

Hidden Time, Hidden Space: Crossing Borders with Ritual

Introduction

In 1104, the official Li Fuxian 李復先 (10??-11??) lamented that, though in former times, battle was conducted according to ritual, military practices of his time were not.¹ Despite Li's complaint otherwise, ritual was an essential element of warfare in the Song dynasty (960-1279). Indeed, the military was braided into the Song ritual network in many ways, both symbolically and practically. For example, military thinkers were invested with deity status, and court discussions on appropriate offerings for these military strategists followed.² More practically, troops received bonus emoluments on the occasions of the suburban sacrifice ritual, performed once every three years.³ Even weapons and equipment were manufactured and distributed according to a ritual hierarchy so that "the troops would respect ritual."⁴ In addition to these means of ritual integration, the *Secret Classic of Venus, Planet of War*; *Tiger Seal Classic*, and the *Comprehensive Military Essentials* document ritual practices.⁵ This chapter is concerned with one of the latter ritual genres, a type of occult ritual

¹ SS 197.4918.

² SS 105.2556. This summarizes three incidents. The first occurred in 1112, under emperor Huizong. In the second instance, Zhang Ze formally complained that sacrificial offerings were not being made to the invested military personages. In the third, Sun Zongjian requested that Huang Shigong be invested as a deity.

³ Wang Zengyu *Songchao bingzhi chutan* (Beijing: Zhonghua shuju, 1983), p. 229.

⁴ SS 197.4920.

⁵ These texts remain a repository—in some cases, the sole repository—of ritual practices of the era. While records of these rituals have been mined by scholars of Daoism, they have been largely ignored by historians and other scholars of the Tang and Song periods.

based on the use of the cosmograph (*shi* 式), which gained great momentum during the Song.

The “Three Cosmographies” (*sanshi* 三式) techniques refers collectively to the Six Water Cycles (*liuren* 六壬); the Supreme One (*taiyi* 太乙); and the Hidden Period (*dunjia* 遁甲) techniques recorded in the manuals.⁶ These techniques were performed on a compass-like device called a cosmograph or *shi* (see below), which was modeled after the Heavens and their movements. In pre-modern literature, these techniques are most closely associated with a kind of sorcery practiced by the famous general, Zhuge Liang 諸葛亮 (181-234). In modern times, the “Three Cosmographies” have become popularized in Hong Kong martial arts movies—in which the hero draws a circle on the ground, scribes a writ in the air, “paces the void” and then disappears by climbing through a rip in space-time.⁷ Moreover, these techniques are still practiced in contemporary Taiwan, albeit in a somewhat different form.

⁶ On the translation of *liuren* as the “Six Water Cycles”, see Doré 1917, v. 5., 344 and *FSCD*, p. 302-3. During the Song, the Hidden Period became synonymous with the Irregular Opening/Hidden Period (*qimen dunjia* 奇門遁甲) and its earlier name, Duke of Thunder (*Lei gong* 雷公). I use Hidden Period and Irregular Opening/Hidden Period interchangeably in this essay. For more on the Three Cosmographies, individually or collectively, see: *DJFYJ*, *DJYY*, *FSCD* and Chen Yinglue 1979; Duan Muyu 1995 (1986); Fei Bingxun 1991; Ho Pengyoke 1998a; Marc Kalinowski 1983; Marc Kalinowski 1991; Kong Richang 1975; Liu Bowen n.d. (1915); Schipper and Wang 1986; Yan Dunjie 1978; Yan Dunjie 1958; Zhuge Wuhou (Liang) 1965, v1&2. Unfortunately, the manuscript for Ho Pengyoke’s recent volume, *Chinese Mathematical Astrology: Reaching out to the Stars* (London: RoutledgeCurzon, 2003) was not available to me at this writing. The general concepts among the three methods were similar, and sometimes used in concert with each other during the Song. All three are discussed in the manuals, but the Hidden Period and Six Water Cycles techniques dominate the manuals. Supreme One is sometimes discussed as one kind of Hidden Period.

⁷ *Qiannu youhun* (*Chinese Ghost Story*) directed by Ching Siu-tung (Beijing dongfang yingyin gongsi, 199?); and the pre-modern novel, *Romance of the Three Kingdoms*, translated by C. H. Brewitt-Taylor (Rutland: Charles E. Tuttle, 1959), v. 2, pp. 251-53 and 438-449; Ho Pengyoke “Zhuge Liang yu *qimen dunjia*” (Singapore: 1997 *Wu Teh Yao Memorial Lectures*, 1998b); Schipper and Wang, “Progressive and Regressive”.

The manuals mentioned above give a similar picture of the extraordinary potential of the “Three Cosmographies” techniques. By understanding the patterns of cosmic space and time, they tell us, one could use the Hidden Period to jump through time and space, change natural phenomena like weather, or disappear entirely.⁸ One could change the tides of fate with the cosmograph: “[Regarding] those having the ability to know good and evil fortune but not being able to change it, they can change it if they use the cosmograph.”⁹ It was also the means to esoteric knowledge: “Feng Hou performed the Hidden Period, thoroughly understanding ghosts and gods. The poles of the Heavens and the obscure and profound, this is what is known as ‘hidden’ (*dun* 遁).”¹⁰ This statement places the techniques of the “Three Cosmographies” on the level of sorcery and the occult, marking them as more than simply a system of prognostication.

Superficially, such rituals may seem the antithesis of military action. The use of these rituals have tended to be dismissed as symbolic and, therefore, tactically or strategically insignificant.¹¹ Scholars often oversimplify them as tools used merely to psychologically and emotionally manipulate the warriors.¹² It is possible that these rituals appear in military manuals through some historical quirk. Yet, these manuals devoted over half of their contents to ritual and belief. Most texts devote space to

⁸ *WJZY* 21.2192; *DJYY*. All *WJZY* citations refer to the *houji* (latter section) unless otherwise noted “*qianji*.”

⁹ *WJZY* 21.2174-5.

¹⁰ *WJZY* 21.2192

¹¹ Or “unscientific,” “superstitious” and “of little value”. See Xu Baolin *Zhongguo bingshu tonglan* (Beijing: Jiefangjun chubanshe, 1990), pp. 350-51 for a rather typical assessment, especially in Chinese secondary scholarship.

