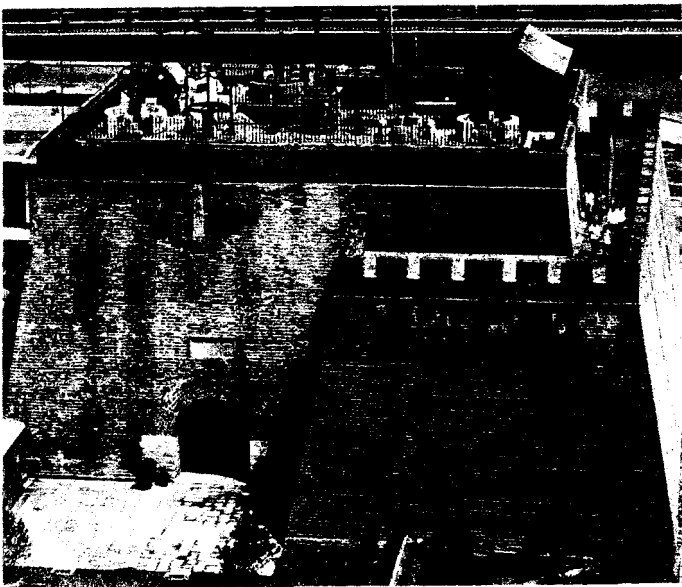


中西文化交流史雜誌

中國天主教史研究

Sino-Western Cultural Relations Journal

XXXIV (2012)



formerly China Mission Studies (1550-1800) Bulletin

The Early Qing Geographical Surveys (1708-1716) as a Case of Collaboration between the Jesuits and the Kangxi Court

Mario Cams 康言
University of Leuven
mario.cams@arts.kuleuven.be

Introduction

Unlike earlier missionaries, the French Jesuits who reached China in 1687 were sent by Louis XIV and his Académie Royale des Sciences in order to study a wide range of aspects of Chinese society, culture, sciences, etc. By doing so, they promoted the early modern European sciences in the Qing empire, while contributing to their development at home by reporting back on their findings. This complex *va-et-vient* of scientific knowledge by the French mission meant a change in the nature of European missions to China and led to the establishment of an influential intercontinental network of communication and circulation of knowledge. One of the fields most heavily influenced by this emerging scientific network was cartography¹. By conducting geographical surveys of the capital, its surroundings and the Great Wall during the first years of the 18th century, French Jesuits were able to impress the Kangxi emperor with their (European) cartographic skills and, as a consequence, were given the assignment to supervise the mapping of the entire empire².

This grand project was carried out in several phases. First, a team of mapmakers set out to the northeastern part of the empire in 1709 in order to conduct a survey of the Manchu homelands and outlying regions. Upon completion of this survey, they were ordered to immediately proceed by mapping the politically important capital province

¹ Foss, Theodore, "Jesuit Cartography: A Western Interpretation of China", *Review of Culture* 21:4 (1994), Macao: Instituto Cultural de Macao, p. 139. An earlier version of this article can be found in Ronan, Charles E. & Bonnie B.C. Oh, ed., *East Meets West: The Jesuits in China 1582-1773*, Chicago: Loyola Univ. Press, 1988, pp. 209-251.

² Foss, 1994, p. 142. Note that not only French Jesuits were involved in the mapping project: German Jesuit Ehrenbert Xavier Fridelli (1673-1743), Portuguese Jesuit João Francisco Cardoso (1677-1723) and French Augustinian Guillaume Fabre-Bonjour (1669-1714) were some of the other active contributors.

of Beizhili, the result of which appears to have especially pleased the emperor. As a consequence, the same group of surveyors was sent to the middle reaches of the Amur river in 1710, returning to the capital by the end of the same year. With the emperor now fully convinced of the Jesuits' cartographic skills, a second phase was initiated. It was decided that the geographical surveys were to be accelerated by forming two separate teams of surveyors, thereby enabling them to operate simultaneously. Thus, the province of Shandong and the Mongol regions were both surveyed in 1711, followed by Shanxi and Shaanxi provinces in 1712. In a third and last phase, no less than three teams of surveyors were sent to simultaneously map the provinces of Henan, Jiangnan, Zhejiang and Fujian; Jiangxi, Guangdong and Guangxi; and Sichuan, Yunnan, Guizhou and Huguang. By 1716, the maps of all of these regions were completed, leaving only Tibet, Korea and Western Turkistan unexplored with the assistance of Jesuit missionaries³. Bridging these gaps with maps drawn entirely on the basis of indigenous sources, a full atlas was finally presented to the emperor in 1718⁴.

In order to successfully complete this enormous mapping project, missionaries were – for the first time – allowed to travel to even the most remote of provinces for surveying purposes⁵. In addition, it is assumed, mapmakers relied on Chinese sources as well as on cartographic works of earlier missionaries, though scholars do not seem to agree as to what extent⁶. In fact, both Western and Chinese academic research on this important cartographic project have until recently largely focused on the technical input of Europeans and not so much on the cooperative character of the imperial mapping endeavor⁷. Despite their valuable contributions, these studies have therefore not fully appreciated the role of the 'recipient' side, *in casu* the populations and elites of the Qing empire. Yet, such a perspective is indispensable, not only for unveiling the exact circumstances under which this new cartographic knowledge of the Qing empire was gathered, but also for uncovering the sources that were used and the officials that were consulted in the process. Eventually, such knowledge will contribute to our

³ Baddeley, John F., *Russia, China, Mongolia...*, Vol. 1, London: Macmillan and Co., 1919. Reprinted Mansfield Centre (Conn.): Martino Pub., 2006, p. clxxxix.

⁴ Foss, 1994, pp. 142-146.

⁵ Turkic and Tibetan areas being the only exceptions, see *supra*. Baddeley, Vol. 1, 1919, p. clxxxix; and Foss, 1994, p. 146.

