

Crisis and Reform of the Calendar as Reflected in *Shiji* 26*

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The *Shiji* 史記 (The Scribe's Record), the earliest extant Chinese draft of a universal history, should certainly be regarded as the joint effort of two men, namely Sima Tan 司馬談 (?–110) and Sima Qian 司馬遷 (c.145–c.86).¹ It is certainly not easy to find safe evidence for how their collaboration worked, whether there are distinct parts written by Tan and others written by Qian, or whether Qian, as the later born one, reworked the whole draft so that he left his traces throughout the finalized work. Yet, it seems that there are some places in the *Shiji* from which quite distinct features pointing to either Tan or Qian can be deduced, and from these it will hopefully be possible to extrapolate on the whole of this unique work in future research.

In this paper, I will pursue a twofold aim: firstly, I would like to approach the *Shiji* from the point of view that this is not only a historical work but also, and perhaps primarily, an exegetical work; and secondly, I hope to be able to add one little stone to the grand mosaic revealing the work as a combined effort of father Tan and son Qian.

The focus of my paper is laid on Chapter 26, the Monograph on the Calendar (“Lishu” 曆書) of the *Shiji*. More precisely, my analysis will focus on its first part, an essay which may certainly be called the earliest extant survey on the history of calendar making from mythical times on down to the Han dynasty and down to Emperor Wu of the Han 漢武帝 (r. 141–87). The second part of the chapter consists of a list of calendar-related data. Not only the list itself but also the question who decided to put it there and for what reasons is certainly much worth considering in this context, too, and I will turn to this list, albeit briefly, after a closer look at the introductory part has been taken.

In what follows, I shall first summarize the contents of this essay. Then, a closer look will be taken at passages in other early sources which are similar or even parallel to those formulated by the *Shiji* author.² And finally, the question will be raised which intention or intentions become discernible behind the historiographer's exegetical effort.

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1 Although the co-editing of the *Shiji* by Sima Tan and Sima Qian is something which has generally been acknowledged by sinologists who do research on this work, only few attempts have been made so far to pursue the question of how to distinguish between the two authors more in detail. To name only some publications on this subject, see Li Changzhi 李長之, “Sima Qian de fuqin” 司馬遷的父親, in *Sima Qian zhi renge yu fengge* 司馬遷之人格與風格 (Beijing: Sanlian, 1984), 24–37; Zhang Dake 張大可, “Sima Tan zuo shi kaolun shuping” 司馬談作史考論述評, in *Shiji yanjiu* 史記研究 (Lanzhou: Gansu renmin, 1985), 58–73; Li Fuyan 李福燕, “Jianlun Sima Tan dui Sima Qian de yingxiang” 簡論司馬談對司馬遷的影響, *Nanping shizhuan xuebao* 23,1 (2004), 73–77. There was a stimulating, but somewhat controversial workshop in Amherst (Mass.), conducted by Prof. E. Bruce Brooks and A. Taeko Brooks, on October 6–10, 2005, focussing on the question of Sima Tan's possible contribution to the *Shiji*. See www.umass.edu/wsp/conferences/wswg/21/index.html.

2 The reason why I still use the singular “author” and not “authors” is mainly for the sake of brevity, but also because it does not seem very reasonable to me that father and son Sima wrote at the same

1 The introductory essay of *Shiji* Chapter 26

The essay contained in the first part of chapter 26 is divided into altogether eight sections.³ The main contents of these sections are as follows:

Section 1: In antiquity, the beginning of the annual calendar was installed precisely at the beginning of the first month of spring (*mengchun* 孟春). As a consequence, the melting of the ice and the animals' revival from hibernation, the sprouting of all kinds of herbs and the first call of the cuckoo, all this took place in accord with the rhythm of the seasons. In contrast with this, if the beginning of the annual calendar is not modeled upon Heaven – in other words: if a slippage between the calendar and the astronomical reality occurs – and if there are no humans, i.e. specialists who take care of restituting the correct constellations, then matters will easily degenerate and it will be difficult to bring them to a happy end.⁴

In Section 2, a true king (*wangzhe* 王者) is depicted as someone who, after receipt of the mandate to rule by Heaven, would primarily be concerned about establishing the calendar at the correct beginning, change the color of the ceremonial vestments accordingly and thus fulfill the will of Heaven.⁵

In Section 3, which is introduced by the formula “the Lord, the Grand Scribe said” (*taishi-gong yue* 太史公曰), the Yellow Thearch (Huangdi 黃帝) is mentioned as the one who first “examined and fixed the rotations of the planets, established the Five Elements, gave rise to the evaporations and corrected the intercalary months” (*kaoding xingli, jianli wuxing, qi xiaoxi, zheng runxu* 考定星曆, 建立五行, 起消息, 正閏餘). Besides, it was him who first established the Five Offices (*wuguan* 五官) whose duty was to take care that Heaven and Earth, Gods, Ghosts and all the other beings did not get mixed with each other in an uncontrolled way. The beneficial result of their work was, we learn, that nature and men were well and in harmony.⁶

In Section 4, a first crisis of the calendrical record is mentioned. This crisis had occurred after the reign of Shaohao 少皞, one of Huangdi's sons. The crisis is said to have been caused by the intrusion of a non-Sinitic “tribe”, the Nine Li (Jiuli 九黎). After Zhuanxu 顓頊, one of Huangdi's grandsons, however, ascended the throne, he gave order to a certain Zhong 重, who was responsible for the affairs of the Heaven and the Gods, and a certain Li 黎, who was responsible for Earth and Men, and thus succeeded in restoring the earlier state of order.⁷

time but rather that one wrote after the other – in other words, that we have to reckon with one voice only, albeit within a layered text, i.e. one individual voice may be followed by that of another individual.

