

# INTRODUCTION

THIS BOOK ANALYZES THE EMPIRE-WIDE CONSTRUCTION PROJECTS OF ZHU Di, who reigned from 1402 to 1424 as the Yongle emperor of the Ming dynasty (1368–1644) (fig. 1.1). Yongle was one of the greatest imperial builders in all of Chinese history. His largest and most ambitious project was the imperial capital in Beijing, established only a few decades after his father, the Hongwu emperor (r. 1368–1398), had built the first Ming capital in Nanjing. At the center of the new capital was the magnificent palace now known as the Forbidden City (Zijin Cheng), which became the locus of imperial power in China for the next five hundred years. For the structural frames of the buildings in Beijing, Yongle ordered logs of *nanmu*, a dense hardwood, to be extracted by the hundreds of thousands from old-growth forests in the southwest part of his empire. Only one monumental *nanmu* hall survives from this time, the Sacrificial Hall at Yongle's tomb, just north of the capital. While the construction of Beijing was under way, Yongle was also building temples dedicated to the Daoist deity Zhenwu in the Wudang Mountains, a sacred range in Hubei. In addition, the emperor was dispatching craftsmen to construct Gautama Monastery (Qutan Si), a palatial Buddhist temple in the northern Sino-Tibetan frontier. He also patronized two famous pagodas, the Porcelain Pagoda (Liuli Ta) in Nanjing and the Five Pagoda Temple (Wuta Si) in Beijing, as well as a modest temple dedicated to the bodhisattva Guanyin in present-day eastern Russia (map 1.1). Taken as a whole, these sites reveal the massive scope of Yongle's architectural ambitions and demonstrate how his sense of empire, his approach to emperors, and his imperial legacy took shape in built space.<sup>1</sup>



## Empire

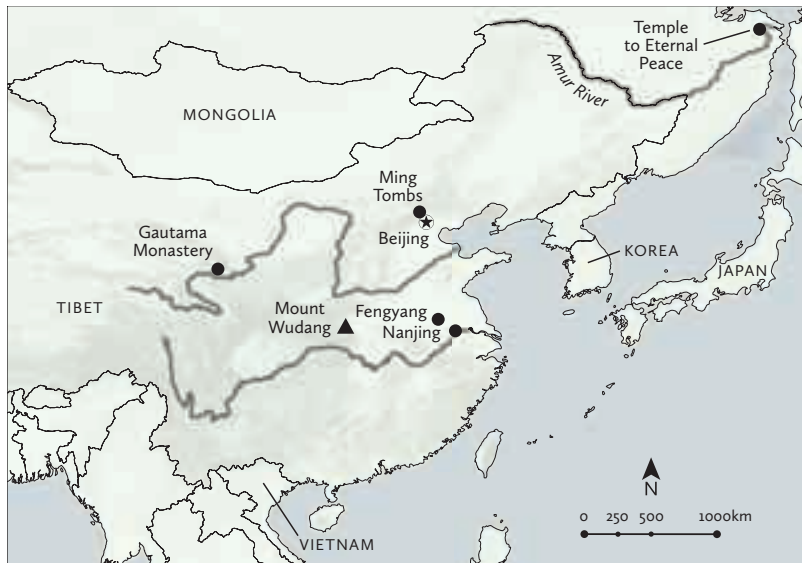
Yongle's conception of empire was vast and far-reaching. Through both military and diplomatic means, the emperor spread his power and influence not only over the territories directly under Ming control but also to the borderlands and beyond. Early in his reign, he invaded Annam (northern Vietnam), transforming it from a vassal kingdom into a province.<sup>2</sup> He personally led five offensive military campaigns into the Mongolian steppes, during the last of which, at the age of sixty-four, he died.<sup>3</sup> In terms of size, cost, and sheer spectacle, the most outstanding of his expansionist missions were the six state-sponsored sea voyages of the Muslim eunuch Zheng He (1373–1433) to Africa, India, and Southeast Asia.<sup>4</sup> The largest of these missions consisted of a staggering three hundred ships and twenty-seven thousand men. Less well-known, yet still extraordinary, were the five Yongle-era missions of the eunuch-official Ishikha (Yishiha) up the Amur River (Heilong Jiang) on a fleet of twenty-five large ships to Nurgal (now Tyr, Russia) in Jurchen territory, along with more than a thousand soldiers and officials.<sup>5</sup>

One of the main purposes of Zheng He and Ishikha's missions was to distribute gifts and enlist foreign states as tributaries. Yongle also sent embassies to Hami, Japan, Korea, Nepal, Ryukyu, Tibet, Turfan, Samarkand, and many more places. In all, thirty-eight states were persuaded to send tribute missions to his court.<sup>6</sup> As the historian David Robinson explains, "The Ryukyu king sent horses, ivory, agate, sandalwood, and spices; the Korean court supplied horses, high-quality paper, inks, ramine and cotton fabrics, and ginseng; the 'king of Japan' offered samurai swords, folding fans, sulfur, silver, and tea-bowls; Vietnam brought southeastern Asian spices, medicines, and precious metals, Mongol and Jurchen envoys arrived with steppe horses, furs, leathers, and hunting falcons; Tibetans brought Buddhist icons, pennants, horses, and relics; and missions from western Asia contributed lions, jade, and textiles."<sup>7</sup> Much like the Chinese emperors' long-standing practice of gathering plants and animals from far off regions for their imperial parks, by collecting the natural products and local crafts of these distant regions and bringing them to his court, Yongle was simultaneously collecting the known world and laying claim to it.

The emperor also used these missions to establish a physical presence in various corners of his empire and beyond. One way he did this was through the erection of stelae in areas far from the capital. By erecting these stelae, Yongle was following the practice of two powerful predecessors: King Aśoka (r. 268–232 BCE) of the Mauryan Empire, who established pillars inscribed with Buddhist edicts across the Indian subcontinent, and Qin Shi Huangdi (r. 220–210 BCE), the first emperor of the Qin dynasty, who left inscriptions describing his accomplishments at sacred mountain sites he visited throughout his domain.<sup>8</sup> Like those of the Mongols before him and the Manchu after him, many of Yongle's stelae were multilingual. The history of Ishikha's missions, for instance, was recorded on a stele

Figure 1.1. Anonymous, *Portrait of the Yongle Emperor* (early fifteenth century). Ink and color on silk, 220 × 150 cm. National Palace Museum, Taipei. Wikimedia Commons.

Map I.1. Locations of the Ming capitals and Yongle's main architectural projects. Map by Dana Heusinkveld and Ani Rucki.



dated to 1413, which originally stood on a high cliff above the Amur River.<sup>9</sup> The Chinese text, composed by Yongle, is inscribed on the front of the stele, while summaries of it are inscribed in Jurchen and Mongolian on the back. Via Zheng He, Yongle also commissioned a stele inscribed in Chinese, Persian, and Tamil in what is now Sri Lanka. The Chinese inscription, written by the emperor in 1409, praises the Buddha, while the Tamil and Persian inscriptions praise Vishnu and Allah respectively.<sup>10</sup> Brunei, Cochin, Japan, Malacca, Mongolia, and the northern Sino-Tibetan frontier all once possessed multilingual Yongle-era stele.<sup>11</sup> Even if most people could not read the inscriptions on these stelae, they could recognize that the stelae signified the Chinese imperial presence and that the emperor was speaking to multiple linguistic audiences.

Yongle claimed ownership over various territories in his empire by renaming them. After he declared the Yellow Earth Mountains (Huangtu Shan) in Changping County north of Beijing the site for his future tomb, he renamed them the Mountains of Heavenly Longevity (Tianshou Shan) (see map I.1).<sup>12</sup> He renamed a forested mountain in Sichuan the Mountain of Sacred Trees (Shenmu Shan) from which he extracted the *nanmu* timbers used to construct his Beijing palaces. Following the reconstruction of Daoist temples on Mount Wudang, he renamed the site the Mountain of Supreme Harmony (Taihe Shan) and ordered that an official seal bearing the new name be delivered to the mountain. After successful military campaigns in Mongolia, Yongle renamed two local areas and erected stelae at them inscribed with victory odes.<sup>13</sup> In Japan and Malacca he “enfeoffed” mountains by granting them Chinese names: Mount Aso on Kyushu became the Mountain Which Will Peacefully Guard the Country (Shouan Zhenguo Zhi Shan), and a hill in Malacca became the Mountain That Protects the Country (Zhenguo Shan).<sup>14</sup>

Deploying court-style architecture was yet another way in which Yongle asserted his imperial presence throughout his empire. During his reign a new court architectural style was developed in the capital and disseminated across his empire through his great construction projects. Like the stelae, these imperial buildings represented the emperor and his absolute authority. This is clearly expressed through the Golden Hall, a small-scale building made of brass that Yongle constructed atop the highest peak of the Wudang mountain range to show his dominance over the sacred Daoist landscape that extended in all directions beneath it.

Through architecture, the emperor could wield authority in politically unstable regions. For instance, Gautama Monastery became a powerful outpost from which he could control regional trade and transportation networks on the Sino-Tibetan frontier. A similar purpose was intended for Ishikha's missions to Nurgal. According to the multilingual stele, Yongle instructed Ishikha to construct a temple dedicated to the bodhisattva Guanyin, called the Temple to Eternal Peace (Yongning Si) in Nurgal (see map 1.1), as he believed that it would help "soften" (*ruohua*) the "wild Jurchen" (*ye Nüzhen*) and lead them into submission.<sup>15</sup> The stele inscription boasts that once the temple was constructed, young and old alike flocked in great numbers to see it, which caused them to convert to Buddhism and submit to the Ming.<sup>16</sup> In 1417, four years after the temple was established, Yongle ordered a Prefectural Buddhist Registry to be established in Nurgal and appointed a Jurchen monk to manage it.<sup>17</sup> Only a decade after the temple was first constructed, however, it was demolished by the locals and had to be rebuilt under Yongle's grandson, the Xuande emperor (r. 1425–1435).<sup>18</sup>

Yongle's expansionist efforts required the mobilization of millions of his subjects, including officials, eunuchs, soldiers, laborers, and religious leaders. At the end of the stele documenting Ishikha's missions to Nurgal are lists of the most important members of the expeditions. The names reflect Chinese, Mongolian, and Jurchen ethnic identities, which, as the historian Morris Rossabi has pointed out, demonstrated that the court both trusted these foreigners and recognized their value in foreign relations.<sup>19</sup> The stele also records the names of the master craftsmen who were sent to oversee the construction of the Temple to Eternal Peace, including carpenters, stonemasons, brick makers, ironworkers, sculptors, and painters. Similar lists of craftsmen were documented for the construction of the Daoist temples on Mount Wudang. They reveal the great degrees of planning and organization required to carry out the emperor's ambitious architectural visions.

The rich resources of the natural environment within the vast expanse of Yongle's empire were extracted on a massive scale for his construction projects. The most important material of all was the *nanmu* used for the timber frames of the palace buildings in the Forbidden City. Yongle went to great lengths to harvest this wood from the forests in the southwest of his empire and transport it to his new Northern Capital via waterways. Like tribute goods, the beams and pillars made out of the *nanmu* indexed the

extremities of the empire and Yongle's control over these distant regions. Beyond their material value, the construction materials gathered in far-off lands were considered auspicious signs from the natural world (*ruì*): when the emperor's officials found large *nanmu* trees growing in abundance in the southwest of the country, it was regarded as a divine substance granted by Heaven for Yongle's taking.<sup>20</sup>

The emperor was heavily invested personally in his architectural projects and through sustained engagement with them achieved a deeper understanding of the distant places within his empire. In turn, Yongle's constructions established his imperial presence within these remote places, leading to significant shifts in their local identities. As a result, the architectural sites became important nodes of interaction between the emperor and his people. His enormous construction projects drew the empire more closely together through the memorials and edicts flowing in and out of the capital, the extraction of materials from distant regions, the participation of craftsmen and laborers from all parts of the country, and the objects crafted in imperial workshops that were sent to furnish the great Daoist and Buddhist temples. Thus Yongle's great architectural projects helped to reinforce his position at the center of his empire, All Under Heaven.

## Emperorship

Yongle's emperorship reached across the extent of his empire and its subjects as well as across all realms of culture, ritual, and religion. He came to power after usurping the throne from his nephew, Zhu Yunwen, the Jianwen emperor (r. 1398–1402), during a bloody three-year civil war known euphemistically as the Pacification of Crisis (Jingnan).<sup>21</sup> This involved not only the burning of large sections of the Nanjing imperial palace with Jianwen inside but also the violent slaughter of Jianwen's loyal officials, friends, and family members.<sup>22</sup> To make matters worse, Yongle was not the child of Hongwu's wife, Empress Ma, but rather of a lesser-rank concubine thought to be of either Mongolian or Korean descent.<sup>23</sup> Many aspects of Yongle's approach to emperorship, including his architectural patronage, can thus be explained by his need to demonstrate that he had the mandate to rule.

One of the ways Yongle did this was to erase the unsightly parts of his past and construct a new history that presented himself in a much more positive light. In addition to expunging Jianwen's reign from the official record, Yongle made a number of grand public gestures to his parents, which implied that he was both a legitimate son and a legitimate successor to the throne.<sup>24</sup> For instance, he sponsored many cultural projects in his parents' honor, including the Porcelain Pagoda at the Monastery of Filial Gratitude (Bao'en Si) in Nanjing and the Daoist architectural complex on Mount Wudang. He erected a massive stele bearing a lengthy inscription

that he composed in praise of his father at the entrance to Xiaoling, his father's tomb in Nanjing. Another stele that he commissioned in memory of his father was never finished because it was too large to move from the Yangshan quarry outside Nanjing, where it remains in situ.<sup>25</sup>

Yongle directly modeled the palaces in his new capital in Beijing on those of his father in Nanjing to project a sense of continuity with Hongwu and to disguise his illegitimacy. However, the fact that the emperor transferred the capital from Nanjing to Beijing indicates that he actually wanted to distance himself from his father—not to mention his nephew—and to inaugurate a new beginning. Yongle's success in this regard can be illustrated through the layout of the Thirteen Ming Tombs (Ming Shisan Ling) north of Beijing. His is not only the largest tomb at this site and the one to which the great spirit path leads, it also served as the center point around which the tombs of all the later Ming emperors were built.<sup>26</sup>

In all his great cultural pursuits, Yongle seems to have been particularly concerned with his visibility. The art historian Dora Ching has argued that whereas in the Hongwu reign imperial portraits were worshipped privately by the emperor and members of the imperial family, Yongle instead used imperial portraits in public ceremonies involving hosts of officials and elaborate rituals.<sup>27</sup> Under Yongle, imperial portraiture was extracted from the private space of the inner courts and brought into the public world of the officials, thereby enabling it to become a much more visible sign of emperorship.<sup>28</sup> An important example of this visibility is an eighteenth-century Tibetan painting of Yongle receiving a consecration ceremony from the Fifth Karmapa, Deshin Shekpa (T. De bzhin gshegs pa, 1384–1415), which represents Yongle as his imperial portrait (fig. 1.2). This indicates that his image circulated well beyond the court and even made its way into other works of art.