¹² See for example Brian Ferguson “The General Consequences of War: An Amazonian Perspective” in *Studying War: Anthropological Perspectives*, ed. S. P. Reyna and R. E. Downs (Amsterdam: Gordon and Breach, 1994), pp. 98-101.

matters that their authors perceive as important. It seems likely, then, that the authors of these manuals believed in these rituals enough to commit them to writing.

Moreover, as seen below, it is difficult to imagine creating rituals as complicated as the “Three Cosmographies” and not practice them. Since the non-ritual contents of the manuals appear to document actual Song practices, it is highly probable that they practiced these rituals, too.

The courts of both the Tang (618-907) and the Song used the Six Water Cycles and Hidden Period techniques. Song emperors consulted “Three Cosmographies” diviners about affairs of state. At least eleven practitioners of the occult arts held positions prestigious enough to warrant biographies in the official histories of the Tang and Song dynasties. Unofficial sources suggest that these techniques were even more widespread than the official histories indicate.

The manuals specify the circumstances in which particular “Three Cosmographies” rituals should be performed and the words and acts that constitute their content and performance. These words and acts and their invocation of the supernatural in the context of a social collectivity and a prescribed setting—in this case, that of military personnel—constitute a system of belief. Understanding the ritual relations documented in these manuals tells us how the Song understood and used their military system, and ultimately, how the Song perceived conquest and put power into practice. From where does the supernatural power of these techniques come? What were the restrictions on this power? In order to answer these questions, I look at a smaller detail of the picture of power during the Song: that is, the role these rituals assumed in defining and creating borders.

Occult rituals found in Song dynasty military manuals defined or partially defined certain kinds of boundaries. I here examine the relations of ritual action to various sorts of limits to determine how such rituals probed, transgressed and defined

these limits. Not the least of these boundaries were those that scribed symbolic or conceptual systems, especially the boundaries of nature, authority and its role in governance, knowledge and culture. Yet these abstract boundaries were never divorced from practice, because practice is dependent upon and determined by such limits. Thus, it would be cavalier to dismiss the links between occult rituals and the Song military system; this is particularly true for what will be defined as rituals of transgression.¹³

Below, I show that the Three Cosmographies techniques are both powerful and empowering in the Song because they enabled the performer to cross certain sorts of boundaries—time, space, the phenomenal universe. Rituals employing the cosmograph negated limits and order (especially as defined by *shu* 數—regularity, numbers, emblem, but other sorts of order, too) to create chaos and so produced supernatural power. The boundaries that I discuss here were constantly shifting, negotiated and defined. While operating as subversion (of the sorts of natural limits available to ordinary human action), and as transgression (of the same), the Three Cosmographies nevertheless operated within certain constraints of the “structure and rules” that it purported to “subvert and radically interrogate,” what Peter Stallybrass and Allon White, in *The Politics and Poetics of Transgression*, call the “politics of transgression”.¹⁴

¹³ On ritual as transgression, see Victor Turner *Ritual Process* (Ithaca: Cornell University Press, 1977 (1969)), pp. 94-130; Mary Douglas *Purity and Danger* (London: Routledge and Kegan Paul, 1966); Marshall Sahlins *Historical Metaphors and Mythical Realities* (Ann Arbor: University of Michigan Press, 1981); and James Boon *Verging on Extra-vagance* (Princeton: Princeton University Press, 1999).

¹⁴ Peter Stallybrass and Allon White *The Politics and Poetics of Transgression* (Ithaca: Cornell University Press, 1986), pp. 6-26 and “Conclusion”; and see James Boon’s discussion in his *Verging*, p. 202.

Generally, ritual creates and maintains order through creating hierarchies, defining tabus, etc.; generally, it creates an ideological ordering.¹⁵ Yet at certain social intervals, according to Victor Turner, the creation of social order depends upon transitions. These transitions entail first disturbing or suspending order in some way prior to the new and different, usually higher, social status. Weddings, confirmations, childbirth and the like are common examples. Turner calls the suspension of status, the period after the old and before the new, “liminal” states. Liminal states involve crossing certain sorts of boundaries to accommodate the transformed social state— infant to child, child to adult, citizen to warrior, etc.¹⁶ Likewise, Kristofer Schipper and Hsiu-huei Wang showed the same to be true for the ritual definition of the Daoist altar and its re-integration with the cosmos. Using the example of the Hidden Period, a Three Cosmographies technique, they eloquently laid out the theme of progressing and regressing along time.¹⁷

Such crossings of boundaries are acts of *transgression*, too; they overstep, trespass, violate, transcend and permeate social, cultural, physical or natural rules. Stallybrass and White discuss transgression in the context of the carnivalesque, taking transgression to be synonymous with “symbolic inversion”; “broadly defined as any act of expressive behaviour which inverts, contradicts, abrogates, or in some fashion presents an alternative to commonly held cultural codes, values and norms be they linguistic, literary or artistic, religious, social and political’.”¹⁸ It is precisely from this

¹⁵ Roy Rappaport *Ritual and Religion in the Making of Humanity* (Cambridge: Cambridge University Press, 1999), passim.

¹⁶ Turner *Process*, pp. 94-130.

¹⁷ Schipper and Wang “Progressive and Regressive”.

¹⁸ Stallybrass and White *Transgression*, pp. 17-18. They are using Barbara Babcock’s definition, cited here. The carnivalesque, now an analytical category of cultural critique, comes from Mikhail Bakhtin’s discussion in *Rabelais and His World* (Cambridge, Mass: M.I.T. Press, 1968).

transgression, from violating certain boundaries, that occult rituals like the Three Cosmographies derive their power.

To be sure, the Three Cosmographies constituted an alternative path, one that may have relied on a different moral code than that being defined at court. Thus, the issue of the social status of the military comes into play in relations between *shi* rituals and the authority to legitimate governance. Three Cosmographies techniques, originating outside the court, transgressed borders of the orthodox and orthodoxy. That is to say, the way that the Three Cosmographies mediated the authority of legitimate governance lies in the difference between the regulation of the cosmograph, or *shi*, as object and its performance.

In the same way, transgression enabled by the cosmograph techniques was ordered within a set of constraints, which were themselves embedded in its continued practice and transmission. In other words, these methods were a kind of sanctioned transgression. Such a concept may not be so surprising: legitimacy and the authority to be considered legitimate stem from the ability, or the perceived right, of an individual, body or institution to transgress (usually its own) laws, customs, and proclaimed or tacit morality.¹⁹ The military system is probably one of the best examples of such transgression.

