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TECHNOLOGY AND PATRONAGE OF CONSTRUCTION PROJECTS IN LATE MING CHINA - THE CASE OF THE ITINERANT MONK-ARCHITECT MIAOFENG FUDENG (1540-1613)¹

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This paper focuses on the figure of Miaofeng Fudeng 妙峰福登 (1540-1613), a Chan Buddhist monk. After a first period devoted to religious and spiritual activities (pilgrimages, pious actions, hermitage and so on), his life changed at the age of 42, when he received funds for building a Buddhist temple and a pagoda from several members of imperial family, notably the Empress Dowager Li Shi 李氏 (*Cisheng Huang taihou*) 慈聖皇太后, mother of The Wanli Emperor (1572-1620). Afterwards, Miaofeng Fudeng was able to find prestigious sponsors to support and finance his projects. Furthermore, officials of the central and provincial government asked him personally to manage bridge constructions. He had the opportunity to lead building sites in many places in Ming China, as in the provinces of present Shanxi 山西, Shaanxi 陝西, Sichuan 四川, and Jiangsu 江苏. He died at the age of 73, renowned for his skill to construct Buddhist monasteries, bridges, pagodas and bronze pavilions.

The name of Miaofeng Fudeng has emerged from a research on the history of the vault structure in Chinese architecture and in particular on the monumental use of a form of buildings distinctive enough to earn a particular name: *wuliang dian* 無梁殿.² As the Chinese term expresses, such halls (*dian* 殿) were made without any (*wu* 無) wooden beams (*liang* 梁); instead they were built with bricks, which have the main advantage of being resistant against fire.³ Another particularity of these buildings is the barrel-vault structure. These elements are noteworthy in the context of the usual wood frame construction for monumental buildings such as temple halls of that period. Only twelve beamless halls have been found in China, and three main periods of construction have been identified. Three halls were built during the Jiajing 嘉靖 reign (1522-1567) of the

¹ This research was originally conducted within a French Agence nationale de la Recherche (ANR) program entitled "Itinéraires individuels et circulation des savoirs scientifiques et techniques en Chine moderne (XVIe-XXe siècles)" (ICCM) directed by Catherine Jami (CNRS) and Frédéric Obringer (CNRS). I sincerely thank the anonymous reviewers for their advices and help to improve this article. I owe them a lot.

² See Bodolec 2001 and Bodolec 2005, especially chapter 6 on Miaofeng Fudeng.

³ Used to characterize a building within a Buddhist temple, this expression can be linked with its homophone *wuliang dian* 無量殿 "Boundless or immeasurable building" which refers to the Buddha Amithaba. Millbank, 2014, p. 17.

Ming dynasty, six during the Wanli 萬曆 reign (1573-1620), and the last three during the Qianlong 乾隆 reign (1736-1795) of the Qing dynasty. Most of them still stand today and match with historical documents such as monastery gazetteers and travel literature. Although some have been restored and sometimes modified, it is possible to distinguish architectural styles and construction techniques which vary according to the periods.

The group built during the Wanli era presents certain similarities. And it is precisely in connection with those buildings that the name of Miaofeng Fudeng crops up regularly in the historical sources. The gazetteers praise his talent as a builder and even link his name to a particular architectural form of brick architecture, the beamless hall, which makes him a seminal figure in the history of Chinese architecture. Furthermore, a biography—written by his friend Hanshan Deqing 憨山德清 (1546-1623)—one of the most eminent Buddhist monks of the Wanli period, accounts for many details of the episodes of his life, relating his achievements and peregrinations.⁴

This article aims to link these materials in order to clarify Miaofeng Fudeng's role as a Monk architect in Ming China.⁵

In the first part, I review the beamless halls, bridges, pagodas and bronze pavilion attributed to Miaofeng Fudeng in order to assess their specific features. As the question of the origin of his technical knowledge is my main concern, the

⁴ The biographical sources are listed in the bibliography of the article. But as far as I know, there are three similar versions of Miaofeng Fudeng's biography: Hanshan Deqing 憨山德清, *Hanshan dashi mengyou quanji* 憨山大師夢遊全集, 1657, *juan* 30, in *Xu Zangjing* 續藏經 (Taipei: Xinwenfeng, 1983), *juan* 73, no. 1456, pp. 674-676; see also idem, *Hanshan dashi mengyou quanji*, *juan* 10, *zhuan* 傳, pp. 11a-18b, 1660, after the Geng Jimao woodblock ed. 耿繼茂刻本, in *Siku weishoushu jikan bianzuan weiyuanhui*, comp., *Siku weishoushu jikan* III (25) (Beijing: Beijing chubanshe, 2001), pp. 382-385; and idem, *Hanshan laoren mengyou ji* 憨山老人夢遊集, *juan* 16, pp. 10a-17b, 1660, after the copy of Mao Baodeng 毛褒等, Changshu Library 常熟市圖書館, in *Xuxiu Siku quanshu bianzuan weiyuanhui*, comp., *Xuxiu Siku quanshu*, *Jibu*, *Bieji lei* (Shanghai: Shanghai guji chubanshe, 2002), vol. 1377, pp. 628-632. Another version attributed to the same author but longer and more detailed was published in 1860; see “Miaofeng Chanshi zhuan” 妙峰禪師傳, *Baohua shan zhi* 寶華山志, 1860, *juan* 12, pp. 1a-14a, in *Zhongguo fosi shi zhi huikan* (Taipei: Mingwen shuju, 1980), series 1, no. 41, pp. 475-501. A short version with only extracts from Hanshan Deqing's text can be found in “Miaofeng dashi mu san mingshan dashi xiang bing tongdian” 妙峰大師募三名山大士像並銅殿, *Qingliang shan zhi* 清涼山志, 1887, *juan* 6, p. 15a, and *juan* 3, pp. 29a-30b, in *Zhongguo fosi shi zhi huikan* 中國佛寺史志匯刊 (Taipei: Mingwen shuju, 1980), series 2, no. 29, pp. 151-154. I also found a version with comments by Liu Zhaoguo 劉肇國 (Ruan Xian 阮仙), “Miaofeng Chanshi xiangzan” 妙峰禪師像贊, *Baohua shan zhi* 寶華山志, *juan* 13, pp. 2a-2b, in *Zhongguo fosi shi zhi huikan* 中國佛寺史志匯刊 (Taipei: Mingwen shuju, 1980), series 1, no. 41, pp. 525-526. We can also mention a stele preserved in Wutai Mountain which relates several episodes of Miaofeng Fudeng's life and signed by Su Weilin 蘇惟霖. The text is published under the title “Yuci Zhenzheng fosi Miaofeng zushi xingshi beiji” 禦賜真正佛子妙峰祖師行實碑記, in Zhao Lin'en 趙林恩, *Ming Qing shanxi beike zhiliao xuan* 明清山西碑刻資料選 (Taiyuan: Shanxi renmin chubanshe, 2005), 339-41.

⁵ The religious dimensions are admirably treated in Zhang Dewei's recent article: Zhang Dewei, 2016, pp. 332-379.

second part is devoted to a larger history of Chinese brick-vault architecture and to the place of Buddhist monks in building activities. Here, I give a background for Miaofeng Fudeng's place in both the social and technological history of construction in China.⁶ In the last part, I try to show how his building activities can be seen in an empire-wide context favorable to the expansion of Buddhism. I investigate the way the benevolence toward religion manifested in the architecture and the restoration of temples with the support and patronage of the local gentry, along with high-ranking members of the administration and especially the Empress Dowager Cisheng herself.