⁶ Foss, 1994, p. 145; and Baddeley, Vol. 1, 1919, p. clxxxviii.

⁷ Examples are Foss, 1994; and Wang Qianjin 汪前进, "Kangxi tongban 'Huangyu quanlan tu' touying zhonglei xintan" 康熙铜版《皇舆全覽圖》投影种类新探 [New Research into the Projection Method Used for the Copperplate Edition of Kangxi's *Huangyu quanlan tu*], *Ziran kexue shi yanjiu* 自然科学史研究 10:2 (1991), pp. 186-194.

understanding of the French mission and enable us to paint a fuller picture of Sino-European cartographic exchange at the time.

Seen in this light, the so-called 'folded memorials with vermilion endorsement' (*zhupi zouzhe* 硃批奏摺) of the Kangxi reign are most certainly worth scrutinizing. Belonging to the category of secret palace memorials known as *zouzhe* 奏摺 and typically reserved for important state affairs, this particular kind of communication presented a way for the emperor to be in direct contact with his most senior officials without going through the many levels of Qing bureaucracy⁸. This was a highly efficient and secretive system: transmitted by private couriers and locked in special boxes, memorials arriving at the imperial palace from the provinces were received by the secretaries of the Chancery of Memorials or *zoushichu* 奏事處 at any time, and were presented to the emperor the very next morning. The Kangxi emperor was known to attach great importance to state affairs and generally spent his mornings going through these memorials, thus being in full control of important matters. At the bottom of a memorial, the emperor sometimes wrote a comment in red ink or vermilion endorsement (*zhupi* 硃批), in which he either took note ('*zhidaole* 知道了') of what he had just read or added instructions, questions or comments for the memorialist. When he felt a memorial needed follow-up, the emperor simply turned down one corner, so that the matter would be discussed the next morning in audience with his Grand Council⁹. The entire processing of such memorials by the palace took only a few days to complete, after which the memorial was archived by the Grand Council and sent back to the memorialist by private courier. This goes to show that matters handled in this way were considered important affairs that required a certain secrecy, and that the Kangxi emperor thought it necessary to be in full control of these issues¹⁰.

As direct correspondence on important affairs between the emperor and his most senior officials, these documents are invaluable sources and offer us a unique insight into the functioning of Qing government and administration. As a result, they can help

⁸ Most officials with rank 4A and higher were allowed to present *zouzhe*. Wu, Silas Hsiu-liang, "The Memorial System of The Ch'ing Dynasty (1644-1911)", *Harvard Journal of Asiatic Studies* 27 (1967), p.25. See also Elliott, Mark C., "The Manchu-Language Archives of the Qing Dynasty and the Origins of the Palace Memorial System", *Imperial China* 22:1 (2001), p. 47.

⁹ Fairbank, J.K. & S.Y. Teng, "On the Types and Uses of Ch'ing Documents", *Harvard Journal of Asiatic Studies* 5:1 (1940), pp. 24-32. Hence the name 'folded memorial' or *zouzhe*.

¹⁰ With the exception of the so-called 'greening memorials' that were also communicated through this system.

us shed light on the procedures followed and difficulties involved in dispatching European missionaries into China's heartland. But more importantly, they allow us to clarify the role of the emperor himself with regard to the successful completion of the mapping project. To what extent was the Kangxi emperor personally involved and what were his concerns as a patron of this endeavor? How did the Qing government and administration handle the practical organization of the project? Can we find more information as to which officials and sources were consulted in the process? For the purpose of answering these questions, I have looked at the published Chinese and Manchu-language 'Folded Memorials with Vermillion Endorsement of the Kangxi Reign' and studied in detail all memorials directly related to the mapping project of the early 18th century¹¹. At the end of this paper, I will complete my argument by discussing a related document from the 'Historical Materials of the Ming and Qing Dynasties'¹².

The Manchu-language 'Folded Memorials with Vermillion Endorsement'

All memorials discussed in this paper, Chinese as well as Manchu, were written by provincial governors and essentially memorialize the completion of the map of a certain province¹³. In doing so, each of these memorials basically follows the same structural pattern: (1) official title and name of the memorialist, followed by a polite opening formula; (2) date on which instructions were issued by the Ministry of Military Affairs; (3) detailed rendering of these instructions; (4) confirmation and date of the completion of instructed tasks; (5) name of the courier and rendering of instructions given to him, followed by a polite closing formula; (6) repetition of the memorialist's official title and name; and (7) vermillion endorsement by the emperor. Following this pattern, the memorial shown in figure 1 is the only one in the 'Complete Translation of Manchu Folded Memorials with Vermillion Endorsement of the Kangxi Reign' that can be directly linked to the early Qing geographical surveys¹⁴. It was sent

¹¹ *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編 (Collection of Chinese-language Folded Memorials with Vermillion Endorsement of the Kangxi Reign), 8 Vols., Beijing: Dang'an chubanshe, 1984; and *Kangxi chao manwen zhupi zouzhe quanyi* 康熙朝滿文朱批奏摺全譯 (Complete Translation of Manchu-language Folded Memorials with Vermillion Endorsement of the Kangxi Reign), 6 Vols., Beijing: Zhongguo shehui kexue chubanshe, 1996. Note that only the Chinese-language translations of the original Manchu memorials were published.

¹² *Ming Qing shiliao ding bian* 明清史料丁編 [Historical Materials of the Ming and Qing Dynasties: Fourth Collection], Vol. 2, Taipei: Zhongyang yanjiuyuan lishi yuyan yanjiusuo, 1972, p. 768.

¹³ In the Jiangsu memorial (see *infra*), the completion of the maps of two provinces is reported.