3 This part of chapter 26 of the *Shiji* [hereafter: S]; references are to the Zhonghua edition] covers the pages 1255–1261. For an earlier translation of the essay, see Édouard Chavannes, *Les Mémoires Historiques de Se-ma Ts'ien*, vol. 3 (1895–1905, repr. Paris: Angers, 1967), 320–332. For an annotated version of the whole calendar chapter, see Chen Jiujin 陳久金, “*Shiji* ‘Tianguan shu’ zhuyi” 《史記·天官書》注譯, in *Boshu ji gudian tianwen shiliao zhuxi yu yanjiu* 帛書及古典天文史料注析與研究 (Taipei: Wanjuanliu, 2001), 168–257. For a recent study focusing on Sima Qian and early calendrical science, see Wu Shouxian 吳守賢, *Sima Qian yu Zhongguo tianwen xue* 司馬遷與中國天文學 (Xi'an: Shaanxi renmin, 2000).

4 *Shiji* 26 (1255:5–8).

5 *Shiji* 26 (1256:7).

6 *Shiji* 26 (1256:9–11).

7 *Shiji* 26 (1257:6–7).

In Section 5, a second crisis of calendar keeping is described which had again been caused by a non-Sinitic “tribe”: the Three Miao (Sanmiao 三苗). They had drawn their lesson, we are told, from the Nine Li, and thus the two offices (for Heaven and Earth) responsible for the correct calendrical records, were abandoned. But then God-Emperor Yao 堯 restored the earlier offices by appointing Xi 羲 and He 和 as officials, so that government and calendar were re-harmonized, and the Emperors Shun 舜 and Yu 禹 also succeeded in maintaining the right order.⁸

In section 6, it is pointed out in which month of the lunar year during the dynasties Xia, Shang and Zhou, the beginning of the astronomical year was established. After a general statement regarding the close relationship between a well-governed empire and high calendrical standards, a third crisis of calendar calculating is described, which was correlated with the decline of the Zhou House after the reigns of King You 幽 and King Li 厲.⁹

In Section 7, the Warring States Period is characterized as a time in which the political turmoil still increased, until Zou Yan 鄒衍 started to teach his Doctrine of Ends and Beginnings (*wude zhongshi shuo* 五德終始說). First steps toward an improvement of the situation were thus made, but as far as the calendrical record is concerned, we learn, the truth about it could not yet be envisaged (*weineng du qizhen ye* 未能睹其真也).¹⁰

Section 8 finally is devoted to the Han dynasty and the several attempts made by specialists to get the calendar right in accord with the theory of dynastic cycles as they had been taught by Zou Yan. But although by the time of Emperor Wen, experts urgently advised the monarch to undertake the steps necessary for reform, caused by whatsoever circumstances, the calendar reform was again postponed.

Then, during the reign of the “Present Emperor” (*jin shang* 今上), i.e. Emperor Wu, specialists such as Tang Du 唐都¹¹ and Luoxia Hong 落下閭 were convened to the court and encouraged to make the calculations for the long expected calendar reform. Then, we learn, the data were made to accord with that of the Xia dynasty, the First day of the New Year was newly installed (*gaiyuan* 改元), simultaneously, the titles of the officials were changed, and the sacrifices on Mount Tai were performed.

This last section ends with an Imperial edict, or probably with an extract from the whole edict. From its content it can be deduced that the emperor was informed by some specialists that the calendar was not altogether correct as yet, and that he thus gave order to another team to calculate the correct dates once again.¹²

From the above summarized essay, we gain the overall picture that calendar keeping is of overriding importance for any monarch who has a claim for ruling All-Under-Heaven. Times of precise and regular calendar keeping are equated with times of harmony and good government, whereas times of decline and turmoil are linked with times in which the calendar record

8 *Shiji* 26 (1257:15–1258:2).

9 *Shiji* 26 (1258:14–1259:3).

10 *Shiji* 26 (1259:12–14).

11 Tang Du 唐都 is mentioned elsewhere in the *Shiji* as Sima Tan’s teacher, introducing him to the duties related to the Office of Heaven (*tianguan* 天官). See *Shiji* 130 (3288:10).

12 *Shiji* 26 (1260:3–1261:1).

was interrupted, times in which the specialists were impeded or even dispersed. According to the historical draft sketched in these lines, there were so far three periods in history in which government was threatened by a severe crisis, and the same happened to the calendrical records: after the decline of Shao Hao, after Zhuangxi, and after the decline of the Western Zhou. But what is the precise message conveyed by the essay? At closer comparison with similar or even parallel texts in early sources, one gets the impression that the essay contained in the *Shiji* is full of subtle allusions, and that we have to know the context of these passages in order to get a clue to the message which the *Shiji* author possibly wants to convey.

2 The author's exegetical attitude

At first glance, this short essay on the calendar may seem as homogeneous as if it had been newly conceived by the *Shiji* author. A closer look at other extant sources discloses, however, that the text must in fact have been put together from a variety of sources. And when reading these parallels or semi-parallels more closely, one cannot help but get the impression that the *Shiji* author had these texts – or texts very similar to now extant ones – in his mind when he compiled his own account. It even seems that the author hoped that an initiated reader would have the same texts in his memory when reading the *Shiji* text so that these allusions sufficed to convey to such a reader a message of more complexity. Although prove for such an “exegetical attitude” – as I would like to call it –, is not so easily be given, at least some examples will be raised below in which passages contained in the *Shiji* clearly allude to parallel or semi-parallel passages in other sources. We shall see in which way the passages contained in the *Shiji* are related to those other accounts.