1- The path of a monk-architect

1-1 Build to order

The first building attributed to Miaofeng Fudeng is situated on Luya Mountain 蘆芽山 in Shanxi province. It is said that at the end of 1582 the Empress Dowager Cisheng, mother of the Emperor Wanli (1546-1615) ordered him to build the main temple of Luya Mountain, the Huayan monastery 華嚴寺 and to build a seven-story iron pagoda at the top of the mountain, the Wanfo pagoda 萬佛鐵塔.⁷ The association of bronze and brick constructions occurred at least three other times in Miaofeng Fudeng building sites.

Some time later, Wang Chonggu 王崇古 (1515-1588)⁸ asked Miaofeng Fudeng to leave Luya Mountain and go to the Wangu monastery 萬固寺, a monastery in Puban 蒲坂 about 600 km away to the south.⁹ This high official, a native of Puzhou 蒲州, in that same area, asked him to restore two sites within the temple. There already existed a thirteen-story Tang dynasty (618-907) pagoda¹⁰ and a building called Dafo dian 大佛殿 (Great Buddha hall). It is

⁶ Construction history differs from the history of architecture in its approach to the buildings. Researchers in construction history try to link the history of styles and forms with the history of construction materials, architectural techniques, and the artisans who worked on building sites. One can consult the website of Construction History Society founded in Cambridge (UK). The journal *Construction History* exists since 1985. The academic community meets regularly at international conferences since the first conference in Madrid in 2003. The next will be organized in Brussels in 2018. <http://www.constructionhistory.co.uk/> [consulted 2018-03-23]

⁷ These buildings were destroyed during the battles that brought the Ming dynasty to an end. See the Gazetteer of Shanxi province, quoted by Glahn, "Fu Deng," in Goodrich and Fang eds., 1976, pp. 462-466; see esp. p. 463. In Kefu 柯夫 and Qianqing 倩青, 1990, pp. 103-104, it is said that Miaofeng Fudeng asked the empress dowager for help with the project. Weidner, 2001, p. 130, note 46.

⁸ Wang passed the *jinshi* 進士 examination, the highest level of official examinations, in 1542-1543. At the time he would have held the position of Minister of War (*Bingbu shangshu* 兵部尚書). See Zhang Huizhi 張撫之 et al., 1999, p. 216; and Goodrich and Fang, eds., 1976, pp. 1369-1374. Glahn, 1976, p. 463.

⁹ West of modern Yongji 永濟, Yuncheng 運城 district, near Shaanxi and Henan provinces

¹⁰ The text says that the pagoda measured 300 *chi* 尺 (96 m). Under the Ming dynasty, 1 *chi*

recorded that Miaofeng Fudeng stayed there for three years working on this restoration. An inscription on the pagoda dates it to 1586. The extant ruins of the building attributed to Miaofeng Fudeng show us what could be his first beamless hall.¹¹ The building was destroyed during the Tongzhi era (1862-1875) of the Qing dynasty.

When the constructions at the Wangu monastery were completed, Miaofeng Fudeng was asked by the Minister of Justice himself, Li Shida 李世達 (1533-1599),¹² to supervise the repair of a bridge on the Wei 渭 River in the district of Sanyuan 三原 in Shaanxi province. This bridge apparently had thirteen arches.¹³ It seems that Miaofeng Fudeng spent two years on the building site and then decided to return to Luya Mountain

On his way back, at a place called Ninghua 寧化 in the territory of Ningwu 寧武 district, Miaofeng Fudeng spotted a vertical cliff. It was the perfect place to construct a cave temple decorated with carved figures of the ten thousand Buddhas and stories from the *Huayan jing* 華嚴經 (Flower Garland Sutra). According to the *Ningwu gazetteer*, an indication of the dates is given: it took three years to excavate and carve the temple, from 1591 to 1594.¹⁴

Between 1594 and 1599, Miaofeng Fudeng received a summons from the Governor of the Northern Metropolitan Province (Bei Zhili 北直隸),¹⁵ Wang Xiangqian 王象乾 (ca. 1544-1626),¹⁶ to supervise the construction of a bridge over the Yang 洋 River in the Xuanhua district 宣化縣, in northern Shanxi province, near the Mongolian border. This was a strategic place where the river was unpredictable, dangerous and very wide. It was certainly because of his previous success with the Sanyuan Bridge on the Wei River that Wang asked Miaofeng Fudeng to take on this challenge.¹⁷ It is recorded that the bridge had twenty-three arches; but nothing remains of it today.¹⁸

equaled 0.32 m; see Liu Dunzhen 劉敦楨, 1997, p. 421.

¹¹ Chen Zhongguang 陳仲光, et al., 1981, pp. 131 and pp.201-202. The Baohua shan gazetteer records that the height of the pagoda was 13 *zhang* 丈 (equivalent to 43.16 m); “Miaofeng Chanshi zhuan,” *Baohua shan zhi*, *juan* 12, p. 8a.

¹² A native of Jingyang in Shaanxi province, Li passed the *jinshi* in 1556. Zhang Huizhi et al., 1999, pp. 961-962; Goodrich and Fang, eds., 1976, p. 738.

¹³ “Miaofeng Chanshi zhuan,” *Baohua shan zhi*, *juan* 12, p. 8b.

¹⁴ Hanshan Deqing, in *Xu Zangjing*, p. 675, lower part, lines 17-18. Shanxi sheng kaogu yanjiu suo 山西省考古研究所, comp., 2003. I did not have access to this reference myself, but see <http://hk.plm.org.cn/gnews/2012130/2012130255550.html> [accessed 27 April 2016].

¹⁵ The term *zhili* 直隸 means “directly attached.” The Northern Metropolitan Region included parts of the actual provinces of Hebei, Henan, Shandong and some districts of Beijing and Tianjin. Hucker, 1958, pp. 5-6.

¹⁶ A native of Xincheng 新城 in Shandong province, Wang Xiangqian received his *jinshi* in 1572. Zhang Huizhi et al., 1999, p. 217; *Mingshi* 明史, 1739, *juan* 93; Glahn, 1976, p. 464.

¹⁷ At least, this was mentioned in the Baohua shan gazetteer; “Miaofeng Chanshi zhuan” *Baohua shan zhi*, *juan* 12, p. 9a.

¹⁸ Hanshan Deqing, in *Xu Zangjing*, p. 675, lower part, lines 20-21.

1-2 Build to fulfill a vow

Hanshan Deqing's text indicates that Miaofeng Fudeng was by then focused on a vow he had made a few years before, to offer three statues and three bronze pavilions (*tongdian* 銅殿) to three sacred mountains: Mount Wutai 五臺山, Mount Emei 峨嵋山 and Mount Putuo 普陀山. In the spring of 1599,¹⁹ Miaofeng Fudeng went to visit Prince Shen 藩,²⁰ who lived at Lu'an 潞安 (modern-day Lucheng 潞城) in the South of Taiyuan 太原.²¹ At that time, the Prince intended to offer a statue to a Mount Emei monastery. Miaofeng Fudeng presented to him the project of the bronze buildings, indicating that each of them would cost 10,000 *jin* 金. Prince Shen agreed to finance the one for Mount Emei and accompanied Miaofeng to Jingzhou 荊州 in Huguang 湖廣.²² With the assistance of Prince Shen's staff, the bronze elements were cast and sent to Sichuan province. Miaofeng himself went to Mount Emei.