But what were the limits that these rituals challenged? How were they defined and transgressed? How do “occult” systems invert, negate or render permeable boundaries? Upon what kind of boundaries do such rituals act? The cosmograph produced power by and through its potential for transgression. I look at two of four related kinds of limits that the Three Cosmographies challenged: the limits of nature

¹⁹ See discussion in Boon *Verging*, pp. 143-165 and 200-202.

and phenomena, especially time and space; and the limits of authority and its role in legitimate governance.²⁰

After discussing the rise of the Three Cosmographies during the Song, I evaluate the existence of these forms as a “sanctioned” transgression, especially in light of these factors: In the first instance, indeterminacy is inscribed within the Hidden Period system itself, both as object (cosmograph) and the ritual techniques for using it; this indeterminacy enabled the user of the cosmograph to transgress the limits of nature. In the second instance, I examine the rise of paradoxical forms of the term *shi*—one being the cosmograph as an object, and another being its meaning of “specifications” as a legal category—that both restricted and transgressed the limits of authority, and commented on the dynamic between court and military during the Song.

The rise of the Three Cosmographies during the Song

The techniques of the Three Cosmographies, especially the Irregular Opening/Hidden Period (*qimen dunjia*), were fully developed and refined during the Song. In Song texts, the three systems were sometimes used in conjunction with each other, and the nomenclature used interchangeably.²¹ The Six Water Cycles was the oldest of the three; the development of the Supreme One remains obscure. Collectively, the Three Cosmographies represent some of the most complex, esoteric

²⁰ Both of these aspects of the cosmograph related to transgression of the two latter limits, geographical and cultural, which I discuss elsewhere.

²¹ In the texts I am working with, the Irregular Opening, Hidden Period, and Six Water Cycles systems were sometimes conflated, and discussed as parts of the same genre of technique and used together; see *FSCD*, p. 14. *Dunjia* is also known as the Occulted *Jia* (the first of the Heavenly stems), the Hidden *Jia*, Hidden Symbols, etc. I follow Kalinowski, Schipper and Wang in using Hidden Period. See Schipper and Wang “Progressive and Regressive”; Kalinowski “Instruments Astro-calendériques”; Marc Kalinowski *Cosmologie et Divination dans la Chine Ancienne* (Paris: École Française d’Extrême Orient, 1991); Kristofer Marinus Schipper *L’empereur Wu des Han dans la Légende taoïste* (Paris: EFEO, 1965), pp. 34-39; Ngo Van Xuyet *Divination, Magie et Politique dans la Chine Ancienne* (Paris: Presses Universitaires de France, 1976), 190-195; Ho Pengyoke “Cong kexue” and “Zhuge Liang”.

rituals disclosed in Chinese manuals, military and otherwise, that I have investigated so far.

Mentioned already in the *History of the Latter Han* (*Hou Hanshu* 後漢書), an incipient form of the Hidden Period started to develop during the era of Northern and Southern Dynasties (420-589). The bibliography of the history of the Sui dynasty (581-618) records thirteen works on the Hidden Period, and many more on the Six Water Cycles. Beginning with Ge Hong 葛洪 (283-343), commentators repeatedly complained of the lack of good practitioners of these techniques, stating that the thorough understanding and transmission of these techniques was lost after *Huiananzi* (淮南子).²²

The Song went to great lengths to resurrect it. The Hidden Period went from geographically grounded system in the writings of Ge Hong to one more deified and star-oriented during the Song.²³ The *Venus Classic* of the late 750s documents eight methods; the *Comprehensive Essentials* lists twenty-four or so.²⁴ By the reign of Song emperor Renzong 仁宗 (r. 1022-63), seven different schools of the Hidden Period system had been established (apparently despite the proscriptions in place).²⁵ Nevertheless, there are repeated warnings in the texts that discuss the Hidden Period as a technique for the specialist alone, and that it must only be practiced only in need. The *Comprehensive Essentials* warns that occult arts generally belong to the realm of ghosts and gods, and that, even those using them with restraint risk breaking tabus.²⁶

²² *TSJC Yishudian*.746.52r.

²³ On the geographic attributes of the Hidden Period in Ge Hong's *Inner Chapters*, see James R. Ware *Alchemy, Medicine and Religion in the China of AD 320. The Nei Pien of Ko Hung (Pao-p'u-tzu)* (New York: Dover Publications, 1966), pp. 279-300.

²⁴ *Taibo* 9; *WJZY* 21. Some of the *zashi* (miscellaneous cosmograph techniques) of the *Taibo* are categorized as Hidden Period in *WJZY*. The *HQJ* discusses Six Water Cycles, Hidden Period, and Orphans and Empties as parts of the same system.

²⁵ *DJYY Siku quanshu tiyao*.2r-3v.

²⁶ *WJZY* 16.1869.

These supernatural acts were accomplished via a system of cosmological openings and passages, based on a cosmological construct of worldly existence as one in a series of temporally and spatially nested universes.²⁷ Within the framework of the sexagenary calendrical cycle, coincidences and ruptures of the cycle and their convergence with alternate space constitute the mechanisms, or the key, by which the participants can tap into supernatural forces to produce a desired result. These mechanisms exist somewhat outside of the ordinary system of regularities of the cycle, in that they take advantage of cyclically impossible combinations symbols that represented time.

Somewhat paradoxically, however, the mechanisms for crossing limits worked according to the rules and structures defined by the regularities of nature (*shu*). For instance, these ruptures were manipulated with number, the latter being an important Song contribution to Chinese philosophy. They closed and opened according to universal regularities and the visual representations of those regularities. In short, the Three Cosmographies rituals straddled the boundary between inside and outside, center and margin, empirical and true reality, the ordinary and the supernatural.

Though skeptics claim otherwise—and it is true that the official records tend to be somewhat indirect and terse about their use—this system was widely practiced, even by some of the Song’s foremost officials.²⁸ Dou Yan 竇儼 (*jin shi* late 930s; d. ca late 960s?), Wang Pu 王朴 (fl. 950s-960s), and Ma Shao 馬韶 (fl. late 960s-998?) were three early Song officials who practiced one or the other of the Three

²⁷ Schipper and Wang “Progressive and Regressive”; Nathan Sivin *Cosmos and Computation in Early Chinese Mathematical Astronomy* (Leiden: E. J. Brill, 1969).

