



Representing a Four-Dimensional Universe: Terraces at the Temple of Heaven in Beijing

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Abstract

By locating the terrace system of the Temple of Heaven within a larger religious context and comparing it with other Chinese ritual architecture and devices, this article unearths some of the seldom-discussed symbolism and functions of the Temple of Heaven. The imperative to symbolically bring the Chinese emperor "closer" to Heaven for communion with the Divine during annual religious ceremonies is a well-understood function of the terrace layout. Closely related to this, however, was another equally critical function, rarely addressed by scholars - to bestow order upon the country by designating the passage of time through number and directional symbolism. In their religious function, these terraces played the same role in religious rituals that Mount Tai, the most sacred peak in China, had for 3,000 years. In their timekeeping function, the terraces served to represent the cycle of time, as understood through the Chinese agricultural calendar system. The Temple of Heaven's terraces existed within a larger system of the Chinese religious-political network and replicated the functions of certain Bronze Age Chinese ritual objects and architecture, perpetuating the universal order through architectural space. This article argues that the terraces comprised a vital and fluid three-dimensional representation of the universe, in which the Chinese emperor's participation fulfilled the fourth, animating dimension of the cosmic order - timekeeping.

Keywords: terrace, Temple of Heaven, Circular Mound Altar, Hall of Prayer for Good Harvests, Mount Tai, Bright Hall, Chinese calendar, Mandate of Heaven

Introduction

For many residents of Peking, this was the one time in their lives they ever saw the Son of Heaven in person. While street traffic was suspended, the normal procedure for the imperial presence, which demanded that all shops be closed and all pedestrians keep out of sight, was not followed on that day. Some of the onlookers caught a glimpse of the emperor, a nice-looking young man though already growing stout. The trek was not at all easy for Wan-li, because the day was turning steadily warmer every minute and the Altar of Heaven was four miles away from the palace entrance - the longest distance that he had ever covered on foot.

The open-air altar in the southern suburbs of Peking had been built by the reigning emperor's grandfather in 1530. On the lower tier of the circular stone terraces Wan-li performed his kowtow. Offerings were made and the prayer spoken. The assembled officials and army officers were arrayed outside the

brick wall enclosing the altar. Their kneeling and standing up was synchronized with the movements of the emperor by commands re-played through the gate by ceremonial officials (Huang, 1982, pp. 118-119).

The foregoing paragraphs, depicting an extremely unusual scene surrounding the Temple of Heaven in Beijing in the Ming Dynasty (1368-1644), took place on May 16, 1585. Since the winter of 1584, Beijing had suffered from droughts; the situation had only worsened by the spring of 1585, despite standardized religious activities conducted by the Ming officials from the Department of Rites (*libu*). Increasingly afflicted by his anxieties over this state of affairs, Emperor Wan-li (1563-1620) of the Ming decided that he must therefore pray to Heaven himself. At dawn on May 16, the emperor, who was customarily carried from place to place in a sedan chair or carriage, walked out of the Daming Gate of the Forbidden City on his own two feet, accompanied by 2,000 civil officials and 2,000 military officers; this vast array undertook a four-mile procession to the Temple of Heaven. The emperor then conducted his obeisance on the circular stone terrace of the open-air altar, namely the Circular Mound Altar (*yuanqian*), while his officials alternately kneeled and stood outside the circular wall. Eventually, on June 12, one month after this imperial procession, the rains duly came forth, and Emperor Wan-li joyfully ordered a thanksgiving service in appreciation of Heaven's response to his prayer (Becker, 2008; Huang, 1982, pp. 118-124).

The architectural structure upon which this unprecedented act of devotion took place, the Circular Mound Altar, is an open-air, empty circular terrace featuring three layers of marble stones (Fig. 1). It is the most essential element of the Temple of Heaven complex, built in 1530 by Emperor Jiajing (1507-1567), the grandfather of Emperor Wan-li. The round terrace was first covered with glazed slabs of deep blue, and had a circular perimeter of 534 m, with a height of 5.2 m. Each year, at the Winter Solstice, the Chinese emperor communicated directly with Heaven by offering thanksgiving sacrifices on this divine terrace. At the Spring Equinox, the emperor would go to a different structure, the Hall of Prayer for Good Harvests (*Qiniandian*), to pray for prosperity in the coming year (Cai, 2011, p. 46). Each architectural element of the Circular Mound Altar and the Hall of Prayer for Good Harvests features its own symbolism, demonstrated through color, shape, and the number of elements in their respective construction (Li, 1990, pp. 101-102).