At that time, Wang Xiangqian, Grand Coordinator (*dazhongcheng* 大中丞) of Sichuan province, was very pleased with the statue and the bronze pavilion and decided to finance the work on the Yong'an monastery 永安寺. The beamless hall known as the Wannian monastery 萬年寺 was part of this project.²³

Wang Xiangqian also agreed to finance the statue for Mount Putuo, the sacred island off Ningbo 寧波, on the coast of Zhejiang province. Around 1603, Miaofeng returned to Jingzhou to oversee the casting of the statue and the pavilion. Everything was ready, and the bronze pieces were already on their way to the sacred island, when, at a place called Longmen 龍門,²⁴ Miaofeng Fudeng learned the bad news that the monks of Mount Putuo had refused the gifts. One reason for this refusal was the fear of so-called Japanese pirates were active along the coast.²⁵

Looking for a good place to erect the statue and the pavilion, at the end of 1603, Miaofeng Fudeng finally arrived at Mount Baohua 寶華山 in the actual Jiangsu province, thirty kilometers from Nanjing. As this setback put a serious strain on the budget, Miaofeng Fudeng presented a special request to the Empress Dowager. He immediately received the sum he requested so that he was able to build not only the bronze structures but also two little pavilions of bricks.

¹⁹ Wanli *jihai* year, spring 萬曆己亥春. Hanshan Deqing, in *Xu Zangjing*, p. 675, lower part, lines 22-23.

²⁰ Zhu Xiaoyong 朱效鏞.

²¹ District of Changzhi 長治.

²² At this time, Hunan and Hubei provinces were joined; the city is in modern Hubei province.

²³ "Lidai gaoseng [Ming] dazhi heshang: Miaofeng" 歷代高僧 [明] 大智和尚妙峰, *Emei shan tuzhi*, 1935, *juan* 5, p. 13b. Zhang Dewei, 2016, p. 358.

²⁴ Also referred to as Jinling 金陵 in the Emei shan gazetteer; *Emei shan tuzhi*, *juan* 5, p. 13a.

²⁵ The biographies only mention the refusal of the Putuo shan monks: *Putuo seng liju zhi* "普陀僧力拒之 [Putuo monks strongly rejected them], Hanshan Deqing, in *Xuzang jing*, p. 676, upper part, ligne 3-4. The hypothesis of the fear of pirates is proposed by Gu Yue, 1997, p. 25. We have not yet found any mention of this incident in the Putuo Shan gazetteers.

It is reported that the buildings of the Huiju monastery 慧居寺, also known as the Longchang monastery 隆昌寺, were finished in 1605.²⁶

The money sent by the Empress Dowager was not only intended for Mount Baohua but also for Mount Wutai. In the spring of 1605,²⁷ Miaofeng Fudeng left for the Xiantong Monastery in Mount Wutai. The Empress Dowager sent two eunuchs to help and to oversee the use of funds. One was Wang Zhong 王忠, from the Directorate of the Imperial Horses Stables *yuma jian* 御馬監; the other was Chen Ru 陳儒 “eunuch from the imperial entourage” (*jinchī dajian* 近持大監). Work began in June 1606; several buildings, all made of brick, were constructed.²⁸ These include a vast beamless hall that is 28 meters wide, 16 meters deep and 20 meters high, surrounded by two smaller beamless halls and a bronze pavilion (Figs.1 and 2).²⁹

By imperial decree, the monastery was renamed the Shengguang Yongming monastery 聖光永明寺. When the buildings were finished, Miaofeng Fudeng organized a great ceremony with ten eminent monks who recited the *Huayan jing* (Flower Garland Sutra). The costs were covered by public funds and contributions from the local population.



Fig. 1. Xiantong monastery, Mount Wutai, Shanxi, 1606 (©author)

²⁶ “*Wenshu wuliang dian, Puxian wuliang dian*” in *Baohua shan zhi* 寶華山志, 1860, *juan* 3, pp.1b-2a. Prip-Møller, 1937, pp. 254-297.

²⁷ Wanli *yisi* year, spring 萬曆乙巳春.

²⁸ Wanli *bingwu* year, summer, fifth month 萬曆丙午夏五月.

²⁹ Millbank, 2014, p. 19.



Fig. 2. Lateral Building, Xiantong monastery, Mount Wutai shan, Shanxi (©author)

1-3 Build to the end

Miaofeng Fudeng was then in charge of the restoration of bridges on the western road to Mount Wutai via Fuping 阜平 in the Northern Metropolitan Province. He built rest houses for pilgrims, where they could benefit from tea and medicine distributed at the expense of the emperor. Texts record that all the constructions were again made of brick³⁰. In the same period, and probably linked with the road and bridge projects, the Empress Dowager ordered Miaofeng to restore the Ciyou Yuanming monastery 慈佑圓明寺 in Fuping 阜平.

The monastery had halls of seven layers, one magnificent Amitābha statue, and several *qing* of land.³¹ After that, he returned to Mount Wutai. But it seems that it was not possible for him to stay long in a place of meditation; the governor of Shanxi province asked him to supervise the restoration of a bridge on a road near Taiyuan. At the same time, the Prince of Jin 晉³² asked him to rebuild the Yongming monastery 永明寺 in the city of Taiyuan. Miaofeng Fudeng changed the name into Yongzuo monastery 永祚寺 and added a new pagoda to the one that already existed. The temple is still popularly called Shuangta monastery 雙塔寺 (Two pagodas temple). He also built several new buildings including a large beamless hall on brick (Fig. 3).³³

When the buildings were completed, Miaofeng Fudeng received another request to repair a long bridge of 10 *li* to the south of Taiyuan.³⁴ The work had not been completed when Miaofeng fell ill, in the ninth month of 1612.³⁵ He returned to Mount Wutai and during his last weeks received numerous visits and prayers. Miaofeng Fudeng died on the nineteenth day of the twelfth month of the

³⁰ Hanshan Deqing, in *Xuzang jing*, p. 676, upper part, line 15. See Glahn, 1976, p. 465.

³¹ Zhang Dewei, 2016, p. 353.

³² This was probably Zhu Qiugui 朱求桂, Prince of Jin 晉 (fl. 1611-1630), even though the records say that he officially became Prince of Jin only in 1613. His father died in 1610.

³³ Hanshan Deqing, in *Xucan jing*, p. 677, upper part, line 23. Weidner, 2001, pp. 131-132.

³⁴ A *li* was then equivalent to approximately 576 metres.

³⁵ Wanli *renzi* year, autumn, ninth month 萬曆壬子秋九月, equivalent to the end of September to October 1612.

renzi 壬子 year during the fourth hour, which corresponds to 15 February 1613 at dawn³⁶. He was seventy-three years old.



Fig. 3. Yongzuo monastery, Taiyuan, Shanxi, 1612 (©author)

This description of Miaofeng Fundeng's activities from 1582 onwards bring to light two dimensions related to construction: one focused on the technical part of his work and the second related with his identity as a monk. The first is related to the particularly important number of brick constructions in Miaofeng Fudeng's work and more specifically of brick masonry vault (bridges, beamless halls, pagodas). This dimension therefore prompts me to consider the place of these constructions in the Chinese architectural system of the time. Was this knowledge widespread among craftsmen and if it was, why are there so few beamless halls in Chinese architecture? I will then address other types of architecture that have the same characteristics as the beamless hall and that can enlighten us on the knowledge of Miaofeng Fudeng. The second dimension is more related to the involvement of Miaofeng Fudeng as a Chan Buddhism monk in secular construction activities. His biography gives us several examples of bridge projects commissioned by important officials. In this regard, Miaofeng Fudeng belongs to an ancient tradition of religious expertise in the field of masonry structure.

A monk involved in vault architecture

Essentially of wood elements, classical Chinese architecture shows only very few examples of use of brick masonry and stone as supporting structure. The two techniques that enable the building in earth and wood are roughly consoles (*dougong* 斗拱) and pisé (*banzhu* 版築). The word *tumu* 土木 (earth and wood) means “building” in the common language. The finest and most remarkable innovations were made in the frames, roofs, consoles, lever arms, etc. Mortars, brick and stone walls are rarely mentioned in the sources mainly due to their marginal use in the “noble” architecture (*l'architecture savante*). In large buildings in the Forbidden City of Beijing, the wood frame is laid on wooden pillars that form the structure. Brick walls are not bearing the load but are only closures and partitions. In the popular architecture, wood frames were very

³⁶ 萬曆壬子臘月十九日卯時. Hanshan Deqing, in *Xucan jing*, p. 677, middle part, ligne 2.

numerous especially in Central and South China. In the north, where the lack of wood is constitutive for at least 500 years, a masonry architecture with most of the characteristics of the classical Chinese architecture (especially the house shape) has been developed.