²⁸ Chinese documents very rarely are direct about the use of these techniques. Part of this is due to the nature of Chinese records of military encounters generally. See Charles Peterson “Bibliographic Note” to “Regional Defense Against the Central Power: the Huai-hsi Campaign, 815-817” in *Chinese Ways on Warfare* ed. Frank Kierman and John Fairbank (Cambridge: Harvard University Press, 1974), p. 335.

Cosmographies techniques. Others were involved less directly. If not participants, they often contributed to court discussions of one or another technique.²⁹ The involvement of these individuals is important because why would the Song court discourage rituals that no one actually practiced?

Indeed, the use of the Three Cosmographies and similar techniques was proscribed during the Song.³⁰ More worrying to Song officialdom than the odd cosmograph secreted away were the practitioners of such arts and the associated collectivity they might inspire. Like all Chinese courts, the Song sought ways to control beliefs that the populace held. Figures who were adept in occult arts could garner some authority in the commoner community, since magical acts are constituted by the belief of the social (or anti-social) collective. This situation could hold true whether the techniques produce results or not. By the same token, the inspired collectivity gave authority over to the practitioner, though it might sometimes be temporally or spatially bounded.³¹ In the case of the Three Cosmographies, such authority was outside of court control or, worse still, even court awareness. The adepts in the Three Cosmographies were disorderly, inherently so because they worked against regularities, the accurate prediction of which formed the root of divination practices. They were institutionally disorderly because the techniques defied accurate categorization, spanning many types of knowledge and therefore, many departments

²⁹ Especially in the drawn out debates over the calibration of the pitch pipes that eventually culminated in the *New Canon of the Essence of Music* in Renzong's reign (see below). Furthermore, it became increasingly popular throughout the Ming (1368-1644) and especially in the Qing (1644-1911). See *LDBRZ*.

³⁰ During the Song, in the ninth month of 972. *SS* 461.13500; *WJZY* 16.1869; Christian Cochini and Anna Seidel *Chronique de la Dynastie des Sung (960-1279)* (Munich: Universität München Ostasiatisches Seminar, nd), 13. On proscription generally, Brian McKnight and James T. C. Liu, trans. *The Enlightened Judgments* (Albany: SUNY Press 1999).

³¹ Marcel Mauss. *A General Theory of Magic* (London: Routledge and Kegan Paul, 1972 (1950)); Turner *Process*, pp. 108-109.

of the government structure.³² It was disorderly for another reason; it was not a part of a textual tradition that was within the Song court's control. This caused the Song a great deal of trepidation, a point to which I shall return.

Even though possession of books on divination and other forms of magic was punishable by strangulation and sometimes death by slicing, neither of these measures were very successful in deterring adepts from acquiring them.³³ The books indeed proliferated, and some of the most dramatic stories we possess involve diviners who openly flouted these proscriptions, thereby reputedly saving the empire (and, incidentally, earning spots in official history). Such was the case of Ma Shao, who openly transgressed court proscription of private practice of astronomical arts to inform Song emperor Taizong 太宗 (r. 976-997) of a Heavenly arrangement auspicious for his future success, if he made timely use of the opportunity (He did). Likewise, Xu Ji 許寂 (850s-936), later an active official, was summoned out of seclusion by Zhaozong 昭宗 (r. 889-904) of the late Tang.³⁴ Zhou Taizu 周太祖 (r. 951-954) consulted Zhao Yanyi 趙延義 (894?-952?) about the fate of his rule.³⁵ Li Jing 李靖 (571-649), a famous general of the Tang dynasty, was said to have used the cosmograph, no doubt referring to his military victories using weather and mists.³⁶ In the Qingli 慶曆 reign period (1041-48), Renzong summoned the recluse Xu Fu 徐復 (n.d. over 70 yrs. at death) to ask about recent incursions of the western nomads.³⁷ Paradoxically, the act of proscribing these techniques contributed to the social

³² See below. Taxonomically indeterminate states are dangerous and polluting because they stand outside of, or are suspended from, an ordered system. Douglas *Purity and Danger*.

³³ McKnight and Liu *Enlightened Judgments*, pp. 476-484.

³⁴ *JWDS* 71.944-945.

³⁵ *JWDS* 131.1730.

³⁶ *DJYY Siku quanshu tiyao*.2r-3v. For example, see the mist incident in which Li Jing routed the Turks, recounted in David Graff "Early Tang Generalship and the Textual Tradition, v.1 &2." (Ph. D. diss., Princeton University, 1995), p. 499.

³⁷ *SS* 461.13500; *JWDS* 71.944; *JWDS* 131.1730; *TSJC Yishudian*.746.50r; *LDBRZ*, p. 782.

construction of these techniques as efficacious, powerful and dangerous, incidentally contributing to the fame and reputation of those who practiced them. Such was precisely the case with Xu Fu and Ma Shao.

The threat of the Three Cosmographies lay in the belief that the methods of the system gave the performer direct access to the divine, circumventing the mediating role of the emperor as “Son of Heaven.” Aside from acquiring an extraordinary source of power through the techniques of Three Cosmographies, the practitioners of these methods potentially undermined the locus of the emperor’s position as the sole representative of divine authority on earth. They posed the threat of not only directly interpreting Heaven’s messages, but manipulating those messages, too. If these ritualists could access Heaven, what would stop others from doing so?

The Song court was also nervous about the performance of the Three Cosmographies for two other reasons. First, the court saw them as undermining the Way (*dao* 道) because, in the contexts of the new cosmology movement, the Three Cosmographies proponents who made them stood outside of philosophical factions. These individuals opted instead for direct, possibly amoral, techniques to achieve the Way. Though Li Quan 李筌 (fl. 750s?-770s?) asserts in the *Venus Classic* that ultimately “auspiciousness and inauspiciousness, success and failure lie not in the [Hidden Period] talisman but in the Dao” the implication is quite the opposite.³⁸ Second, the Song was concerned with the inconsistencies in calendrical prediction and empirical observations in the positions of the stars and other asterisms. These difficulties in time-telling methods likely both spurred the recovery and development of the Three Cosmographies techniques, while creating some anxiety about who might eventually possess them.