In Yongle's approach to emperorship we see a desire to encompass the whole world. This can be clearly illustrated by his most ambitious literary work, the 22,937-volume *Great Yongle Encyclopedia* (Yongle dadian), compiled between 1403 and 1408.<sup>29</sup> In the preface to this encyclopedia Yongle writes: "I ordered my literati-officials to compile The Four Treasuries, to purchase lost books from the four corners of the country, to search and to collect whatever works they could find, to assemble and classify them according to both topical and phonetic order, and to make them into enduring classics. The fruits of their labor is this encyclopedia, which includes the breadth of the universe and all the texts from antiquity to the present time, whether they are big or small, polished or crude."<sup>30</sup>

Yongle's goal in creating the encyclopedia was to amass knowledge that spanned the whole universe, all of space and time. By dictating how to organize and classify this knowledge, he was asserting his power over it. Because he never ordered his *Great Encyclopedia* to be printed, scholars have speculated that for Yongle the act of creating the encyclopedia was more important than the final product. The historian Shi-Shan Tsai has argued that Yongle used the encyclopedia to provide disaffected literati

Figure 1.2. *The Fifth Karmapa Deshin Shekpa and the Yongle Emperor* (late eighteenth or early nineteenth century). Ink and color on silk, 100 × 60 cm. Current location unknown. Pal, *Tibetan Paintings*, plate 92.



with the opportunity to work together for several years on a great scholarly project to bolster their confidence in his regime.<sup>31</sup> The historian Endymion Wilkinson has similarly suggested that Yongle's reason for commissioning the encyclopedia was to rid texts of any possible references that could cast doubt on the legitimacy of his claims to the throne.<sup>32</sup> These scholars draw

attention to the important fact that it is impossible to separate Yongle's cultural productions from his political motivations.

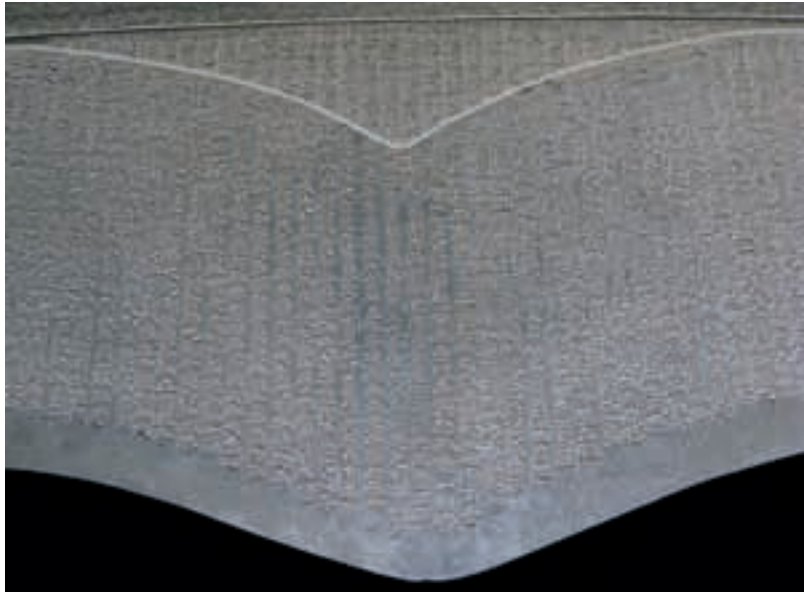
In the same way that Yongle's *Great Encyclopedia* represents his desire to incorporate *everything*, we see in his religious patronage an attempt at complete *coverage*. As demonstrated through his architectural patronage, the emperor placed equal weight on each of the Three Teachings (Sanjiao): Buddhism, Daoism, and Confucianism. During his reign Yongle ordered the compilation of three major religious works: the *Daoist Canon* (Daozang), the *Buddhist Canon* (Skt. Tripiṭaka), and the *Tibetan Buddhist Canon* (T. Kanjur).<sup>33</sup> He also commissioned an important collection of Buddhist texts titled *Famous Sutras of Various Buddhas, Bodhisattva, Arhats, and Divine Monks* (Zhuofo pusa miaoxiang ming hao jingzhuo).<sup>34</sup> In addition to the Daoist and Buddhist publications, in 1415 Yongle compiled the Confucian *Great Compendia of the Five Classics, Four Books, and Human Nature and Principle* (Wujing sishu xingli daquan).<sup>35</sup> This was distributed to each of the prefectural and county schools throughout the empire for the examination candidates to master.<sup>36</sup> He published a number of his own Confucian writings as well, including *The Mind-and-Heart Method of the Sage* (Shengxue xinfa), which, as the historian Hok-lam Chan has pointed out, "vividly reveals the emperor's image of himself as a sage ruler."<sup>37</sup>

Yongle surrounded himself by high-ranking religious figures who served as his spiritual advisers. The most famous of them was the Chan Buddhist monk Daoyan (also known as Yao Guangxiao, 1335–1418), who was said to have helped the future emperor in his revolt against Jianwen. Yongle invited the heads of each of the three main schools of Tibetan Buddhism to his court to give teachings and perform elaborate state ceremonies on behalf of himself and his family. A possible reason why Yongle sponsored the reconstruction of the temples on Mount Wudang was so that he could find a famed Daoist immortal named Zhang Sanfeng, rumored to be living on the mountain, and convince him to become the emperor's personal religious adviser at court, although Yongle was never successful in finding him.

Yongle's lavish patronage of Buddhist art and architecture as a means of political legitimation was not new in Chinese history. Beginning in the Northern Wei period (386–534) and lasting for the rest of dynastic China, rulers sponsored the creation of great Buddhist monuments and even equated themselves with Buddhas and bodhisattvas. The famous female emperor Wu Zetian (r. 684–704) of the Tang dynasty, for instance, claimed to be a reincarnation of Maitreya, while Khubilai (r. 1260–1294) of the Mongol Yuan dynasty and Qianlong (r. 1735–1796) of the Manchu Qing dynasty both saw themselves as reincarnations of the bodhisattva Mañjuśrī.<sup>38</sup> Yongle instead chose the Daoist deity Zhenwu to represent himself.

Yongle's evenhanded religious patronage may have stemmed from a desire to cover all bases with regard to the afterlife, which was necessary given the violent means by which he came to the throne. In some cases we see that he was striving for redemption. For example, a text dated to 1494

Figure 1.3. Yongle bell (ca. 1417), Great Bell Temple (Da Zhong Si), Beijing, detail. Bronze, 5.5 × 3.3 m (entire bell). Author's photograph, 2012.



informs us that following a particularly fierce battle in 1400, Yongle, deeply troubled by the great number of casualties, ordered the skulls of the dead to be collected and made into rosary beads and skull cups (Skt. *kapāla*). The rosaries were distributed among the palace eunuchs to pray for the rebirth of the fallen soldiers, while the skull cups were filled with pure water and placed on an altar.<sup>39</sup> For the new capital at Beijing, Yongle commissioned a massive Buddhist bell onto which were cast the first twenty chapters (more than 130,000 characters) of the *Famous Sutras of Various Buddhas* of 1417 as well as more than a hundred esoteric formulas (Skt. *dhāraṇī*) in Lantsha script (fig. 1.3).<sup>40</sup> The Qianlong emperor later wrote an ode to the great bell, in which he mentioned that Yongle had it cast in order to repent (*chanhui*) for murdering the loyal officials of Jianwen.<sup>41</sup> In Beijing, Yongle erected so-called “sutra listening towers” (*tingjing lou*) at major crossroads, within which a Buddhist monk would loudly recite scriptures every evening, thereby spreading the Dharma among the city’s populace.<sup>42</sup>

The art historian Craig Clunas has observed that Yongle’s reign was “attended by almost continuous visual expressions of cosmic approbation of imperial rule.”<sup>43</sup> Indeed, the emperor constantly looked for signs that Heaven approved of his reign. If a sign appeared, he would immediately order that it be documented in visual form. He commissioned a number of paintings that recorded sightings of auspicious images from the natural world. These included several paintings of rare animals and mythical creatures, the most famous of which is the hanging scroll of a *qilin* (giraffe) being offered as tribute to the Ming court.<sup>44</sup> Right after the Daoist temples on Mount Wudang were completed, Yongle asked his ministers to document any signs of the deity Zhenwu’s approval of the project. The ministers submitted to the throne painted and printed images of rainbow

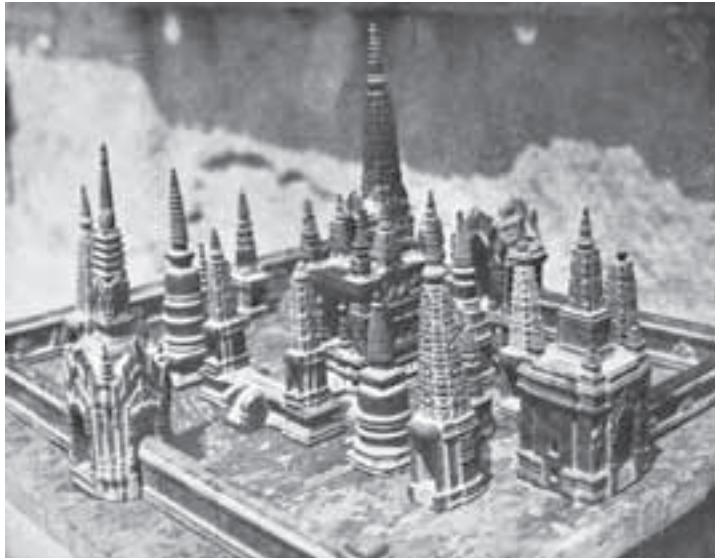


Figure 1.4. (top) Detail of *Illustrations of Auspicious Responses at the Temple of the Sacred Valley* (1407). Handscroll, ink and color on silk, 4.97 × 66 cm. *Xizang wenwu jingcui*, 52. (bottom) Detail of *Illustrations of Auspicious Responses at the Temple of the Sacred Valley* (1407). Handscroll, ink and color on silk, 4.97 × 66 cm. *Xizang wenwu jingcui*, 53.



light, fantastic clouds, and Zhenwu himself appearing above the mountain. Miraculous light and other auspicious images were also recorded in a nearly five-meter-long painted silk handscroll of a twenty-eight-day Tibetan Buddhist ritual performed by the Fifth Karmapa for Yongle's parents in Nanjing (fig. 1.4).

Figure 1.5. Model of the Mahābodhi temple complex (early fifteenth century). Wood. Narthang Monastery, Tibet. Liu Yisi, *Xizang Fojiao yishu*, 10.



In addition to the fleeting signs from Heaven, Yongle was concerned with obtaining actual objects that could validate his rule. For instance, his five military campaigns against the Mongols may have in part been motivated by a desire to get ahold of an ancient imperial jade seal (*yuxi*) rumored to be in Mongol hands.<sup>45</sup> In the third year of his reign (1405), Yongle dispatched the eunuch-admiral Zheng He to obtain a famed tooth relic of the Buddha in Sri Lanka. This event was recorded in a note appended to the Ming edition of the Tang dynasty pilgrim-monk Xuanzang's (602–664) *Records of the Western Regions* (*Xiyu ji*).<sup>46</sup> The record describes Zheng He's arduous task of obtaining the relic, which involved, among other things, the capture by force of the city in which the relic was being held by a non-Buddhist king. Upon Zheng's return to the capital in 1411, we are told that Yongle ordered a sandalwood Diamond Seat (*Jingang Baozuo*; Skt. *Vajrāsana*) to be made to store the tooth relic so that people could make offerings to it and, in turn, receive blessings and immeasurable merit.<sup>47</sup> The implication of this story is that the tooth relic, a long-standing symbol of legitimacy, was rightfully taken from a nondeserving king and given to the pious Yongle emperor, who would safeguard it and ensure that it would be used to bring blessings to all.

Whether this story actually has any historical validity, the reference to the Diamond Seat within the text is intriguing. The name fundamentally refers to the seat upon which the Buddha achieved enlightenment, but it also came to be known as the stupa type exemplified by the Mahābodhi temple in Bodhgayā, India, constructed at the site of the Buddha's enlightenment. The Mahābodhi stupa has a distinctive shape reflective of northern Indian Hindu temple architecture characterized by a collection of five "mountain peaks" (Skt. *śikhara*) on one base. Between the twelfth and fifteenth centuries the Mahābodhi stupa inspired numerous copies

throughout Buddhist Asia, both portable models and full-scale replicas, at least two of which can be linked to Yongle.<sup>48</sup>

One is a sandalwood model of the Mahābodhi temple complex located in Narthang (T. sNar thang) Monastery in Tibet (fig. 1.5).<sup>49</sup> The model, containing twenty-one replicas of stupas and gateways in a walled precinct, bears the inscription “Donated in the Reign of Yongle of the Great Ming Dynasty” (*Da Ming Yongle nian shi*).<sup>50</sup> Yongle sent many ritual objects bearing this inscription to Tibetan lamas as gifts, the most well-known of which are small gilt-bronze Buddha statues. The wooden Mahābodhi complex undoubtedly belongs to the same category of object.<sup>51</sup> However, the model’s architectural details are so intricate and precise that it seems improbable that it could have been made by someone who had never seen the temple in person. It is thus likely that the model was made in India and passed through the Yongle court, where it was inscribed, before being brought to Tibet.

The more famous Diamond Seat commissioned by Yongle is a full-scale “copy” of the Mahābodhi stupa in Beijing now known as the Five Pagoda Temple on account of its distinctive shape (fig. 1.6).<sup>52</sup> The origins of this pagoda can be traced to an Indian monk known as Śāriputra (also called Paṇḍita, Ch. Bandida, c. 1335–1426). Around 1417, Śāriputra traveled to the Ming court and presented Yongle with a model of the Mahābodhi stupa along with five golden Buddha images.<sup>53</sup> Earlier, Śāriputra had served for three years as the abbot of the Bodhgayā monastery, where he had probably obtained the model.<sup>54</sup> Yongle bestowed upon Śāriputra the title Great State Preceptor (*Da Guoshi*) and built him the Temple of True Awakening (*Zhenjue Si*) in which to reside.<sup>55</sup> The emperor requested that a



Figure 1.6. Diamond Seat Pagoda (mid-fifteenth century), Zhengjue Monastery, Beijing. Author's photograph, 2017.

“throne” (*baozuo*) be made at the temple to house the five golden images, yet it was “not easily finished” (*fuke yijiu*) at that time. Around fifty years later, the Chenghua emperor (r. 1464–1487) ordered that the Temple of True Awakening be refurbished and a stone Diamond Seat stupa to be created there in the “Central Indian style” to complete the “unfinished good deeds” (*shanguo weiwan*) of his predecessor. We can thus gather that the stupa was initiated in the Yongle reign to house the five golden Buddha images given to him by Śāriputra, but for reasons that are not entirely clear it was not finished until the Chenghua reign.

Yongle’s act of commissioning the full-scale replica of the Mahābodhi stupa in his new capital was highly symbolic. Between the thirteenth and fifteenth centuries, rulers throughout Asia sponsored copies of the Mahābodhi Temple to transform their kingdoms into exemplary Buddhist centers and to claim their status as Cakravartin, or “wheel turning” Buddhist kings.<sup>56</sup> In doing so, they outwardly connected themselves to King Aśoka, the model of the Cakravartin ideal, who had constructed the first stupa atop the site of the Buddha’s enlightenment in the third century BCE. By patronizing the Mahābodhi stupa replica in Beijing, Yongle was asserting his new capital’s position at the center of the Universe, as the Mahābodhi Temple was considered in Buddhist belief to be located at the center of the world; thereby Yongle was claiming himself to be a Universal Emperor.<sup>57</sup>

## Legacy

Yongle’s great monuments had important historical afterlives, continuing to shape the public perception of him well after his death. Even today Yongle remains closely associated with all of the sites he initiated, despite the fact that they were patronized by his successors and were reconstructed over time. The Forbidden City, for example, to this day is invariably linked to Yongle, even though only a few small-scale halls within the palace date to his reign.<sup>58</sup> As with famous architects today, a connection to Yongle often guaranteed the “success” of a construction project in terms of its historical impact.