2-1 The vault structure: a widespread knowledge

The masonry vault remains a rarity whose near absence in contemporary vernacular architecture as in the classical architecture is bound to be raised. However, the vault and the arch are not entirely absent, and have a very long existence in four types of building: tombs, bridges, arch openings (gates and windows) of pagodas and city gates. Here it is not a question of making an exhaustive history of the vault in Chinese architecture but of giving some historical points of reference in order to demonstrate the mastery of these techniques since ancient times.³⁷ During the Eastern Han, tombs involving arch or dome structures in bricks were widely distributed in China. At the beginning, the curvature of the barrel vault was relatively small. From the middle Eastern Han onwards stone tombs were very much in vogue.³⁸ The typical arrangement being a single-chambered construction, rectangular in plan, with walls faced with stone blocks. Arch construction, as a structural pattern, was adopted in brick and stone tombs. This practice continued well after the Sui and the Tang when most of the stone tombs were built in a square shape and a cupola-shaped roof. Between the latter Han and the early Ming, the barrel arch was widely adopted in above-ground construction, for example in the Ming tombs where the vault shape was the more common type.³⁹

Stone and brick can withstand very high pressure. The arch structure is the ideal form for stone construction.⁴⁰ As far as I know, the earliest records of the arch bridge are provided by the description on a molded brick made during Eastern Han dynasty⁴¹. One of the oldest remaining bridges, the famous Anji bridge 安濟 in Hebei which was built during the Sui period (589-618), presents a great segmental arch bridge consisting of a single arch, 37 meters in span which is in turn composed of 28 separated arches built up side by side in a series.⁴² Like the building of an arch, the construction required only a narrow centering capable of being moved on as each arch was completed. The long practice in the Ming and Qing brought forth a new development in the technique of brick and arch construction. During this period, arched city gates of brick appeared, which were supposed to possess greater defensibility. Formerly before the Yuan, wood framework was used to carry load in the gateway and it was only from the

³⁷ Bodolec, 2005, chaps. 1, 2 and 3.

³⁸ “Qin-Han muzang jianzhu”, 1980, pp. 193-270.

³⁹ Kuhn, 1996, p. 42 and pp. 53-54. Zhongguo tianye kaogu baogaoji, 1990, pp. 14-15.

⁴⁰ Mao Yisheng, 1986.

⁴¹ Lü Pin, Zhou Dao, 1965, p. 17.

⁴² Liang Sicheng, 1936, pp. 1-16.

southern Song to the Yuan that wood framework was gradually replaced by the barrel arch construction, for example the Heyi gate 和義 of Dadu capital of Yuan dynasty.⁴³

As we have seen in his biography, Miaofeng is known not only for his beamless halls but also for his stone bridges. John Kieschnick has shown with many examples, from at least the sixth century to the end of the Qing, that monks played a prominent role in building and maintaining Chinese bridges.⁴⁴ The sources most of the time only indicate the dates of construction, the place and the name of the monk in charge of the site. Rarely, technical details or the precise role of the monk in the building process is indicated. Some of them are known to have built tens or even hundreds of bridges, which suggests that they would have mastered some knowledge in architecture and labor management.⁴⁵ Bridges are also seen as acts of virtue and merit, as acts of compassion and building a bridge is valued by the Buddhist canon and the society. Miaofeng has undoubtedly benefited from the knowledge of the monks of the different monasteries where he lived, monks who probably had had the experience of such buildings.

It can therefore be said that Chinese artisans had mastered brick and stone masonry architecture since ancient times. The knowledge on mortars and brick-laying has allowed them to build quite sophisticated structures. The beamless halls attributed to Miaofeng Fudeng, in this sense, belong to the Chinese constructive system and he was probably able to lean on craftsmen familiar with the techniques of vault building. His expertise in bridges is proof of this. Nevertheless, a closer look at the vault structures permits to realize that the beamless halls use different construction techniques which can bring new elements to understand their rather scarce presence in Chinese architecture.

2-2 Vault with abutments: a technical innovation

Technically, the underground vaults for tomb, the bridges, the pagoda windows and the city gates have in common to be just “a hole in a mass”, a vault which transmits its load (vertical force) and pressure (horizontal force) to a huge mass of earth (tombs, gates in the walls) or in the case of bridges, to bases on the ground. The forces which naturally cause the collapse of the vault are perfectly balanced thanks to these masses. These buildings belong to a same architectural environment. On the other hand, Ming beamless halls are built with extra-heavy walls to counterbalance the horizontal thrust of the barrel-arch construction. The emergence of buttress pilasters was an improvement, reducing the amount of brick needed and at the same time increasing the span of doors and windows and, of course, of the entire vaulted structure, enabling these to let in more light.

⁴³ Zhang Yuhuan, 2000, pp. 176-177. *Tushuo Beijing shi*, 1999, pp. 217 and 227.

⁴⁴ Kieschnick, 2003, pp. 199-2008.

⁴⁵ Kieschnick, 2003, p. 204. Mao Yisheng, 1986, p. 236. Needham et al. 1965, p. 160.

At this time the vault, “which was just a hole in a massive structure, has been liberated to form a free structure above the ground.”⁴⁶

The still extant beamless halls attributed to Miaofeng are of two types: large buildings (averaging 25 meters in length) and the smaller ones sometimes called in the documents "halls of flower" *duodian* 朵殿, which are smaller in size. The large structures exist at the Yongzuo monastery in Taiyuan, at the Xiantong monastery in Mount Wutai, but also at Wangu monastery where only some ruins remain. The structure of the Mount Emei monastery is quite different. The hall is unique in Miaofeng Fudeng's work with a square plan and a dome roof. On all four sides vaulted openings bring in light. At each corner of the roof and in the center of the dome are decorative Tibetan-style stupas.⁴⁷

Going back to the four buildings with important similarities, one might consider separately the interior and the exterior of the construction. While the outside aims to look like an ordinary Chinese temple, the inner structure is relatively complex, consisting of an elongated vault crossed by three or five oblong vaults. This helped to create a larger space in which Bodhisattva statues were installed. In the Yongzuo monastery, the vaulted buildings form the three sides of a square courtyard. The main building is 25 meters long and comprises five oblong rooms, each with a span of 3 meters. The elongated vault that crosses the oblong ones is more than 6 meters long. The layout of the other buildings in the courtyard is similar (Fig.4).

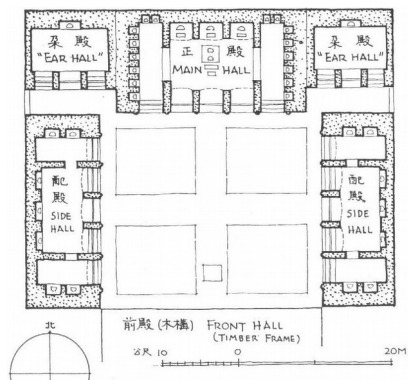


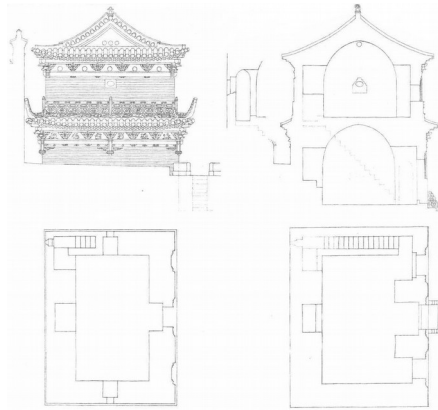
Fig. 4. Yongzuo monastery, Taiyuan, Shanxi, 1612 (after Liang Ssu-Ch'eng and Fairbank, 1983, p. 173)

The main building of Xiantong monastery in Mount Wutai is 28.2 meters long and 16.2 meters wide with only three oblong vaults and an elongated transverse vault that is quite wide. At the rear of this building, one can observe the two constructions called *duodian*. As they can be called beamless hall

⁴⁶ Translated from Adam, 1995, p. 180.