This article examines the terraces that feature in both the Hall of Prayer for Good Harvests and the Circular Mound Altar, and thus investigates two essential functions of the Temple of Heaven's terrace system. The most prominent and best-known features are the massive staircases, tasked with bringing the emperor "closer" to Heaven for his communion with the



Figure 1

The Circular Mound Altar, the Temple of Heaven (Photography: Liman Zhang)

Divine, thereby fulfilling his role as proprietor of the "Mandate of Heaven." A second imperative, no less important but somewhat less obvious and rarely discussed by contemporary scholars, was to bestow order upon the country by designating and optimizing the passage of time through number and directional symbolism. Although the structure of the Temple of Heaven and its foremost symbolism are very familiar to Chinese nationals and some scholars of architectural history, this ritual architectural complex requires further study. I argue that the complexity of its symbolism stretches far beyond its function as a venue for offerings to Heaven. My approach is to relocate this architectural structure within a larger religious context dating back to the Bronze Age of early China and construct a logical connection with other ritual and political infrastructure, such as the legitimacy of Chinese emperors and the production and propagation of Chinese calendars. I argue that the emperor's physical interaction with the terrace system played a vital role in fulfilling the symbolism of the Temple of Heaven, and conversely, that the spatial conception of those terraces legitimized the emperor's role, not only as the ultimate political power, but as a divine facilitator of order and upholder of society.

Terraces as a Staircase for the Mandate of Heaven

The Temple of Heaven is located on the east side of Yongdingmennei Street, Chongwen District, Beijing, and encompasses a total area of over 10,000 m², three times the size of the Forbidden



Figure 2

Bird's-eye view, the Temple of Heaven
(Google Earth)

City (Yao, 2006, p. 38; Fig. 2). Its central axis runs through three major architectural units, from north to south. These are the Imperial Vault of Heaven, the Hall of Prayer for Good Harvests, and the Circular Mound Altar. The latter two structures are each built upon a promontory of marble terraces in three levels. As in all the most spiritually significant architecture of imperial China, such as the Hall of Great Harmony in the Forbidden City, the Sacrificial Hall of the Imperial Mausoleum, or the Temple of Ancestors, the Temple of Heaven's political symbolism was expressed through the shapes, colors, and numbers of its architectural units. The Hall of Prayer for Good Harvests and the Circular Mound Altar are both round, representing Heaven, whereas the precincts in which they stand are squares, representing Earth. According to *Kaogongji*, a classic work on science and technology in ancient China dating from the Warring States Period (475–222 BCE), the squareness of the chariot is intended to represent Earth; the roundness of the canopy is intended to represent Heaven (Tseng, 2011, p. 23). This shape symbolism was easily translated into architecture. The number nine appears frequently in the design of the Temples of Heaven, as it is the number of the ultimate manifestation of *yang*, the active principle in the dualistic *yin-yang* concept of the universe. Further, the number nine symbolized the emperor's ultimate political power.

As the divine venue for the annual ceremonies conducted by the emperor, the Temple of Heaven was a seminal architectural complex for religious communion with Heaven, the supreme power that reigned over lesser gods and human beings. In the famous Zhou Dynasty ode *Book of Songs*, it is written that:

Heaven, in giving birth to the multitudes of the people,
To every faculty and relationship annexed its law.
The people possess this normal nature,
And they [consequently] love its normal virtue (Legge, 1871, p. 541).

The emperor, who was, through his ancestors, the recipient of Heaven's mandate to rule, was designated the Son of Heaven, and therefore charged with mediating between the divine and human worlds. Emperor Hongwu (1328-1398) of the Ming Dynasty once proposed that "sacrifice to the Heaven and the earth, for the common people under the Heaven" involves both respecting Heaven and caring for the people (Cao, 2011, p. 30). The emperor's relationship with Heaven endowed him with the legitimacy to rule, and he did so by establishing and maintaining reliable societal relationships and bureaucratic systems based upon Heaven's virtues (Mason, 1987).