¹⁴ See figure 1. Only the Chinese translation is recorded in this publication.

to the throne on November 11th, 1714 by Man-pi 滿丕, Manchu bannerman and provincial governor (*xunfu* 巡撫) of Guangdong province¹⁵. The memorial is rather short, but nonetheless gives us at least two important clues as to how the mapping project was dealt with by the Qing administration. First, the provincial governor indicates that he received an “official communication from the Ministry of Military Affairs” (*bingbu zi* 兵部諮) with instructions regarding the surveying of his province, thereby suggesting this ministry was in charge of both communication and practical organization.

¹⁵ Man-pi made it to provincial governor in 1710 and was promoted into the Ministry of Works in 1715. Most biographical information included in this paper was taken from *Qingdai zhiguan nianbiao* 清代職官年表 [Chronological Table of Official Posts for the Qing Dynasty], 4 Vols., Beijing: Zhonghua shuju, 1980.

2509 广东巡抚满丕奏进广东省全图折

康熙五十三年十月初五日

① 广东巡抚奴才满丕谨奏：为奏地图事。③

② 康熙五十二年闰五月，准兵部咨称：奉上海：派郎中绰尔岱、武官郑妙手，前往江西、广东、广西可也。倘一省之图画完，立即交付该巡抚，派家人送来可也。钦此。康熙五十三年十月初五日，理藩院郎中绰尔岱等已将广东省全图绘完，交与奴才。④ 本日，立即遣奴才之家人南景賚捧，⑤ 谨奏。为此具折谨奏。⑥

广东巡抚奴才满丕。⑦

朱批：知道了。⑦

Figure 1: taken from *Kangxi chao manwen zhupi zouzhe quanyi* 康熙朝滿文朱批奏摺全譯 (Complete Translation of Manchu-language Folded Memorials with Vermillion Endorsement of the Kangxi Reign), p. 980.

Second, he states that he personally received the entire map of Guangdong province directly from the mapmakers upon completion, and that he *immediately* entrusted one of his *jiaren* 家人 to travel to the capital and present it to the throne¹⁶. On another note, it is remarkable that no mention is made of the two Jesuits who most certainly were involved in the mapping of Guangdong: Pierre Vincent de Tartre (1669-1724) and João Francisco Cardoso¹⁷.

As we will see, all but one of the initial memorials discussed in this paper likewise indicate the memorialist having received instructions by means of official communication from the Ministry of Military Affairs¹⁸. This can be explained by the fact that this ministry consisted of four departments or bureaus, one of which was in charge of all communication between the central administration and provincial governments, and responsible for the horse relay system that made such interregional communication possible¹⁹. Furthermore, in the 'Table of Official Positions in Successive Dynasties', composed during the Qing dynasty, another department of the ministry is specifically linked to the act of mapmaking itself: "[This department] handles the mapping of all under heaven, so as to be fully informed of both strategically located and remote places."²⁰ Thus, it can be assumed that standard procedures were followed when issuing instructions to provincial governors and that the involvement of the ministry in itself does not imply a special treatment of this particular mapping project. On the other hand, from the content of these memorials we learn that initial instructions sent to these governors included personally ensuring the map of their province was transmitted to the palace immediately after completion and without any delay. The only memorialist who does not explicitly mention this official communication from the ministry nevertheless reports to have followed the same procedure, thereby indicating that he probably received these instructions as well. This seems to stress the importance and strategic value attached to these surveys by the Qing emperor and administration. Of course, the very fact that these governors were

¹⁶ *Jiaren* 家人 is used widely throughout the published *zouzhe* for private couriers transmitting secret memorials to the palace. Wu, 1967, p. 27.

¹⁷ Foss, 1994, p. 144.

¹⁸ The only exception being the first Guizhou memorial, see *infra*.

¹⁹ This department, the *chejia si* 車駕司, is often translated as 'Remount Department'. See Liu, Adam Yuen-Chung, *Ch'ing Institutions and Society 1644-1795*, Hong Kong: Univ. of Hong Kong Centre of Asian Studies, 1990, p. 40; and Fairbank, J.K. & S.Y. Teng, "On the Transmission of Ch'ing Documents", *Harvard Journal of Asiatic Studies* 4:1 (1939), p. 15.

²⁰ This department was called *zhifang si* 職方司 in Chinese. *Lidai zhiguan biao* 歷代職官表 [Table of Official Positions in Successive Dynasties], Shanghai: Shanghai guji chubanshe, 1993, *juan* 12.

instructed to use the system of secret palace memorials to transmit the maps is in itself testimony to the strategic importance of the project.

In contrast to the published Manchu-language memorials, the 'Collection of Chinese-language Folded Memorials with Vermillion Endorsement of the Kangxi Reign' contains no less than eight memorials directly linked to the geographical surveys of the early 18th century. One quick look at these memorials reveals that all of them deal with one of the last stages of the mapping project: the simultaneous surveying of the provinces of Henan, Jiangnan, Zhejiang and Fujian in 1713-1714, with Jean-Baptiste Régis (1663-1738), Joseph Marie Anne de Moyriac de Mailla (1669-1748) and Romain Hinderer (1668-1744); Jiangxi, Guangdong and Guangxi in 1713-1714, with de Tartre and Cardoso; and Sichuan, Yunnan, Guizhou and Huguang in 1713-1715, with Fridelli, Fabre-Bonjour and Régis²¹. Since the Manchu-language memorial described above also deals with this stage of the mapping project, the fact that it was written in Manchu does not indicate a special sensitivity towards the transmitted information, even more so since it follows the same pattern as the Chinese-language memorials, both in structure and in content²².