⁴⁷ As far as I know, the sources do not give information about the particular form of this building. See Millbank, 2014, p. 18 for a more detailed description.

because of their vault structure, they are significantly smaller. In a very interesting way, these two buildings are very close stylistically to those built at Mount Baohua and at the Yongzuo monastery in Taiyuan. The Mount Baohua gazetteer tells us the measurements: 10.24 meters high and 6.72 meters wide.⁴⁸ Their length is close to 8 meters.⁴⁹ Their vaults are elongated, which means that they are perpendicular to the main entrance. The vaults have a span of 3.50 meters. (Fig. 5)



292. KIASMOON: Pao Hwa Shan. Hef Ch'ü Sun.
Wen Shu T'ien. Vaulted Brick Structures. North Gable, Cross Section and Plans. 1:100.

Fig. 5. Longchang monastery, Mount Baohua, Jiangsu, 1605 (after Prip-Møller, 1937, p. 266)

The beamless halls attributed to Miaofeng have remarkably shallow abutments: 3.5 to 4 meters thick for the largest vaults and 1.5 meter for the smaller ones. I did not find any Chinese source describing a method for calculating the thickness of the vault support walls, but according to a 17th century French book, a 6-meter barrel vault can be supported by an abutment of 1.5 meters. The calculations are not very complicated for skilled craftsmen but require a particular technicality.⁵⁰

There are no buildings of this style in later periods, although one exception is known: the Kaiyuan monastery 開元寺 in Suzhou (Jiangxi). Situated in the Ruiguan monastery 瑞光寺 in the southwestern quarter of the city, it is the only building remaining after many fires.⁵¹ This beamless hall is attributed to a monk

⁴⁸ The measurements are respectively 3 *zhang* 丈 2 *chi* 尺 and 2 *zhang* 1 *chi*. “Wenshu wuliang dian” and “Puxian wuliang dian,” *Baohua shan zhi*, 1736-1795, juan 3, pp. 1b-2a.

⁴⁹ Prip-Møller, 1937, p. 266. See also Jiang Shirong 江世榮 et al., 1955, p. 87, fig. 2.

⁵⁰ Adam, 1995, p. 182. Derand François, 1755, p. 10.

⁵¹ Demiéville, 1925, p. 245. *Suzhou fuzhi* 蘇州府志, 1829-1877, juan 39, pp. 9-10. Liu Dunzhen 劉敦楨, 1984, pp. 257-317.

named Ruyuan 如緣 and was built in 1618 according to the documents.⁵² Its exterior style and inner structure are very similar to those built by Miaofeng,⁵³ which he most likely used as a model although no formal proof thereof can be provided (Figs 6 and 7).



Fig. 6. Kaiyuan monastery, Suzhou, Jiangsu, 1618 (Chinese postcard around 1920)

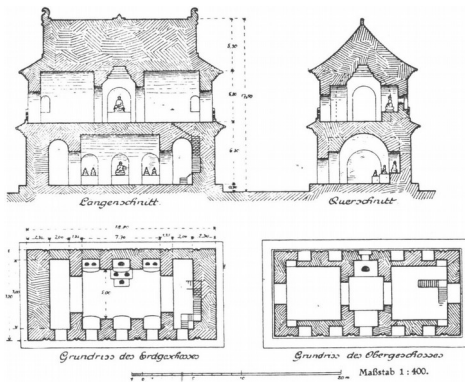


Fig. 7. Kaiyuan monastery, Suzhou, Jiangsu, 1618 (after Boerschmann, 1925, p. 35)

As we have already said, very few buildings have these technical characteristics and can be called beamless halls. But the techniques of the arch shape for bridges, gateways of city walls and temples have been preserved during the Ming and Qing dynasties, and the techniques of the vault with abutments have been maintained until nowadays for vernacular architecture in Shanxi province and northern Shaanxi (so called Shaanbei).

⁵² Pan Zengyi 潘會沂, early XIXth, p. 13a. Niu Ruolin 牛若麟, Wang Huanru 王煥如, 1642, *juan* 24, p. 24a-29b. Wu Xiuzhi 吳秀之, 1933, *juan* 36, p. 6b-7b. Liu Dunzhen, 1984, p. 316, n. 24.

⁵³ Jiang Shirong 江世榮 et al., 1955, pp. 85-86, fig. 1; and Boerschmann, 1925, p. 35, Abb. 10.

2-3 The vault with abutment for houses

Houses called *yaodong* 窑洞 are located in the northern part of the loess tableland, in the basin of Huanghe, one of the most important alluvial deposit zones in the world. The golden colored loess is sometimes two hundred meters high. In this area a high concentration of cave dwellings dispatched on seven regions shelter nearly forty million people. In Shanxi, Shaanxi, and Gansu, more than fifty per cent of the inhabitants still live in *yaodong*⁵⁴. Those houses may be divided into three different groups. The *tu yaodong* 土窑洞 (only made in earth, deeply excavated in the cliff), the *tianjing yaodong* 天井窑洞 (a type of dwellings of very spectacular effect because they are ten meters deep in a very flat landscape) and the *duli yaodong* 獨立窑洞 (independent type). The three groups have in common their name (*yaodong*) and also their plan, on average nine meters in length, four meters in width, three and half meters in height, and the use of the vault shape. The “independent type” (*duli yaodong* 獨立窑洞) presents certain architectural and technical similarities with beamless halls (Fig. 8). Even though this architecture is less impressive and not intended for temple or monastery construction, there are numerous common elements: rectangular form, entry by the narrower side, bricklaying techniques, barrel vaults, etc. Could there be a connection between these vernacular constructions and Miaofeng Fudeng?

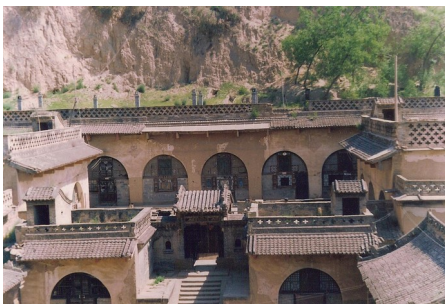


Fig. 8. Jiang family manor, Liujia mao, Mizhi, Shaanxi (©author)

Indeed, the biographies of the monk give us some clues. Miaofeng was born in 1540 at Pingyang 平陽 (modern Linfen 臨汾) in Shanxi province to a family named Xu 續. From the many episodes of his life before 1586, we learn that he had many opportunities to cross villages on his trips to the Xiyan 棲岩 Temple

⁵⁴ *Zizhou xianzhi* 1993, p. 267; *Zichang xianzhi* 1993, p. 440; *Lingshi xianzhi* 1992, p.193; *Mizhi xianzhi* 1993, p. 257.

on Mount Zhongtiao 中條山⁵⁵ or to Mount Jiexiu 介休山.⁵⁶ In the prefecture of Linfen, where Miaofeng was born and where he lived for several years, independent *yaodong* made of brick are still quite numerous today. The oldest among them were built for the local elite like the Shi family manor of Shijiagou 師家溝 in Fenxi 汾西 district which probably dates from the years 1760-1770. The independent *yaodong* for wealthy people were also built in cities, like the ones in Pingyao 平遙, as well as in rural areas, such as the huge manor of the Wang family in Jingsheng 靜升, in Lingshi 靈石 district (Fig. 9).