That the effects of Yongle’s constructions extended well beyond his lifetime is well illustrated by the Porcelain Pagoda in Nanjing.<sup>59</sup> This remarkable octagonal, nine-story pagoda was made of brick and faced with molded and glazed ceramic tiles—a completely novel construction method that required great degrees of technological sophistication. At night, more than one hundred lanterns hanging from the roof eaves illuminated the delicate pagoda structure and its colorful architectural skin. It was a great spectacle meant to be seen from afar and to communicate the glory of its great patron.<sup>60</sup> Two centuries after it was first constructed, the Porcelain Pagoda caught the attention of a number of European visitors to the city, who recorded its image in detailed illustrations that later circulated widely



in the form of prints (fig. 1.7). This eventually caused the pagoda to become known in Europe as one of the Wonders of the World. In 1762, during the height of the excitement for chinoiserie in England, the architect William Chambers created a ten-story wooden copy of the Porcelain Pagoda at Kew Gardens outside of London.<sup>61</sup> However, the significant architectural differences in material and form between the two pagodas indicate that although Chambers wanted to associate himself with the powerful Porcelain Pagoda by replicating it, he did not actually have the means to re-create such a technically sophisticated structure. In order to fill the void that was left by its destruction during the Taiping rebellion in the late nineteenth century, a contemporary version of the Porcelain Pagoda was recently constructed in Nanjing.

The Porcelain Pagoda was not the only architectural project initiated by Yongle to inspire copies. During the Ming and Qing dynasties several copies, both miniature and full-scale, were made of the Golden Hall located on the summit of Mount Wudang. In fact, Yongle's idea to create the Golden Hall was not original; he took it from an earlier metal hall that had been established on the mountain by local Daoist priests. Nonetheless, while the earlier metal hall remained virtually unknown, Yongle's Golden Hall not only became a famous symbol of Mount Wudang, it was also considered the prototype upon which all later metal halls were based. In addition to architectural novelty, Yongle's reputation was a key factor in shaping the power and influence of his buildings.

Figure 1.7. Johannes Nieuwhof (Dutch, 1618–1672), *Porcelain Pagoda in Nanjing* (1665). Etching, 30 × 20 cm. Wikimedia Commons.

Figure 1.8. Pagoda at Tabun subury-a (1723), Kōkeqota, Inner Mongolia. Photograph courtesy of Isabelle Charleux.



A similar phenomenon can be seen in relation to the aforementioned Diamond Seat pagoda at the Temple of True Awakening in Beijing. In 1723 a near-exact replica of this pagoda was erected in Kōkeqota, Inner Mongolia, by a Mongolian lama who had lived in Beijing (fig. 1.8).<sup>62</sup> This is important because it suggests that, at least in the eyes of one Mongolian lama, Yongle’s pagoda had replaced the Mahābodhi Diamond Seat pagoda in Bodhgaya as the authentic “original.” The Diamond Seat pagoda at the Temple of Complete Awakening was replicated at least once more, in 1748, by the Qianlong emperor at the Temple of Azure Clouds (Biyun Si) outside Beijing. Although this is a less faithful copy than the Inner Mongolian example, it is clear from the form—including the cube-like base, the five dense-eave pagodas, and the square pavilion in the front center—that it was designed with Yongle’s pagoda in mind.<sup>63</sup>

While the timber architecture patronized by Yongle may not have inspired copies in the same way that his other more distinctive buildings did, its influence was nonetheless great. After Yongle built the highest-ranking halls in his capital out of massive *nanmu* trunks, this wood became considered the ideal imperial construction material for the rest of dynastic Chinese history. The use of *nanmu* in these buildings led to a newfound aesthetic emphasis on the materiality of wood in architecture. The huge beams and columns created out of the *nanmu* set new standards for imperial construction, redefining what it meant for a building to be monumental. It is no exaggeration to say that after Yongle constructed the buildings in his capital out of *nanmu*, imperial architecture in China changed forever.

In the centuries after Yongle moved the capital to Beijing, he became the subject of popular legends related to its construction.<sup>64</sup> In one of these legends he is said to have been the son of the last emperor of the Yuan dynasty, Toghan Temür (r. 1333–1370).<sup>65</sup> Perhaps even more significant, Yongle's architectural engagements led him to be conflated with powerful deities in popular legends. For example, he became associated with the deity Zhenwu after he constructed the Daoist architectural complex on Mount Wudang, and to Vajradhāra, the highest Buddha in the Tibetan Buddhist pantheon, following his patronage of Gautama Monastery. Yongle's architectural projects therefore helped transform him from an emperor into a semi-mythical, even godlike, figure.

Yongle's legacy was consciously shaped not only with the help of his most trusted officials during his lifetime but also by his imperial successors after he died. This is particularly true of his grandson, Xuande.<sup>66</sup> Indeed, a number of Yongle's most important architectural projects—the Porcelain Pagoda, the main hall at the Gautama Monastery, and the Sacrificial Hall at Yongle's tomb—were completed under Xuande. The Diamond Seat Pagoda was likewise finished in the Chenghua reign. Even through the more implicit act of reconstructing the great halls in Beijing out of *nanmu*, Yongle's successors were referring back to him, thereby helping to reinforce his authority. As Yongle's descendants, they of course had a stake in promoting his legitimacy as a ruler.

Yongle's great architectural projects were integral to his conception of empire and his approach to emperorship. Unlike paintings that were tucked away in the imperial collection or statues hidden deep inside temples, these monuments had enormous physical presences. They required the efforts of millions of people—from the conscripted laborers forced to collect the timbers and quarry the stone, to the skilled craftsmen who planned and built the structures, to the religious officials who performed rituals in them afterward. These great sites not only became the subjects of awe, myth, and admiration, they were also an important part of many people's lives, inspiring interaction and engagement in myriad forms. The influence of Yongle's architectures did not die with him, but continued to shape the memory of the emperor for centuries afterward, even to this day.



# PERFECTING THE PAST

## The Design and Construction of the Northern Capital

IN THE ELEVENTH MONTH OF THE EIGHTEENTH YEAR OF HIS REIGN (1420), the Yongle emperor announced to All Under Heaven the completion of the palace—later known as the Forbidden City—in his new Northern Capital, Beijing: “Since the beginning of the construction, soldiers and civilians from all over the country have taken an active part in it. By the grace of Heaven and support of the people, the palace is now complete.”<sup>1</sup> On New Year’s Day of the nineteenth year (1421), he installed the spirit tablets in the Ancestral Temple (Tai Miao), finalizing the transfer of the capital to the north. He invited his ministers to the most illustrious building in the palace, the Hall of Revering Heaven (Fengtian Dian), and banqueted them in celebration.<sup>2</sup> Upon imperial order, three of Yongle’s most loyal officials composed a lengthy encomium of the new capital, “Rhapsody of the Great Unification of the Imperial Capital” (Huangdu dayitong fu), in which they praised the emperor’s sagelike virtue and described in rich detail the splendor of the imperial palaces.<sup>3</sup> Yongle basked in the glory of his new capital, the materialization of his ambitious imperial vision and a symbol of power, prestige, and moral redemption within his numinous empire.

Prior to becoming Yongle’s capital, Beijing had already had a long history as a capital city, serving as the seat of power of the Khitan Liao (906–1125), the Jurchen Jin (1115–1234), and the Mongol Yuan (1279–1368) (fig. 1.1). In the Liao dynasty it had been a modest southern capital located in the southwest corner of what is now Beijing. The Jin expanded the city significantly and designated it their Central Capital. In the Yuan dynasty Khublai Khan (r. 1260–1294) established his capital, Dadu, around Taiye Lake, an artificial body of water located to the northeast of the Liao and Jin capitals, which had been created as a pleasure spot for the Jin dynasty rulers.<sup>4</sup>

The Yuan palatial city consisted of three palaces organized around the lake: the main palace (Gongcheng) was located to its east, while Abundant Fortune Palace (Longfu Gong) and Palace of Promoting Sagacity (Xingsheng Gong) were located to its west.<sup>5</sup> The walled palace city was situated in the southern part of a larger walled rectilinear imperial city. When Yongle's father, the Hongwu emperor (r. 1368–1398), founded the Ming dynasty, he moved the capital to the south, in what is now Nanjing.

Yongle's own connections to Beijing began in the seventh year of the Hongwu reign (1374), when he was only fourteen. In that year Hongwu enfeoffed the young prince in the former Yuan capital in the region of Yan.<sup>6</sup> The Prince of Yan's palace, completed in 1379, was constructed directly atop the remains of the Yuan imperial city and followed much of its lavish design.<sup>7</sup> According to detailed textual descriptions, the palace contained a main hall of eleven bays in width, in front of which was a large gate and behind which, aligned south to north, were two halls of nine bays each. Behind these were three more nine-bay halls, front, middle, and rear, as well as other subsidiary halls and covered corridors comprising hundreds of bays. This grandiose layout far exceeded the sumptuary restrictions for the Ming princes' palaces established by Hongwu in the fourth year of his reign; it also surpassed, at least with regard to the number of bays along the façade of the main hall, the imperial palace in Nanjing, whose main hall was only nine bays across the front. This is, notably, the only Ming princely palace for which such a detailed textual description exists. It was likely intended to serve as evidence for the extravagance of the palace, for which the Prince of Yan was heavily criticized, particularly by his nephew, the future Jianwen emperor.<sup>8</sup>

Soon after he took the throne from Jianwen in 1402, Yongle began discussing the issue of transferring the capital back to the north.<sup>9</sup> This prospect must have been appealing for several reasons. By moving the capital away from the south, Yongle could distance himself from the troubling event of his usurpation, in which he burned down the Nanjing palaces with his nephew inside, while also returning to his former fief as the Prince of Yan, where he had already lived for more than two decades. Being stationed in the north furthermore offered him a better position from which to defend against the Mongols, who had retreated to the northern steppes at the beginning of the Ming dynasty but continued to cause problems at the northern frontier. Only one year after he ascended the throne, Yongle changed the name of his former fief from Northern Peace (Beiping) to Northern Capital (Beijing), thereby establishing the city's importance within the political geography of his empire, even though the main capital officially remained in Nanjing for nearly twenty more years.<sup>10</sup>

According to the official Ming histories, "When the Northern Capital was built, the structure of all the ancestral temples, altars to heaven and earth, palace halls, and gate towers followed those of the Southern Capital. However, [those in the Northern Capital] surpassed [those in the Southern Capital] in grandeur and magnificence."<sup>11</sup> Indeed, Yongle delib-

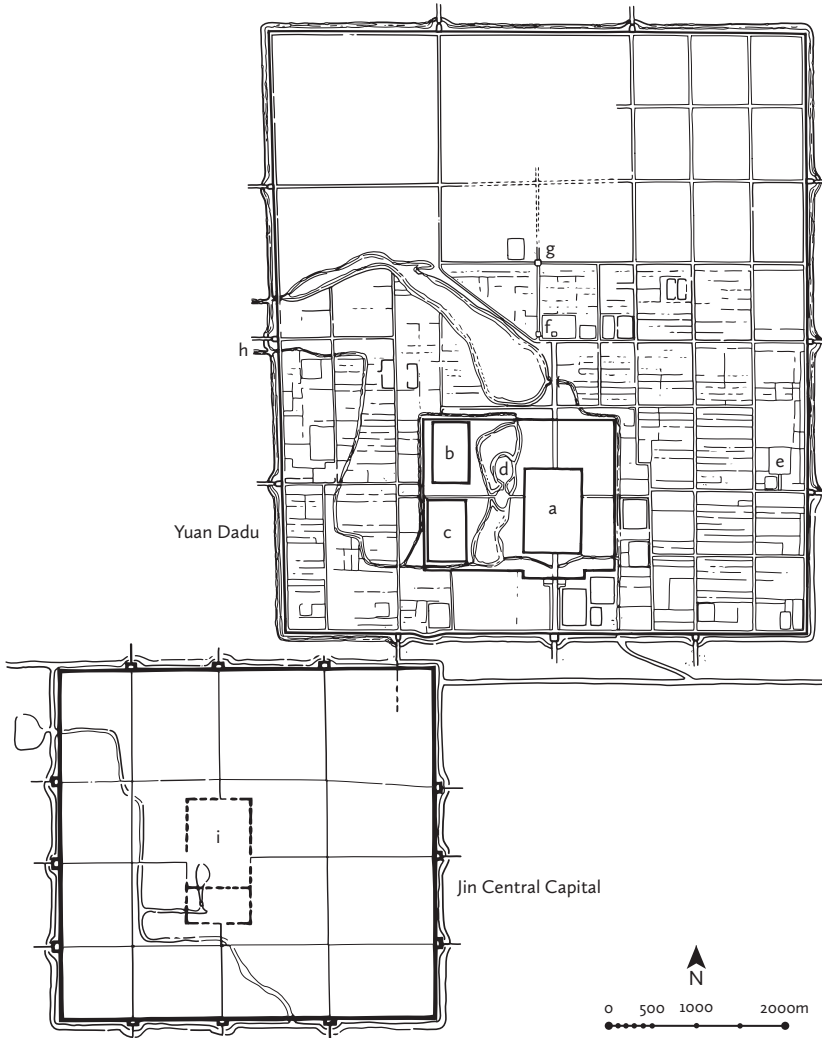


Figure 1.1. Plans of former Jin (1115–1234) and Yuan (1279–1368) dynasty capitals in what is now Beijing. a. Main Palace. b. Palace of Promoting Sagacity. c. Abundant Fortune Palace. d. Taiye Lake. e. Ancestral Temple. f. Drum Tower. g. Bell Tower. h. Golden River. i. Jin dynasty palace. Pan, *Zhongguo gudai jianzhu shi*, 18 and 21.

erately modeled the architecture in his new capital on that of his father. Ideologically speaking, this act gave built expression to filiality and continuity, while disguising nepoticide and disruption. Practically speaking, it greatly facilitated the planning process because most of the methodological basis for the designs of the palaces and ritual buildings had already been painstakingly worked out under Hongwu. The intense amount of imperial construction in the early Ming dynasty enabled craftsmen to hone their specialized skills, leading to an architectural renaissance that resulted in a new simplified and standardized court style that reflected Yongle’s great power. Although in many ways Beijing thus marked the culmination of a complex process of planning and construction that originated in the Hongwu reign, Yongle’s capital did not passively mimic the architecture of Nanjing. Rather, it perfected upon that architecture in order to project Yongle’s status as the supreme ruler of All Under Heaven and his new capital’s place at its center.

## City Planning in Nanjing

Selecting the location of a capital and laying out its most important buildings, the palaces and the altars, were among the most important problems the emperor of a new dynasty faced. These decisions not only determined where an emperor positioned his reign in history, they were also thought to influence the fate of his dynasty. For Hongwu a great deal lay at stake in these decisions because his capital had to convey the sense that he was restoring the standards of the past, particularly of the Tang (618–907) and Song (960–1279), before the century-long period in which the country was “corrupted” by the Mongols.<sup>12</sup>

Exactly how did a capital city take shape? Throughout most of Chinese history this process was handled in two main ways, both of which looked to the past. The first can be called the “tangible” method—that is, by using the buildings of earlier capitals as direct models. This involved measuring the foundations and making blueprints of important buildings in former capitals with which the new dynasty wanted to be associated, then constructing buildings in the new capital according to those plans. When the Ancestral Temple and the Hall of the Supreme Ultimate (Taiji Dian) were being designed for the Northern Wei (386–534) capital at Pingcheng, for instance, an official was sent to Luoyang to measure the foundations of the same buildings in the former Wei (222–265) and Jin (265–420) capitals.<sup>13</sup> Similarly, during the construction of the Northern Song (960–1127) capital at Bianliang the emperor ordered an official to make diagrams of the palaces in Luoyang, and during the construction of the Jin dynasty Central Capital, craftsmen were sent to do the same in Bianliang.<sup>14</sup> This method of planning indicates that the sacred power of great past dynasties was thought to be embodied in their most important ritual buildings, and that by making blueprints and erecting copies of these buildings, later rulers could transfer this sacred power to their own dynasties.

