel, with similar examples among very late Shang-dynasty bronzes as well as other vessels from the opening years of the Zhou dynasty. He has also convincingly demonstrated that this Tangbo 湯伯 should correspond to a figure known in received sources as Xiefu 燮父, who succeeded his father Tangshu Yu 唐叔虞, the younger brother of King Cheng of Zhou 周成王, as the lord of Tang 唐,<sup>23</sup> before then moving to Jin. The inscription serves to date Xiefu's move to Jin to the "twentyeighth year" of some king's reign. Professor Zhu cautiously states only that this year must refer to either the reign of King Cheng or that of King Kang 康王, though it is almost certain that it should be the reign of King Cheng. In either event, as Professor Zhu also points out, the date is irreconcilable with the chronology proposed by the "Xia-Shang-Zhou Chronology Project," which allotted just twenty-two years to King Cheng and twenty-five years to King Kang, even though traditional chronologies had given them thirty (or thirty-seven) years and twentysix years.

In the work done at present in dating bronze inscriptions, if we determine that the *Jue Gong gui* is a vessel of the twenty-eighth year of King Cheng's (reign), then we would certainly have to change the chronology proposed by the "Xia-Shang-Zhou Chronology Project," for instance by adjusting the date of King Wu's conquest of Shang. Or else there are also scholars who have suggested, based on bronze inscriptional data, that King Mu's length of reign be reduced. However, the latter would require shifting the *Shi ji*'s clear record regarding King Mu's length of reign, so that would also entail the problem of changing the chronology.<sup>24</sup>

In fact, the *Report* acknowledges this problem. It says of the *Jue Gong gui*:

Concerning whether this vessel should belong to the time of King Cheng or King Kang, as well as the influence this has for the dates of Western Zhou, the "Xia-Shang-Zhou Chronology Project" convened a special conference in April, 2007. Following this, the scholarly world had a series of discussions, the details of which can be seen in Zhu Fenghan's article "Brief Discussion of Several Bronze Vessels Concerned with Western Zhou Chronology" (簡論與西周年代學有關的幾 件銅器); until now, no consensus has been reached.

<sup>23.</sup> In both paleographic and also traditional sources, Tang is written indiscriminately as either  $\boxplus$  or  $\begin{subarray}{c}$ 

<sup>24.</sup> Zhu Fenghan, "Jianlun yu Xi Zhou niandaixue youguan de jijian tongqi," 38.

footnote continued on next page

No matter if one places this vessel in King Cheng's reign or King Kang's reign, it would require revising the dates that the "Xia-Shang-Zhou Chronology Project" had given for King Cheng and King Kang. We hope that in the future other relevant materials will be discovered, providing still clearer evidence for work in this regard.<sup>25</sup>

On the one hand, this recognition of the problem is commendable. However, despite admitting that "No matter if one places this vessel in King Cheng's reign or King Kang's reign, it would require revising the dates that the 'Xia-Shang-Zhou Chronology Project' had given for King Cheng and King Kang," the Report's final "Xia-Shang Zhou Chronology" (夏商周年表) does not change the date for either reign.<sup>26</sup> One wonders what "clearer evidence" would be required for the Project actually to revise its chronology.

## The Jun Gui 毗簋

In 2012, Wu Zhenfeng 吳鎮峰, published a new comprehensive collection of inscribed bronze vessels, containing many previously unknown inscriptions, including one—on the *Jun gui* 毗簋 bronze vessel—the inscription of which contains a full date notation that he and other scholars have argued certainly dates to the reign of King Yih of Zhou 周懿  $\pm$  (Figure 1).<sup>27</sup> As both the *Brief Edition* and the *Report* have stressed,<sup>28</sup> the reign of King Yih is crucial to the reconstruction of Western Zhou chronology because of a record in the *Zhushu jinian* 竹書紀年 *Bamboo Annals* that is understood to refer to a solar eclipse in the first year of his reign: "the day dawned twice at Zheng" (天再旦于鄭).<sup>29</sup> The *Brief Edition* had named this eclipse record as one of its "seven important

<sup>25.</sup> Xia Shang Zhou duandai gongcheng zhuanjiazu, ed., Xia Shang Zhou duandai gongcheng baogao, 79. The original reads:

關於這件簋屬於成王時還是康王時,以及其對西周年代研究帶來的影

響, "夏商周斷代工程" 曾在 2007 年 4 月舉行專題研討會,隨後學術界有

一系列討論,詳細情況可看朱鳳瀚《簡論與西周年代學有關的幾件銅器》 一文中的概述,迄今尚未達成一致意見。

無論定該簋於成王時還是康王時,都會使"夏商周斷代工程"所推成、康 年代需要修改。希望今後還會有相關材料發現,為這方面工作提供更明確

的證據。

<sup>26.</sup> Xia Shang Zhou duandai gongcheng zhuanjiazu, ed., Xia Shang Zhou duandai gongcheng baogao, 518.

<sup>27.</sup> Wu Zhenfeng 吳鎮烽, ed., Shang Zhou qingtongqi mingwen ji tuxiang jiiheng 商周 青铜器銘文暨圖像集成, 35 vols. (Shanghai: Shanghai guji chubanshe, 2013), #05386.

<sup>28.</sup> Xia-Shang-Zhou duandai gongcheng Zhuanjiazu, Xia Shang Zhou duandai gongcheng 1996–2000 jieduan chengguo baogao: Jianben, 24–25; Xia Shang Zhou duandai gongcheng zhuanjiazu, ed., Xia Shang Zhou duandai gongcheng baogao, 61–66.

<sup>29.</sup> Zhushu jinian 竹書紀年 (Sibu congkan ed.), 2.11a.



Figure 1. Inscription on the Jun gui 毗簋; from Wu Zhenfeng 吴镇烽, ed., Shang Zhou qingtongqi mingwen ji tuxiang jicheng 商周青铜器铭文暨图像集成 (Shanghai: Shanghai guji, 2013), #05386.

points" (七個支點) for Western Zhou chronology, identifying it with a solar eclipse that occurred at dawn on 19 April 899 B.C.E..<sup>30</sup> The *Report* provides fuller discussion of the eclipse than did the *Brief Edition*,<sup>31</sup> con-

<sup>30.</sup> Xia-Shang-Zhou duandai gongcheng Zhuanjiazu, Xia Shang Zhou duandai gongcheng 1996–2000 jieduan chengguo baogao: Jianben, 24–26.

<sup>31.</sup> One difference between the *Brief Edition* and the *Report* is that the *Report* includes citations to previous identifications of the eclipse. Li Runquan 李潤勸, "Jiaoliu yu zhengming: Ji Zhong-wai xuezhe guanyu Xia Shang Zhou niandai de yichang lunzhan" 交流與爭鳴: 記中外學者關於夏商周年代的一場論戰, *Kaogu* 考古, 2003.2, 80, notes that at a special panel discussing the "Xia-Shang-Zhou Chronology Project" held at the 2002 annual convention of the Association for Asian Studies, I had questioned the Project's scholarly ethics in failing to note previous scholarship, including especially the work of Pang Sunjoo 方善柱, in identifying this record with the solar eclipse of 19 April 899 B.C.E.; Fang Shanzhu 方善柱, "Xi Zhou niandaixue shang de jige wenti" 西周年代學上的幾個問題, *Dalu zazhi* 大陸雜誌 1975.1, 15–16. The *Report* does note Pang's work (Xia Shang Zhou duandai gongcheng zhuanjiazu, ed., *Xia Shang footnote continued on next page* 

cluding, as did the *Brief Edition*, that King Yih's reign began in 899 B.C.E.. Also as did the *Brief Edition*, the *Report* states that King Yih's reign lasted eight years, ending in 892 B.C.E..

The inscription on the *Jun gui* calls into question this end-date for the reign for King Yih, if not necessarily the start-date. Since it has not yet been published in English,<sup>32</sup> it is worth examining in full here.

The inscription can be transcribed and translated as follows.