Independent *yaodong* served not only as private houses but also as monasteries and temples in this region. This is the case for the Longtian miao 龍天廟 in the district of Fenyang 汾陽, Shanxi province, where epigraphs specified that the wood buildings and the *yaodong* were restored during the Qianlong era.⁵⁷ Sometimes these *yaodong* exist in the same places locations as the beamless halls, for example in the Yongzuo monastery in Taiyuan (Fig. 10). It is reasonable to suppose that, if independent *yaodong* were as numerous in Miaofeng Fudeng's time as in the late seventeenth century, he was familiar with the form as well as the techniques of construction. If we can refer to the current situation, the building of brick vaults requires many workers, laborers hired for the duration of the project. The only professionals are the master masons who understand the calculations for constructing the vaults (Fig. 11). Today, and most probably also in the Ming period, the most skilled ones were very much in demand and were engaged all around the district and sometimes beyond.⁵⁸



Fig. 9. Wang family manor, Jingsheng, Lingshi, Shanxi (©author)

⁵⁵ Mountains in southeastern Yongji district.

⁵⁶ Also known as Mian shan 綿山 in the district of Jiexiu 介休.

⁵⁷ Lin Huiyin 林徽因 and Liang Sicheng 梁思成, 1934-35, pp. 13-14.

⁵⁸ Bodolec, 2010, pp. 6-7.



Fig. 10. One of the lateral temples, Yongzuo monastery, Taiyuan (©author)



Fig. 11. Building site in Yanchuan district 延川縣, 2011 (©author)

Like the building of the arches in the beamless hall and the *yaodong*, the construction of bridge arches required only a temporary structure to center the vault. The bricks were laid in the same manner, layer by layer from the springing point to the keystone (Fig. 12). One piece of evidence of this shared knowledge is found in Miaofeng Fudeng's biography. He was summoned several times to conceive other types of vaults than beamless halls, including the multi-arched bridges on the Wei River in Shaanxi and on the Yang River in Hebei. These bridges, constructed upon the request of civil officials, were great successes: much of Miaofeng Fudeng's fame came from bridge architecture. In a sense, this makes him part of the tradition of bridge building amongst Buddhist monks. But one still has to account for the uniqueness of his technique and style within this tradition.

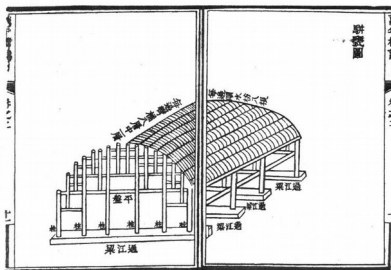


圖 十 第

Fig. 12. Wannian bridge 萬年橋, Nancheng, Jiangxi, 1634-1647 (after Liu Dunzhen, 1933, fig. 10).

The assumption is made that Miaofeng, on the building sites in Sichuan or in Jiangxi, was able to presumably hire masons and bricklayers specializing in brick bridge construction. They could work on beamless structures and there was therefore no need to move a team of artisans from Shanxi province. This hypothesis is also corroborated by the architectural style of the beamless halls which borrow their decorative vocabulary from timber construction, but do so through carved brick pilasters, railings, and brackets.⁵⁹ Between the openings in the facade are brick pilasters set on molded pedestals. These pilasters have no capitals but decorative brackets instead, which support an architrave with three layers of brackets as a sort of cornice. All these elements are made of brick. The roofs also imitate the classical wood-temples: they are of saddle-back hipped roof *xieshan wuding* 歇山屋頂 following the roof style typically found in one-room palace halls in Chinese architecture. The upper part is surmounted by a canopy. Miaofeng, familiar with the techniques of abutments was able to supervise their building and lead the artisans.

However, such technical skills are not sufficient to explain how Miaofeng successfully carried out these gigantic projects. Furthermore, we do not have much information about the cost of such achievements. If we follow Timothy Brook's indications, a full-scale reconstruction, which might take decades to complete, could cost some ten thousand taels; to restore or relocate an existing monastery would require two or three thousand. The cost of construction of one major building like a Buddha hall varied according to its size and magnificence, though the budget usually exceeded a thousand taels and could run as high as two thousand.⁶⁰

Miaofeng Fudeng and his Patronage

3-1 Local elite and high officials

As we have already seen, very early in his life Miaofeng received support from a member of the imperial clan, Zhu Junzha 朱俊柵 (r. 1558-1603), a fifth generation descendant of the founder of the Ming dynasty. Referred to as the Prince of Shanyin in historical sources, he played an important role in the first period of Miaofeng Fudeng's life. He encouraged him to further his knowledge of Buddhist texts and travel around the empire. The influence of this prince was certainly decisive for the architectural education of the monk, since he had had the opportunity to visit many monasteries. Miaofeng crossed the paths of two other princes. The first was Zhu Xiaoyong 朱效鏞, known and mentioned above

⁵⁹Weidner, 2001, p. 130.

⁶⁰Brook, 1993, p. 162.

as Prince Shen. Miaofeng asked him for the funds necessary to cast the first of the three statues, as well as the bronze pavilion for the monastery at Emei Mountain in Sichuan province. He agreed to finance that specific project and he accompanied Miaofeng to Jingzhou in Huguang, where the elements were cast.⁶¹ In Taiyuan, circa 1610, Zhu Qiugui, known as the Prince Jin, asked him to repair the Yongzuo monastery.

These persons were members of the local elite, in Chinese: *jin* 衿, *shen* 紳 or even *shi* 士, in other words people who can be defined as “a social elite that sustained its dominance through the mobilization of cultural and social, as well as economic and political, resources in the local context”.⁶² Local elites, who shared with the government the control of local affairs, represented an informal power in contrast to the formal power invested in the local government⁶³. The Chinese gentry was the only group that could legitimately represent the local community in discussing local affairs with officials and in participating in the governing process. The gentry consisted of officials—active, retired, or even dismissed—including those who had purchased their official titles or ranks, and also included the holders of degrees or academic titles. Wealth or landed property *per se* was not a qualification for gentry status. Commoner-landlords did not belong to the gentry class, no matter how much land they owned.⁶⁴ In the case of a local district’s public works, the role of the gentry was very important. Their members could finance a large part of infrastructure projects, such as the restoration of a city’s walls or the construction of bridges. The construction of a bridge or a road was an opportunity to increase the prestige of the donor, and such constructions could be officially described as “acts of virtue” (*yiju* 義舉) or “good deeds” (*shanju* 善舉).⁶⁵ Indeed, Miaofeng was appointed to supervise the construction of bridges in various places in Shaanxi and Shanxi provinces. Those ultimately responsible were, however, high-ranking members of the imperial government. Among them were men such as Li Shida, the Minister of Justice; Wang Xiangqian, governor of the North Metropolitan Province and later governor of Sichuan province; or the governor of Shanxi province, whose name does not appear in the sources. It is unclear whether these officials summoned Miaofeng to build bridges within the framework of an official request or as the result of a benevolent action by the local gentry. In the case of Li Shida, for example, who was a native of Jingyang district in Shaanxi, near the Wei River where Miaofeng erected a bridge, we can argue that this represented a gentry-sponsored project. But for Wang Xiangqian, a native of Shandong province, the connections are more tenuous.

It is in relation to beamless halls and statues of Bodhisattvas that the role of the gentry in Miaofeng Fudeng’s activity was more obvious. In the case noted

⁶¹ Hanshan Deqing, in *Xu Zangjing*, *juan* 73, no. 1456, p. 675.