The text of Section 1 is wholly paralleled by passages in the *Da Dai Liji* 大戴禮記. If one further divides Section 1 into three subsections, it can easily be shown that in the latter work the subsections are all contained in one and the same chapter of the received version of the *Da Dai Liji*, albeit arranged in a different order.¹³ And, what is more, there are some subtle differences as regards the context of these passages.

To begin with, while in the *Shiji*, the time in which an ideal calendar was established which was perfectly in harmony with the seasons of the year is only vaguely dated to “in antiquity” (xi 昔), the *Da Dai Liji* version relates this, slightly more concretely, to Yu 虞, i.e. the mythical Emperor Shun 舜, and the Xia 夏 dynasty.¹⁴

Then, there are two statements which are in the *Shiji* text treated anonymously, whereas in the *Da Dai Liji*, they are both clearly denoted as originating from the mouth of scribes of old. The first statement, a comment on the meaning of words, is explicitly marked as a comment by Shun's scribe Boyi 虞史伯夷.¹⁵ The second statement, a menace that if the calendar is not brought into harmony with the succession of the seasons, things will easily

13 Subsection 1, SJ 26 (1255:5–7), parallels *Da Dai Liji* 大戴禮記 [thereafter: DDLJ]; references are to the ICS Ancient Chinese Texts Concordance Series edition], “Gaozhi” 誥志, 9.4/58/20–22; subsection 2, SJ 26 (1255:7–8), parallels DDLJ 9.4/58/18–20; subsection 3, SJ 26 (1255:8), parallels DDLJ 9.4/58/17–18.

14 Cf. SJ 26 (1255:5–7): 昔自在古, 曆建正作於孟春(...), versus DDLJ 9.4/58/20–22: 子曰(...)虞夏之歷, 正建於孟春 (...).

15 Cf. SJ 26 (1255:7–8): 明者孟也, versus DDLJ 9.4/58/18–20: 虞史伯夷曰: 『明, 孟也』。

go wrong, is marked as words by a Grand Scribe of Zhou 周太史.¹⁶ And his words are again indicated as words that Master Kong – here called by his personal name Qiu 丘 – had heard. The whole passage, finally, is marked as part of a communication between Master Kong and a duke – probably Duke Ai of Lu, in which Master Kong admonishes the lord that there is a close relationship between correct calendar keeping and orderly rule. The fact that Master Kong, according to the *Da Dai Liji* account, received instruction on calendar matters from scribes of old and uses this knowledge to instruct the duke who asks the master about good government is certainly significant for the *Da Dai Liji*. Master Kong is thus clearly embedded in the scribes' tradition.

But in the context of section 1, another source which the *Shiji* author obviously alludes to, must be mentioned, too: the *Lǐshì Chunqiu* 呂氏春秋, “Spring and Autumn of Master Lü”. Part of this work is an astronomical calendar in which for every season of the year, the proper rites and political activities for a ruler are prescribed. The calendar sets out with the first month of spring (*mengchun*), and ends with the last month of winter (*jidong* 季冬).¹⁷ Here, very much like in the *Shiji*, but more in detail, the movements in nature appropriate for the season are described. Much space is devoted then to the admonition of how the cycle of nature is interrupted if the son of Heaven does not pursue the appropriate rites and fulfil the political duties related to the season. And what is more, at the very beginning of the section, the reader is informed that it is the Grand Scribe (*taishi* 太史) who, three days before the ceremony marking the beginning of spring was to be performed, instructed the Son of Heaven about the correct time to proceed to the ceremony.¹⁸

Both sources, the *Lǐshì chunqiu* and the *Da Dai Liji*, may thus be denoted as predecessors of the authority represented by the *Shiji* author, in that they both emphasize the close relationship between the correct establishing of the calendar and good and successful government, as well as the eminent authority of a scribe. By alluding to these sources, the *Shiji* author clearly shows that he, the Lord the Grand Scribe (*taishigong* 太史公), considers himself to be a late representative of the scribal tradition as it has been transmitted by these texts.

Next, in Section 4, the first crisis comprising both the calendar record and the government is described. According to the *Shiji*, it occurred after the decline of Shaohao and was caused by the Nine Li who are blamed for having destroyed the virtue. The people and the gods, we learn, in consequence got mixed which led to chaos.¹⁹ This passage has a close parallel in the *Guoyu* 國語.²⁰ The crisis was overcome when Zhuanxu had acceded to the throne and decided to appoint two officials to take over responsibility for the management of Heaven and Earth: namely the above mentioned Zhong (as responsible for Heaven) and

16 Cf. SJ 26 (1255:8): 正不率天，又不由人，則凡事易壞而難成矣，versus DDLJ 9.4/58/17–18: 丘聞周太史曰：『政不率天，下不由人，則凡事易壞而難成。』

17 Those chapters of the *Lǐshì chunqiu* 呂氏春秋 (thereafter: LSCQ; references are to the ICS edition) which comprise this astronomical calendar are chapters 1–12, the “Twelve Almanacs” (*shierji* 十二紀). The first chapter, called “Mengchun ji” 孟春紀, is devoted to the first month of spring (*mengchun*).