The Chinese-language 'Folded Memorials with Vermillion Endorsement'

As mentioned above, eight Chinese-language memorials can be linked to the early Qing geographical surveys, originating from the provinces as follows: Jiangsu (1), Zhejiang (2), Jiangxi (3&4), Sichuan (5), Yunnan (6), and Guizhou (7&8). Memorials 1, 2, 3, 5, 6 and 7 transmitted completed provincial maps to the throne, while memorials 4 and 8 were follow-up replies to the vermilion endorsements made on transmissions 3 and 7, respectively. When analyzed carefully, these documents offer us further insight into the different forms of cooperation between the emperor, his national and local officials, and the teams of surveyors including European missionaries. More specifically, they contain important information regarding (1) the size and composition of the different teams of mapmakers, (2) the practical organization and timing of the

²¹ See *supra*.

²² It is often argued that Manchu-language memorials to the throne were mostly reserved for particularly sensitive or strategic information. But the fact that all but one of the memorials presented in this paper were written in Chinese might easily be explained by their geographic origin in China proper (Elliott, 2001), as well as by the author of the only Manchu memorial being a Manchu bannerman. As a consequence, the fact that only one of the memorials discussed in this paper was written in Manchu does not alter the importance or strategic value attached by Qing officials to the content of that particular memorial.

surveys, (3) the role of the emperor himself, and (4) the importance of locally prepared documents for the successful completion of the mapping project.

The most striking result of the analysis of the Chinese-language palace memorials, is the information that was found on the composition and size of the different teams of surveyors. To begin with, the first Jiangxi memorial mentions the titles and names of seemingly all of the surveyors of the second team²³: “Li Bingzhong 李秉忠, Westerners de Tartre and Cardoso, [...] *langzhong* Chao-er-dai 綽爾代 and *wuguanzheng* Miao Shou 苗受”²⁴. In the Sichuan memorial, another list is given, this time of the third team of mapmakers²⁵: “[...] the *jianshi* of the Hall of Military Eminence Bu-er-sai 布爾賽, Westerners Fridelli and Shan Yaozhan 單爻占, *xiangdao hujun canling* Ying-zhu 英柱, *langzhong* of the Ministry of Personnel Lang-gu-li 朗古禮, and the *jianfu* of the Directorate of Astronomy Shuang-de 雙德[...]”²⁶.

²³ As is suggested by the absence of the character *deng* 等. See infra. *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編, Vol. 5, p. 328.

²⁴ According to the circular that is discussed at the end of this article, Li Bingzhong was Superintendent of the Hall of Moral Cultivation or Yangxindian 養心殿, located in the inner palace. This is where the emperor stored his clocks and other mechanical instruments that had been given to him by European missionaries, who trained Chinese and Manchu officials to maintain them. *Langzhong* 郎中 is the title for the director of a ministry or other important government body. In the Manchu-language memorial, Chao-er-dai is said to work for the Lifanyuan 理藩院. *Wuguanzheng* 五官正 is the official title for a director of one of the Five Offices in the Directorate of Astronomy or Qintianjian 欽天監. In the Manchu-language memorial, the character *Zheng* 正 is replaced by *Deng* 鄧, possibly due to translation problems. This cannot be confirmed however, as the original Manchu-language documents were not published. Most translations of titles and institutions in this article were taken from Hucker, Charles O., *A Dictionary of Official Titles in Imperial China*, Taipei: Southern Materials Center, 1985.

²⁵ *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編, Vol. 5, pp. 674-676.

²⁶ *Jianshi* 監視 was an official title given to a superintendent. The Hall of Military Eminence or Wuyingdian 武英殿 in the inner palace is where the imperial printing office was located. Like the Hall of Moral Cultivation, this hall housed personnel that dealt with the Europeans at court, as is explicitly mentioned in a document that was published in *Qingzhong qianqi xiyang tianzhujiao zaihua huodong dang'an shiliao* 清中前期西洋天主教在華活動檔案史料, Beijing: Zhonghua shuju, 2003, p. 53. Shan Yaozhan presumably refers to Fabre-Bonjour, since his gravestone carries a homophone name in different characters: Shan Yaozhan 山遙瞻. See Edward Malatesta & Gao Zhiyu, ed., *Departed, Yet Present: Zhalan, the Oldest Christian Cemetery in Beijing*, Macao: Insituto Cultural de Macao, 1995, p. 166. *Hujun canling* 護軍參領 is the title for a banner colonel in the Guard: an elite group within the banner system responsible for protecting the palace. See Elliott, Mark C., *The Manchu Way: The Eight Banners and Ethnic Identity in Late Imperial China*, Stanford: Stanford univ. press, 2001, pp. 81, 366. The prefix *xiangdao* 嚮導 here presumably refers to the banner colonel's ties to the Xiangdaochu 嚮導處 or Escort Office, an office providing the military entourage for imperial outings. Lang-gu-li is otherwise written as Lang-wu-li 朗烏裡. See *Yunnan tongzhi* 雲南通志 [Yunnan Gazetteer], in *Siku quanshu* 四庫全書, 1736, *juan* 18. *Jianfu* 監副 is an official title for the Vice-Supervisor of the Directorate of Astronomy.

When we compare both of these lists to the more scattered information on the first group of mapmakers that is included in the Jiangsu memorial, we notice some similarities in the composition of these three teams of surveyors, as well as in the order in which they are named²⁷. Regardless of the completeness of these lists, each of these teams seems to have had a fixed composition: an envoy from the inner palace with ties to the European missionaries at court, indicating the emperor's personal engagement; two or three (mostly) Jesuit missionaries, essential because of their knowledge of European surveying techniques; a representative of an important administrative body, indicating the involvement of different segments of top Qing administration; and a representative of the Directorate of Astronomy, strongly linked to the Jesuits' presence in China and to the observation of the heavens²⁸. Most likely, an elite banner colonel was also appointed and sent along, but perhaps not at all times²⁹.