³⁸ *Taibo* 9.243.

The historical context of the rise of the cosmographic techniques was closely connected to the Song concern about time. The Song noticed early in the dynasty a discrepancy between their predictions of the positions of the Heavenly bodies and their actual locations.³⁹ These disparities spurred activity in developing armillary spheres and similar instruments—relatives of the cosmograph. The court’s concern in this matter was manifold. Han Xianfu 韓顯符 (c. 940-1013), a Three Cosmographies practitioner who made two such spheres, argued in court for the resolution of calendrical discrepancies. He laid out the importance of accurate astral prediction: If the constellations and asterisms were not accurately recorded, calendrical calculations would gradually become inaccurate; divining and prognostication would not be true. In solving these problems, “one would then know order and the distance of all the stars from the earth; the retrograde and regular motions can be divined, and the auspicious and inauspicious will be known. Therefore, good fortune will be plumbed since it will align with the proper position; understanding affairs so that their disasters can be repulsed—all of this can be known with this instrument.”⁴⁰

Hong Mai 洪邁 (1123-1202) discussed the importance of Heavenly cycles in determining the fate of the country, also, presenting specific instances in history as proof of their efficacy.⁴¹ Hong described a numerical scheme for the nesting of time cycles, similar to that discussed by Shen Kuo 沈括 (1031-95) in his *Notes Taken in Dream Creek* (*Mengqi bitan* 夢溪筆談), and he correlated these with the changes of yin/yang 陰陽, numerical relationships of the nested cycles, drought and flood, and the

³⁹ SS 461.13499, 13501. (The meaning of *houyi* in this passage is obscure).

⁴⁰ SS 461.13502. About Han’s armillary spheres, see also F. Richard Stephenson “Chinese and Korean Star Maps and Catalogs” in *History of Cartography*, ed. J. B. Harley and David Woodward (Chicago: University of Chicago Press), pp. 540-41.

⁴¹ *TSJC Yishudian*.745.43v; *RZ sanbi*.7.12; p. 400; Cheng Minsheng and Li Xu *Rongzhai suibi <baihuaban>* (Taipei: Hanqin wenhua shiye youxiangongsi, 1994), p. 416.

occurrence of disasters every fifty-seven years. He then uses the Supreme One method of inferring and reckoning to analyze the events of the Xining 熙寧 reign period (1068-77).⁴²

Solutions to these problems with time were also taken up in the ritual cycle. In the Qiande 乾德 reign period (963-67) of Song Taizu 太祖 (r. 960-976), the sacrificial offerings in the auspicious time rituals were increased.⁴³ In 1109, Huizong 徽宗 (r. 1101-1125) invested various deities that connected time and calculation.⁴⁴ The instructions for making accurate models of the Heavens assumed divine characteristics, when, in 1102, a Daoist adept bestowed upon Wang Fu 王黼 (1079-1126) just such a book.⁴⁵ The Song court was concerned about the accuracy of the calendar precisely so that its divination and prognostication would be accurate. Aside from its awe-inspiring role, such accuracy was essential to good prognostication techniques, which in turn contributed to the spectacle of dynastic awe, legitimacy, and power.

It may also be that the possession of such occult techniques shaped an attitude of political, cultural and military superiority of the Song vis-à-vis their neighbors. The Song alone did not possess these techniques. The bordering polities were concerned with their own calendrical accuracy also, no doubt for similar reasons. One Liao history, for instance, documents that the Tang dynasty built a giant cosmographic altar to the Noble Deities of the Nine Palaces (*Jiugong guishen* 九宮貴神) by Su Jiaqing 蘇嘉慶 (fl. ca 740s) to the east of the capital gates, an account so oft-repeated in sources of the era that it is legendary.⁴⁶ The Jurchen, China's northeastern neighbors,

⁴² *TSJC Yishudian*.745.43v-43r, <*Yinyang caisui*> and <*Taiyi Tuisuan*>.

⁴³ *SS* 108.2593

⁴⁴ *SS* 105.2551.

⁴⁵ *SS* 80; F. Richard Stephenson “Chinese and Korean Star Maps and Catalogs”, p. 541.

⁴⁶ *Liaoshi* 23; *JTS* 24.929.

took the Song armillary spheres when they invaded the Song capital in 1125. They boasted four Three Cosmographies specialists in their Secretariat; scholar Yuan Shushan notes at least four practitioners in the Jurchen's Jin dynasty (1115-1232), one of whom was a military man.⁴⁷ Some of this talent, however, was no doubt captured from Song China when the Jin took Kaifeng. In the Jin Office of the Astronomer, which included the testing of the various forms of the occults arts such as the Six Water Cycles, twenty-six of the students were Jurchen, while fifty of them were Han Chinese.⁴⁸ In 1107, the Jiaozhi 交趾 kingdom (modern-day Guangxi province) sent tribute to the Song court, requesting permission to buy its books on calendrical, divination, magic and military arts. The latter applauded their "righteous intentions" but refused to sell. In 1127, when in a much more vulnerable position, the Song faced the same request in more demanding tones.⁴⁹

Texts also indicate that interest in the Three Cosmographies was as high among the neighbors of the Song as it was within the Song itself. These neighbors saw this system as a key to governance that perfectly synchronized with Heaven. According to the official texts, performances of the Three Cosmographies, especially the Six Water Cycles, were no more rare during the Five Dynasties (907-60) than they were during the early Song. Xu Ji, Zhao Yanyi, Ma Shao and his contemporary, Chu Zhilan 楚芝蘭 (fl. before 990-?; d. 60 yrs. old), Zhou Keming 周克明 (953-1017), and Dou Yan are all noted as practitioners of the Three Cosmographies in the official histories of this period.⁵⁰

⁴⁷ See his *LDBRZ* pp. 712, 741, 759.

⁴⁸ *JS* 56.1270 and 51.1152-53.

⁴⁹ *WXTK* 330.2593. For more on the Zhuang people who inhabited this area, see Jeffrey G. Barlow "The Zhuang Minority Peoples of the Sino-Vietnamese Frontier in the Song Period," *JSEAS*, 18.2(1987):250-269.

⁵⁰ *JWDS* 71.944; *JWDS* 131.1730; *SS* 461.13500-04.