唯十年正月初吉甲寅,王在周〔般〕 大室。旦王格廟即位。瓚王,康公入 門右吮立中廷北嚮。王呼作冊尹冊命 吮曰:戈甾乃祖考保又功于先 王,亦弗忘乃祖考登裏厥典封 于服。今朕丕顯考鄭王既命汝 更乃祖考事,作司徒。今余唯 申先王,命汝兼司西朕司徒,訊 訟,取**徵**十寽,敬勿灋朕命。賜 汝鬯卣、赤市、幽黄、攸勒。吮拜稽首,對 揚天子休,用作朕烈考幽叔寶 尊簋,用賜萬年,子子孙孙其永寶。

It was the tenth year, first month, first auspiciousness, *jiayin* (day 51); the king was at the Ban Great Chamber in Zhou. At dawn, the king entered the temple and assumed position. Saluting the king, Kang Gong entered the gate at the right of Jun and stood in the courtyard facing north. The king called out to the head of the slip-makers to read the command to Jun, saying: "In the past, your grandfather

Zhou duandai gongcheng baogao, 62n3), but without elaboration. For further comments on this by me, see Xia Hanyi 夏含夷, "Ren zhi si ye qing, zhi zhi si ye chang" 仁之思也 清知之思也倀, Zhongguo xueshu 中國學術 5.3-4 (2004): 381-83.

<sup>32.</sup> I have discussed the vessel and its inscription in Chinese in Xia Hanyi 夏含夷, "You Jun gui mingwen kan 'Tian zai dan yu Zheng'" 由《毗簋》銘文看 '天再旦于鄭,'" Lishi yanjiu 歷史研究 2016.1, 40–48, and in a still unpublished English-language article: Edward L. Shaughnessy, "The Day the Sun Dawned Twice: The 899 B.C.E. Double-Dawn Solar Eclipse, the Bamboo Annals, Bronze Inscriptions, and the Reign of King Yih of Zhou," in Across Text and Source: Comparative Perspectives in Literary and Historical Theory, ed. Ulrich Timm Kragh (Forthcoming).

and father protected and had merit with the past kings, and I have also not forgotten that your grandfather and father raised up and packaged their registers and field-markers in service. Now that my illustrious deceased-father King Gong had commanded you to succeed your grandfather's and father's service to be supervisor of the multitudes, now it is that I extend the past king's command, and command you concurrently to supervise my supervisor of multitudes in the west and to hear trials, taking as stipend ten *lüe*. Be careful and do not neglect my command. I award you a bucket of sweet wine, red kneepads, a dark jade-piece, and a harness." Jun bowed and touched his head to the ground, in response extolling the Son of Heaven's grace, herewith making for my valiant deceased-father Youshu this treasured offertory *gui*-tureen, with which to be awarded ten-thousand years; may sons' sons and grandsons' grandsons eternally treasure and use it.

Since the king in this inscription refers to his own deceased father as King Gong  $\tilde{PE}$ , it stands to reason, as Wu Zhenfeng has argued, that this king should be identified as King Yih.<sup>33</sup> The date notation beginning the inscription, "tenth year, first month, first auspiciousness, *jiayin* (day 51)," shows clearly that his reign lasted at least ten years, clearly contradicting the Project's chronology allotting only eight years to his reign. This problem too has been pointed out by Zhu Fenghan.

In this way, the "Western Zhou Bronze Inscription Dates" that the *Report on the 1996–2000 Provisional Results of the Xia-Shang-Zhou Chronology Project: Brief Edition* has published giving King Yih's reign as the eight years from 899–892 has to be adjusted, in only one of two ways. The first would be to move the beginning of the reign earlier in time, but this would eliminate the rationale for setting 899 as the first year of King Yih.

If we were to maintain 899 as the first year, then we would have to move the end of his reign later. According to this, King Yih's tenth year

<sup>33.</sup> As I discuss in detail in "The Day the Sun Dawned Twice," there is, to be sure, some evidence that King Xiao 孝王, the successor to King Yih, might also have been a son of King Gong. The *Shi ji* 史記 says in one place that he was a younger brother of King Gong, which would suggest that his father was King Mu, but in another place that he was a younger brother of King Gong; Sima Qian 司馬遷, *Shi ji* 史記 (Beijing: Zhonghua shuju, 1959), 4.140–41, and 13.503. Other, later, sources share this confusion. The argument I make in "You Jun gui mingwen kan 'Tian zai dan yu Zheng'" supports the identification with King Yih, but even a King Xiao dating for the *Jun gui* would be incompatible with the Project's chronology, since it allots King Xiao only six years.