The term "Mandate of Heaven" has two implications: on the one hand, it justifies the emperor's position religiously, thus legitimizing his rulership; on the other, it charges him with the responsibility to connect his subjects with the divine realm, as the one figure with the power to communicate directly with Heaven (Tseng, 2011, p. 18). Ceremonial architectural complexes such as the Hall of Prayer for Good Harvest and the Circular Mound Altar were designed to express the emperor's ultimate authority as the sole intermediary to Heaven, a role vouchsafed to no other living individual. The tall platforms and circular terraces of such structures fulfilled the imperatives of political symbolism by symbolically bringing the emperor closer to Heaven, thereby demonstrating his ultimate authority over all human beings. For an in-depth understanding of the terraces, we must compare the architecture of the Temple of Heaven to other palatial imperial Chinese architecture, such as the Bright Hall, the Ancestral Temple, or the Hall of Great Harmony in the Forbidden City, all of which featured high terraces. According to art historian Wu Hung, some of these imperial structures, "more than a hundred meters high, helped their owners intimidate and even terrorize political opponents" (Wu, 1995, p. 12). Thus, the terraces of these imperial structures, with their prescribed heights and symbolism based on the number nine, effectively showcased the emperor's "Mandate of Heaven."

Prior to the construction of the Temple of Heaven, Mount Tai, located in Shandong Province, had been designated as a natural altar where the emperor would directly commune with Heaven.

Rising to 1,545 m, Mount Tai was one of China's preeminent ceremonial sites, used as a place of worship for over 3,000 years. The emperors carried out sacrifices on the summit to pay homage to Heaven and at the foot of the mountain to pay homage to Earth (Lewis, 1999, p. 27). Within the Temple of Heaven, east of the Hall of Prayer for Good Harvest, is the Seven-Star Stone Group. These seven stones symbolized the Big Dipper in the sky, as well as the seven peaks of Mount Tai. The Temple of Heaven, Mount Tai, and other ritual objects, such as the nine Tripod Cauldrons, functioned as symbols of the authority devolved upon the ruler by the Mandate of Heaven, and existed as centers where the emperor could offer ritual sacrifices to the ancestors from Heaven and Earth during major religious ceremonies.

Given an understanding of the basic symbolism and functions of the Temple of Heaven in a larger religious network, let us now focus our discussion on the design of the Circular Mound Altar and examine how its design fulfilled these requirements. The Circular Mound Altar is a circular three-level terrace that served as a divine location for the emperor to offer his sacrifices to Heaven at the winter solstice. This terrace is distinguished primarily by the fact that it is ordered around the number nine. There are nine steps between each level; the numbers of various elements of each level, including pillars and steps, are either nine or multiples of nine. The top level has 72 slates, the middle has 108 slates, and the bottom level has 180 slates, comprising 360 slates in total. This denotes the 360 degrees of the complete circle, thus representing the circumference of heaven (Pletcher, 2010, p. 128).

In the center of the upper terrace is the Tianxin Stone (Stone of Heaven's Heart), which is surrounded by concentrically arranged flagstones (Fig. 3). There are nine stones in the first circle, 18 in the second, and 27 in the third. The pattern continues in this manner up to the ninth circle, which has 81 stones (Yao, 2005, pp. 21-22). Thus instilled with the power of the number nine, the Circular Mound Altar's terrace, although significantly shorter in height than Mount Tai, still maintains the capacity of a symbolic staircase to Heaven. As the emperor made a short "journey" to the top of a terrace built according to multiples of the number nine, he was deemed to approach Heaven spiritually and physically.

Another important and well-known feature of this terrace is its acoustic properties. When religious ceremonies were performed on the Circular Mound Altar, the boulders on the top terrace could amplify a voice whispered through it. According to the research of numerous scholars, this sound effect is caused by the extreme smoothness of the altar's walls and floor, which allow sound waves to proceed in all directions toward the stone balustrades, from whence they are reflected back again.

Overall, with its circular and numerical symbolism and its special sound effects, the white marble terrace of the Circular Mound Altar was perfectly suited to serve as a magnificent