18 Cf. LSCQ 1.1/1/10: 是月也，以立春。先立春三日，太史謁之天子曰：『某日立春，盛德在木。』

19 SJ 26 (1257:5): 少皞氏之衰也，九黎亂德，民神雜擾，不可放物，（…）。

20 *Guoyu*, “Chuyu, xia” 楚語下, 18.1, 562: 及少皞之衰也，九黎亂德，民神雜糅，不可方物。

the above mentioned Li (as responsible for Earth).²¹ A parallel statement is not only contained in the *Guoyu*,²² but also in the *Shangshu* 尚書, with the only difference that there it is the “August Thearch” (Huangdi 皇帝) and not Zhuanxu who is said to have appointed both Zhong and Li.²³

After the reign of Zhuanxu, we learn from the essay, the Three Miao caused the next political crisis. This crisis was again of bad impact on calendar making, as the following passage shows:

其後三苗服九黎之德，故二官咸廢所職，而閏餘乖次，孟陬殄滅，攝提無紀，曆數失序。堯復遂重黎之後，不忘舊者，使復興之，而立義和之官。²⁴

After that, the Three Miao imitated the way the Nine Li had (disturbed) the virtue. As a consequence, the two offices (of Zhong and Li) were wholly destroyed, the intercalary elements were put in the wrong order, the first month of the year was installed wrongly, the *sheti* star could not be determined,²⁵ and thus the calendrical calculations lost their correct order. Yao then reinstalled the descendants of Zhong and Li; they had not forgotten the old (methods), and (Yao) gave them order to revive these and to appoint Xi and He as officials.²⁶

But who are the descendants of Zhong and Li? – Remarkably, the *Guoyu* contains a passage which runs almost parallel to the above quoted one. From there, it can be deduced that it was the Sima clan 司馬氏 who was among the descendants of Zhong and Li, the two officials responsible for Heaven and Earth.²⁷ And strangely enough, although it is precisely this hint at the Sima clan which is missing in the essay on the calendar, there is indeed a passage – and a much more prominent one – elsewhere in the *Shiji* where it is explicitly mentioned that Zhong and Li were the remote ancestors of the Sima clan: it is in *Shiji* Chapter 130, the autobiographical one, at the very beginning where the genealogy of the Sima family is traced.²⁸

It thus seems that here again, the *Shiji* author by subtly omitting something which is instead contained somewhere else in the same work intends to alert the learned reader. In this case, I argue, the message conveyed to the reader is the hint at the eminent historical prominence, and, closely related to that, the eminent competence of the members of the Sima clan as specialists for establishing the calendar of the Han.

21 SJ 26 (1257:5–6): 顓頊受之，乃命南正重司天以屬神，命火正黎司地以屬民，使復舊常，無相侵瀆。

22 *Guoyu* 18.1, p. 562: 顓頊受之，乃命南正重司天以屬神，命火正黎司地以屬民，使復舊常，無相侵瀆，是謂絕地天通。

23 *Shangshu* [reference is to the ICS edition], “Lüxing” 呂刑, 55/50/14: 皇帝...乃命重黎絕地天通。

24 SJ 26 (1257:15–16).

25 The *sheti* 攝提 star is part of the constellation “bear watcher”. It was used by ancient calendar makers in order to adjust the months to the lunar cycles. If the position of the *sheti* star was not calculated correctly, then the calendar could not be calculated correctly, either. See Chen Jiujin, 262, n. 4.

26 Cf. Chen Jiujin, 261–262; tr. Chavannes, 325.

27 Cf. *Guoyu* 18.1, p. 563: 「其後，三苗復九黎之德，堯復育重、黎之後，不忘舊者，使復興之。以至於夏、商，故重、黎氏世敘天地，而別其分主者也。其在周，程伯休父其後也，當宣王時，失其官守，而為司馬氏。

28 Cf. SJ 130 (3285:5–6): 昔在顓頊，命南正重以司天，北正黎以司地。唐虞之際，紹重黎之後，使復興之，至于夏商，故重黎氏世序天地。其在周，程伯休甫其後也。當周宣王時，失其守而為司馬氏。

Then, in Section 6, a more general statement on the close interrelation between calendar-keeping and government is followed by a brief sketch of the decay of both during the Eastern Zhou period, which resulted in the loss of calendar specialists and thus in a further crisis:

天下有道，則不失紀序；無道，則正朔不行於諸侯。幽、厲之後，周室微，陪臣執政，史不記時，君不告朔，故疇人子弟分散，或在諸夏，或在夷狄，是以其襍祥廢而不統。²⁹ When the Way prevails in All-Under-Heaven, then one does not miss the proper order of the records; when the Way does not prevail in All-Under-Heaven, the correct day of the new moon will not be put to practice by the feudal lords. After Kings You and Li, the House of Zhou fell into decay, retainers usurped the government; scribes did not maintain a record of the correct times;³⁰ the ruler did not announce the day of the new moon.³¹ As a consequence of that, the hereditary specialists³² were dispersed; some remained in All-the-Xia,³³ others went to the Yi and Di (tribes). This is also why their prognostications were interrupted, and why there was no further transmission.³⁴

An attentive reader will, already when reading the first lines of this passage, immediately feel reminded of the almost parallel formulation in the *Lunyu* 論語 where Master Kong is quoted with the words that when the Way prevails in All-Under-Heaven, then rites, music and punitive expeditions are initiated by the Son of Heaven, while when the Way does not prevail there, this initiative is on the part of the feudal lords.³⁵ Both, the *Lunyu* and the *Shiji* passage emphasize the bad state of affairs caused by a weakened central authority which lead to insubordination from the part of the feudal lords. But whereas the *Lunyu* concentrates on the socio-political aspects (authorization to practice rites, music and to lead punitive expeditions), the *Shiji* parallel shifts the focus towards the state of calendar-related affairs – the scribes' correct record of the days, the ruler's correct announcement of the first day of the month – which shows that the *Shiji* author must have regarded the bad state of affairs in the field of the calendar-record as an infallible mirror of the socio-political situation in general.