The second way in which Chinese capitals were designed can be called the “intangible” method—that is, based on descriptions from canonical texts such as the *Book of Rites* (Li ji) and the *Rites of Zhou* (Zhou li). This kind of classicism began in the Han dynasty (206 BCE–220 CE) and continued throughout the rest of dynastic Chinese history.<sup>15</sup> Much like Greek temple architecture is employed in the United States capital to symbolize democracy, Chinese emperors lent legitimacy to their rule through the adoption of classical Confucian architecture. The problem with planning cities and erecting buildings based on texts is that the descriptions were both scarce and vague, containing few, if any, details pertaining to the actual construction of the buildings. This meant that considerable liberties were taken when it came to executing the plans. For instance, although we know that a number of historical capitals are based on the ideal city plan described in the *Rites of Zhou*, they all altered this plan in significant ways.<sup>16</sup> Han dynasty Luoyang contained two palaces instead of the prescribed one, and its overall shape was irregular.<sup>17</sup> The palace in Tang Chang’an was

likewise located in the north instead of at the center of the city as prescribed.<sup>18</sup> Most capital cities can therefore be considered a variation on a theme, rather than an exact copy of a past model.

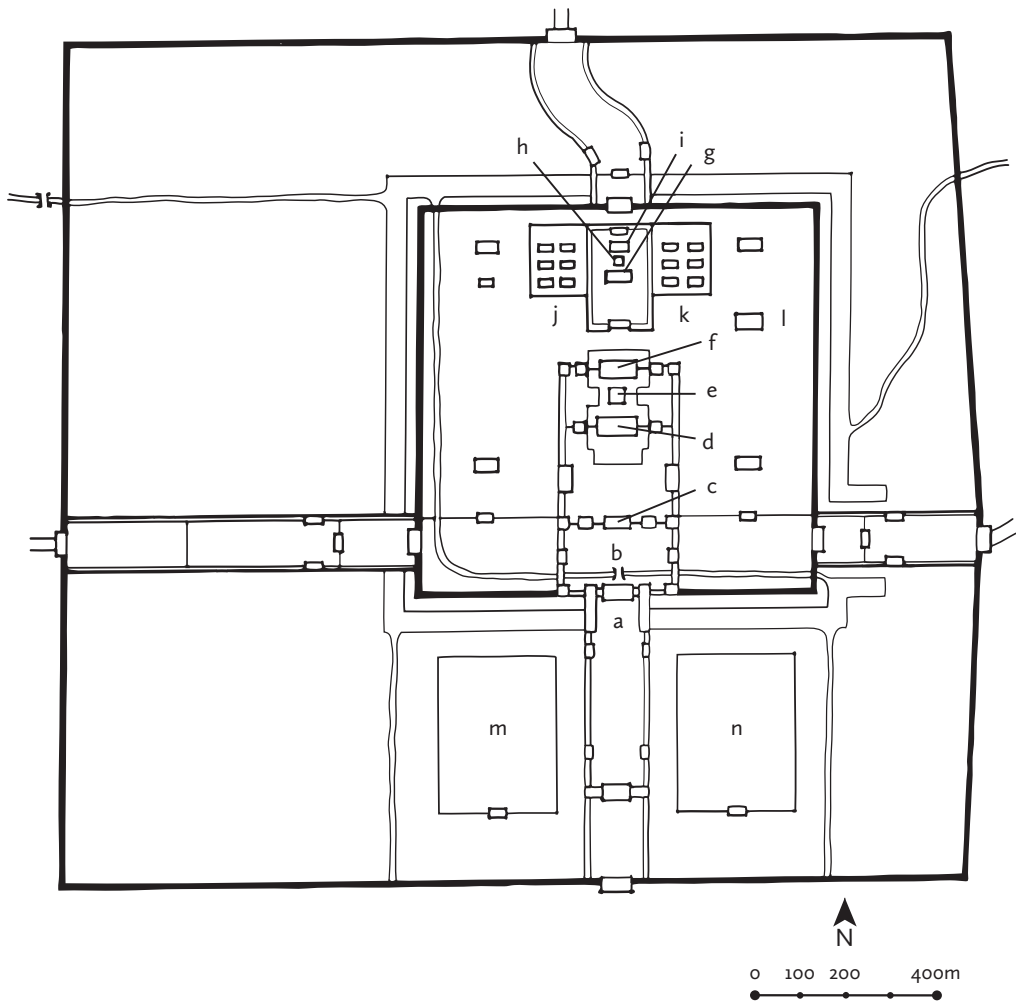
Hongwu seems to have been troubled by where and how to build his capital. In the eighth month of the first year of his reign (1368), he sent down an order designating Yingtian (Nanjing, Jiangsu) the Southern Capital and Bianliang (Kaifeng, Henan) the Northern Capital; he announced his intention to reside in one during the spring and the other during the fall.<sup>19</sup> But the next year, Hongwu decided to make his hometown, now Fengyang, Anhui, the main capital.<sup>20</sup> After the construction of Fengyang (the Central Capital) had been under way for six years (1369–75), Hongwu traveled there to check out the progress in person. When he returned to Nanjing (the Southern Capital), however, he decided to stop the construction of Fengyang altogether, citing the enormous costs.<sup>21</sup> Hongwu spent the next two years (1375–77) reconstructing the palaces and altars in the Southern Capital, incorporating into their design much of the layout of the abandoned Central Capital.<sup>22</sup> He instructed his advisers to make the architecture “plain and solid” (*pusu jianzhuang*), devoid of excessive ornamentation.<sup>23</sup> It was not until the eleventh year of Hongwu’s reign (1378) that construction was finally completed and Nanjing was officially designated the main capital (*jingshi*). In the twenty-fifth year of Hongwu’s reign (1392), the capital at Nanjing once again underwent reconstruction, during which time more halls and gates were added.<sup>24</sup>

The site Hongwu ultimately selected for his capital had already served as a capital city during the Northern and Southern dynasties (420–589) and the Five Dynasties period (tenth century). It was situated in a geomantically favorable position, with the Zhong Mountains to the northeast, Xuanwu Lake at the north, the Yangzi River at the northwest, and the Qinhuai River at the south (fig. 1.2). The entire capital city was surrounded by a massive brick wall thirty kilometers in length that extended far to the west of the imperial palaces toward the Yangzi River. The Nanjing administrative center was located in the east of the city. It comprised a walled palatial city within a larger walled imperial city, with government offices extending in front. The palatial city was entered through the large U-shaped Meridian Gate (Wu Men) (fig. 1.3). Aligned along the central axis after the gate were the Golden River Bridge (Jinshui Qiao), the Gate of Revering Heaven (Fengtian Men), and the Three Halls (San Dian): the Hall of Revering Heaven (Fengtian Dian), the Hall of Magnificent Canopy (Huagai Dian), and the Hall of Scrupulous Behavior (Jinshen Dian), where the emperor conducted state affairs. Behind these buildings was the residential ward of the emperor. It was entered through the Gate of Heavenly Purity (Qianqing Men), behind which was a smaller version of the Three Halls: Palace of Heavenly Purity (Qianqing Gong), Examining Oneself Hall (Shengong Dian), and Palace of Earthly Tranquility (Kunning Gong). On either side of these halls were the Six Palaces (Liu Gong), where the women of the court lived.<sup>25</sup>



Figure 1.2. Plan of Ming dynasty Nanjing. a. Palace City. b. Imperial City. c. Altar to Soil and Grain. d. Ancestral Temple. e. Zhengyang Gate. f. Bell Tower. g. Drum Tower. h. Qinchui River. i. Xuanwu Lake. j. Yangzi River. Pan, *Zhongguo gudai jianzhu shi*, 26.

The difficulties involved in the process of planning Hongwu's capitals can be better understood through the example of the Ancestral Temple. This was where the emperor made sacrifices to his ancestors who were memorialized in the form of inscribed rectangular tablets. In accordance with the prescription "On the left, the Temple to the Ancestors, on the right, the Altar to the Land" (*zuozu youshe*) outlined in the *Rites of Zhou*, the Ancestral Temple was traditionally located in the eastern suburbs of a capital city (i.e., to the left of the ruler, who faces south). Since at least the Han dynasty, the layout of the state Ancestral Temple followed one of two



architectural forms. In the first, the multihall type, each tablet was housed in its own small hall, and the halls were positioned according to the alternating generation (*zhaomu*) order: the hall dedicated to the first ancestor was located in the “center,” facing south, that of the second ancestor situated to the right (west) of center, the next to the left (east) of the center, and so on. The second form, the two-hall type—known in classical literature as “same hall, different rooms” (*tong tang yi shi*)—comprised two large halls (*miao* and *qin*) aligned south to north. The tablets were installed in the rear hall and organized into the alternating generational order, one tablet for each bay. Once the tablets exceeded nine, a third hall (*tiao*) could be added behind the second hall to house the retired tablets.

Shortly after Hongwu had ascended the throne, he instructed the Imperial Secretariat Li Shanchang (1314–1390) to compile a study of canonical Confucian ritual structures from the Song and pre-Song periods to be used for the planning of the important buildings in his capitals.<sup>26</sup> Li’s finished study, titled *Discussions on the Altars for Sacrifices to Heaven*

Figure 1.3. Plan of Ming dynasty Nanjing palatial city. a. Meridian Gate. b. Golden River Bridge. c. Gate of Revering Heaven. d. Hall of Revering Heaven. e. Hall of Magnificent Canopy. f. Hall of Scrupulous Behavior. g. Palace of Heavenly Purity. h. Examining Oneself Hall. i. Palace of Earthly Tranquility. j. Western Six Palaces. k. Eastern Six Palaces. l. Hall for Honoring the Forebears. m. Altar to Soil and Grain. n. Ancestral Temple. Pan, *Zhongguo gudai jianzhu shi*, 113.

and *Earth and the Ancestral Temple* (Jiaoshe zongmiao yi), reviewed the canonical texts and historical precedents for the ritual structures and made a recommendation for each. For the Ancestral Temple, Li proposed the multihall type, probably because it was thought to be older than the two-hall type.<sup>27</sup> The first Ming Ancestral Temple was completed in Nanjing in the first year of the Hongwu reign (1368). Following Li's suggestion, it consisted of four halls, dedicated to Hongwu's great-great-grandfather, his great-grandfather, his grandfather, and his father, arranged in the alternating generational order.<sup>28</sup> The temple was located quite far from the palace, in the northeast of the Imperial City, diagonally opposite the Altar to Soil and Grain (Sheji Tan) at the southwest.<sup>29</sup>

Not long after the first Ancestral Temple was built, Hongwu became dissatisfied with it. He complained that on account of its location outside the palace walls, the temple was not suited for holding the daily rites to the forebears—although it was suited for performing the more infrequent seasonal rites to the ancestors.<sup>30</sup> Here, Hongwu was making a distinction between his personal forebears, in his capacity as a son, and his ancestors as imperial predecessors, in his capacity as ruler. For the construction of the new Central Capital, Hongwu ordered the official Tao Kai to seek out a historical precedent for a more conveniently located temple to the forebears.<sup>31</sup> Tao reported back that the Song emperors had established a temple called the Hall for Filial Longing for the Imperial Forebears (Qinxian Xiaosi) within the palace, at which regular offerings were made to ancestral portraits. Tao suggested that the emperor similarly establish a Hall for Honoring the Forebears (Fengxian Dian) inside the palace walls to the left (east) of the emperor's residence, the Palace of Imperial Tranquility. He proposed that like its Song model, the Ming hall should follow the two-hall form and contain ancestral portraits, to which regular offerings of food should be made. The emperor followed Tao Kai's suggestion.<sup>32</sup>

When the Central Capital was being constructed, significant alterations were also made to the design of the main Ancestral Temple. The boldest change was to position the Ancestral Temple and the Altar to Soil and Grain directly outside the main entrance to the palatial city, on either side of the central axis. This was the first time in Chinese history that these two buildings were located so close to the palatial city.<sup>33</sup> The layout of the Ancestral Temple in the Central Capital was changed from the multihall to the two-hall type, with each hall consisting of nine bays.<sup>34</sup> The main appeal of the two-hall form was that it was considered to be a return to the traditions of the Tang and Song dynasties.<sup>35</sup> It had practical advantages: many tablets could be fit within one hall, thereby using up much less space than the multihall type, and the tablets could be added or retired without requiring major structural alterations. After Hongwu had finally decided that Nanjing would serve as the main capital, he incorporated into its design the changes to the ancestral temples that had been made in the Central Capital.<sup>36</sup> Like the Central Capital, the final form of Nanjing possessed twin temples to the ancestors: the Hall for Honoring the Forebears,

to the east of the emperor's residence inside the palace, and the Ancestral Temple, to the east of the central axis outside the palace (see fig. 1.3).<sup>37</sup>

The first Ming capital in Nanjing thus took shape over a period of several decades and involved continuous planning and reworking. The construction of the Central Capital was a pivotal moment in this process, in which many new ideas were worked out. Throughout the construction of Hongwu's capitals historical precedents were sought out to justify the design of the buildings, creating the illusion of an unbroken architectural line extending well into the past. In reality, Hongwu made significant decisions regarding the layout of the city, such as constructing a second ancestral hall within the palace walls, for the sake of convenience or practicality.

## Planning and Constructing Beijing

In contrast to the false starts and failed attempts of Nanjing, the city planning of Beijing was a relatively smooth process because Yongle adopted much of his father's ready-made plan. With regard to how the process was carried out, a valuable record discovered in Fangshan County in the 1970s helps fill the lacuna in the official histories. The record is taken from an epitaph of a eunuch named Ni Zhong, which documents that in the fifteenth year of Yongle's reign (1417), the emperor dispatched Ni to Nanjing to measure the palace halls and to document their scale relative to one another. Yongle instructed Ni to prepare (now lost) blueprints of the buildings and to take them back to Beijing, after which the plans were used to lay out the new capital.<sup>38</sup> Thus while Hongwu relied largely on the "intangible" method when designing his capital, Yongle instead followed the "tangible" method to create a strong symbolic link between his capital and that of his father, even though he was in fact returning the Ming capital to the former powerbase of the Mongols.

According to the official records, the construction of Beijing began in the eleventh month of the fourteenth year of the Yongle reign (1416) and was completed in the eleventh month of the eighteenth year (1420). This has led to the incorrect assumption that the city was built in only four years.<sup>39</sup> In reality, at least a decade earlier, craftsmen and laborers had begun making the preparations for its construction by felling trees, quarrying stones, firing ceramic roof tiles, hauling bricks, pounding earthen foundations, and fabricating the parts of the timber-frame halls. The resources, both human and material, required to build the new capital came from many different corners of the country, representing the prosperity of Yongle's realm. The high degrees of preparation and organization involved in the construction of the capital enabled the erection of the buildings to be handled with great speed and efficiency, which also spoke to Yongle's great capability as a ruler.

In the fourth year of Yongle's reign (1406), an edict was issued to start securing the craftsmen necessary for the project:

I order the Ministry of Works to call up all the craftsmen in every trade. Select the soldiers from all the guards of the capital, from every guard under the jurisdiction of the Regional Military Commissions in Henan, Shandong, Shaanxi, Shanxi, the Regency of the Central Capital, and the Metropolitan Area. Select adult male commoners from the Provincial Administration Commissions in Henan, Shandong, Shaanxi, and Shanxi, the Metropolitan Area of Fengyang, Huaian, Yangzhou, Luzhou, Anqing, Xuzhou, and Hezhou. In the fifth month of next year they will all go to the capital to hear their assignments. The rotations are for a six-month period. Each person will receive five *dou* of rice a month.<sup>40</sup>

This statement reveals that both civilian and military laborers were requisitioned to take part in the construction of the capital. Most of the soldiers came from garrisons in the north, where they were stationed to protect the northern frontier. The civilian craftsmen came from a wide range of places in the northeast and southeast of the country.