Thus, an initial survey of evidence suggests that the civilizations around the Song possessed, or at least wanted to possess, this kind of knowledge. Who received it from whom remains obscure. The Buddhist monk, Yixing 一行 (683-727), who undoubtedly had access to Indian texts, wrote a number of texts on the Three Cosmographies.⁵¹ But judging from requests made by tribute missions to the Song, China possessed either the most developed or the most accessible forms of calendrical arts. By at least 1104, the Three Cosmographies, along with astronomy, calculations (including those of *Sunzi's Art of War* or *Sunzi bingfa* 孫子兵法), and calendrical reckoning were incorporated into the Song curriculum for the official examination system under the “Calculations (*suanxue* 算學)” category.⁵²

Of the Three Cosmographies techniques, the Hidden Period (*dunjia*) in particular was expressly defined as a military technique; “being the art that one [uses] to mobilize troops while avoiding the enemy, and to conceal oneself while escaping material form; can it be considered anything but wondrous!”⁵³ The *Official History of the Song* (*Songshi* 宋史) calls it a military art, simultaneously describing it as a stage in the process of acquiring civilization.⁵⁴ The techniques utilizing the cosmographs linked time—especially as the progressions and regressions of Heavenly bodies—with violence, as represented by the military. Time was considered violent, anyway, because it carried the potential to act outside of *shu* (regularities, number, emblem).⁵⁵

⁵¹ *JTS* 191.5112.

⁵² *SS* 157.3686-87; See also *SHY* 31.4 <*Zhiguan*>.

⁵³ *TSJC Yishudian*.745.44v.

⁵⁴ *SS* 461.13495.

⁵⁵ Deborah Porter demonstrates this convincingly in *From Deluge to Discourse* (Albany: SUNY Press, 1996), where she shows that the motion of various asterisms inspired Chinese myth; an especially salient, and in the manuals, oft-cited example is the myth of Huangdi's (highly ambivalent) conquest of Chiyou. On the ambivalent character of Chiyou, see Michael Loewe *Divination, mythology, and monarchy in Han China* (Cambridge: Cambridge University Press, 1994), p. 242.

The role of the Three Cosmographies in relation to violence and legitimate authority is expressed in the Tang dynasty text, the *Six Models for the Enlightened Emperor* ([*Minghuang*] *Liudian* [明皇]六典) which relegates the Six Water Cycles method to the realm of popular practice, reserving the Hidden Period and Supreme One forms for the use of specialists only.⁵⁶ The “specialist” has presumably received some kind of official sanction to practice. A Song commentator, one Mr. Chao 晁氏, defined the Hidden Period as the sole technique to be used for determining the fate of the country, ranking “the most well-known” occult arts of his time:

The Six Water Cycles is for inferring the fate for one single time period. The celestial animal system, the five asterisms, figuring fortunes, and physiognomy— these categories of arts are for inferring the fate of the individual. Burial divining is good for inferring the destiny of the clan. Hidden Period method is for inferring the fate of the country. To know these arts is to know supernatural occurrences of the near and the far; sometimes they are accurate and sometimes they are not, but one cannot exhaust belief in only one of them.⁵⁷

Posterity has interpreted Mr. Chao as meaning that the Hidden Period was an exclusively military technique.⁵⁸ For this reason, everything associated with it was closely guarded by the court.

Many of the performances of the Three Cosmographies were directly related to military action. He Gui 賀瑰 (fl. 907-915?) used it to determine the strategy of conquest for Liang Taizu 梁太祖 (r. 907-14).⁵⁹ Shi Kang 史抗 (fl. ca. 1119-1125) performed the Six Water Cycles to predict the fall of Daizhou 代州—and, incidentally, his own death—to the Jin in 1125 (He and his two sons perished on the ramparts).⁶⁰ In earlier eras, Sang Daomou 桑道茂 (fl. 766-80s?) used the Six Water

⁵⁶ *FSCD* 297 <*Sanshi*>, citing *Liudian* 14.

⁵⁷ *TSJC Yishudian*.746.52r.

⁵⁸ *TSJC Yishudian*.746.52r. *DJYY* and Duan Muyu *Qimen dunjia* identify the Hidden Period system with the eight battle array schema. The system is usually linked to use in battle: see *DJFYJ*; *DJYY*; Chen Yinglue *Guiguzi qimen*; Liu Bowen *Qimen dunjia*.

⁵⁹ *XWDS* 23.239.

⁶⁰ *SS* 446.13171.

Cycles in 758 to figure the outcome of a siege. And the Tang court requested a copy of Li Quan's *Venus Classic*, who received it from a mysterious Daoist adept, in the late 750s.⁶¹ Indeed, the references to the Three Cosmographies in official texts define the contours of a topography of major military events. The examples above coincide with the Tang dynasty's An Lushan Rebellion (755-63); the reunification of China proper under the Song founders (960s); the incursions of the Xi Xia (1030s and 1040s); the fall of the Northern Song (1126); and later, when the court created oversight of the Three Cosmographies as an official position (Office of the Three Cosmographies; *sanshi guan* 三式官), the Mongol invasions (1215-79).⁶²

Yet, until the compilation of the *Comprehensive Essentials* in 1044, official sources never really specify the content of these rituals. The privately authored Tang-dynasty work *Venus Classic* documents the Duke of Thunder (*Lei gong* 雷公) method, the previous name for the Hidden Period. Therein, the Tang Hidden Period technique is mentioned as a talisman. By 1005, Xu Dong 許洞 (976-1015?) included some content of the technique in his manual, the *Tiger Seal Classic*. With these exceptions, there is a gap in writings that consciously discuss the Hidden Period until Yang Weide 楊維德 (?-after 1054) completed the sections of the *Comprehensive Essentials* and his *Classic of the Talismanic Response of the Hidden Period* (*Dunjia fuying jing* 遁甲符應經).

⁶¹ Taibo <biao>.

⁶² SS 157.3687. We might note that the pitch pipe debate, one of two incidents involving court use of the cosmograph, also coincided with hostilities on the Song periphery. In the first instance, in 1035, it corresponded with increasing tensions with the Xi Xia, and raids by the southwestern tribes, the Liao 獠 and the Yao 徭, who plundered Leizhou and Huazhou; in 1049, with a rebellion by the Man 蠻 peoples in the southwest. The Qidan Liao and later, the Jurchen Jin, shared with Song China this particular ideology. In this sense, then, the *shi* were very much a protocol that codified the approaches to governance, if not warfare.