would be 890. However, from the almanac for that year, the first day of the first month was *bingshen* (day 33), while *jiayin* (day 51) was the nineteenth day of the month, inconsistent with the "first auspiciousness" date notation. Since all the evidence seen heretofore in Western Zhou bronze inscriptions concerning the term "first auspiciousness" (which is mainly in the first ten days of the month) shows that no matter what, it could not be as late as the nineteenth day, thus setting 899 as King Yih's first year also has to be changed.<sup>34</sup>

I have argued elsewhere that the 899 B.C.E. date for King Yih's first year does not have to be changed after all.<sup>35</sup> Whether that is the case or not, Zhu Fenghan is surely right that this inscription shows that the Project's assigning only eight years to the reign of King Yih is impossible. This is not surprising for anyone who has studied bronze vessels and Western Zhou chronology; the Project's assigning only eight years to King Yih, six years to King Xiao 孝王, and eight years to King Yi 夷王, has always been implausible since there are several fully dated bronze vessels that artistic and historical criteria suggest date to these reigns and which have year notations of twelfth year or greater.<sup>36</sup> But what is truly astounding is that even though Wu Zhenfeng's compendium of bronze vessels was published in 2012, and Zhu Fenghan's discussion of the Jun gui was published in 2014, well before the various drafts of the Report were completed, the Report does not mention the vessel at all. Even though "Postscript I" says that the last of the "internal newsletters" (內部傳遞研究資料) was issued on 12 January 2010,37 between that date and the date of "Postscript II," 10 June 2021, one would think that some one of the editors would have taken note of this important

<sup>34.</sup> Zhu Fenghan 朱鳳瀚, "Guanyu Xi Zhou jinwen liri de xin shuju" 關於西周金文 曆日的新數據, Gugong bowuyuan yuankan 故宫博物院院刊 2014.6, 12.

<sup>35.</sup> Xia Hanyi 夏含夷, "You Jun gui mingwen kan 'Tian zai dan yu Zheng'" 由《毗 簋》銘文看 '天再旦于鄭,'" Lishi yanjiu 歷史研究 2016.1, 40-48. In this study, I demonstrate that the Jun gui's full-date notation, while incompatible with the calendar of 890 B.C.E., as Zhu Fenghan states, matches exactly the calendar of 888 B.C.E., *jiayin* (day 51) being the first day of the first month of that year, fully consistent with the "first auspiciousness" lunar-phase notation. This is consistent with the "double-yuan" thesis first suggested by the late David S. Nivison in, "The Dates of Western Chou," 524-35.

<sup>36.</sup> Both the *Tai Shi Cuo gui* 大師虛簋 and the *Wang gui* 望簋 are dated to twelfth years, and the *Wuji gui* 無異簋 to a thirteenth year, not to mention the *Xiu pan* 休盤, dated to a twentieth year. The *Report* implausibly dates both the *Tai Shi Cuo gui* and the *Wang Gui* to King Li's reign, and both the *Wuji gui* and *Xiu pan* more plausibly to King Gong's reign.

<sup>37.</sup> Xia Shang Zhou duandai gongcheng zhuanjiazu, ed., Xia Shang Zhou duandai gongcheng baogao, 544.

evidence, and at least pointed it out in the *Report*. Whether the date 899 B.C.E. for the first year of King Yih stands or not, the *Jun gui* demonstrates that the Project's chronology of his reign, and thus for all of the other mid-Western Zhou reigns, is wrong. Failure to mention this evidence will not make it go away.

#### Conclusion

In an article published in 2008, I made the following statement:

[T]he public attention given to the Project—almost unprecedented in terms of humanistic scholarship—and the implied government imprimatur given to its results carry with them a special burden of responsibility. The one explicit result that everyone looks to first is the Project's absolute chronology of the Western Zhou dynasty—a result that is on view not only in the stone wall outside the Centennial Altar Museum in Beijing, but also published in the most recent edition of the *Ci hai* 辭海, and now included in elementary and high school history books all over China (there are even reports that it has been regarded as the required answer on school exams). Now that evidence has surfaced to show this chronology to be flawed—indeed, completely wrong—it is incumbent on the leaders of the Chronology Project to retract its conclusion, and to do so in as public a manner as possible.<sup>38</sup>