The method of drafting and organizing the craftsmen used for the construction of Beijing had been established in the century or so prior to Yongle's reign. Beginning in the Yuan dynasty, censuses were taken of the country's craftsmen and their names entered into an official registry of artisan households (*jianghu*).<sup>41</sup> In the early Ming these registered craftsmen were further divided into two types: "residential craftsmen" (*zhuzuo jiang*) and "rotating craftsmen" (*lunban jiang*).<sup>42</sup> Residential craftsmen lived in or near the capital city and created buildings and luxury goods for the imperial family.<sup>43</sup> Although they were far fewer in number than rotating craftsmen, residential craftsmen participated the most frequently in imperial projects and were therefore the leaders in artistic and technological knowledge. In contrast, rotating craftsmen were usually conscripted laborers who traveled to the capital on a temporary basis depending on the need for their particular skill.<sup>44</sup>

Historical records testify that the number of workers involved in the building of the Northern Capital was enormous, totaling three hundred thousand registered craftsmen and one million other laborers.<sup>45</sup> The most reliable source for estimating what kinds of craftsmen were employed is a list of registered craftsmen dated to 1393 during the late Hongwu reign, about a decade before construction began in Beijing. The record lists 232,819 individuals from sixty different occupations, approximately half of whom were involved in the building trade:

- 33,928 carpenters (*mu jiang*) on a five-year rotation
- 9679 sawyers (*ju jiang*) on a four-year rotation
- 7590 tile makers (*wa jiang*) on a four-year rotation
- 5137 painters (*youqi jiang*) on a four-year rotation
- 102,780 bamboo workers (*zhu jiang*) on a four-year rotation
- 4541 ironsmiths (*tie jiang*) on a four-year rotation

- 1376 diggers (*tugong jiang*) on a three-year rotation
- 1112 framers (*dacai jiang*) on a three-year rotation
- 6017 stone masons (*shi jiang*) on a two-year rotation
- 2370 kilnsmen (*heiyao jiang*) on a one-year rotation
- 1710 glaze tile makers (*liuli jiang*) on a one-year rotation<sup>46</sup>

These figures represent the less skilled rotating craftsmen, the type who were instructed to travel to the capital for six months at a time.

Most of the residential craftsmen who took part in the construction of Beijing were from the region of the lower Yangzi River delta known as Jiangnan. This was where the country's most talented craftsmen lived because they had already participated in the construction of the first two Ming capitals.<sup>47</sup> Their biographies, preserved in local gazetteers, highlight their extraordinary talents and place particular emphasis on their recognition from Yongle.<sup>48</sup> Among the most renowned master craftsmen was the carpenter Kuai Xiang, who was later commemorated in a large hanging scroll in which he stands prominently in front of the Forbidden City (fig. 1.4).<sup>49</sup> Other famous Jiangnan craftsmen included the stonemason brothers Lu Xian and Lu Xiang, the carpenter Cai Xin, and the tile maker Yang Qing. The most influential non-Jiangnan master craftsman was undoubtedly the Vietnamese eunuch Nguyen An (Ruan An), who has often been called the "architect" of Beijing, on account of the great many projects he oversaw.<sup>50</sup>

If Yongle in the construction of Beijing largely continued Hongwu's system of craftsmen, even down to the specific individuals involved, his approach to gathering and producing construction materials reveals that he wanted his capital to surpass that of his father in magnificence. In the same edict in which Yongle ordered the country's craftsmen to go to the capital to receive their assignments, he also dispatched several high-ranking officials to begin the task of preparing the construction materials:

The Minister of Works Song Li was sent to Sichuan, the Vice Minister Gu Pu to Jiangxi, the Vice Ministers Shi Kui and Jin Chun to Huguang [Hubei and Hunan], the Vice Censor-in-Chief Liu Guan to Zhejiang, and the Assistant Censor-in-Chief Shi Zhongcheng to Shanxi, all to supervise the soldiers and commoners in selecting timber, for a wage of five *dou* of rice and three *din* of cash per person per month. The Marquis of Taining Chen Gui and the Assistant Minister of Punishments of Beijing Zhang Sigong instructed the soldiers, commoners, and craftsmen in the production of bricks and roof tiles, at five *dou* of rice per person per month.<sup>51</sup>

As suggested in this edict, Yongle went to great lengths to obtain the highest possible quality materials from the best sources in his empire, particularly timber. He apparently did not recycle any construction materials from Dadu, as had been done with capital cities in the past, but rather

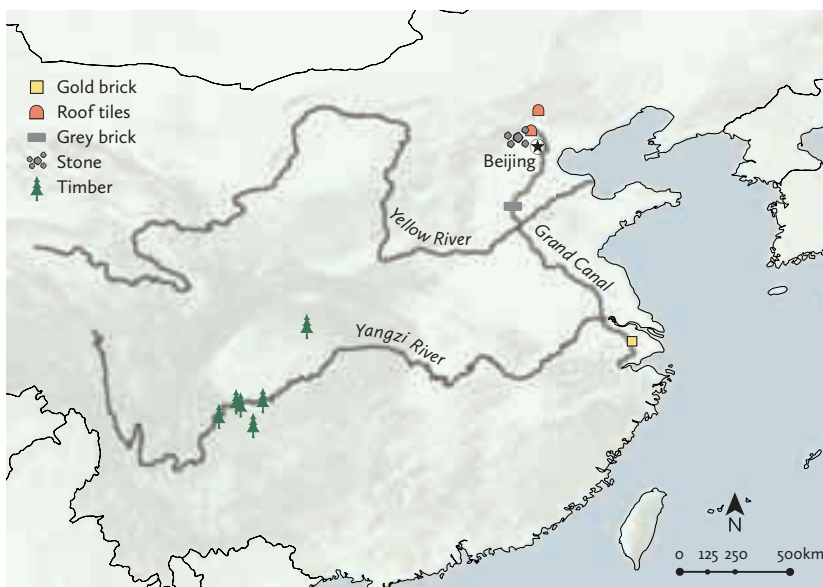


created everything from scratch. Before any materials could be sent, however, the main waterways leading to the capital, the Tonghui River and the Grand Canal, had to be dredged, as they had silted over due to decades of neglect.<sup>52</sup>

The most common material made for the Ming palaces was standard gray brick (*qing zhuan*). It was used everywhere from walls to plinths to floors.<sup>53</sup> Yongle ordered these bricks to be produced in kilns in Linqing, Shandong, instead of the kilns in Jiangnan that his father had used (map 1.1).<sup>54</sup> In the Yongle reign, Linqing possessed an estimated three hundred large-scale kilns.<sup>55</sup> Each kiln could produce approximately twelve batches of one thousand to four thousand bricks in a month, depending on the size of the brick and the size of the kiln.<sup>56</sup> The bricks themselves came in several different standard types and sizes.<sup>57</sup> Linqing was conveniently located at the junction of the Grand Canal and the Huitong River, reopened in 1416 for the purpose of shipping bricks north.<sup>58</sup> According to a local gazetteer, in the Yongle reign one million bricks from Linqing were requisitioned every year for the city walls of Beijing.<sup>59</sup> To transport them, imperial regulations specified that grain boats passing through Linqing had to take bricks with them to the new capital.<sup>60</sup>

The most valuable type of brick used in the Beijing palaces were “gold bricks” (*jinzhuan*), so named because of how expensive they were to produce. These large square bricks possessed a dark color and a smooth surface.<sup>61</sup> In contrast to the gray bricks, which served a variety of purposes, gold bricks were exclusively used to pave the floors of the most illustrious halls in the palaces. The gold bricks were created in Suzhou and were each stamped with the phrase “manufactured under the supervision of the Suzhou prefectural office” (*Suzhou fu duzao*) as a means of quality control.

Figure 1.4. Zhu Bang (attributed), portrait of the master carpenter Kuai Xiang in front of the Beijing imperial palace (1480–1580). Hanging scroll, ink and color on silk, 170 × 110.8 cm. British Museum, London.



Map 1.1. Sources of the construction materials for Yongle's Beijing. Map by Dana Heusinkveld and Ani Rucki.

The process of creating such numbers of bricks was enormously complicated and took as long as a year and a half.<sup>62</sup> Because of their large size, only about one hundred gold bricks could be fired at a time.<sup>63</sup> The bricks were sent to Beijing via the Grand Canal and then directly into the city via the Tonghui River, where they were unloaded at the Square Brick Depot (Fangzhuan Chang) located north of the palace<sup>64</sup>

The stone used for the palace was mainly quarried in Fangshan County, approximately seventy kilometers southwest of Beijing.<sup>65</sup> The most conspicuous use of stone was in the elaborately carved ramp known as the imperial path (*yudao*), which led up the platform where the main halls of the outer courtyard were situated. Although no information on the transportation of the massive slabs of stone required for the reconstruction of this ramp survives from the Yongle reign, we know that for the reconstruction of the platform in the Wanli reign (1572–1620) the process involved thirty thousand men and took twenty-eight days. To move the stone, the laborers had to wait until winter so that they could flood the roads between the quarry and the palace with water and slide the stone across the ice.<sup>66</sup> The same process was likely required in the Yongle period.

In contrast to brick and stone, roof tiles (*wa*) were created in or near the capital. The glazed tile (*liuli wa*) factories were located just southwest of the palaces, while unglazed tile (*hei wa*) factories were located north of the city, near today's Yaotai.<sup>67</sup> Master craftsmen provided these factories with information about the building's dimensions and roof type, and the number of tiles needed was calculated based on this information.<sup>68</sup> The roof tiles came in four main types. The plate tiles (*ban wa*) were laid with the concave side face up, while the cylindrical tiles (*tong wa*) were laid face down, overlapping with the plate tiles.<sup>69</sup> The eaves tiles (*yan wa*), usually impressed with decorative designs, consisted of drip tiles (*dishui*) at the end of the plate tiles and circular tiles (*goutou* or *wadang*) at the end of the cylindrical tiles.<sup>70</sup> The polychrome glaze that covered these tiles not only added beauty and distinguished the rank and the function of the buildings within the palace, it also made the roof tiles water resistant, which was necessary to help protect the timber frame.<sup>71</sup>

Most of the timber for the buildings was gathered in Sichuan, more than eighteen hundred kilometers from Beijing, between 1406 and 1407. It was shipped down the Yangzi, then up the Grand Canal, and finally via the Tonghui River into the capital. The first shipment of wood likely arrived to the capital in the first month of the sixth year (1408), when the Minister of Works was called from Nanjing to Beijing to inspect the incoming lumber.<sup>72</sup> This means that it took approximately two years to extract the logs from the forest and ship to the new capital. Other reports note that it could take up to five years for the timbers to reach Beijing.<sup>73</sup> The logs were stored in two main places within the capital—the Sacred Timber Yard (Shenmu Chang), located outside today's Chongwen Gate, and the Great Timber Yard (Damu Chang), located in today's Chaoyang Gate region.<sup>74</sup> The storehouses functioned not only to store the wood but were also the

places where all the prefabrication of the parts of the timber frame was carried out.<sup>75</sup> Therefore the onsite “construction” of the palaces was much more a process of assembling the parts than designing and building from scratch.

Over the course of the roughly fifteen-year period in which the Northern Capital was being built, Yongle made three inspection tours to check out the progress, in the seventh (1409), eleventh (1413), and fifteenth (1417) years of his reign.<sup>76</sup> During his first two inspection tours to Beijing, Yongle stayed in the very same palace he had occupied as the Prince of Yan. But in the eighth month of the fourteenth year (1416), he ordered his ministers to tear down his former residence so that he could begin constructing the new imperial palaces in its place.<sup>77</sup> At this time Yongle ordered the construction of a new Western Palace (Xigong), which could serve as a residence and place for him to hold court while his imperial palace was being built.<sup>78</sup> The Western Palace was completed in the fourth month of the fifteenth year (1417).<sup>79</sup> It was located to the west of Taiye Lake, atop the remains of the former Yuan dynasty Abundant Fortune Palace, and contained several gates and halls named after those in Nanjing.<sup>80</sup> Two months later, construction on the new capital began. The establishment of the Western Palace thus marked a major turning point: not only did Yongle never again reside in Nanjing after the Western Palace had been built, but the Western Palace became the political center of the empire in the final years leading up to the completion of the main palaces in Beijing.<sup>81</sup>

## Sanctioning the New Capital

The construction of Beijing involved matters of timber, brick, and stone as well as generating approval for it, especially among the disaffected literati from the region of Nanjing. An important artifact that illustrates Yongle’s efforts in this regard is a collection of landscape paintings called the *Eight Views of the Northern Capital* (Beijing bajing tu), completed in 1414. In 1409 the emperor ordered the court artist Wang Fu to accompany him on his second inspection tour to Beijing to record some of its major sites in visual form. The result was a set of eight monochromatic ink paintings done in the handscroll format: “Sunset at Jintai” (Jintai xizhao), “Clear Waves at Taiye Pond” (Taiye qingbo), “Spring Clouds at Qionghua Island” (Qionghua chunyun), “Cascading Rainbow at Mount Yuanquan” (Yuanquan chuihong), “Layered Shades of Green at Juyong Pass” (Juyong diecui), “Misty Trees at Jimen” (Jimen yanshu), “Dawn Moonlight at Lugou Bridge” (Lugou xiaoyue), and “Clearing Snow in the Western Hills” (Xishan jixue) (fig. 1.5).<sup>82</sup>

Accompanying each scene was an inscription that highlighted the great achievements made by Yongle in relation to the new capital. For instance, one inscription explains: “The Sagely Son of Heaven arrived here like a soaring dragon. He commanded the construction of Beijing as the capital where people from myriad directions convened. Carriages patrolled



Figure 1.5 (top). “Clear Waves at Taiye Pond”; (bottom). “Layered Shades of Green at Juyong Pass,” from Wang Fu, *Eight Views of the Northern Capital* (1414). Handscroll, ink on paper, 42.1 × 2006.5 cm (entire scroll). National Museum of China. Lin, “Gifts of Good Fortune and Praise-Songs for Peace,” 130–31.

in the surrounding areas; scholarly officials lined in procession. . . . The roads in all four directions were even and straight, enabling the control of all regions. This is a firm foundation for imperial descendants to reign for ten thousand generations.”<sup>83</sup> This inscription clearly places Yongle’s capital at the center of the universe, where people from everywhere gathered and the roads from all directions led, and establishes it as the base of imperial power for future generations.

The *Eight Views of the Northern Capital* included a frontispiece written by the Hanlin scholar Hu Guang and, at the end, odes to the new capital composed by thirteen of Yongle’s most trusted officials. These odes were written in the Eminent Court Official Style (Taige ti), a graceful writing style that, according to the art historian Lina Lin, was developed by scholars in the Yongle reign to “describe an age of peace and prosperity.”<sup>84</sup> An excerpt from the ode written by the official Yang Rong leaves little doubt about the political implications of the work: “I have carefully studied the various advantageous terrains of the emperor. No place is superior to Jinling [Nanjing] as an imposing and beautiful capital site. Yet no place surpasses Yanjing [Beijing] for having broad deep terrain and steep, secure

passes which will firmly protect the level, broad plain forever. Although Chang'an is kept secure by the Hangu Pass and Mount Yao, and Luoyang is the center of the earth, no capital surpasses Jinling or Yanjing for being strategic imperial capitals which will always be peaceful burial sites."<sup>85</sup> As the art historian Kathryn Liscomb has argued, in praising Beijing as the imperial capital, Yang Rong highlighted its military defensibility as well its geomantic suitability as a burial place for the emperor.<sup>86</sup> He also established a parallel between Nanjing and Beijing as twin capitals of the Ming empire.

At least three versions of the *Eight Views* were produced in the early fifteenth century.<sup>87</sup> The record was likely intended to help convince officials in Jiangnan who were opposed to the movement of the capital about the merits of Beijing.<sup>88</sup> It is noteworthy that the paintings seem to reflect the watery landscapes of the Southern Capital much more so than the arid landscapes of the Northern Capital, perhaps in an effort to make it more appealing for the Jiangnan officials.