Official sources do note that the content of the Three Cosmographies was taxonomically independent. This categorical ambiguity distressed Zheng Qiao 鄭樵 (1104-1162), author of the early Song encyclopedia, the *Comprehensive Treatise* (*Tongzhi* 通志). Noting that the Hidden Period appeared in four different categories of the Four Imperial Treasuries (*Siku shumu* 四庫書目)—“Military Treatises,” “Five Phases Divination,” “Six Water Cycles Reckoning,” and “Fortune-telling”—he argued for its definitive categorization as a subcategory of Six Water Cycles reckoning.⁶³ But his argument went unheeded. In the *Official History of the Song*, it appears in conjunction with the “Calendar,” “Astronomy,” “Nine Palaces Ritual,” “Mathematics,” “Military Arts,” “Five Phases,” and “Music.”⁶⁴ In the encyclopedias of the late Song-early Yuan (1279-1368) dynasties, the *General Investigation on Important Writings* (*Wenxian tongkao* 文獻通考), Song commentators Mr. Chen 陳氏 and Mr. Chao 晁氏 raised the same argument.⁶⁵ This taxonomical indeterminacy marks the Three Cosmographies generally and the Hidden Period in particular as chaotic and disorderly, even anarchical. Building on Mary Douglas’s thesis, Turner states that “that which cannot be clearly classified in terms of traditional criteria of classification, or fall between classificatory boundaries, is almost everywhere regarded as ‘polluting’ and ‘dangerous.’” In this sense, he says, such things are “anarchical, and have to be hedged around with prescriptions, prohibitions, and conditions.”⁶⁶ Such was the case with the Three Cosmographies.

In light of the early Song trepidations about the taxonomy of the techniques of the Three Cosmographies, the proscriptions around them, and the re-organization of

⁶³ TZ 71.834.

⁶⁴ SS 23.2507; SS 24.1604; SS 126.2955 ff.; SS 165.3923; SS 260.5246.

⁶⁵ TSJC *Yishudian*.746.52r.

⁶⁶ Turner *Process*, p. 109 referring to Douglas *Purity and Danger*.

the Song bureaucratic structure into the civil and military branches, it is most remarkable that the court sanctioned the practice of these techniques by military representatives. Practice of these rituals in the military environment, at least as prescribed by the manuals, meant that they were performed far from the court. It is probable that they realized that such practices were taking place with or without court sanction. Such a situation may have motivated their inclusion in the *Comprehensive Essentials* in the first place. The institution of examinations for Three Cosmographies practitioners in the Department of the Astrological Observation (*Taishi ju* 太史局) followed in 1104, possibly a move for more complete control.⁶⁷

The Three Cosmographies, especially the Hidden Period, assumed increasing importance over the course of the Song. This elevation in status was due in part to the gradual slippage in accurate prediction of the motions of the Heavenly bodies. These discrepancies distressed the Song court because of the effect they had on the accuracy of occult arts, the calendar, the ritual cycle, and the use of the Three Cosmographies as a warfare technique. For precisely these same reasons, possession of these occult techniques was highly desired by the Song and its neighbors. The rise of the number of texts written on the Three Cosmographies, the corresponding establishment of their seven different schools during the Song, their institutionalization through official venues such as the examination system, and their capture in writing as in imperially issued military manuals were results of the court trying to recover legendary “lost” arts in order to gain control of a tradition practiced outside of the court.

Cosmograph and the boundaries of nature

One of the most obvious types of boundaries that the Three Cosmographies transgressed was that of phenomenal boundaries, principally those of time and space.

⁶⁷ *SS* 157.3686-87; *SS* 165.3923.

These cosmograph techniques exploit the rather odd phenomenon of a time-tracking system that employs ten Heavenly stems crossed with twelve Earthly branches yet produces only a sixty-year, rather than one hundred and twenty-year, cycle. This meant that there were unused stems and branches at certain systemic intersections. By using cyclically impossible stem/branch combinations, metaphysical correspondences, and universal forces in conjunction with ritual performance, doors between series of nested universes opened at certain “time” locations.

This section explains how a characteristic indeterminacy inherent in the *shi* as object (cosmograph) and as ritual (occult technique) made transgression of phenomenal boundaries possible. Above I noted that *shi* crossed cultural taxonomies, the foundation of Song ideas about the means of knowing. This section shows how the Three Cosmographies, with especial focus on the Hidden Period, crossed phenomenal boundaries as time, space, and the limits of the body. All of these challenged the limits of nature and mediated how humans conceptualized, constructed and acted upon their universe. In what ways did such indeterminacy make crossing boundaries of space, time and other phenomena possible? The section below clarifies what these boundaries and markers were on the *shi* as object, and how, in conjunction with *shi* as occult method, manipulated these boundaries within a highly ordered, fixed and complex set of restraints.

Elements of the cosmograph

Like the Six Water Cycles and Supreme One techniques, the Hidden Period was performed on a device suitably called a cosmograph. Unfortunately, no cosmograph for the Irregular Opening/Hidden Period system (hereafter, Hidden Period) has been excavated. But the elements of the Six Water Cycles cosmograph—which, based on descriptions in extant manuals, those of the Hidden Period closely