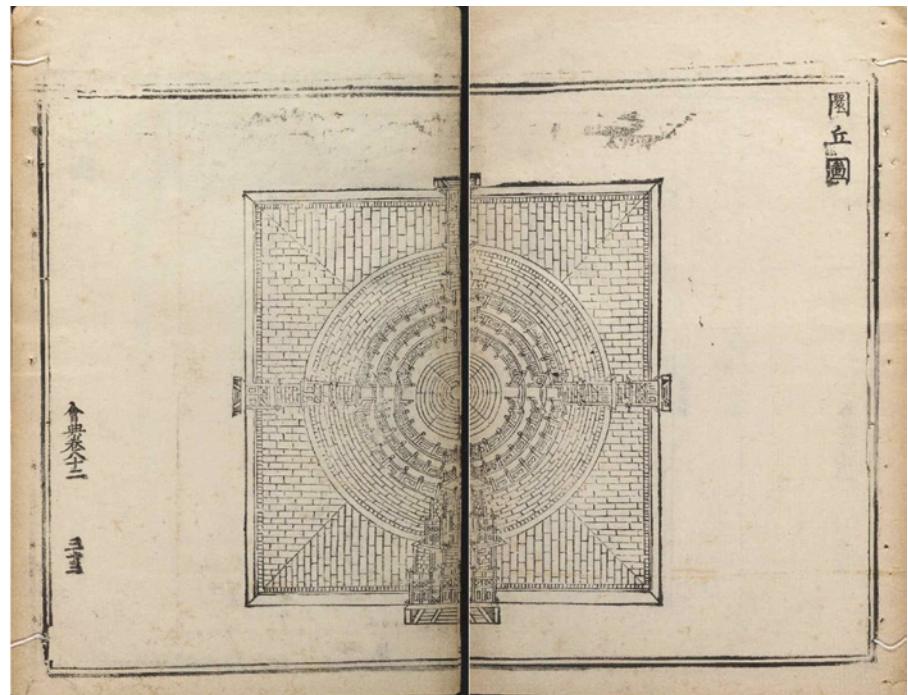


Figure 3

Design of the Circular Mound Altar (Image source: *Daqing huidian* [The Government of the Qing Dynasty; 1644–1912], Vol. 12, public domain)

symbolic "staircase" towards Heaven. The terrace of the Hall of Prayer for Good Harvests provided similar functions for religious ceremonies that took place at the beginning of spring. Heaven bestowed its mandate upon whomever was most fit to rule, and the Son of Heaven was in turn responsible for the prosperity and security of his people, as he embodied the link between Heaven and his human subjects (Dull, 1990). In the words of the famous Han Dynasty scholar Ban Gu (in *Bai Hu Tong*): "The Son of Heaven was named by Heaven as the ruling nobility; the one who is called the emperor received the order from Heaven and served as [Heaven's] minister". Ceremonies at the Temple of Heaven were carried out routinely during the Ming and Qing Dynasties. In the year 1722, when Emperor Kangxi (1654–1722) of the Qing (1644–1912) was ill, he sent his fourth son to the Circular Mound Altar for the winter solstice ceremony. Unsurprisingly, that fourth son succeeded as the next emperor in the coming year (Yao, 2006, p. 144). At the top of the divine terrace, the conduct of sacrificial ceremonies for Heaven's blessing was not just a highly formal practice of court etiquette, but also a symbolic communication with Heaven and a demonstration of the emperor's inherited monopoly on Heaven's will.

Four-Dimensional Terraces as a Calendar

In the previous section, we discussed the terraces of the Temple of Heaven from the perspectives of shape, number, and sound effect; these features endowed them with the religious functions of Mount Tai. In this section, we will focus on something more abstract: the cosmos (universe), defined as a four-dimensional entity that encompasses everything – heaven, earth, and all of humanity, as well as time itself. This understanding of the four-dimensional cosmos stimulated the imperative to produce cosmological charts such as the *bagua* diagram, religious architecture, and ritual objects to represent the cosmic order. Architectural monuments are generally considered three-dimensional objects with regard to their perceived characteristics of authority and permanence (Wu, 1995, p. 11). However, a number of Chinese religious structures, including the terraces of the Temple of Heaven, seem to conduct movement within themselves, and therefore maintain a “living” nature. In order to facilitate a sufficient discussion of the fourth-dimensional aspects of the Temple of Heaven terraces, it becomes necessary to familiarize ourselves with the design principles found in other Chinese ritual architecture created to fulfill similar religious purposes.



Figure 4

Diagram of the Bright Hall (Image source: Wang Guowei [1877–1927], *Mingtang miaozhong tongkao*)

According to the official *The History of Ming (Mingshi)*, in the year 1530, Emperor Jiajing of the Ming revived ancient ritual traditions in which religious ceremonies were conducted outside the palace, a practice known as *jiaoji*. Therefore, in planning the construction of ritual architecture, the emperor and his scholars decided that the design of the Temple of Heaven should follow the model of the Bright Hall (*mingtang*) of the Zhou Dynasty (Wu, 2006, p. 134). The Bright Hall, the predecessor structure of the Temple of Heaven, first appears in the literature in *Yi Zhou Shu* (Lost Book of Zhou), a collection of Chinese historical documents from the Western Zhou Dynasty (1046–771 BCE; Fig. 4). According to the section *Kaogongji* (from *The Rites of Zhou*), the Bright Hall of the Zhou Dynasty was developed from Xia and Shang Dynasty concepts. The Zhou Dynasty Bright Hall consisted of five rooms built according to the “yin and yang five elements” configuration, which allowed the Zhou emperor to carry out the “monthly move to one room (*yueling*)” according to the “four seasons and five elements” cycle (Zhang, D., 2004, pp. 130–131). The primary significance of the Bright Hall lay in the emperor’s utilization of this structure to promote monarchical power through divine influence, and to use his divine powers to consolidate political authority.