In 1417 several of the officials who contributed to the *Eight Views* composed a collection of odes, titled *Ode to Imperial Virtues and Auspicious Responses* (Shengde ruiying song), that described miraculous appearances of radiant light, mythical animals, and many other things that signaled Heaven's approval of Beijing.<sup>89</sup> In the same year, shortly after the Hall of Revering Heaven was completed, the official histories record that the Golden River and Taiye Lake within the palatial city froze and created splendid shapes of towers, dragons, phoenixes, and flowering plants within the ice. Yongle invited all his officials to go see these miraculous phenomena, which they took to be an auspicious sign and repeatedly expressed their congratulations to the emperor.<sup>90</sup> These various visual and textual records reveal that in the years leading up to the official transfer of the capital in 1420, Yongle and his officials spent great efforts fabricating an image of Beijing as a divinely sanctioned capital city.

## The Layout of Yongle's Beijing

Having served as both the capital of the Yuan dynasty and his kingdom when he was the Prince of Yan, Yongle's Beijing had a very recent architectural past with which he had to deal. Yuan Dadu had comprised three concentric rectangular enclosures formed with tamped-earthen walls, with the palaces located in the center of the city's southern part (fig. 1.6). When the general Xu Da (1332–1385) captured and occupied Dadu in the early Ming dynasty, he shifted the northern boundary of the former capital about three kilometers to the south as a matter of defense.<sup>91</sup> Under Yongle the southern boundary was also moved about half a kilometer to the south, although the east and west walls were left in place. This means that Dadu and Beijing were the same width, but Beijing was considerably

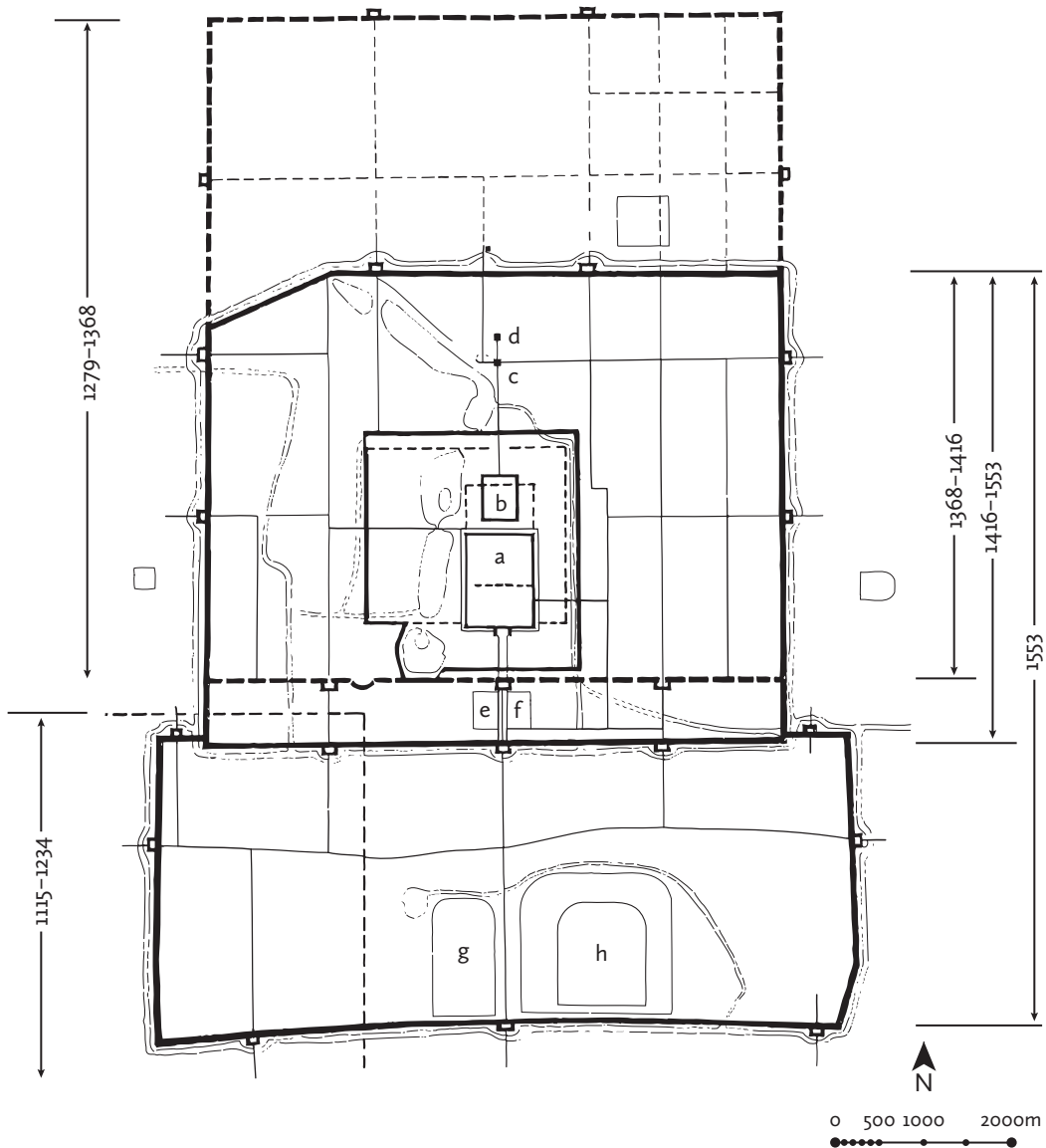


Figure 1.6. Plan of Ming dynasty Beijing. a. Forbidden City. b. Long Life Mountain. c. Drum Tower. d. Bell Tower. e. Altar to Soil and Grain. f. Ancestral Temple. g. Altar to Agriculture. h. Altar to Heaven. Pan, *Zhongguo gudai jianzhu shi*, 35.

shorter than Dadu in depth. Yongle tore down the two Yuan palaces west of Taiye Lake and built his new palace about four hundred meters south of the main Yuan palace, keeping its position atop the Yuan central axis.<sup>92</sup> He fortified his palace more heavily than had the Mongols, surrounding it by a brick wall and a moat.<sup>93</sup> In front of the palace, in the location of the former southern city wall of Dadu, Yongle constructed a major east-west thoroughfare modeled on one in Hongwu's Central Capital.<sup>94</sup> Beijing reused much of Dadu's street plans, waterways, and drainage systems.<sup>95</sup> Thus, rather than breaking with the architectural past of his capital,

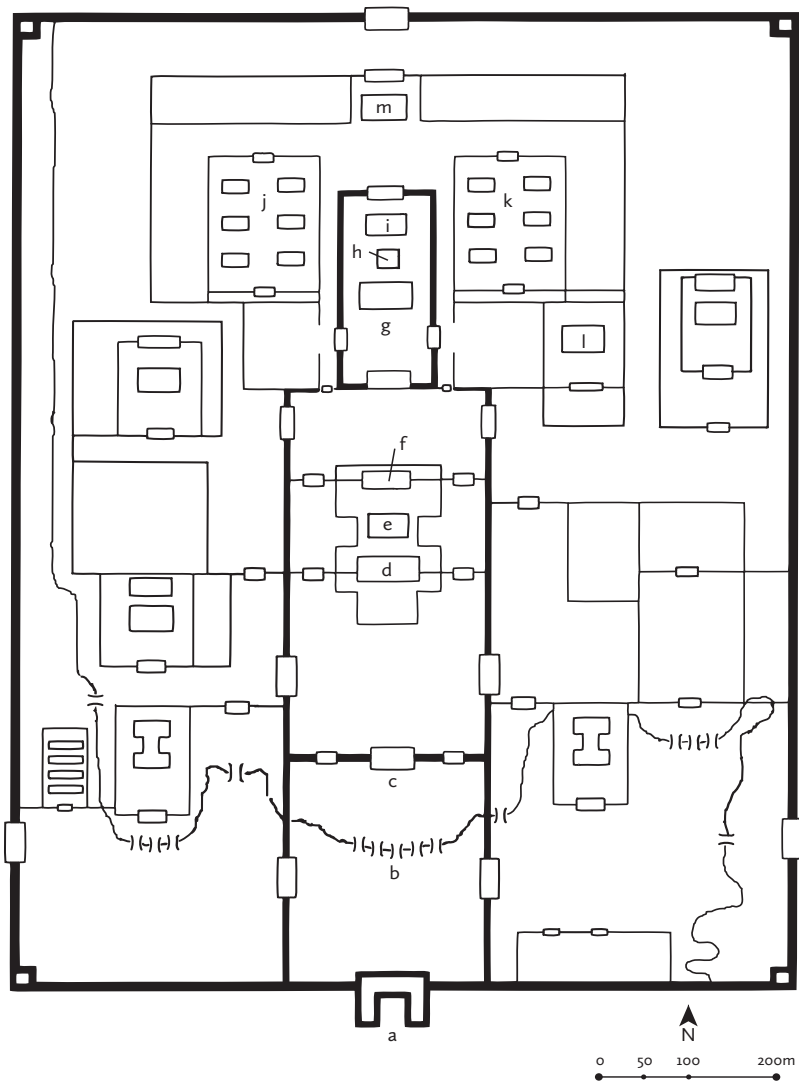
Yongle literally built upon it, using much of the preexisting city infrastructure to his advantage.

With the debris from the demolished Yuan palaces and the earth excavated from the moat, Yongle created a massive artificial hill at the northern end of his palace, which fulfilled the geomantic requirement of blocking malevolent forces to the north.<sup>96</sup> The hill was named Long Life Mountain (Wansui Shan) after a natural mountain to the north of the palaces in the Central Capital.<sup>97</sup> To the north of this hill, along the central axis, were constructed the timekeeping devices for the city, the Bell Tower and Drum Tower, just to the east of where they had been in the Yuan.<sup>98</sup> Yongle considerably extended the southern central axis leading to his palace to create a grander entrance. The series of gates that unfolded along the southern approach were named and arranged after those in Nanjing, as were the yamen on either side of it.<sup>99</sup> Further south he constructed the Altar to Agriculture (Xiannong Tan) and the Altar to Heaven (Tian Tan) to the east and west of the central axis after his father's capital. The Altar to Heaven's famous circular Prayer for Good Harvests Hall (Qinian Dian) was originally built in the 1530s under Jiajing and has been heavily reconstructed many times since.<sup>100</sup> Under Jiajing three more altars were added, at the north, east, and west of the city. The long north-south central axis, the three concentric walled enclosures, and the suburban altars on all four sides of the outer city wall together had a centering effect upon the imperial palace.

In many respects, the palace city in Beijing was a mirror image of that in Nanjing (fig. 1.7). The scale of both palatial cities was the same: approximately 750 meters east to west and 950 meters north to south.<sup>101</sup> Both cities could be divided horizontally into two parts of roughly even size and vertically along three north-south axes—a much more orderly layout than exists today. A detailed early description of Yongle's new capital survives in the "Rhapsody of the Great Unification of the Imperial Capital" of 1421. This record confirms that the layout of the main halls in the Beijing palace city were identical to those in Nanjing.<sup>102</sup> Even various idiosyncrasies of the Nanjing palace city were transplanted to Beijing. For instance, following his father, Yongle constructed the main audience hall, the Hall of Revering Heaven, with only nine bays across the front instead of the traditional eleven.<sup>103</sup> Yongle also continued one of the major innovations of Hongwu's capitals: placing the Altar to Soil and Grain and the Ancestral Temple directly in front of the palace.<sup>104</sup> As in Hongwu's capitals, the Beijing ancestral temple consisted of two halls, front and back, of nine bays each (fig. 1.8).<sup>105</sup> Moreover, a Hall of Honoring the Forebears was constructed within the Beijing palace walls, in the same location as it had been in Nanjing.<sup>106</sup>

The greatest departure from the Nanjing palatial city plan was the addition of a temple dedicated to the deity Zhenwu, the Guardian of the North, inside the imperial palace.<sup>107</sup> The temple, called the Hall of Imperial Peace (Qin'an Dian), is located at the very north end of the Forbidden City,

Figure 1.7. Plan of the Forbidden City in the Yongle reign. a. Meridian Gate. b. Golden River Bridge. c. Gate of Revering Heaven. d. Hall of Revering Heaven. e. Hall of Magnificent Canopy. f. Hall of Scrupulous Behavior. g. Palace of Heavenly Purity. h. Examining Oneself Hall. i. Palace of Earthly Tranquility. j. Western Six Palaces. k. Eastern Six Palaces. l. Hall for Honoring the Forebears. m. Hall of Imperial Peace. Redrawn after Wang Zilin, *Zijin Cheng yuanchuang yu yuanchuang*, 17.



within the imperial garden, and contained a large statue of Zhenwu cast in bronze. According to a Qing dynasty history of Beijing, Yongle also had an image of Zhenwu painted between the two central bracket-sets of the roof eave of the Hall of Revering Heaven.<sup>108</sup> Yongle claimed that Zhenwu had aided him during his usurpation of the throne. By constructing a temple for the deity in such a prominent position in his new palace, Yongle was not only outwardly expressing his devotion to Zhenwu, he was also implicitly designating Zhenwu the guardian of his empire.<sup>109</sup>

Despite the many consistencies between the Nanjing and Beijing city plans, due to the differences in their local topographies, the two capitals would not have looked much alike in person. While the flat landscape of the Northern Capital helped dictate its straight lines, right angles, and orderly layout, the mountainous and watery landscape of the Southern Capital

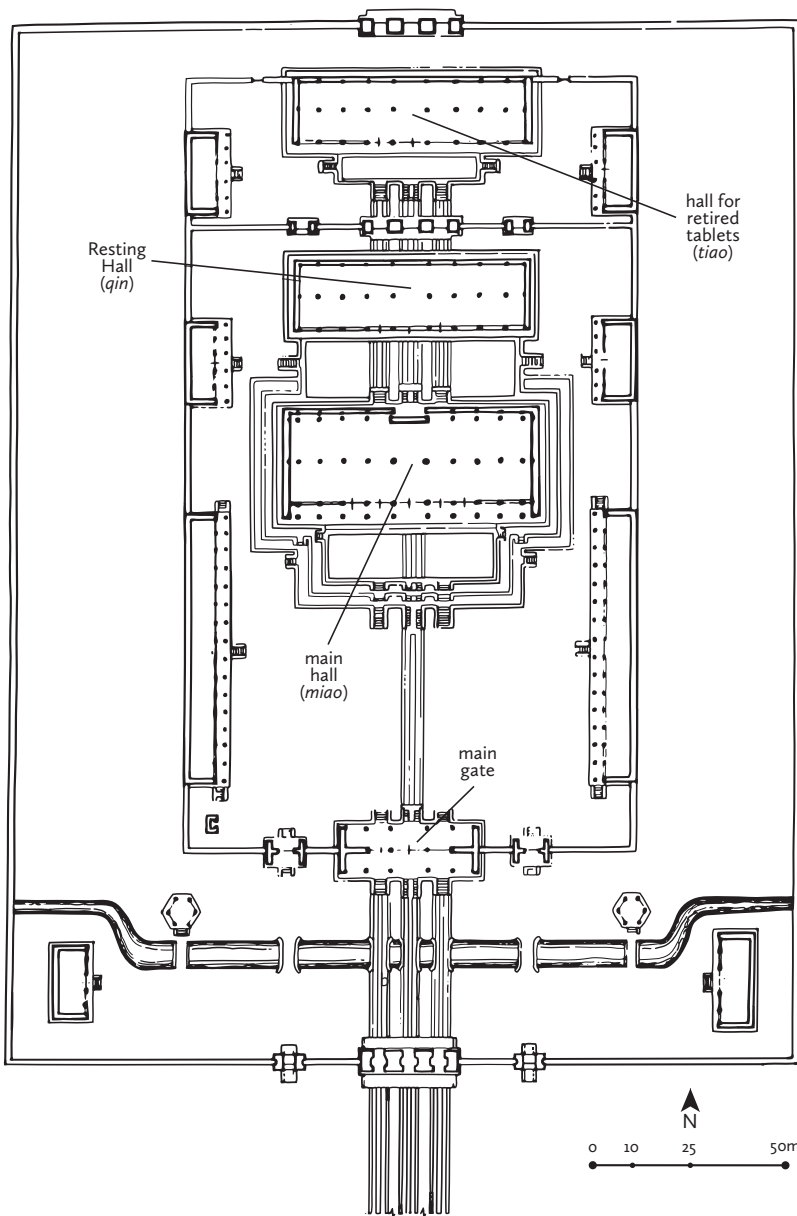


Figure 1.8. Plan of Beijing Ancestral Temple. Pan, *Zhongguo gudai jianzhu shi*, 164.

resulted in much more relaxed shapes and patterns.<sup>110</sup> Furthermore, the natural environment of the south was deliberately incorporated into the architecture of Nanjing: the Zhong Mountains and the Yangzi River served as protective barriers at the northeast and northwest, and the Xuanwu Lake and Qinhuai River to the north and south provided natural places for recreation and transportation. Although landscape features played an important role in the architecture of Beijing, its “mountains,” “lakes,” and “rivers” were completely artificial. This artificiality combined with the rigid city layout gave Beijing a schematic and abstracted feel, as opposed to

the more organic feel of Nanjing. This helped convey the centrality of the imperial palace—the architectural expression of the emperor—within the capital, the empire, and ultimately the universe. Far more so than Hongwu’s capital, Yongle’s capital communicated the power of the emperor to mold and shape the natural environment to create a perfected space from which to rule.

