18 | The Study

The Temple of Heaven: cosmological symbolism

If you've been to China, and Beijing in particular, possibly you also went to visit the Temple of Heaven. I can only assume you were amazed at its layout, with numerous squares and circles cleverly combined, vibrant colors, dense and open spaces, exquisite paintings, wonderful architectural components, and so on. However, what you likely saw was just the beauty of the place, but perhaps not its intrinsic significance. Understanding the cosmological symbolism of the Temple of Heaven, will help you see its true value and splendor.



THE TEMPLE OF HEAVEN, or Tian Tan, is one of the largest altar complexes in China and a paradigm of Chinese mystical and cosmological symbolism. It was once a place for emperors to make sacrifices, to pay respect to their ancestors, and to pray to Heaven at winter solstice each year. As the son of Heaven and the ruler of the people, the emperor would intercede with the gods in the name of his people and pray for a good harvest. The Temple of Heaven was built between 1406 and 1420, during the reign of Emperor Yongle, who was also responsible for the construction of the Forbidden City. The temple was enlarged and renamed 'Tian Tan' during the reign of Emperor Jiajing in the 16th century. It was renovated in the 18th century under Emperor Qianlong. It is a spatial representation of Chinese cosmology and astronomy, on which the political power and legitimacy of the imperial dynasties were based for more than two millennia.

Magical layout of cosmology

The overall planning of the Temple of Heaven met with basic ancient Chinese architectural ideas. A double ring of walls enclose the compound of temple structures. The 'north circular' and 'south square' meet with the Chinese traditional understanding of the cosmos as a 'hemispherical dome', situated over a 'flat earth'. Similarly, the north wall was constructed higher than the south wall, signifying that Heaven is higher than Earth. As the temple was where the emperor would pray to the heavens, the temple's design needed to reflect this relationship. In accordance with the theory of Hemispherical Dome, the north wall of the temple was designed to be circular, a symbol of Heaven's shape; the south wall was to be square, representing the Earth's appearance. The main temple buildings line up from north to south along the central axis of the compound. All the temple structures have a square or circular design, again representing the shapes of Heaven and Earth. The Circular Mound Altar (圜丘坛) stands in the southern part of the compound, and was designed as a place of Heaven worship; it comprises a triple circular altar, surrounded by a square enclosure. The Hall of Prayer (祈年殿), with its three-tiered conical roof, is found at the northern end of the grounds, and was designed as a place to pray for a good harvest.

Heavenly number nine

According to traditional Chinese design theories, the Circular Mound Altar needed to establish a cosmic connection with Heaven; using the 'heavenly number nine' was an effective tool

Above: The Temple of Heaven, Beijing, China. Image reproduced under a Creative Commons license, courtesy of 月明 端木 on for this as Heaven is believed to have nine levels. The Circular Mound Altar is constructed of three circular stone platforms, each with its own white marble balustrade, and as a whole enclosed by first an inner circular wall, and then an outer square wall. Both walls have four gates; one at each cardinal point – north, east, south, west. Each platform is reached by walking up nine steps. The diameter of the entire altar is 45 Zhang (丈, ten feet); in other words, nine multiplied by five. Those two numbers are often used together to represent the emperor. In the center of the uppermost platform lies the Tianxingshi (Heaven's Heart Stone). Around this, flagstones pave the platform in nine concentric circles, with each circle comprising a multiple-of-nine number of flagstones: the first ring has 9 stones, the outer ring has 81.

Combined with the traditional calendar

Another remarkable feature at the Temple of Heaven is the link between architectural design and the traditional Chinese calendar. Most notably in the Hall of Prayer. The Hall of Prayer reflects the Chinese calendar with the number of its com-ponents. The total number of pillars in the Hall are 28: the four highest and largest columns stand at the center of the Hall, around that are 12 pillars, and again around those are another 12. The innermost columns represent the four seasons, the 12 middle columns the months of the year, and the 12 outer columns the 12 hours of a day. The 24 outer and middle columns represent the solar term, whilst the total number of columns signify the 'Twenty–Eight Lunar Mansions' (28星宿), the Chinese heavenly stars, comparable to the zodiacal constellations recognized in western astrology.

Number eight and orientation symbols

The number eight is a Chinese symbol for universal unity, for rebirth or blessing. It also represents the eight cardinal and intercardinal directions: north, northeast, east, southeast, south, southwest, west, and northwest. The number eight is also present in the Chinese 'Eight Symbols' (八卦符号), which represent the fundamental principles of reality.

The Imperial Vault of Heaven (皇穹宇), located to the south of the Hall of Prayer, has a conical roof and stands on a single layered marble base. The Vault houses eight peripheral columns and eight internal columns, both sets reflecting the points on a compass. Inside, the floor paving is again a concentric pattern, this time nine rings with each a multiple of eight fan-shaped stones. Thus the first circle has 8 stones,

the second circle 16, and so forth, out to the ninth circle with 72 stones. The total number of stones is 360, signifying both the degrees in a circle and the days in a year according to the ancient calendar. In the center of the vault stands a shrine for the God of Heaven; on four other platforms in the vault you find memorial tablets for eight former emperors.

Cosmological meanings of colors

The various colors found on and in the structures of the Temple of Heaven are so well coordinated, are so harmonized and stunning, that you may be led to suspect that they were placed there by the gods. The colors indeed have a cosmological significance. The gates, walls and pillars of the temple are red, which indicate Chinese royalty. Red columns could only ever be used for imperial buildings; they were forbidden in ordinary houses, and homeowners risked being sentenced to death. All the roofs are covered with dark-blue glazed tiles, which are a strong reflection of blue skies and Heaven.

The Hall of Prayer's three-tiered roof used to be different colors; blue, yellow and green tiles were used to represent Heaven, the Emperor and the Earth. During the Qing Dynasty, the colors were unified into the single color cyan, making the symbolism more explicit: to highlight vibrant plants and good weather. Another building in the temple compound, known as Zhai Palace (斋宫), was built to house the emperor during ceremonies. As the emperor's palace, its roof should be covered with yellow glazed tiles, but in fact they are blue. It was the emperor's choice, as he wanted to reflect his pious respect of Heaven.

Conclusion

Many Chinese buildings, old and new, are related in various ways to cosmology, as it is seen as an effective way to establish a connection with Heaven. An old Chinese saying goes, "An object is a Tai Chi world (一物一太极)", meaning that anything can be interpreted by using cosmological theories. Architecture is certainly one of the most significant ways in which this 'small universe' is expressed, connecting Earth with Heaven. So next time you visit China, and perhaps even the Temple of Heaven, take note of all the cosmological significance, and you will see how it enhances all the beauty.

Chen Chunhong, School of Architecture of Tianjin University (China); main fields of interest include architectural history, Chinese architectural archaeoastronomy and Chinese architectural heritage. (historychen@126.com)