The importance of the Bright Hall has not escaped the attention of modern scholars. Before archaeological evidence was available, scholars strove to clarify the structure’s significance from a large corpus of texts produced in the pre-Han and Han eras. According to the ancient text *Huainanzi*, the Bright Hall was “the greatest thing among all things” and “manifested the

deepest meaning of all meanings" (Ames, 1994, p. 143). After the first Han Bright Hall site was discovered in 1956, scholars attempted to restore its above-ground structure by consulting, somewhat indiscriminately, this same corpus of texts. According to the restoration model of the Han Dynasty Bright Hall built by Wang Mang in the first century CE, we can see that it consists of a circular platform and a highly geometric floor plan. It was surrounded by alternating circles and squares, reminiscent of the shapes of Heaven and Earth (Liu, 2016, pp. 2-3).

Unlike the magnificent palace architecture of the period, the political and religious significance of the Bright Hall was not expressed through monumental scale. As a matter of fact, Wang Mang's Bright Hall is believed to have been completed in only 20 days (Liu, 2016, p. 3). The key characteristic of the Bright Hall was its correctness: construction was required at the correct time, by the correct person, following the correct order. Presenting his political plan to a high-ranked lord, the Chinese philosopher Xunzi (316-235 BCE) concluded his speech by saying: "If things are done this way, then the Bright Hall can be constructed, and you can hold court there to receive the feudal lords" (Wu, 2007, p. 194). In the words of Wu Hung, "the hall's architecture demonstrates the working of the Universe. The building itself thus becomes the source of changes and transformations [...] it brings all things into its unifying light" (Wu, 2007, pp. 191-192). Overall, the Bright Hall's construction symbolized a desire to perpetuate a legal and stable rulership according to the cosmic order. The Bright Hall provided a representation of the universe and its order and required the emperor's participation to embody and fulfill that order.

The meaning of the Bright Hall was rather complex. Han Dynasty scholar Cai Yong's (133-192 CE) "Treatise on the Bright Hall and Monthly Ordinances" (*Mingtang yueling lun*) addresses the ways in which the Bright Hall embodied cosmological components and movements:

The various sections of the Bright Hall have their regulations. The whole building has a square floor plan of 144 *chi* on each side, a measurement determined by the numerical value assigned to Earth. The round roof is 216 *chi* in diameter, which is based on the numerical value assigned to Heaven. The Great Temple in the center is three *zhang* on each side, and the Room of Communing with Heaven is nine *zhang* in diameter, because nine and six represent the transformation of yin and yang [...] The 12 rooms correspond to the 12 zodiac constellations. Each of the nine chambers has four doors and nine windows, so that there are altogether 36 doors and 72 windows [...] The building has four sides and is painted with five colors; four and five are the numbers of the four seasons and the Five Phases, which determine the activities taking place there. The structure

covers an area of 24 *zhang* on each side, a figure that echoes the 24 divisions of the year (Wu, 2007, p. 197; trans. Wu Hung).

As a three-dimensional building, the Bright Hall invited the emperor (the Mandate of Heaven) to manifest the fourth dimension - time. Taking Wang Mang's Bright Hall as an example, the structure was surmounted by an astronomical observatory called *lingtai*. Inside the hall, there were 12 rooms corresponding to 12 months, surrounding a central chamber which symbolized the midpoint of the year. In the words of Wu Hung:

It was the emperor who linked these static spaces into a temporal/spatial continuum: He would begin his year in the first room at the northeast corner (where the *yang* ether rose) and move clockwise through the hall. Each month he would dwell in the proper room, dress in the proper color, eat the proper food, listen to the proper music, sacrifice to the proper deities, and attend to the proper affairs of state (Wu, 2003, p. 120).

As a living embodiment of the Mandate of Heaven, the emperor's movements represented the symbolic movement of the universe, which could also be recorded in a calendar. Without the emperor's participation, the fourth dimension of the cosmic order, timekeeping, could not be fulfilled. The Mandate of Heaven was the only force that could complete the final dimension of the cosmic order.