Previous scholarship has tended to explain the architecture of imperial Beijing in relation to fengshui, Five Phases cosmology, theories of yin and yang, and numerology.<sup>111</sup> Although it is true that evidence of these principles can be found within the architecture of the palaces—for instance, the numbers five and nine, associated with male yang energy, appear throughout—they were really only ideological details.<sup>112</sup> Rather, the design of Beijing was primarily a result of the superimposition of elements of Hongwu’s capitals onto the earlier Mongol city plan.

Even though Yongle strove to create a continuity with his father through the architecture of his capital, popular Mongolian legends concerning the construction of Beijing instead present Yongle as a descendant of the Mongol imperial line.<sup>113</sup> In a folktale titled “The Mongolian Story of How Emperor Yongle Built the City of Beijing,” Yongle is said to be the son of the last emperor of the Yuan dynasty, Toghon Temür (r. 1333–1368), born from a Mongolian consort who was secretly pregnant at the time she was taken by the Ming troops from Dadu. When Hongwu later found out about the future Yongle’s real paternity, he banished him to the north, where Yongle constructed a capital in accordance with Mongolian conceptions of astrology, cosmology, and the division of time.<sup>114</sup> While we should not actually believe this colorful story, it is remarkable that in the Mongol imaginary, the construction of Beijing was considered a key link between Yongle and the rulers of the Yuan and a major point of departure from the legacy of Hongwu, founder of the Ming.<sup>115</sup>

## A New Imperial Architecture

Regarding what the buildings in Yongle’s capital looked like, the esteemed early twentieth-century architectural historian Liang Sicheng (1902–1972) made the following observation: “With the founding of the capital at Beijing at the beginning of the fifteenth century, there appeared, principally in the official architecture of the court, a style of marked departure from the tradition of the Song and Yuan dynasties. The change is very abrupt, as if some overwhelming force had turned the minds of the builders toward an entirely new sense of proportion.”<sup>116</sup> The term “official architecture” (*guanshi jianzhu*) used by Liang refers to state-sponsored, as opposed to vernacular, constructions in China. Whereas vernacular Chinese architecture varied widely from region to region, depending on such factors as geography, climate, and culture, official architecture, because it was regu-

lated by the government, remained relatively standardized. Furthermore, while vernacular architecture tended to evolve organically at a consistent rate, official architecture instead developed in sudden, abrupt changes, with significant changes occurring at the start of each new dynasty.<sup>117</sup>

Within the history of official Chinese architecture, the early Ming was a moment in which particularly great leaps were made. The appearance of this new architectural style in the Yongle reign indicates that it had been created sometime during the great period of construction of the three imperial capitals in the first fifty or so years of the Ming.<sup>118</sup> Unfortunately, its origins are obscured by the fact no imperial Ming buildings from before the Yongle reign survive. Although today only a handful of small Yongle-era structures in Beijing and a few more outside the capital remain, originally all the buildings patronized by this emperor would have exhibited the novel architectural style, the key characteristics of which were the simplification and standardization of the timber-frame structure.<sup>119</sup>

The governments of both the Song and the Qing published extensive treatises of their official dynastic architectures. The Song construction manual, *Treatise on Architectural Methods* (Yingzao fashi), was compiled in 1103.<sup>120</sup> The Qing construction manual, *Building Methods of the Board of Works* (Gongbu gongcheng zuofa), was compiled in 1734.<sup>121</sup> These exhaustive manuals were primarily intended to regulate and standardize construction practices and to economize labor and materials. They included information on all aspects of traditional construction (such as carpentry, masonry, brickwork, and roof tiling) and also outlined the principles that guided construction (such as the system of ranking buildings according to a modular unit). For reasons that are unknown, no government-issued construction manual exists from the Ming. This presents challenges for historians of Ming architecture because it means that we must rely exclusively on the data from surviving buildings for information. Without a grammar book for Ming architecture, we lack a precise vocabulary to talk about it. Does it make more sense to use the terms (and concepts) from the *Treatise on Architectural Methods* or the much different ones from the *Building Methods of the Board of Works*?

The fundamental construction principle outlined in the Song *Treatise on Architectural Methods* is the modular (*caifen*) system. In this system a standard unit (*cai*) is used to determine the sizes of the various other components of the building.<sup>122</sup> Its dimensions corresponded to the cross-section of the arm (*gong*) of the bracket-set (*dougong*) (fig. 1.9).<sup>123</sup> The unit could either be a single unit (*dancai*) or a full unit (*zucai*), which included the addition of a stiffener (*zhi*) at the top.<sup>124</sup> The single unit measured 15 *fen* in height and 10 *fen* in width, while the full unit measured 21 *fen* in height and 10 *fen* in width. The modular units came in eight grades (sizes).<sup>125</sup> The largest and highest-rank module (Grade 1) measured 9 *cun* in height and 6 *cun* in width (approximately 28 × 19 cm), while the smallest and lowest-rank module (Grade 8) measured 4.50 *cun* in height and 3 *cun* in width

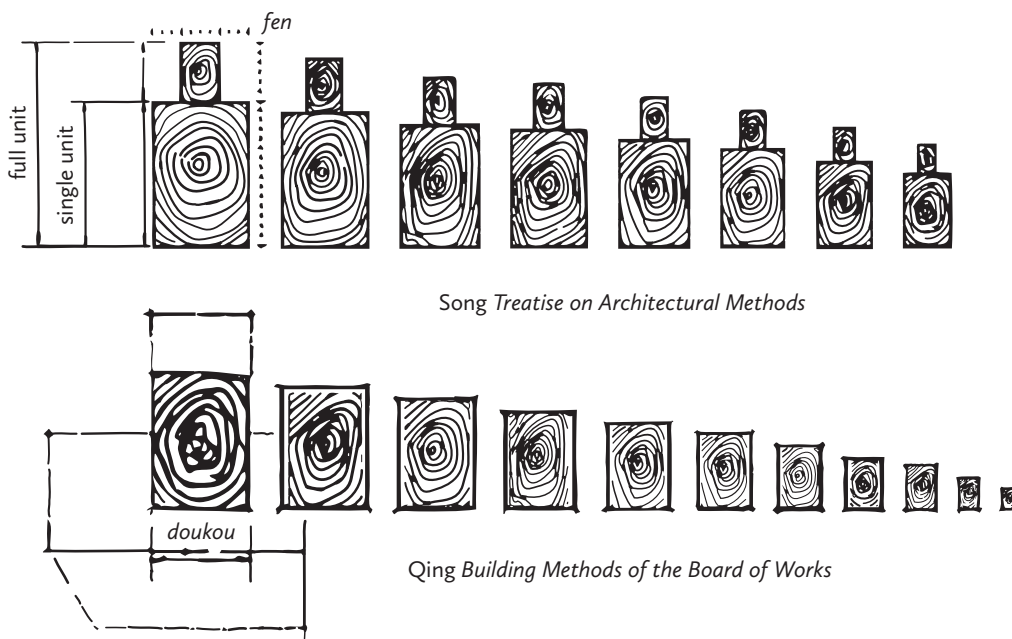


Figure 1.9. Song and Qing dynasty modular systems. Redrawn after Guo Qinghua, “Yingzao fashi,” 7, and Liang Sicheng, *Pictorial History of Chinese Architecture*, 18.

(approximately  $14 \times 9$  cm).<sup>126</sup> In the Song the size of the module and the overall scale and rank of a building were in direct proportion: the larger the unit, the larger the building and the higher its rank.

In the Qing manual *Building Methods of the Board of Works*, the module was called “block mouth” (*doukou*).<sup>127</sup> Its width corresponded to the opening (*kou*) in the capital block (*dou*) into which the bracket arm was inserted.<sup>128</sup> The single block mouth module measured  $14$  *fen* in height and  $10$  *fen* in width, while the full module measured  $20$  *fen* in height and  $10$  *fen* in width, slightly shorter than the standard unit in the Song.<sup>129</sup> The Qing modular units came in eleven grades. The highest grade (Grade 1) measured  $8.40$  *cun* in height and  $6$  *cun* in width (approximately  $27 \times 19.50$  cm), while the lowest (Grade 11) measured  $1.4$  *cun* in height and  $1$  *cun* in width (approximately  $4.50 \times 3.20$  cm), significantly smaller than the lowest-grade module in the Song.<sup>130</sup> Although in theory the Qing Grade 1 module was almost the same size as that of the Song, Grade 1 modules were never actually used in Qing construction. We would expect that the most eminent hall in the Forbidden City, the Hall of Supreme Harmony (formerly the Hall of Revering Heaven, last reconstructed in 1695), would employ a Grade 1 module, yet it actually only employs a tiny Grade 7 module.<sup>131</sup> This indicates that by the Qing dynasty the size of the module no longer corresponded to the size or rank of a building, as it had in the Song.

Ming buildings reveal a significant decline in the importance of the module in relation to the overall rank and size of the buildings.<sup>132</sup> For example, the modules of several Yongle-era buildings discussed in this book range from  $3.00$  to  $3.50$  *cun* ( $9.50$ – $11$  cm) in width.<sup>133</sup> This corresponds

to the eighth, or lowest grade on the Song dynasty ranking scale. The largest modules from the Ming are found in the four halls along the central axis of the Ancestral Temple (reconstructed in 1545), which measure 3.90 *cun* (12.50 cm) in width.<sup>134</sup> Still, this corresponds to only the sixth rank in the Song *Treatise on Architectural Methods* scale, which would be the equivalent to a small pavilion in that dynasty.<sup>135</sup> Because the halls in the Ancestral Temple range from five to eleven bays across the façade, we can see that by this time a strict relationship no longer existed between the size of the module and the size of the building, as stipulated in the *Treatise on Architectural Methods*.<sup>136</sup> By the late Ming, even some of the most important halls to the state, such as those along the central axis of the Forbidden City, employ modules so small that they do not even factor on the Song scale.<sup>137</sup>

The modular unit is closely linked to bracket-sets because its dimensions corresponded to either the cross-section of the bracket arm (in the Song) or the width of the opening of the block into which the bracket arm is inserted (in the Qing). Therefore, as the module shrank over time, bracket-sets also became smaller—or perhaps more correctly, because bracket-sets shrank over time, so did the module. The column-top bracket sets of high-ranking buildings in China went from measuring 40 percent to 50 percent of the height of the column in the Tang, to measuring 30 percent in the Song, 25 percent in the Yuan, and finally, to just 20 percent of the height of the column in most Ming and Qing buildings.<sup>138</sup> One reason for this decline may be that Tang and Song builders had “over designed” bracket-sets—that is, made them larger than necessary because they could not determine exactly how big they needed to be to support the roof eaves—but by the Ming they had figured out that much smaller bracket-sets provided sufficient support. In other words, the shrinking of the bracket-sets indicates that over time craftsmen became more skilled at estimating precisely what was needed to support the roof eaves, thereby economizing labor and materials.

The great reduction of the size of the bracket-sets during the Ming was also made possible because of technological improvements in the rest of the timber structure. By the Ming period bracket-sets no longer carried as much of the load as in earlier buildings because the eave support was in part taken up by the transverse tie-beam that extended beyond the wall plane.<sup>139</sup> Moreover, the purlins, the beam frame, and the pillars were now connected to each other directly with mortise and tenon. This provided a much stronger structural grid and obviated the need for complex connecting members, such as bracket-sets, “camel-humps” (*tuofeng*), “supporting-feet” (*tuojiao*), or “forking-hands” (*chashou*), which had been popular in the Song period.<sup>140</sup> Advances in brick and glaze technologies made during the Ming, as well as the more widespread use of brick, contributed to a decline in the importance of the bracket-sets: because brick walls and glazed roof tiles helped to prevent rain and corrosion, it was no longer as necessary for buildings to have such huge overhanging eaves and giant bracket-sets to support them.<sup>141</sup>

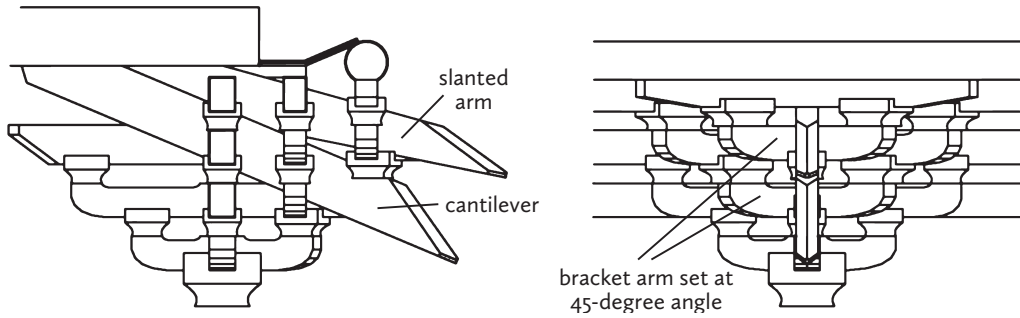
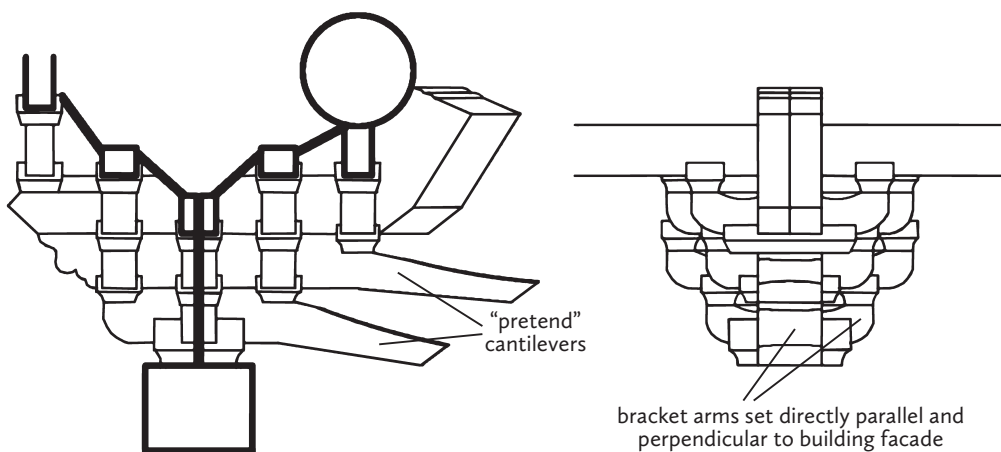


Figure 1.10. Example of a pre-Ming bracket-set from the main hall of the Longmen Temple in Pingshun, Shanxi (tenth century). Line drawing courtesy of Lala Zuo.