And the allusions to the *Lunyu* passage do not even end with this: slightly further in the above quoted *Shiji* account mention is made of “retainers who usurp the mandate of the state” (*peichen zhi guoming* 陪臣執國命), and in such a state, the passage continues, it would be

29 SJ 26 (1258:14–15).

30 Scribes had to keep the record of days and thus to safeguard that the days of a month were in accord with the real waxing and waning of the moon, i.e., the first day of a month had to be a *shuo* 朔, i.e., the day of the new moon.

31 See Zheng Xuan's 鄭玄 commentary, quoted by the *Jiji* commentary to the *Shiji*, SJ 26 (1259:4): 禮，人君每月告朔於廟，有祭，謂之朝享：“According to the rites, a good ruler had to announce the day of each new month in the ancestral temple, as part of a sacrifice. This rite was called the *chaoheng* 朝享 (rite).”

32 The term *chouren zidi* 疇人子弟, literally: “the sons and younger brothers of colleagues”, refers, according to Chen Jiuji, 263, n. 3, to professionals specialized in the arts of astronomy, astrology and calendar making who hand down both their knowledge and their position from generation to generation.

33 The term *zhuxia* 諸夏 denotes the realm of the cultured people as opposed to the “barbarians”, such as the members of the Yi 夷 and Di 狄 peoples, mentioned shortly afterwards.

34 Cf. Chen Jiuji, 262; tr. Chavannes, 326–327.

35 *Lunyu* 16.2: 孔子曰：「天下有道，則禮樂征伐自天子出；天下無道，則禮樂征伐自諸侯出。」

a wonder if the power did not pass away from them within three generations.³⁶ In the *Shiji* passage, the remark “retainers usurped the government” (*peichen zhibi zheng* 陪臣執政) is juxtaposed to several more tokens of a thorough weakness of the central authority during the Eastern Zhou period, namely: “scribes did not keep a record of the correct times” (*shi bu ji shi* 史不記時), and “rulers did not announce the day of the new moon” (*jun bu gao shuo* 君不告朔). Here it is even more apparent that whereas the *Lunyu* passage concentrates on the socio-political impact of an increasing shift of power from the formerly strong central ruler down towards the family clans, the *Shiji* author sees all these developments reflected in the bad state of the calendar record of those times.

To conclude from the above said, the *Shiji* author is here, very much like Master Kong himself, acting as an exegete, extrapolating from the observable things on the general state of matters. But whereas for Master Kong, the very focus of his attention seems to be the state of the society and the relationship between the central authority and the nobility,³⁷ the *Shiji* author seems to act here primarily as an exegete of the Heavens. It is the calendar record which not only seems to be at the center of his interest but for which he also clearly claims to have a high degree of expertise.

Finally, a closer look will be taken at the concluding remarks of Section 6. It is here that the *Shiji* author illustrates well that he is not only perfectly familiar with the rules of calendar making but also with the scholarly transmission of these rules through history:

周襄王二十六年閏三月，而春秋非之。先王之正時也，履端於始，舉正於中，歸邪於終。履端於始，序則不愆；舉正於中，民則不惑；歸邪於終，事則不悖。³⁸

As for the twenty-sixth year of the reign of King Xiang of Zhou, an intercalary month has been added after the third month; this is, however, condemned by the “Spring and Autumn” (author who said): “When the earlier kings established the correct seasonal dates, they put the first [day of the year] at the beginning [of the year], raised the correct [day of the new moon] in the middle [of the year] and distributed the remainder to the end [of the year]. If one puts the first [day of the year] at the beginning [of the year], the correct hierarchies are not disturbed; if one raises the correct [day of the new moon] in the middle [of the year], the people do not doubt, and if one distributes the remainder to the end [of the year], affairs will not run counter to their proper order.”³⁹

According to the authority who criticized the method applied by the calendar officials of Lu, it violated the rules of calendar making to add an intercalary month simply after a month somewhere in the year, since there were defined parts of the year – at the beginning, in the middle and at its end – to which manipulations aimed at making the lunar year fit neatly with the astronomical year had to be confined. But who is the authority the *Shiji*

36 陪臣執國命，三世希不失矣。For a more in-depth analysis of this *Lunyu* passage in the context of Master Kong’s socio-political vision from the standpoint of a *shi* 士, see my recent paper „Die ‚Manager‘-Schmiede in Lu: Zum Praxisbezug der Lehre des Meisters Kong“, *Bochumer Jahrbuch zur Ostasienforschung* 30 (2006), 241–242.

37 It should, however, be noted that Master Kong, also according to the *Lunyu*, clearly endorsed the maintenance of calendar-related rites. From *Lunyu* 17.1 we learn that Zigong wanted to abolish the sacrificial sheep at the day of the announcement of the new moon. Master Kong objected to this, reminding his disciple of the importance of the rite – which, he argued, had more weight to him than saving the life of the sheep.