Though the Temple of Heaven might have differed in its physical appearance from the earlier Bright Hall, it faithfully carried forward its predecessor's tradition of communication with Heaven and timekeeping. The terraces of the Temple of Heaven may therefore also be regarded as an immense Chinese calendar. Despite its subtleties and somewhat obscure composition, the Temple of Heaven effectively expressed timekeeping in its own architectural layout. Timekeeping and calendar construction served to define the greatest political authority; because the vital exercise of timekeeping was imbued with such significance, it could make use of the highest-ranked ritual architecture. Thus, the Temple of Heaven became a logical place in which to store bells, calendars, and clocks, objects designed to tabulate temporal divisions. In the 16th year of the reign of Emperor Qianlong (1711-1799) of the Qing Dynasty, a bell tower was constructed inside the complex of the Circular Mound Altar, enshrining an enormous bronze bell. Later, after the bell tower was destroyed, this giant bronze bell was removed to the Zhai Palace, a small edifice within the temple. Emperor Qianlong had not utilized the bell for any practical purposes, but rather installed it in the Circular Mound Altar to symbolize his Mandate of Heaven and his



Figure 5

The Hall of Prayer for Good Harvests, the Temple of Heaven (Photography: Liman Zhang)

rulership over the unified country (Cao, 2011, p. 45). Moreover, there are four gates built into the Circular Mound Altar, namely Taiyuan Gate, Zhaocheng Gate, Guangli Gate, and Chengzhen Gate. The characters "Yuan, Heng, Li, Zhen" are taken from the *Book of Changes*. The Southern Song Dynasty scholar Zhu Xi (1130-1200) explains: the newborn material is called *yuan*; the growing material is called *heng*; the grown-yet-not-quite-mature material is called *li*; and the mature material is called *zhen* (Zhang, 2011). When the emperor is walking around the Circular Mound Altar, he is transforming himself into the moving hand of a huge clock, and thus embodies the movement of Heaven.

The Hall of Prayer for Good Harvest followed the design principles of the Bright Hall even more closely (Fig. 5). As the shape, color, and number symbolism of the Hall of Prayer for Good Harvest represents Heaven's authority, the internal structure and portals represent the cycle of the seasons - spring, summer, autumn, and winter - and the passage of time (Wu, 2008, p. 80). On top of the three-level terrace, there stands a magnificent triple-gabled circular building. The hall is round, symbolizing the shape of Heaven, and the roof tiles are blue, symbolizing the blue sky. The four inner circle pillars with dragon motifs symbolize spring, summer, autumn, and winter throughout the year; the 12 golden pillars in the middle circle symbolize the 12 months of

