An ancient system for dating events, tiangan dizhi was replaced after the end of the Chinese imperial system by the Gregorian calendar. But some Chinese people still rely on the sixty-year cycle of tiangan dizhi to determine where and when to plan events both momentous and mundane in the course of their lives.

Tiangan dizhi is a cyclical time-measuring system used in China since antiquity. The system juxtaposes two parallel sequences: the sequence of heavenly stems (tiangan 天) which consists of ten equal-length named units, and the system of earthly branches (dizhi 地支), which consists of twelve equal-length named units. Specifically, the calendrical system identifies major time units, principally a year or a day, by pairing one stem and one branch.

Because of the difference in the number of stems and the number of branches, it takes sixty counts before the original pairing reappears, thus forming the sexagesimal, or sixty-year, cycle in Chinese time reckoning. Enumerated below are the sixty pairings that occur as the heavenly stems, numbered here 1 through 10 for the purpose of illustration, pair with the heavenly branches, coded here A through L for the purpose of illustration. (The actual tiangan dizhi system does not use numerals and letters; the system uses Chinese characters to stand for the ten branches and twelve stems.)

1A, 2B, 3C, 4D, 5E, 6F, 7G, 8H, 9I, 10J,
1K, 2L, 3A, 4B, 5C, 6D, 7E, 8F, 9G, 10H,
1I, 2J, 3K, 4L, 5A, 6B, 7C, 8D, 9E, 10F,
1G, 2H, 3I, 4J, 4K, 6L, 7A, 8B, 9C, 10D,
1E, 2F, 3G, 4H, 5I, 6J, 7K, 8L, 9A, 10B,
1C, 2D, 3E, 4F, 5G, 6H, 7I, 8J, 9K, 10L,
1A (the beginning of a new cycle) …

History of Tiangan Dizhi

Scholars generally agree that this sexagesimal system began during the Shang dynasty (1766–1045 BCE), when the kings attached the names of the heavenly stems to their personal names. The paired names also appeared on oracle-bone inscriptions (called jiaguwen, 甲骨文 which means “words carved on tortoise shells or cattle scapulas” and which were used by Shang kings for divination purposes). The paired names carved on bones were used to indicate the day but not the year when a spiritual quest was to be performed. The late historian Derk Bodde believed that it was not until the Han dynasty (206 BCE to 220 CE) that this sexagesimal system was used to date both years and days.

This sequential system had been complicated in the late Zhou dynasty (1045–256 BCE), when other cosmological signs or beliefs were correlated with tiangan and dizhi to map space and time. The ten heavenly stems were split into the duality of yin and yang: 1, 3, 5, 7, 9 belong to yang and 2, 4, 6, 8, 10 belong to yin. The ten heavenly stems were further paired to correlate with the five elements (wuxing, 五行) or the “five movements”—wood bending (1, 2), fire rising (3, 4), soil growing (5, 6), metal molding (7, 8), and water sinking (9, 10)—and the five cardinal
directions—east (1, 2), south (3, 4), center (5, 6), west (7, 8), and north (9, 10).

In the same manner, the twelve earthly branches were categorized into the yin–yang dichotomy: yang—A, C, E, G, I, K; yin—B, D, F, H, J, L. They were further correlated with the twenty-four solar terms (jieqi 节气) in a solar year, the twelve zodiac animals representing the years (rat, ox, tiger, hare, dragon, serpent, horse, sheep, monkey, rooster, dog, and boar), the twelve lunar months in a year (the Chinese months are called by their numerical order), and, lastly, the twelve two-hour units (shicheng 时辰) in a day.

These two greatly enriched sequences in post–Han China (after 220 CE) thus constituted a composite cosmological order of space-time configuration for interpreting the existence and meanings of ephemeral human lives, from the nature and affairs of the emperor to individual mundane existences. For example, unlike the followers of the lineal Gregorian calendar, which extends from the time of Christ’s alleged birth to infinity and represents a year by a number in sequential order, the Chinese typically chronicled and named years following this sexagesimal cycle of each reign, such that the Gregorian 1840 CE was chronicled as the 1G year of Emperor Daoguang. Besides chronicling the yearly order for the entire state, the court astronomers also determined the auspicious time and place for the emperor to visit, the proper direction of the main gate of the court, the spatial allocation of household furniture—all based on the calculation of this tiangan dizhi system. At the time of the emperor’s death, the court astronomers also prescribed the most auspicious time and location for the funeral, the physical construction of the coffin and the tomb, and the direction of the cemetery.

**Tiangan Dizhi Today**

With the downfall of the imperial court in 1912, the sexagesimal system was replaced with the Gregorian calendar system. Except for respected scholars who still date important events by using the traditional and formal tiangan dizhi names, few people today use tiangan dizhi to name the years.

Other parts of the tiangan dizhi system are better preserved and widely in use in daily life. For instance, people may figure out the unique characteristics of a specific space-time period, or node, and arrange activities (such as scheduling a haircut, launching a new business, taking a trip, and so on) accordingly. This practice has persisted throughout Chinese history, down to the twenty-first century. A newborn baby’s birth characters called shengcheng bazhi (生辰八字 the eight characters of birth)—for the birth year, month, day, and hour—are still carefully recorded according to the designated characteristics of the paired heavenly stems and earthly branches. Fortune-tellers use these eight birth characters to predict the ebb and flow of an individual’s life cycle. It is a common practice for parents to bring the eight birth characters of a prospective bride and groom to a fortune-teller to see if the two sets are compatible. At the time of death, a fortune-teller or a Daoist priest will analyze the eight birth characters of the deceased in order to pick the proper time and location for the funeral.

**Further Reading**