⁶² Brook, 1993, p. 15.

⁶³ Ch’ü Tung-ts’u, 1962, p. 168.

⁶⁴ *Ibid.*, pp. 170-172.

⁶⁵ Yang Liansheng, 1964, p. 13. Kieschnick, 2003, pp. 208-212.

above, Wang Chonggu, a native of Puzhou in Shanxi, chairman of the Ministry of War, asked Miaofeng to restore the pagoda and the main building of the Wangu monastery, where Miaofeng Fudeng had lived as a monk in his youth. Another important magistrate, Wang Jiyu, Grand Coordinator of Sichuan province, agreed to patronize the Wannian monastery on Mount Emei in circa 1600. These names are not the only examples of the involvement of officials in the restoration and building of Buddhist temples. Although they were educated in Confucianism, the local elite of late Ming period had chosen to patronize Buddhism, and particularly Buddhist monasteries, instead of other forms of benevolent deeds. As Timothy Brook demonstrated, “monastic patronage became significant in the late Ming because it constituted a local forum for the autonomous organization of the gentry.”⁶⁶ Buddhism provided a context for social elites to create an identity for themselves in terms that were to some measure independent of the state. The individual itinerary of Miaofeng is another example of this fortunate situation. Like other monks, he was able to benefit from opportunities to spread Buddhism and to develop the monasteries. The fact remains that the most important sponsor of Miaofeng was at the top of the social pyramid in the person of the Empress Dowager, mother of the Wanli emperor. How could a simple monk get such support? Let Hanshan Deqing explain how it happened.

3-2 Miaofeng Fudeng's Prestigious Patron: the Empress Dowager

In 1571-1572, the Prince of Shanyin, Miaofeng Fudeng's protector and mentor, had just built a monastery at Mount Nan 南,⁶⁷ and he invited Miaofeng to reside there. Some time later, the Prince wanted to obtain a copy of the *Yongle beizang* 永樂北藏 (the so-called Northern version of the Tripitaka) for the new monastery. He did Miaofeng the great honor of asking him to carry out this task. Being the owner of one of these sets of the Buddhist canon was not a trivial privilege, and calculations show that only fifteen sets of the Tripitaka were given away by the throne in the 1590s.⁶⁸ Miaofeng met up with Hanshan Deqing again when he arrived in Beijing in winter of 1572, and their friendship grew stronger. In 1573, the first year of Wanli reign, Miaofeng obtained a copy of the *Yongle beizang*; when he returned to Puzhou, Hanshan Deqing accompanied him. The Prince of Shanyin was particularly pleased and agreed to let Miaofeng go to Mount Wutai. At the end of February 1574,⁶⁹ Miaofeng and Hanshan Deqing started out towards the sacred mountain, nearly 700 km to the North. The route

⁶⁶ Brook, 1993, p. 320.

⁶⁷ There are at least eight places named Nanshan in Shanxi province; I assume this was the place nearest to the residence of the Prince of Shanyin, at the Wangu monastery, Yongji, Yuncheng district.

⁶⁸ Hsu Sung-peng, 2000, pp. 95-96.

⁶⁹ Wanli *jixu* year, spring, first month 萬曆甲戌春正月, equivalent to the end of February to the beginning of March 1574.

ran through Pingyang, where Miaofeng was born. As his parents had died unburied several years earlier, he decided to perform the appropriate rites. Arriving at Mount Wutai, the two took up residence in Longmen 龍門, on the Beitai 北臺, for three years.⁷⁰ During all this time, they continued to be anxious about the after-life of their respective parents, and they decided to make a copy of the *Huayan jing*, the Flower Garland Sutra. Hanshan Deqing decided to use ink made of blood and gold flakes, while Miaofeng chose instead the blood of his own tongue mixed with red ink.⁷¹ We assume that they began to copy the sutra in 1577.

When the copies were completed, Miaofeng wanted to hold an Undiscriminating Great Assembly (*wuzhe dahui* 無遮大會, Sanskrit, *pañcavarsikāparisad*), which was a meeting of religious figures and the faithful for confession and forgiveness of sins. During a whole year, Miaofeng Fudeng raised funds and support, and finally, in December 1581, the ceremony was ready to be held. The presentation of the copied sutras and the preaching took place in the Dayuan temple, newly restored thanks to donations from the Empress Dowager. Originally, this restoration in which Miaofeng Fudeng seems to have had no implication involvement, was planned in memory of the late emperor and for the reiging of the new emperor Wanli. The Empress Dowager sent artisans to help complete the work along with officials on behalf of the outer court (Ministry of Works) and from the inner court (eunuchs actually).⁷² The ceremony lasted 120 days,⁷³ and it is said that Miaofeng Fudeng invited 500 eminent monks to participate. In his autobiography, Hanshan Deqing described the ritual and said that there were no less than ten thousand people who came from all directions.⁷⁴ While the ceremony was already underway, messengers from the Empress Dowager came to Mount Wutai to pray for the birth of a crown prince. This was part of a major effort to help Wanli Emperor, who had married three years before, have a son. Hanshan Deqing suggested incorporating the prayer in the ceremony but both the envoys and Miaofeng Fudeng objected mainly not to interfere with Wanli Emperor own messengers sent to Mount Wudang 武當山, a sacred Daoist mountain in the northern part of Junxian 均縣 in Hubei province. The Empress Dowager's request was thus unofficial but in the end the two monks accepted to change the object of the ceremony and pray for the birth of an heir. In the eighth

⁷⁰ The Mount Wutai gazetteer adds details on the exact place of their stay: the Miaode an 妙德庵, where a temple still exists today. "Miaofeng dashi zhuan", *Qingliang shan zhi*, 1701, *juan* 3, p. 30a.

⁷¹ The Mount Wutai gazetteer even specifies that the gold flakes and the paper were provided by the Empress Dowager herself. Frequent references to the practice of blood writing appear from throughout Chinese Buddhist history in biographies of monks, see Kieschnick, 2003, pp. 174-175.

⁷² For a complete depiction of the *Wuzhe dahui* see Zhang Dewei, 2010, Appendix E, pp. 275-286.

⁷³ From the Wanli *xinsi* year, winter, eleventh month 萬曆辛巳冬十一月 to the *renwu* year, spring, third month 壬午春三月, equivalent to December 1581 to April 1582.

⁷⁴ Hanshan Deqing, in *Xu Zangjing*, *juan* 53, p. 960a.

month of Wanli 10 (1582), Zhu Changluo 朱常洛 (1582-1620) Wanli's first son, was born and it seems that the credit counted/was given? to the Mount Wutai ceremony and personally to Miaofeng Fudeng and Hanshan Deqing.⁷⁵ Right after the end of the *Wuzhe dahui*, the two friends departed from Mount Wutai and separated. As Hanshan Deqing went to Zhengding 正定 (Hebei) to convalesce,⁷⁶ Miaofeng Fudeng went to Mount Luya in northern Shanxi province to retire to a small hermitage (*an* 庵).⁷⁷

After the birth of the heir apparent at the end of 1582, the Empress Dowager sought to express her gratitude to the two monks. As mentioned above, when she learned of Miaofeng Fudeng's retreat, she ordered him to restore the main temple of Luya Mountain, the Huayan monastery, and give funds to build an iron pagoda of seven stories, the Wanfo pagoda 萬佛铁塔, on the top of the mountain. Miaofeng Fudeng, at the age of forty-two, thus began a new career as an architect.⁷⁸ Imperial benevolence towards him continued throughout the rest of his life. When he died, in February 1613, the imperial family contributed lavish gifts for his funeral; the Empress Dowager herself sent 1,000 *jin* 金 and 500 pieces of cloth. The Emperor ordered that a tomb pagoda be erected for him in the western part of the Xiantong Monastery. It is recorded that an inscription calling him *zhengzheng Fozhi* 真正佛子, "true disciple of Buddha," was carved.⁷⁹ The emperor also ordered the completion of all the buildings in progress at the time.⁸⁰

The biography written by Hanshan Deqing emphasized the close relationship between Miaofeng Fudeng and the Empress Dowager Cisheng. In doing so, he indicated that the ritual organized in 1582 proved to be a key event in Miaofeng Fudeng's life. As in his autobiography, he stressed the correlation between this event—which took place in spite of strong objections from his contemporaries—and the birth of the crown prince ten months later. Without entering into details, we have to keep in mind that Hanshan Deqing himself had had a special relationship with the Empress Dowager. Specifically, he wanted to attract her attention to his personal project: the restoration of the Dabao'en monastery in Nanjing, which was severely damaged by fire in 1566. The insistence on incorporating the two events could be a way to establish a link with the imperial court, especially with the Empress Dowager. Miaofeng Fudeng, sometimes reluctantly, according to the sources, also benefited from these circumstances.