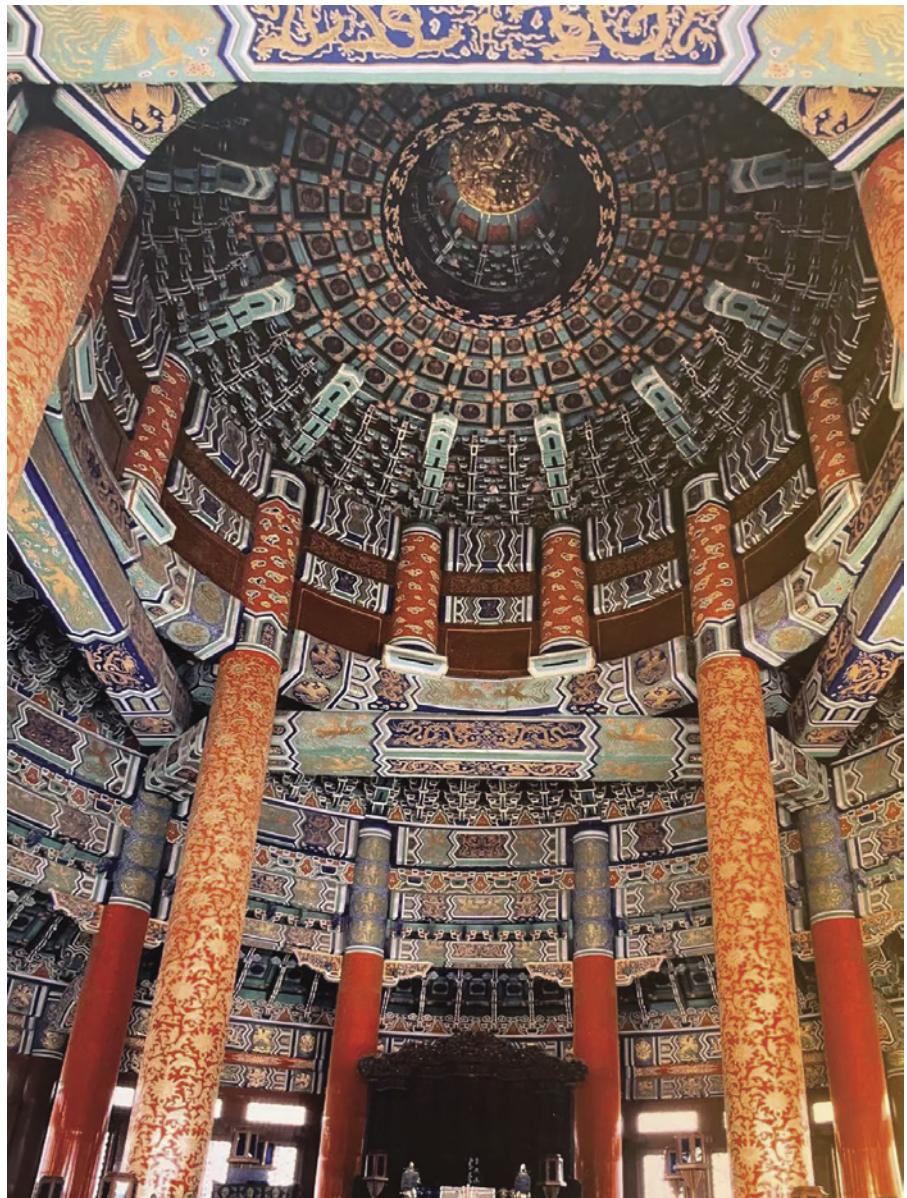


Figure 6

Pillars in the interior, the Hall of Prayer for Good Harvests, the Temple of Heaven
(Photography: Liman Zhang)

the year; and the 12 eaves pillars on the periphery symbolize the 12 *shichen* in a day (Fig. 6). The 24 pillars of the middle and outer circles symbolize the 24 solar terms in a year. There are a total of 28 pillars within these three circles, symbolizing the 28 essential constellations in Chinese

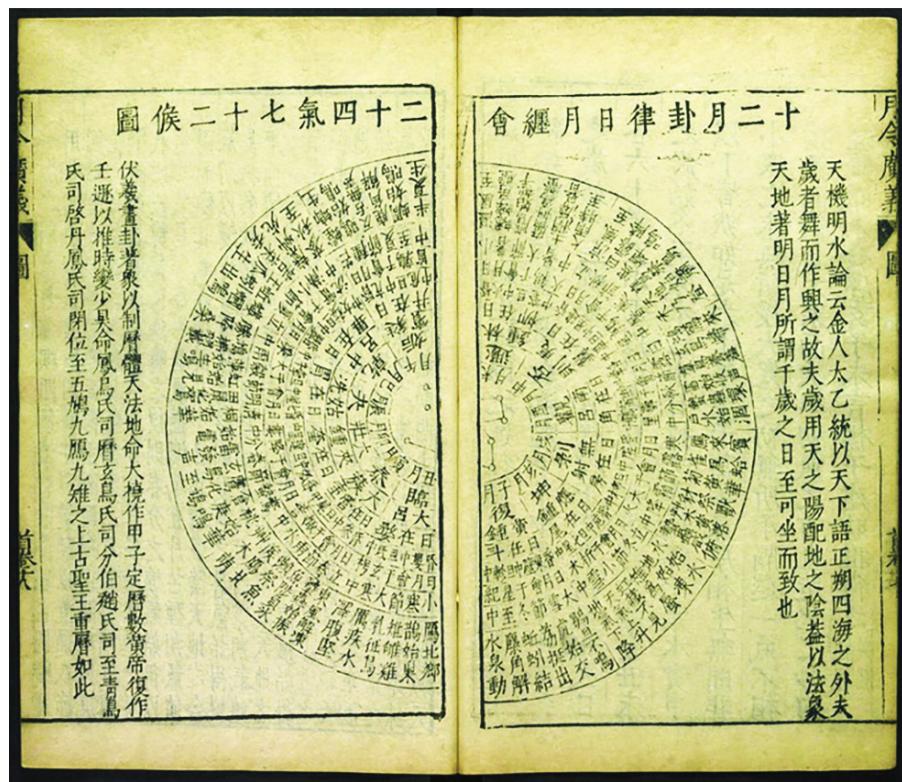


Figure 7

A Chinese calendar showing 12 months and 24 *jieqi* (Image source: Feng Yingjing [1555–1606, Ed.], "Tianji mingshui lun," in *Yueling Guangy*)

astronomy. In addition, the eight dwarf pillars at the top make a total of 36, which symbolizes the 36 heavenly kings. The Leigong pillar under the canopy symbolizes the emperor's domination over the universe (Yang and Xu, 1999).