Alongside the shrinkage of the size of bracket-sets, we see in the Ming a major simplification of bracket-set types. Pre-Ming bracket-sets were rich in variety and included diagonal members such as cantilevers (*ang*) and slanted arms (*xiegong*) (fig. 1.10).<sup>142</sup> Ming bracket-sets, however, came in a limited number of types, usually with either seven or nine “steps” (*cai*)—or projections perpendicular to the façade (fig. 1.11).<sup>143</sup> Furthermore, in the Ming period, cantilevers—which originally served to help support the load of the roof eaves—became decorative “pretend” cantilevers (*jiaang*); the slanted arms disappeared altogether.<sup>144</sup> The use of bracket-sets in the Ming was standardized according to the buildings’ function: the most eminent state halls used nine-step brackets in their upper eaves and seven-step brackets in their lower eaves, while Buddhist and Daoist halls used seven-step brackets on the upper eaves and five-step brackets on the lower eaves.<sup>145</sup> In short, Ming bracket-sets were smaller, less complex, and more standardized than those of earlier periods. This would have greatly sped up the work of the craftsmen because they did not need to fabricate great numbers of different individual components, as they would have in the past.

The simplification of the bracketing system that occurred in the Ming dynasty was echoed in the rest of the timber frame. In the Song period the highest-ranking buildings followed the so-called palace (*diantang*) form, in which a pillar grid of uniform height is topped with a layer of bracket-sets, and the roof frame composed of beams and purlins (fig. 1.12). Lower-ranking buildings, followed the so-called mansion (*tingtang*) form, in which the pillars of uneven height, held together with tie-beams, support the roof purlins directly (fig. 1.13).<sup>146</sup> Even though some official Ming buildings, such as the Sacrificial Hall at Yongle’s tomb, use pillar grids of uniform height, the complex bracket-set layer is omitted, and most Ming buildings, even very lofty ones, employ the simpler mansion form framework.<sup>147</sup> Moreover, whereas buildings of the Tang, Song, and Yuan periods often employ decorative “crescent-moon-shaped beams” (*yueliang*), in official Ming architecture only straight beams are used.<sup>148</sup>

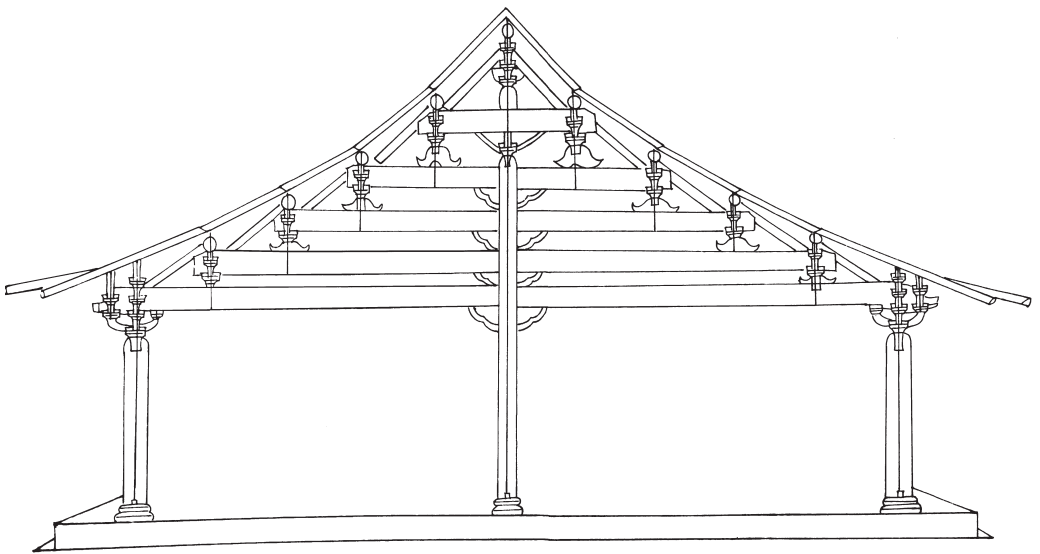
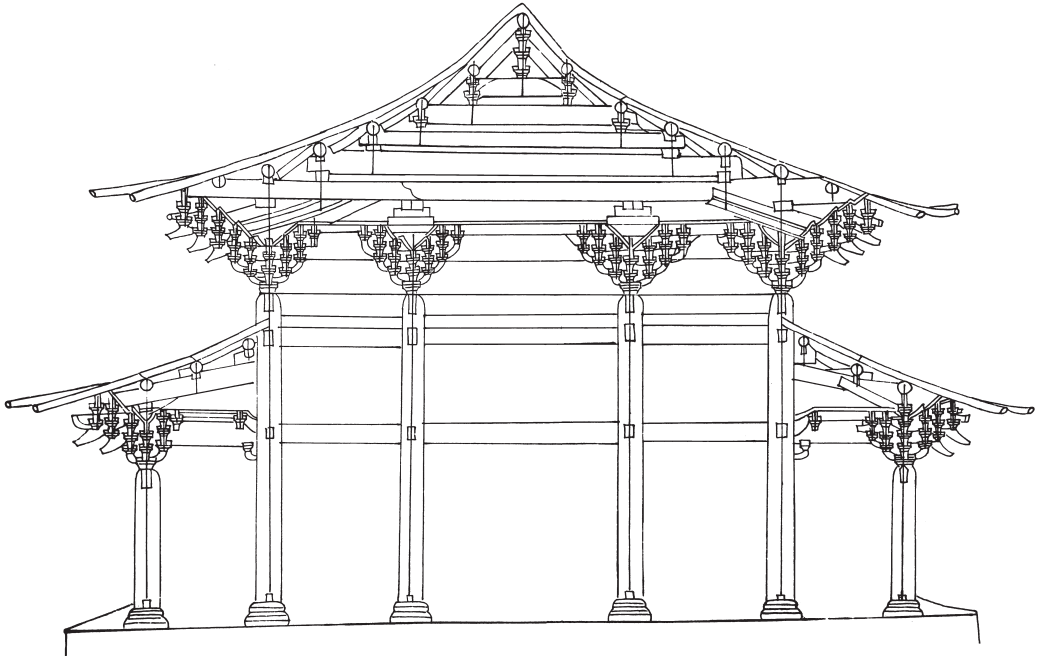


Finally, in contrast to buildings of the pre-Ming period, when it was common to either shift (*yizhuzao*) or completely eliminate (*jianzhuzao*) pillars to create more interior space, in Ming architecture each bay possesses four pillars, resulting in an orderly structure.<sup>149</sup>

By Yongle's reign new models for indicating a building's rank had been established. Before the Ming dynasty one of the key indicators of a building's status was the size of the bracket-sets. In the early Ming, however, status was instead communicated through the number of intercolumnar bracket-sets (*pingshenke*), particularly those in the central bay. In the Song dynasty most buildings only had one intercolumnar bracket-set. In the Yuan dynasty we often see two intercolumnar sets; but by the Ming it was common for very high-rank buildings to have six or eight intercolumnar sets in the central bay.<sup>150</sup> The more sets a Ming building contained, the greater its importance to the state. Both the Sacrificial Hall and Main Gate at Yongle's tomb possess eight sets of intercolumnar brackets in the central bay.<sup>151</sup> The Golden Hall atop Mount Wudang possesses a remarkable ten sets, denoting its preeminent status among all of Yongle's constructions.<sup>152</sup> These examples all indicate that strict sumptuary laws guided Ming construction. An imperial Ming building's importance was also conveyed through the large sizes of the columns and beams and the type of wood used to construct them, *nanmu* being the most illustrious of all.

The decline in the size of the module, the shrinking of the bracket-sets, and the suspension of the system of ranking buildings as it was outlined in the *Treatise on Architectural Methods* had in fact already begun in the Yuan dynasty.<sup>153</sup> But by the Yongle reign these construction methods were being executed to a much greater degree and much more consistently than ever before, indicating that they were part of a mature architectural system. Due to a lack of both textual and material evidence, it is difficult to know precisely how and why official Ming architecture originally took

Figure 1.11. Example of a Ming dynasty bracket-set from Huangqian Hall at the Altar to Heaven in Beijing. Line drawing courtesy of Lala Zuo.



shape. It was most likely first developed by the Jiangnan craftsmen during the construction of Hongwu's capitals and was driven by the desire to simplify the building process to save time and costs. When the capital was moved to Beijing, it was transmitted northward through these master craftsmen's embodied knowledge, replacing the northern architectural styles of the Yuan.<sup>154</sup> Official Ming architecture was likely further refined in the early Yongle reign, as hundreds of thousands of craftsmen and other laborers from all over the empire worked together, contributing their different skills and knowledge.<sup>155</sup> Finally, it was regulated and deployed on a massive scale for the construction of Yongle's Beijing and the other building projects he sponsored throughout his empire.

It is no coincidence that the birth of the simplified and standardized architectural style coincided with the ascendancy of the absolute ruler, Yongle. On the one hand, official Ming architecture was a result of the practical concerns of the master craftsmen, who had to build structures more quickly and efficiently during the decades of nonstop construction of the three Ming imperial capitals. On the other hand, because this architectural style flourished under Yongle's patronage, it also had to represent and transmit his authority, as it was he who assumed the ultimate responsibility for its creation. The architectural style in which the buildings of the new capital were constructed possessed an overarching sense of order and uniformity that communicated the message of a strong centralized power controlled by a capable and moral ruler. The official Ming architectural style thus ultimately served as a metaphor for the emperor himself.

## Conclusion

The construction of Beijing was a massive, empire-wide effort that involved millions of Yongle's subjects, from lowly laborers to lofty officials, as well as building materials gathered from throughout his realm. The great quantities of people and resources poured into the project reflected the richness of Yongle's empire, while the efficiency with which the construction was handled spoke to his abilities as a ruler. Visual and textual records of the new capital sponsored by the emperor promoted it as a perfect, numinous city sanctioned by Heaven. Yongle modeled his capital city on that of Hongwu, who had, together with his officials, spent more than a decade determining its layout based on loose interpretations of classical texts. Yongle also took advantage of the preexisting infrastructure of the Mongol capital, which significantly facilitated the construction process. Thus although the construction of three Ming capitals within a period of less than fifty years undoubtedly took enormous financial, material, and human tolls, with regard to architecture, it had far-reaching effects and ultimately engendered a simplified and standardized official court style that symbolized Yongle's absolute authority.

Figure 1.12. Song dynasty palace form hall. Redrawn by Ani Rucki after Li Jie (1065–1110), *Yingzao fashi*, vols. 7, 8, and 11.

Figure 1.13. Song dynasty mansion form hall. Redrawn by Ani Rucki after Li Jie (1065–1110), *Yingzao fashi*, vols. 11, 15, and 16.

The glory in which Yongle basked following the completion of his capital was short-lived. In the fourth lunar month of 1421, only a few months after construction had finished, lightning struck the Hall of Revering Heaven, and a fire broke out, destroying it along with the two buildings behind it.<sup>156</sup> This naturally caused the whole court great shock. For Yongle it must have been particularly upsetting, as it appeared to signal Heaven's disapproval of his reign. Two days later, following tradition, the devastated emperor issued an "Edict in Response to the Disaster of the Hall of Revering Heaven" (*Fengtian dian zai kuan xu zhao*), in which he solicited "sincere words" (*zhenyan*) from several high-ranking ministers to determine why the natural disaster had happened. Among them, the official Zou Ji submitted an especially lengthy memorial, the "Memorial on the Hall of Revering Heaven Disaster" (*Fengtian Dian zai shu*), enumerating the many problems involved in moving the capital to the north. A small portion is excerpted here:

For nearly two decades Your Majesty has been preoccupied the construction of the Northern Capital. The scale of the labor has been exceedingly costly; the scope of taxation has been uncommonly wide. Superfluous officials are eating through the tax grain, and lavishly waste the reserves of the realm. The men who provide the labor have been mobilized by the millions. Providing service labor throughout the year, they cannot take care of their own fields. . . . At the same time the demands on the populace from your bureaucrats have increased day by day. For instance, last year when they needed colored pigments, hundreds of thousands of people were ordered to find such materials. If the people could not give what the officials demanded, they had to pay money instead, and some of the monies were pocketed by the officials. . . . At present, a starving multitude in Shandong, Henan, Shanxi, and Shaanxi eat nothing but tree bark, grass, and whatever crumbs they can find. Others, in desperation, are forced to sell wives and children for their own survival. In contrast, tens of thousands of Buddhist monks and Daoist priests who were brought here to pray in various temples, daily consume hundreds of piculs of rice. . . . Since the Hall of Revering Heaven, where you conduct state business and receive the audience of officials, burned, it is time to reflect and reform. . . . You should send all of those poor workers home so as to placate the anger of heaven. Let's return the capital to Nanjing and report to your father at his tomb about the reasons for the calamity.<sup>157</sup>

As evidenced in Zou Ji's memorial, the movement of the capital to the north greatly disrupted the lives of hundreds of thousands, if not millions, of people. The project depleted the imperial coffers and diverted attention away from the many problems already facing the empire in the early

fifteenth century.<sup>158</sup> Although Yongle was undoubtedly deeply troubled by the accusations of the officials who had given their “sincere words,” he had them imprisoned, and the capital remained in Beijing. The charred remains of the Three Halls served as a lasting accusation of Yongle’s illegitimacy as emperor, recalling every day the palace he burned down in Nanjing with his nephew inside. This memory was not erased until decades later, when the halls were finally rebuilt in the Zhengtong reign (1435–1449). The enormous social and economic devastation caused by the construction of Beijing eventually too faded from memory. Yet the contours of the city—its moat, walls, gates, and main halls—endured for centuries and were forever afterward associated with the Yongle emperor.



*What the Emperor Built* is made possible by a collaborative grant from the Andrew W. Mellon Foundation.

Publication of this book has been aided by a grant from the Millard Meiss Publication Fund of CAA.

The Chiang Ching-kuo Foundation for International Scholarly Exchange, the James P. Geiss and Margaret Y. Hsu Foundation, the Metropolitan Center for Far Eastern Art Studies, and the offices of the Dean and Provost at Boston College also provided support for this book.

Copyright © 2020 by the University of Washington Press

Design by Jeff Wincapaw, Tintype Studio  
Composed in Calluna, typeface designed by Jos Buivenga  
Maps and architectural drawings revised by Ani Rucki

24 23 22 21 20 5 4 3 2 1

Frontispiece: The Golden Hall (1418) atop Heaven's Pillar Peak, Mount Wudang, Hubei. Drone photograph courtesy of Zhang Jianwei.

Printed and bound in Korea

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage or retrieval system, without permission in writing from the publisher.

UNIVERSITY OF WASHINGTON PRESS  
[uwapress.uw.edu](http://uwapress.uw.edu)

LIBRARY OF CONGRESS CATALOGING-IN-PUBLICATION DATA

Names: Campbell, Aurelia, author.

Title: *What the emperor built : architecture and empire in the early Ming* / Aurelia Campbell.

Description: Seattle : University of Washington Press, [2020] | Includes bibliographical references and index.

Subjects: LCCN 2019038424 (print) | LCCN 2019038425 (ebook) | ISBN 9780295746883 (hardcover) | ISBN 9780295746890 (ebook)

LCSH: Architecture—China—History—Ming-Qing dynasties, 1368–1912. | Architecture and state—China—History—To 1500. | Ming Chengzu, Emperor of China, 1360–1424—Art patronage. | China—Civilization—960–1644.

Classification: LCC NAI543.5 .C36 2020 (print) | LCC NAI543.5 (ebook) | DDC 720.951/0902—dc23

LC record available at <https://lcn.loc.gov/2019038424>

LC ebook record available at <https://lcn.loc.gov/2019038425>

The paper used in this publication is acid free and meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI Z39.48–1984.∞