In addition, the 'Yunnan Gazetteer' that was included in the *Siku quanshu*, stipulates that all officials that were part of the third team of surveyors were Manchu bannermen, which appears to have been true for the first team of surveyors as well³⁰. This shows that the missionary-mapmakers involved in the project were well surrounded by mostly (if not only) Manchu officials from different institutions and that, even though these European mapmakers possessed the necessary technical knowledge to successfully complete the mapping project and were thus indispensable, the project was clearly taken very seriously by the Qing administration and emperor. With several important Qing institutions represented and directly involved in the surveying endeavor, it is evident that this cartographic undertaking was a project of the Qing state, as much as it was one of the Jesuit missionaries.

Second, as we already mentioned above, different memorials indicate that the Ministry of Military Affairs was in charge of the practical organization of these surveys. In the Jiangsu memorial, however, it is suggested that this ministry not only sent out general instructions, but also followed up on the progress made by the

²⁷ The Jiangsu memorial mentions unspecified officials, *baitang'a* 拜唐阿 (see infra), and *hujun canling* Tao-fan-qi 陶蕃齐 as being part of this team. According to de Mailla, four officials accompanied the European mapmakers in this team. See du Halde, Jean-Baptiste, ed., *Lettres édifiantes et curieuses*, Vol. 14, Paris : Nicolas le Clerc, 1720, p. 8.

²⁸ An essential part of geographical surveying methods in the early eighteenth century.

²⁹ Since both the Jiangsu and Sichuan memorials mention these, whereas the Jiangxi memorial does not.

³⁰ *Yunnan tongzhi* 雲南通志, *juan* 18. De Mailla mentions 'four Tartar mandarins' in his letter that was published in *Lettres édifiantes et curieuses*. See note 27.

surveyors. This can be seen from supplementary ministry instructions that are reiterated in this memorial, sent to the throne on July 2nd 1713 by the provincial governor of Jiangsu, Zhang Boxing 张伯行³¹:

"Officials, *baitang'a* 拜唐阿 and Westerners who travelled to Henan and Jiangnan for drawing the map should not return³². From there, they may continue drawing [the maps of] Zhejiang's Zhoushan 舟山 and other regions, as well as Fujian's Taiwan and other regions³³. But when crossing the seas, we urge you and your men to [first] carefully consider the weather and time [of crossing]. There is no need to hurry. Please pass these instructions on to them."

This excerpt confirms that the Ministry of Military Affairs was responsible for the practical organization and follow-up of the surveys, even though other ministries may have been involved as well. In the first Jiangxi memorial for example, an official communication from the Ministry of Works (*gongbu* 工部) is also mentioned, but no further information is given³⁴. On another note, when we look at the list of both Manchu and Chinese-language memorials, we notice that no memorials were found originating from Guangxi, Fujian and Huguang, the last provinces surveyed by each team of mapmakers. Although there is certainly the possibility that these memorials were lost, it seems more likely that instructions prescribed provincial maps to be immediately transmitted to the palace upon completion, except for the maps of those provinces that were last surveyed by each team. If this is true, surveyors most likely personally took these maps with them upon their return to the capital.

The memorials discussed here each also contain a number of dates that are of interest if we wish to understand the timing and progress of these surveys. When we compare the dates mentioned in the Zhejiang memorial to those mentioned in the

³¹ *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編, Vol. 4, pp. 856-859. Zhang Boxing (1652-1725) was a native of Henan province. He made it to governor of first Fujian and later Jiangsu province, was then promoted to serve in the capital as Right Vice-Minister of Revenue, and finally ended his career as Minister of Rights.

³² *Baitang'a* was a title given to administrative personnel, often bondservants, who did not have an official ranking. Many bondservants worked for the Imperial Household Department or Neiwufu 內務府, which was housed in the above mentioned Hall of Moral Cultivation. Rawski, Evelyn S., *The Last Emperors: A Social History of Qing Imperial Institutions*, Berkeley: Univ. of California Press, 1998, pp. 166-167.

³³ Zhoushan is a prefecture comprising a group of islands located in northeastern Zhejiang. Most geographical information in this article is taken from *Zhongguo lishi dituji* 中國歷史地圖集 [Collection of Historical Maps of China], Vol. 8, Shanghai: Ditu chubanshe, 1987.

³⁴ *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編, Vol. 5, p. 328.

Jiangsu memorial for instance, we notice that the surveyors needed only about six and a half months to complete the entire map of Zhejiang province³⁵. Dates from other memorials confirm that provincial maps drawn by the first and second team of surveyors were completed in less than one year, perhaps indicating the existence of a timeframe for the completion of these surveys. According to Baddeley, "the speed at which the Jesuits must have worked and travelled is remarkable, even allowing for the facilities they would everywhere receive; and it is evident that, in most cases, the survey can only have touched the principal routes"³⁶. Supported by data from these memorials and considering travel conditions at the time, it seems indeed reasonable to assume that these teams of mapmakers relied greatly on data from Chinese sources, which they then verified and supplemented using European cartographic techniques³⁷.

While most of the provincial maps were thus completed in well under one year, the third team of mapmakers seems to have needed much more time to draw the maps of Sichuan, Yunnan and Guizhou. This can be explained by the remoteness of parts of these provinces at the time, as well as by the difficult terrain, variety in climate and complex ethnic situation. Another reason for the holdup was the death of French Augustinian Guillaume Fabre-Bonjour, who presumably died of malaria in the town of Mengding 孟定 in late December 1714³⁸. In the Yunnan memorial, governor Gan Guobi 甘國璧 (1668-1747) states that Fabre-Bonjour was replaced by Régis in accordance with supplementary instructions sent by the Ministry of Military Affairs on April 17th 1715³⁹. At the same time, the Superintendent of the Hall of Military Eminence Bu-er-sai appears to have been replaced by Chang-bao 常保, who was dispatched together with Régis⁴⁰.

³⁵ July 2nd 1713 (KX 52, 10.V) and January 21st 1714 (KX 52, 6.XII) respectively. *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編, Vol. 5, pp. 288-290.