In terms of their overall layouts, the terraces of the Circular Mound Altar and the Hall of Prayer for Good Harvest are arranged in a cardinally oriented configuration with a clearly defined center. In terms of their contents, both terraces represent the cycle of time, in the form of a daily clock, an annual calendar, or an abstract cycle of growth, decay, and rebirth. Cyclical, rather than linear, time in China had traditionally been calculated as a succession of dynasties and seasons, moving in circles (Zhang, 2012, p. 136). To this end, the circular shapes of these terraces corresponded to the Chinese concept of time, and so resembled the design of a traditional Chinese calendar (Fig. 7). The subdivision of time in the traditional Chinese calendar was complicated and pseudoscientific, but it was crucial that Chinese rulers understood it fully. Understanding and producing a calendar was a vital component of imperial Chinese politics. Oversized chronographs were routinely

commissioned by Chinese emperors as symbols of their political control over a unified time and space (Zhang, 2012, p. 137). Generally speaking, the calendar and clock prescribe appropriate human activities according to seasons, months, or hours within a day. The terraces in the Temple of Heaven thus demonstrate a correlative cosmology for an ideal government, regulating the correct rituals and administrative behavior for the ruler.

Space, Time, and Political Authority

The triangular relationship between time, space, and the political authority of the Chinese emperor was translated into the terraces of the Temple of Heaven. However, it was designed to function as an animate cosmic theater rather than as a static altar or a staircase leading to heaven. While the terraces of the Temple of Heaven may lack magnificence of scale compared with other palatial buildings and platforms in imperial China, their utilization of number, shape, color, and directional symbolism rendered them into four-dimensional representations of the universe – that is, all-inclusive entities encompassing heaven, earth, and mankind (with the emperor as mediator), as well as time and space. They replicated the functions of the Bright Hall, perpetuating the universal order through architectural space.

According to Wu Hung, architecture did not replace ritual objects such as bronzes or jades to express the very soul of social and political power until the Eastern Zhou Dynasty (Wu, 1995, p. 78). The use of monumental buildings and tombs to exhibit political authority emerged during the Eastern Zhou and Qin Dynasties. We may therefore relate the Temple of Heaven not only to other architectural complexes of Imperial China but to earlier ritual objects, along with other political practices such as urban planning, calendar-making, and monthly ordinances. In other words, the Temple of Heaven not only functioned as a self-contained architectural complex, but demonstrated a political system that consolidated the country into an interrelated political network. Within this political network, the emperor abided at the center of the temporal/spatial structure of the universe. The *Book of Documents* (*Shang shu*), one of the Confucian classics written during the second and first millennia BCE, begins with stories of Emperor Yao, a legendary sage in the time of Great Harmony, who established a system that allowed him "to compute and delineate the sun, moon and stars, and the celestial markers, and so to deliver respectfully the seasons to be observed by people" (Wu, 2003, p. 113). Under this system, the emperor connected the spatial and temporal order with his governance, securing harmony between Heaven and men.

The final religious usage of the Temple of Heaven took place on December 23, 1914, in the third year of the Republic of China (Fig. 8). At dawn, the new president, Yuan Shikai, dressed in a



Figure 8

Yuan Shikai (first on left) at winter solstice ceremony, the Temple of Heaven, 1914
(Image source: Wikimedia)

military uniform, led a procession of men in ancient attire to the Temple of Heaven. Approaching the Circular Mound Altar, Yuan cloaked himself in the imperial habiliments, and stepped onto its terrace. Ancient music was played, and traditional dancers responded (Li, 2012). This religious ceremony was a forerunner of Yuan's enthronement, which took place a year later, after he declared himself emperor of the Great Chinese Empire, dissolved China's Parliament, abandoned the Gregorian calendar, readopted the traditional calendar, and assumed the era name Hongxian. However, due to pressure from various sources, Yuan was forced to abandon his new title after a reign of only 83 days. The Temple of Heaven ceremony failed to secure him the Mandate of Heaven, but rather alerted his rivals to his overweening ambitions. Yuan thus became the last individual to employ the Temple of Heaven for communication with the Divine.

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