38 SJ 26 (1259:1–3).

39 Cf. Chen Jiu-jin, 262; tr. Chavannes, 327.

author is alluding to by saying that the “Spring and Autumn”, *Chunqiu* 春秋, was criticizing this? If one examines the entry related to the first year of Duke Wen of Lu 魯文公 (625 BC), which corresponds with the above mentioned 26th year of the reign of King Xiang of Zhou, one finds in fact no hint in the chronicle at a criticizing authority. Instead, it is one of the three major “commentaries” to the *Chunqiu* attached to this entry,⁴⁰ namely the *Zuoqibuan* 左傳 text, which in an additional remark points out that an intercalary element must have been inserted here to the chronicle of Lu and which sharply criticizes that this procedure ran counter to the rules.⁴¹ Thus, the *Shiji* author by mentioning *Chunqiu* must in fact have meant the *Zuoqibuan*, or, in other words, he seems to have adopted the position of the *Zuoqibuan* author in the way he interpreted the sparse record of the chronicle of Lu.⁴²

Summarizing the results achieved so far, we have been able to identify several texts which the *Shiji* author apparently alludes to in his essay on the calendar and which all seem to have two closely related topics in common: the matter of correct calendrical calculations on the one hand and the question of orderly rule on the other hand. All these texts, of which we may assume that the *Shiji* author had them at his disposal, may be characterized as sharing one common tradition: the scribe’s tradition.⁴³ This is a tradition which may be characterized here as a tradition handed down by professionals whose duties consisted in keeping both the correct record of important political events and that of calendar making and correct record of calendar-related records. This common denominator should be kept in mind when scrutinizing more closely which purposes the *Shiji* author may have pursued when writing this introductory essay.

3 The author’s intent behind the record

From the above adduced examples, a whole bunch of possible motivations for the *Shiji* author to write the essay in the way he did could already be sensed. Below, three major aspects will be summarized in a more systematic way:

Firstly, by adducing precedents from history, times in which the calendar record was kept correctly and order prevailed in the empire as contrasted to times in which the calendar record was not kept correctly and the empire fell into chaos, the author undoubtedly wants to convince his reader, preferably a ruler, that in order to make sure that the empire was in

40 The three major commentaries of the *Chunqiu* are the *Zuoqibuan* [thereafter: ZZ], the *Gongyang zhuan* 公羊傳 and the *Guliang zhuan* 穀梁傳.

41 Cf. ZZ, Wen 1.2: 於是閏三月。非禮也。先王之正時也，履端於始，舉正於中，歸餘於終。履端於始，序則不愆。舉正於中，民則不惑。歸餘於終，事則不悖。 For the intriguing view that the criticism expressed by the *Zuoqibuan* author here is in fact directed against the professionals responsible for the entry in the chronicle of Lu, i.e. the scribes of the *Chunqiu* period, see also Chen Meidong 陳美東, “Luguo lipu ji Chunqiu, Xi Zhou lifa” 魯國曆譜及春秋，西周曆法, *Ziran kexueshi yanjiu* 19,2 (2000), 130.

42 For more recent studies on the relationship between the *Shiji* text and the three major scholarly transmissions of the *Chunqiu*, see esp. Chen Tongsheng 陳桐生, *Shiji yu jin gu wen jingxue* 《史記》與今古文經學 (Shantou: Shaanxi renmin jiaoyu, 1995), 33–94; see also Stephen W. Durrant, “Sima Ch’ien’s Conception of the *Tso chuan*,” *Journal of the American Oriental Society* 112.2 (1992), 295–301, 297 and n. 18.

43 For a case study on a post-Sima representative of what I call the scribe’s tradition, see my paper “Did Chu Shaosun Contribute to a Tradition of the Grand Scribe?,” *Oriens Extremus* 44 (2003/04), 11–26.

peace and one's own position stable, highest priority should be given towards a calendar which was in perfect accord with the luni-solar succession of the astronomical year.

Secondly, by composing a text which at closer look turns out to be a true patch-work of passages taken from sources which can be characterized as belonging to a tradition of professionals – calendar makers, astronomers, astrologers, scribes – the author places himself in a tradition which suits well with someone whose position at the imperial court was that of a Grand Scribe (*taishi* 太史). And by giving a survey on the history both of calendar making and of political crises corresponding to times of degenerating calendrical record, he builds a bridge between past and present and thereby draws the reader's attention to the author's immediate past and present and its interpretation: the time of Emperor Wu.

Thirdly, even though nowhere in the Monograph on the Calendar the author explicitly points at the historical importance of the Sima clan, he does it indeed indirectly: as mentioned above, he does so not only by alluding to a passage from the *Guoyu* in which the descentance of the Sima clan from Zhong and Li is immediately following after that passage which the author is actually quoting in his account, but also by explicitly quoting the part containing the hint at the Sima clan in the autobiographical last chapter.⁴⁴

As for the intentions behind the *Shiji* author's record, it is – in spite of his quite obvious efforts at concealing his true ambitions – not difficult to guess what the author in this essay intends to say. The message behind his historical survey on calendar making is, in my view, a twofold one: Firstly, he wants to draw the reader's attention to the fact that time has come for the Han to put the long expected and long prepared calendar reform to practice, and secondly, among all the candidates who supposedly at that time rivalled with father and son Sima for being entrusted with that task – Gongsun Qing 公孫卿, was, as I have discussed elsewhere more in detail⁴⁵ –, the author obviously feels justified to denote himself as the most qualified specialist of them all. Thus, it should not seem too far-fetched to interpret the essay on the history of the calendar *in nuce* as an attempt at convincing the reader that the great task of finally overcoming the still extant crisis which, according to his words, found its expression in the increasing slippage between the calendar and the actual succession of the seasons, would be tackled best by putting it into the experienced hands of the Sima.