I knew full well at the time that article was published that such a demand was very unlikely to have any effect. The *Report* is proof that it did not. Repeating the same demand now is just as unlikely to have any effect, and yet it still seems proper to do so. As I mentioned at the beginning of this review, Li Xueqin's claim that the Project had "taken various disciplines, including natural sciences and the human and social sciences, which previously had no contact and lacked even a common language, and merged them together," can only be commendable if the results are subject to the scientific method to which all of these different disciplines adhere: the need to consider all relevant data, and especially to test whether the conclusions drawn from one data set can be replicated when new data emerge. As I hope to have demonstrated in the above discussion, a great deal of new data has emerged since the Project reached its "provisional results" in 2000, and over and over again these new data show that the chronology produced by the Project—and espe-

<sup>38.</sup> Shaughnessy, "Chronologies of Ancient China," 25.

cially the absolute chronology of the Western Zhou period—not only cannot be replicated, but in fact that the chronology is wrong from the beginning of the period to its end.<sup>39</sup> This is not to say that all of the contributions of the Project should be repudiated. The various excavations and developments in <sup>14</sup>C dating described in copious detail in the *Report* have helped to bring Chinese archaeology to an ever greater degree of sophistication and are surely to be lauded. However, these have not made their way into the *Ci hai* 辭海, or even into the showcases of Chinese museums. It is the chronology that everyone turns to first. It needs to be corrected. Far from stimulating research on this topic, the Project has retarded new research, with scholars in China disinclined to challenge this new orthodoxy.

Li Xueqin, the scientific leader of the Project, is no longer alive, and so his responsibility has come to an end. The other three scientific leaders of the Project were Qiu Shihua 仇士華, responsible for <sup>14</sup>C dating; Li Boqian 李伯謙, responsible for archaeology; and Xi Zezong 席澤宗 (1927–2008), responsible for astronomy. Qiu Shihua is now in his 90s, and Li Boqian is 86 (born in 1937), and neither of them is trained to comment on historical and inscriptional matters. Perhaps Song Jian 宋健, the prime mover behind the Project, might be called upon to address these scientific flaws, but not only is he also in his 90s, he only ever had an amateur's interest in the topic. What is needed is for a bona fide scholar of sufficient gravitas and sufficient knowledge of the issues concerned to make a formal statement admitting that at least the Project's chronology of Western Zhou is flawed and should no longer serve as any sort of standard. Although I myself do not have sufficient standing to make such a statement on my own (and since I would not be viewed as an impartial authority, in any event, having produced my own chronology of Western Zhou), I feel that I should at least issue the call for some Chinese scholar to do so. It would take considerable courage, especially given the current political context, but not only would it be an important contribution to the study of early Chinese history, but it would also be an acknowledgment that the "Xia-Shang-Zhou Chronology Project" has indeed adhered to the scientific method.

<sup>39.</sup> Since attempts to use the Project's chronology of Western Zhou to date Western Zhou bronze vessels have not only been futile, but have led in their own turn to incorrect results, it is all the more imperative that this chronology be corrected.

## 《夏商周斷代工程報告》及其西周年代評論

## 夏含夷

## 摘要

"夏商周斷代工程"是中國政府從 1995 年到 2000 年支持的五年學術 項目,目的是為了判斷西周時代絕對年代框架以及夏代和商代的大約年 代。在 2000 年,這個項目公布了一種階段性的報告,題做《夏商周斷 代工程 1996 - 2000 年階段成果報告:簡本》。二十多年以後,在 2022 年"夏商周斷代工程"終於出版了正式報告,即《夏商周斷代工程報 告》。正如《夏商周斷代工程報告》也承認的那樣,這二十多年以來 眾多考古發現顯示了原來的西周年代框架含有嚴重問題,甚至有絕對錯 誤。雖然如此,《夏商周斷代工程報告》毫無改變地繼承了《夏商周斷 代工程 1996-2000 年階段成果報告:簡本》的年代框架。本文對二十年 以來代表西周時代四個不同的階段的四種發現作簡單的介紹,及其對" 夏商周斷代工程"的結論作評論。最後,我還指出根據學術道德,"夏 商周斷代工程"的相關領導有責任公開地指出《夏商周斷代工程報告》 的問題。

**Keywords:** Xia-Shang-Zhou Chronology Project, Western Zhou, Chronology, Bronze Inscriptions, Scholarly Method 夏商周斷代工程,西周,年代學,銅器銘文,學術方法