³⁶ Baddeley, Vol. 1, 1919, p. clxxxvii.

³⁷ As is also suggested by Foss. Foss, 1994, p. 145.

³⁸ *Xinzuan Yunnan tongzhi* 新纂雲南通志 [The New Edition Yunnan Gazetteer], Kunming: Yunnan renmin chubanshe, 1949, *juan* 180. Mengding is situated on the border with Burma.

³⁹ *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編, Vol. 6, pp. 310-313. Gan Guobi 甘國璧 was a Han bannerman and held different posts throughout his life, governor of Yunnan being his most senior position.

⁴⁰ Chang-bao was awarded the same title as Bu-er-sai, suggesting a replacement. It is possible that this Chang-bao was the father of He-shen 和珅 (1750-1799), the official who played an important role during the Macartney Embassy. However, this cannot be confirmed. Hummel, Arthur W., *Eminent Chinese of the Ch'ing Period (1644-1912)*, 2 Vols., Washington: US Govt. Printing Office, 1943, p. 288.

Apart from team composition, practical organization and timing of these surveys, the Chinese-language memorials also inform us about the role of the emperor with regard to the mapping project. Upon receiving the first Jiangxi memorial in February 1714, the emperor not only took note (*'zhidao le'*) of the completion of the Jiangxi map, but also wished to know "how the surveyors went about their business"⁴¹. Exactly fifty days later, the governor of Jiangxi replies to the emperor in a second memorial, giving us an idea of the time needed for official correspondence to be held over great distances, even considering the efficient handling of these *zouzhe* at the palace⁴². This reply is telling in that it articulates the emperor's concerns regarding the dispatching of surveyors into China's heartland:

"Imperial envoy Chao-er-dai and others crossed the border into Jiangxi province on the 9th of the 6th month of last year⁴³. They started drawing [the map] in the area subordinate to Jiujiang 九江 prefecture, and came to the provincial capital after that⁴⁴. Your servant and others have offered them wine and food. After drawing the provisional maps of the two districts of Nan 南 and Xin 新, they immediately left for Raozhou 饒州, Guangxin 廣信 and other prefectures and subordinate areas in order to finish drawing [the map]⁴⁵. It was completed in the 12th month. They then went on to Guangdong. Your servant has learned that in each prefecture and county, they have been offered wine and food and that there were no disturbances in these places. The imperial envoys and mapmakers have been very respectful of the Emperor's kingly ways and went about their business in the most peaceful and quiet way⁴⁶."

Other than reporting on the route taken by the surveyors in the province, it is stressed here that the mapmakers were treated well and operated in a peaceful and quiet way. This indicates that correspondence of this kind between the emperor and his governors was strictly personal and most likely held without the knowledge of the surveyors. It goes to show that the emperor was very much involved indeed: he was concerned

⁴¹ *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編, Vol. 5, p. 328.

⁴² *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編, Vol. 5, p. 433. For more information on the time needed for the transmission of documents in the Qing empire, see Fairbank & Teng, 1939.

⁴³ July 30th, 1713 in the Gregorian calendar.

⁴⁴ Jiujiang is a prefecture located in the very north of Jiangxi.

⁴⁵ Nan and Xin refer to the districts of Nanchang 南昌 and Xinjian 新建 that comprise the prefectural city of Nanchang 南昌, the capital of Jiangxi. Raozhou and Guangxin prefectures lie in northeastern Jiangxi.

⁴⁶ *Wangfa* 王法, here translated as 'kingly ways', is an expression referring to an emperor's virtuous way of ruling the country.

about the progress made and the way his surveyors conducted themselves in the provinces. Extending his control over the mapping project by way of informing himself about the surveyors' whereabouts and conduct, the emperor here clearly positions himself as a patron of the mapping project.

An equally revealing memorial in this regard, though rather short, was sent to the throne on November 27th 1715 by the governor of Guizhou province, Liu Yinshu 劉蔭樞⁴⁷. The memorial follows the general pattern discussed above without offering much extra information. Yet, in listing the titles and names of the surveyors, the memorialist mentions *daren* 大人, which appears to have caused some confusion at the palace. From the vermilion endorsement at the bottom of this memorial, we see that the emperor interpreted this as *dachen* 大臣 or Grand Minister:

"Noted, but there was no *dachen* sent. This is not consistent with the content of the memorial. Who is *daren*? Ascertain clearly and report back."

Roughly three months later, again a good indication of the time needed for distant communication, the same memorialist replies in a last memorial to the throne⁴⁸:

"In general, when we meet imperial envoys in the outer provinces, we do not discuss [their] high or low ranking. [Instead,] we call all of them *daren*. I thought this practice was common. Your servant is honest and had the best intentions. Thirty years have passed since entering officialdom, but I still have the manners of the countryside. I lack assistants and aides, so there is no one who practices the prevalent customs. Personally composing letters, I do not know the rules. I have committed the absurd crime of having spoken of *daren*, and I cannot take it back. I beg your Majesty to exceptionally forgive me."

Once more, the Kangxi emperor here clearly shows his thoroughness in dealing with these palace memorials. Concerned about the fact that someone appears to be part of the group of surveyors without his knowledge, he demands to be informed who the unspecified *daren* might be. This blunt communication between the emperor and his provincial governor again confirms the wish of the emperor to be in direct control of the mapping project.

⁴⁷ *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編, Vol. 6, pp. 605-606. Liu Yinshu (1637-1723) was a native of Shaanxi and held different sub-provincial posts before becoming governor of Guizhou in 1709.

⁴⁸ *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編, Vol. 6, pp. 786-787.