4 Turning to the *Hanshu* account of Emperor Wu's calendar reform

But who is “the author” of the essay analysed above? As indicated at the outset of this study, we have to reckon with (at least) two men who contributed to the received *Shiji* text, namely Sima Tan and Sima Qian.⁴⁶ Strictly speaking, almost the whole essay, except its last

44 For a previous discussion of this apparently typical style of the author's pointing out by implicitly alluding to something and by mentioning parts of the whole matter in different chapters of the work, see my paper “Sima Qians *Huo*-Zweifel in Kapitel 61 des *Shiji*,” *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 153 (2003), 115–142.

45 See my “The power of an alleged tradition: a prophecy flattering Han Emperor Wu and its relation to the Sima clan,” *Bulletin of the Museum of the Museum of Far Eastern Antiquities* 74 (2002), 243–290.

46 Apart from Sima Tan's and Sima Qian's co-editorial effort, we have certainly to reckon with further interpolations, among others, by Yang Yun 楊惲, Sima Qian's grandson, as well as by Chu Shaosun 褚少孫 who had even signed his supplements by name. I have argued elsewhere that, although the life data of Yang Yun and Chu Shaosun must have overlapped to some degree, it was probably Chu who added information on Yang Yun to the *Shiji*. See Schaab-Hanke (2003/04), 23 and n. 50.

part, could well come from the hand of Sima Tan. And, as I shall argue presently, there is good reason to assume that most of the introductory essay was indeed written by Tan. In this last part, however, mention is made of how the calendar reform was finally brought about. And the details about this event, albeit certainly of utmost importance to Tan, are precisely – if we take Qian’s report in *Shiji* 130 seriously – what Tan did not witness.⁴⁷

Since Section 8, the last section of the essay, not only contains the hint at the establishment of the new calendar itself but also the edict issued by Emperor Wu, in which it is reported that the Emperor had entrusted a team of specialists to calculate the calendar once again, apparently because a previous calculation was blamed by some officials to have turned out not to be correct, this a further piece of strong evidence that this edict could not be known by Sima Tan but only added by his son Qian.

A more detailed – and perhaps more thorough – picture of what had really happened shortly before and after Sima Tan’s death, can be gained by turning to the Treatise on Pitch Pipes and the Calendar (“*Lüli zhi*” 律曆志) in the *Hanshu*.⁴⁸ Remarkably, the imperial edict is quoted there as well, but the order of events is different from that in the *Shiji* account. According to the *Hanshu* version, a team – consisting of (Gongsun) Qing 卿, (Hu) Sui 遂,⁴⁹ (Sima) Qian 遷, a certain Zun 尊 and She Xing 射姓 – were ordered by the Emperor to deliberate on the new calendar of the Han. Then, all the necessary preparations were taken to make the change towards the new calendar in the 11th month of the 7th Year of the era Yuanfeng 元封 (104 BC), on the day of the new moon, at day break.⁵⁰ But then, Deng Ping 鄧平 and others submitted a memorial to the Emperor complaining that the numbers would still not work. Thus, a team of about twenty specialists, among them Tang Du and Luoxia Hong, and under the guidance of Deng Ping and Sima Ke 司馬可, were chosen to make the

47 According to Qian’s report in SJ 130 (3295:5–8), his father Tan must have died in the very same year and perhaps immediately before the *Feng* and *Shan* sacrifices on Mount Tai, scheduled for the spring of the year 110 BC, took place. Qian’s account even subtly suggests that his father died out of grief that he was not allowed to participate in the great event which he seems to have expected for a very long time. Cf. esp. the passage: 今天子接千歲之統，封泰山，而余不得從行，是命也夫，命也夫！“Now the Son of Heaven is going to connect to a tradition of a thousand years and will perform the sacrifices on Mount Tai, but I do not have the privilege to accompany him there – such a bad luck, such a bad luck!” As can also be deduced from the *Shiji* account, the establishment of the new calendar took place together with or even slightly prior to the sacrifices: 乃改元 (...) 封泰山。See also above, p. 36.

48 The *Hanshu* 漢書 (Book of the Han) [thereafter: HS; references are to the Zhonghua edition] should probably, very much like the *Shiji*, be regarded as a combined effort of father and son, Ban Biao 班彪 (3–54) and Ban Gu 班固 (32–92), and, last but not least, also of Ban Gu’s sister, Ban Zhao 班昭 (c. 48–c. 117). For an analysis on Ban Zhao, see my “Frauenbiographien aus weiblicher Hand? Ban Zhao und das *Xu Lienü zhuan*,” in D. Schaab-Hanke and Judit Arokay, *Auf anderen Wegen? Bemerkenswerte Frauen in Ost- und Südostasien* (Hamburg, Hamburger Sinologische Gesellschaft, 2007) [forthcoming].

49 That Hu Sui 壺遂 was collaborating with Sima Qian when the preparations for the new calendar were taken, is corroborated by a remark in SJ 108 (2865:4). For the famous communication between Sima Qian and Hu Sui on the making of “Spring and Autumn,” see SJ 130 (3297:7–3300:1).