⁷⁵ This son was the subject of a major dispute between Wanli Emperor and his mother. Zhu Changluo under the reign name of Taichang 泰昌 only reigned for one month in 1620. Zhang Dewei, 2010, chap. 3, p.73 sq.

⁷⁶ Hsu Sung-peng, 1978, pp. 74-75.

⁷⁷ District of Kelan 苛嵐縣.

⁷⁸ These constructions were destroyed during the battles that brought the Ming dynasty to an end; see the gazetteer of Shanxi province, quoted by Glahn, 1976, p. 463.

⁷⁹ Mount Wutai stele. Su Weilin (*jinsi* 1598) text copied in Zhao Lin'en, 2005, p. 341. Zhang Dewei, 2016, p.328, note 6.

⁸⁰ "Miaofeng dashi mu", *Qingliang shan zhi*, 1887, *juan* 3, p. 30b.

Hanshan Deqing, more directly involved than Miaofeng Fudeng in power struggles within the Imperial court, was less fortunate.⁸¹ He was arrested in 1595 and exiled to Canton a few months later. Indeed, at this moment, a court controversy centering on the issue of succession occurred: the Empress Dowager and her son, the Wanli emperor, were the leaders of two opposing factions. During this court dispute, religion, especially Buddhism, was widely used as both a protective shield and a weapon. As a consequence, we can see some effect in the support of temple construction when, for example, the Empress Dowager's party was the weaker, in the years 1595 to 1602.

However, the Empress Dowager Cisheng was the most powerful woman in the religious life of the court, in the capital, and in the empire. The number of her patronage projects and the sums she provided were enormous. Miaofeng Fudeng was not the only Chan monk she protected and financed. In the year 1602 alone, two other monasteries were restored with funds from the Empress Dowager. The Yuquan Monastery 玉泉寺 in Dangyang district 當陽 (in modern Hubei province), underwent a major restoration led by the Abbot Wuji Zhenghui 無跡正誨 (fl.1602), a monk of empire-wide reputation. The project was initiated with the help of imperial patronage, when Empress Dowager Cisheng gave Zhenghui a grant of 10,000 taels to carry out the work. She also presented him with a copy of the imperially printed Tripitaka in the name of the Wanli emperor.⁸² In the same year, another monk, named Xinkong Mingkai 心空明開 (1568-1641), went to Beijing precisely to procure a copy of this document. Knowing that the Empress Dowager had long suffered from an incurable eye affliction, Mingkai presented to the throne a medical lotion, which proved to be effective in easing her condition. The Empress Dowager showed Mingkai her gratitude by having the emperor present not only a copy of the Tripitaka but also 1,000 taels of silver. The imperial donation stimulated a spate of contributions from provincial, prefecture and district officials, as well as from eight prominent members of the Zhucheng 諸城 district gentry. Within five years, the Guangming Monastery 光明寺 was completed. Its library housed the 6,780 volumes of the Tripitaka, which were delivered to the monastery in 1607.⁸³ The Empress Dowager seems to have financially supported at least forty-seven Buddhist temples, from the foundation of institutions to renovation, rebuilding, and erecting statues.⁸⁴ She also had close links with monks, as we saw in the case of Miaofeng Fudeng. She was central to most of his projects; perhaps she even was at the source of his building activity as an architect.

⁸¹ Zhang Dewei, 2014, pp. 263-285.

⁸² See the *Yuquan shan sizhi* (1694), *juan* 1, p. 5a; and the *Dangyang xianzhi* (1866), *juan* 13, p. 35b, quoted in Brook, 1993, p. 291, n. 30.

⁸³ *Wuliang shanzhi*, *juan* 2, pp. 1a, 4a-b, 14a-16b; quoted in Brook, 1993, p. 241, n. 46.

⁸⁴ Zhang Dewei, 2000, pp. 85-86.

Conclusion

Miaofeng Fudeng's individual renown as a leading monk responsible for a number of important construction projects involving the beamless form is unquestionable. I would argue that the period and historical circumstances in which he lived were favorable to Miaofeng Fudeng's work. He lived in a very particular time of the Ming dynasty, the Wanli era, when Buddhism flourished more than in other periods. The late Ming was a period of revival for religious institutions, when Buddhist monasteries were restored all over the empire. Sometimes the abbot received financial assistance or moral patronage from the emperor himself or from the members of his family such as the Empress Dowager. In other cases, the funding came from civil servants in the provinces or from influential eunuchs. The temples were then said to be *gongjian* 公建 (built by officials); this had a moral connotation and could encourage members of the elite to contribute donations to the work in progress.⁸⁵ Although restrictions on building temples were officially maintained, they were often not enforced.⁸⁶ The Ministry of Rites had a say in the appointment of monastery officials and abbots of important temples. Thus, Miaofeng Fudeng was promoted to the status of abbot *zhuchi* 住持 of the Xiantong Monastery on Mount Wutai. He contributed to its development by building a beamless hall there.⁸⁷ As Timothy Brook has shown, the chief context of this revival was the formation and expansion of the local gentry.⁸⁸ It seems that one can identify two periods of greater activity in Buddhist construction during the Ming period. The first was at the beginning of the dynasty, during the Hongwu 洪武 (1368-1398) and Yongle 永樂 (1403-1424) eras, which correspond to the phase of rebuilding the empire after the reconquest. A second period opened during the Wanli reign (1573-1620), and continued until the beginning of the Qing dynasty in 1644.⁸⁹ The beamless halls attributed to Miaofeng Fudeng were all built during this period.

However, it was more difficult to understand why all Miaofeng Fudeng's constructions belonged to the field of masonry architecture and rather than that of classical wood architecture—why his expertise lay in the knowledge of the forces governing vaulted structures. As we learned in his biography, he was summoned several times to conceive types of vaults other than beamless halls, for example, the multi-arched bridges on the Wei River in Shaanxi and the Yang River in Hebei. These bridges were commissioned by civil officials and were recognized as great achievements. Much of Miaofeng Fudeng's fame came from the bridge architecture. But Miaofeng Fudeng's work on brick-vaulted temple structures is impossible to dissociate from his origins in Shanxi, where brick vaults were relatively common in vernacular architecture, and which were un-

⁸⁵ Goossaert, 2000, pp. 136-137; Eberhard, 1964, p. 314.

⁸⁶ Goossaert, 2000, p. 140.

⁸⁷ Gu Yue, 1997, p. 22.

⁸⁸ Timothy, 1993, pp. 3-4; Zhang Dewei, 2010, pp. 17-26.

⁸⁹ Eberhard, 1964, pp. 277-289.

doubtedly inspired by a long experience by the time-honored use of the "vault with abutment" technique.

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