A last but nonetheless important indication of the way in which the emperor, his officials and the missionary-mapmakers cooperated during the surveys, was found in the Sichuan memorial. Here, the memorialist explicitly specifies the preliminary work that had to be completed before the arrival of the surveyors⁴⁹:

“Respectfully following [the orders], your servant has immediately contacted all the subordinate prefectures, departments, districts, military camps, military posts, etc. The officials have obeyed the texts of the Ministry by arranging horses, local gazetteers, books, flags, gongs and other items needed to serve [the surveyors].”

Local gazetteers and other books were thus arranged for wherever the surveyors set foot, thereby unveiling some of the Chinese sources that were consulted. The fact that these documents were consulted locally indicates that these mapmakers were provided with geographical data from the latest local gazetteers rather than relying solely on earlier versions and compilations, some of which were undoubtedly kept at the imperial palace. To a certain extent, this confirms our earlier assertion that the Jesuit missionaries and Qing officials relied greatly on Chinese sources when drawing these provincial maps, gathering geographical data which they then verified and supplemented using European surveying techniques⁵⁰. But more importantly, this excerpt confirms that full cooperation was expected from provincial and local officials alike.

A Circular from the 'Historical Materials of the Ming and Qing Dynasties'

Apart from the memorials discussed above, a complementary document from the 'Historical Materials of the Ming and Qing Dynasties' contains more specifics regarding team composition and practical organization of these surveys⁵¹. While the exact nature and provenance of this document remain uncertain, it seems fair to assert that it functioned as a circular: an imperial decree dispatching the last two teams of surveyors is translated into practical instructions, thereby discussing team composition, the number of horses granted to each official and other practicalities⁵². It

⁴⁹ *Kangxi chao hanwen zhupi zouzhe huibian* 康熙朝漢文朱批奏摺彙編, Vol. 5, pp. 674-676.

⁵⁰ See supra.

⁵¹ *Ming Qing shiliao ding bian* 明清史料丁編 [Historical Materials of the Ming and Qing Dynasties], Vol. 2, p. 768. See footnote 12 for a full reference. An annotated but incomplete translation can be found in Fu Lo-shu, *A documentary Chronicle of Sino-Western Relations (1644-1820)*, 2 Vols., Tucson: Univ. of Arizona Press, pp. 118-119/491.

⁵² Ministry instructions rendered in the above memorials are also confirmed in this circular.

is stipulated that strong horses must be prepared even in remote areas without relay stations, and for those travelling to Yunnan, Guizhou and Guangxi, a malaria warning was even included⁵³:

“[...] the miasma in Yunnan, Guizhou and Guangxi is very bad. From the 4th month until the 8th month, when the miasma can be encountered, personnel going there should temporarily go elsewhere to draw [the map] and wait until the miasma has dispersed before returning.”

The document consists of what in fact seem to be two separate circulars, quite similar in content but with substantial differences in wording. The first one discusses instructions originating from the Remount Department of the Ministry of Military Affairs, whereas the second circular reiterates similar stipulations issued by the Department of Waterways of the Ministry of Works⁵⁴. Separate instructions were thus issued by two different ministries for traveling over land and by water respectively, which explains why official instructions from the Ministry of Works were mentioned in some of the memorials discussed above and confirms that more ministries were involved in the practical organization of the mapping project. In fact, it is reasonable to assume that this circular is a draft version or perhaps even an exact copy of the official instructions mentioned by the governors in their memorials to the throne⁵⁵.

More importantly, this circular contains new information on the surveying of provinces that were not dealt with in the folded memorials with vermilion endorsement. It is mentioned in this document that “*xiangdao hujun canling* Ying-zhu, *langzhong* Lang-wu-li and *jianfu* Shuang-de, all of whom went to Shanxi and Shaanxi provinces, will [now] go to Sichuan, Yunnan, Guizhou and Huguang”. Thus, this circular reveals the identity of team members for the surveying of Shanxi and Shaanxi provinces in 1712, so that information on team composition for the surveying of most of China proper is now available for comparison⁵⁶. When we list all team members, number of horses and personal servants on the basis of data from the memorials as

⁵³ For more information on malaria in Yunnan and its influence on the advance of the Chinese state in the province, see Bello, David A., “To Go Where No Han Could Go for Long”, *Modern China* 31.3 (2005).

⁵⁴ For more information on the Department of Waterways or *shuisi* 水司, see *Lidai zhiguan biao* 歷代職官表, *juan* 14.

⁵⁵ Since instructions in this circular are very similar to the renderings of these instructions by some of the governors. Certain passages from the Jiangxi and Sichuan memorials for example, seem to have been literally copied from this circular. See *supra*.

⁵⁶ With the exceptions of the provinces of Shandong and Beizhili.

well as from the circular, it is apparent that teams of surveyors were quite large, most likely consisting of at least five to seven core members, an unknown number of personal servants and some 24 to 30 horses⁵⁷. Moreover, team composition as discussed above can now be confirmed: representatives of several key institutions were indeed represented, mostly (if not only) Manchu officials.

One notable exception to this seemingly fixed team composition was the group of surveyors for Jiangxi, Guangdong and Guangxi provinces. As mentioned above, the first Jiangxi memorial did not mention an elite banner colonel being part of this team of mapmakers. In fact, the circular indicates that such an official, by the name of Langtu 朗圖, was originally included as part of this team, but for reasons of efficiency or secrecy, the decision was made not to send a representative of the elite banner system along with this group of surveyors:

“[...] *langzhong* Chao-er-dai and *wuguanzheng* Miao Shou will be sent to Jiangxi, Guangdong and Guangxi provinces to lead [the team] and report back to the capital. Do not send others. Only those who do the measurements were originally sent to survey. This is enough, the less people the better.”

It is implied here that the elite banner colonels did not take part in the actual measurements, but rather acted as military escorts for the teams of mapmakers. While one can only guess as to why considerations of efficiency or secrecy influenced the composition of this team only, the circular confirms that no elite banner colonel was part of the second team of surveyors.