50 HS 21A (975:8–11).

calculations once again.⁵¹ In the end, we learn from the *Hanshu*, (Sima) Qian was ordered by the emperor to use the calendar which Deng Ping had made.⁵²

If one follows the *Hanshu* account, it therefore becomes quite obvious that the great calendar reform under Emperor Wu, the Grand Inception Reform, was finally brought about by Deng Ping and his team. Whereas Sima Qian seems to have had a leading function in the first stage of the project, his role during the second and decisive step was confined to merely put into practice a calendar system that had been calculated by others.⁵³

Thus, a closer comparison of the account in the *Hanshu* with the one in the *Shiji* suggests that the great calendar reform under Emperor Wu took in fact place in two steps, the first step being made in 110 BC, the very year in which Sima Tan died, and the second in 104 BC. Although there is no open contradiction between the account in the *Shiji* and that in the *Hanshu*, the version contained in the *Shiji* either intentionally makes no effort at elucidating the reader in this respect, or, which seems even more probable to me, the account ends with mention of the first calendar reform which for Sima Tan must have been immediately ahead. The edict then as the final part of Section 8, might be the only addition to this essay made by Sima Qian, and it can be guessed that its content – the admonition to the Emperor made by some of Tan’s and Qian’s colleagues that the previous calculations were not correct yet – was something which did not need any further comment.

Viewed in this light, one final thought should be dedicated to the calendar list attached to Chapter 26 and the question by whom and for what reason this might have been added there.

This list, which bears the title *Lishu jiazhi pian* 曆術甲子篇 (Draft on Reckoning the First Day of the Year according to the Calendar Arts), covers a period of altogether 76 years. To it, intercalary months have been added systematically, in a system very like that which Meton had developed in Greece during the 5th cent. BC.

According to Wu Shouxian 吳守賢, who devoted a monograph to Sima Qian and his contributions to Chinese astronomy, the list is not to be understood as an actual calendar but rather as a strongly idealized scheme, a model for calendar calculation in general.⁵⁴ In his view, thus, the name *taichu* 太初 (Grand inception) which is indicated at the beginning of this list, had nothing to do with the name of the era Taichu which Emperor Wu had determined as the name of the reign era (105–101) in which the calendar reform was put to effect. Rather, he argued, this was just a general name for a calendar in which all kinds of astronomical cycles would coincide. And, Wu Shouxian argues, if the calendar list contained in *Shiji* 26 is not the Grand Inception Calendar but rather a calendar system and if this system differed from the system on which the Grand Inception Calendar was based, then this system is probably not the new one but the former one as it had been propagated by Sima Qian.⁵⁵

51 HS 21A (975:13).

52 HS 21A (976:4).

53 For the interpretation that the above mentioned *Hanshu* passage suggests that the calendar reform under Wudi took place in two steps, see also Wu Shouxian 吳守賢, *Sima Qian yu Zhongguo tianwen xue* 司馬遷與中國天文學 (Xi’an: Shaanxi renmin, 2000), 32–33.

54 Cf. Wu Shouxian, p. 43: 我們認為《曆術甲子篇》，是“曆術”而不是“曆書”，(…)。

55 This result should, however, be understood as in the first place being directed against the opinions of colleagues who maintain an earlier argument, already formulated as early as by the *Suojin* commentary to the *Shiji*, that due to the several era names in the list which postdate Sima Qian the list itself must have been added by a later hand the list could not date back to Sima Qian. Cf. SJ 26 (1270:3–4). As

I would, however, even dare to do one step further and argue, based on what has been said above the collaboration of Tan and Qian, that very probably the calendar list was wholly or at least primarily a contribution by Tan, not Qian, but Qian was certainly the one who had decided to put it here, at the end of Chapter 26. What his father could not know – and certainly he would not have been very happy to experience this – was that the calendar calculations he certainly had worked at for a long period in the end suffered the fate of being dismissed. Sima Qian, whose fate was to witness how the story went on, by doing so probably intended to keep the memory of his father and his brilliant workmanship, namely, to have established what Nathan Sivin has denoted the “earliest astronomical system of which we have adequate records”.⁵⁶ The list thus seems to have served him as a reminder, dedicated to the memory of his father Tan, the great scribe, who had descended from an elevated clan of scribes.

Turning back to the purposes formulated at the outset of this study, I would like to emphasize that Chapter 26 is certainly only one case example out of many which will be necessary to closely scrutinize in order to gain a more thorough picture of how Sima Tan and Sima Qian should be distinguished from each other in this text. This chapter, however, seems to me to be of special interest, since the topic of the calendar, as were those of rites and music, the pitch-pipes, the Office of Heaven and the *Feng* and *Shan* sacrifices,⁵⁷ were certainly at the core of the interest of a grand scribe, an identity which Sima Tan and Sima Qian shared, and thus it will be probably in those chapters of the *Shiji* which are dedicated to these topics that we will find the most intense mixture of what may be called “pure” historiography with exegetical inclinations that give evidence of the scribe’s scholarly expertise and subtle traces of a highly personal concern.

for the argument that these later additions could have been made by Chu Shaosun, see also the comments by Chavannes, App. 3 (“Le Calendrier des mémoires historiques”), 646–666.

56 See Nathan Sivin, “Cosmos and computation in early Chinese mathematical astronomy,” *T’oung Pao* 55 (1969), 10.

57 Chapters 23–28 of the *Shiji* are dedicated to these “core” themes.