Conclusions

From the memorials and the circular discussed above, we can draw a number of conclusions, each testimony to the thoroughness with which the mapmaking project was handled and to the importance attached to it by the Qing emperor and administration. It is important to reiterate, however, that since all memorials discussed in this paper are directly linked to the last stages of the surveying project, namely the surveying of the provinces of China proper, all conclusions presented below can only be applied with certainty to the surveying of these very provinces as it was organized between 1712 and 1716.

⁵⁷ See annex.

First, the Kangxi emperor was personally engaged in the mapping project and presented himself as a patron of the surveying endeavor. This can most clearly be seen from the endorsements on the memorials concerning the maps of Jiangxi and Guizhou provinces. Indicating that he is aware of the composition of the team of surveyors and inquiring about their whereabouts and conduct, the emperor extends his wish to be in direct control of the surveying endeavor and positions himself as a patron of the project. In addition, the fact that a representative of the inner palace was part of each team of surveyors and that the system of secret palace memorials was chosen to transmit the maps also indicates this engagement.

Second, this cartographical undertaking was as much a project of the Qing state as it was of the Jesuit missionaries. This is reflected in the composition and size of the different teams of surveyors, consisting of representatives from several important Qing institutions and including mostly (if not only) Manchu officials⁵⁸. Furthermore, the surveying of these provinces was organized and planned by the Ministry of Military Affairs (and to a lesser degree by the Ministry of Works), and governors were instructed to transmit the map of each province to the throne as soon as it was completed and without any delay. Only for this particular purpose, the system of secret palace memorials was chosen, while different means of communication were presumably preferred for other purposes. The provinces that were last surveyed formed an exception to this rule, as surveyors were most likely required to personally carry the maps of these provinces with them upon their return to the capital. We also know that most of the provincial maps were completed within one year, suggesting that a schedule was to be followed.

Third, up-to-date local gazetteers were kept at the ready wherever the mapmakers set foot. Taken into account the time needed to complete the provincial maps, local gazetteers most likely served as direct sources which were then verified by European surveying methods. The surveyors' arrival was also prepared for by sending envoys to remote regions in advance to pave the way and by notifying local officials. Other instructions included preparing horses, gongs and flags for the mapmakers.

With this small step taken, we can confirm that the Kangxi emperor was personally engaged in the mapping project and that local gazetteers were used as important, if not indispensable, sources during the surveys. We have also begun to uncover the way in

⁵⁸ See annex.

which the surveying was practically organized and planned, thereby providing insight into team composition, team size and timing. However, much more work needs to be done if we wish to fully understand the interplay between the emperor, Qing officials and European mapmakers during the course of these geographical surveys, as well as its impact on the Sino-European network of communication and circulation of knowledge.

Annex: Teams of Surveyors for China Proper

	Surveyors for SX & SX	Surveyors for HN, JN, ZJ, & FI	Surveyors for JK, GD & GX	Surveyors for SC, YN, CZ & HG
Inner palace personnel Horses	Not specified	Not specified: <i>baitang 'a</i> (M)	Li Bingzhong (?) 5 + 1 (for instruments)	Bu-cr-sai (M) [Chang-bao (M)] 4 + 1 (for instruments)
Jesuit missionaries Horses	de Tartre and Cardoso	Régis, de Mailla and Hinderer	de Tartre and Cardoso 5 + 5	Fridelli and Fabre-Bonjour [Régis] 5 + 5
Elite banner personnel Horses	Ying-zhu (M)	Tao-fan-qi (M)	(planned: Lang-tu (M)) /	Ying-zhu (M) 5
Top administrative staff Horses	Lang-gu-li (M)	Not specified (M)	Chao-cr-dai (M) 4	Lang-gu-li (M) 5
Bureau of Astronomy staff Horses	Shuang-de (M)	Not specified (M)	Miao Shou (?) 4	Shuang-de (M) 5
Team members total Horses total	6+	7+	5+ 24	6+ 30

For Chinese characters, see *supra* (part III). (M) stands for Manchu. [] are used to indicate replacements during the surveys.

中西文化交流史雜誌 (中國天主教史研究)
SINO-WESTERN CULTURAL RELATIONS JOURNAL
XXXIV (2012)

[formerly *China Mission Studies (1550-1800) Bulletin*]

cover: Ancient Beijing Astronomical Observatory 北京古觀象台

- 1 Mario Cams 康言: Early Qing Geographical Surveys (1708-1716) as a Case of Collaboration between the Jesuits and the Kangxi Court
- 21 Claudia von Collani 柯蘭易: The Kangxi Emperor, Charles-Thomas Maillard de Tournon and Matteo Ricci
- 45 Translation of the Journal of Lucas Augustinus Ly (Li Shiyin 李世音, Chinese Catholic Priest), Part II: 1750-1751, translated by Joseph RUELLEN, M.E.P. & annotated by Robert ENTENMANN 鄢華陽
- 59 Reviews of New Publications in the Field

.....
Back issues indexed in EBSCO Historical Abstracts with Full Text research database

.....
The editor gratefully acknowledges the support provided by Baylor University.

.....
The *Sino-Western Cultural Relations Journal* [entitled *China Mission Studies (1550-1800) Bulletin* until 1989] was inaugurated in 1979 in Germany as an international periodical devoted to current scholarly work in Sino-Western history since 1500. The *Journal* is published annually and is available on a subscription or single copy basis at the cost of US\$12.00 to individuals and US\$25.00 to institutions postpaid. Back issues are available at the same cost, except for an entire set for which there is a 25% discount.

Mr. D. E. Mungello [編輯: 孟德衛], SWCRJ Editor
Department of History
Baylor University
One Bear Place #97306
Waco, Texas 76798-7306 U.S.A.

ISSN 1041-875

e-mail: D_E_Mungello@baylor.edu

FAX (254) 710-2551