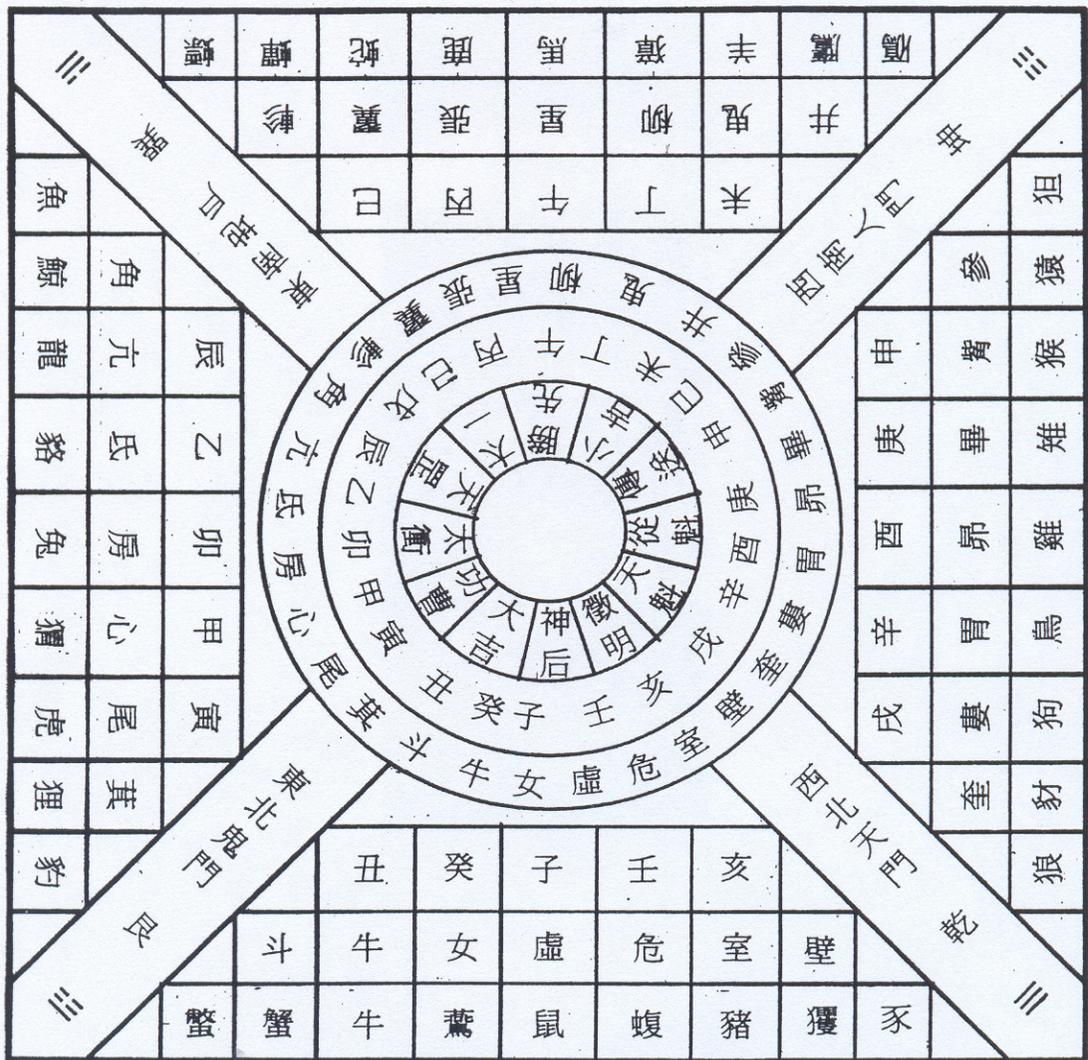
resembled—provide visual clarity. This device was traditionally composed of two plates, with the top plate being moveable and called the Heaven plate and the bottom one fixed, square, and representing Earth. The design and layout of the cosmograph reflected *yin/yang*, the primal forces that set creation in motion according to Song cosmologists, the Five Phases theory of mutual conquest and production, and a system of correspondences. The cosmograph models Heaven—the constellations, the moon, and the nine asterisms, and correlates these with time, the Five Phases, and Earthly events.⁶⁸

Figure 6.1 shows a drawing of an excavated Six Water Cycles cosmograph from the Six Dynasties period (222-589), which Marc Kalinowski believes may date to the late sixth century. It measures twelve centimeters square.⁶⁹ The round center plate is the Heaven plate with three levels of markings. On the first level, the twelve

⁶⁸ This and the following is based on the discussions of the cosmograph in note 7 above and: Christopher Cullen “Some Further Points on the Shih.” *Early China* 6(1980-81):31-46, Donald J. Harper “The Han Cosmic Board (*shih*).” *Early China* 4(1978-1979):1-10 and “The Han Cosmic Board. A response to Christopher Cullen” *Early China* 6(1980-1981):47-56; Kalinowski “Instruments Astro-calendériques” and *Cosmologie*; Michael Loewe *Ways to Paradise* (London: George Allen and Unwin 1979); John Major *Heaven and Earth in Early Han Thought: Chapters 3, 4, and 5 of the Huainanzi* (Albany: SUNY Press 1993). Derived from five phase conquest and production are the mutual control (*zhi*) and dissolution (*hua*), which also played a role in the Hidden Period system. See Chao Weipang “The Chinese Science of Fate-calculation” *Folklore Studies* 5(1946):279-315, pp. 288-291.

⁶⁹From Kalinowski “Instruments Astro-calendériques”, pp. 353, 368, 372. This and following discussion based on the same, pp. 368-381.

South



North

Figure 6.1. Reconstruction of a late sixth century cosmograph. (From traditional sources; reproduced in Kalinowski 1983 and Yan Dunjie 1958.)

monthly spirits are marked. On the second ring, the stems and branches are arranged in various correspondences with the monthly spirits, and represent the twenty-four “solar mansions” or “solar nodes” (*jieqi* 節氣). These latter divide the year into eight “nodes” or seasons of three fifteen-day periods, using the ten Heavenly stems and twelve Earthly branches (leaving two of the solar mansions unaccounted for). The stems and branches are eccentrically arranged to correspond to the monthly spirits.⁷⁰ The next outer ring shows the twenty-eight lunar mansions. Note that the relationship of each ring to the other is fixed; that is, there is only one moving plate that contains all of the rings.

On the Earth plate, there is a pyramid arrangement intersected by four diagonal axes at the corners.⁷¹ Called the Four Secondary Cables (*siwei* 四維), diagonal ropes that form the secondary structure of a net, these axes suggests a relationship with the Heavenly Mainstay Cable (*tiangang* 天罡), the ropes that form the primary structure of the net.⁷² The metaphor of Heaven as a net holding the constellations and planets create a concrete, phenomenal structure on which time hangs. Each axis is inscribed with a direction, a door, a trigram, and its character. These assignments are determined by the Nine Palaces. The innermost row on the Earth plate displays again the stems and branches that represent the twenty-four solar mansions minus the two missing from the Heaven plate and missing, in addition, the *mou* 戊 and *ji* 己 Heavenly stems. The second row shows the twenty-eight lunar mansions, and the third

⁷⁰ According to John Major in his discussion of TLV mirrors, the “solar nodes” used the 12 Earthly branches and 8 of the 10 Heavenly stems, 2 of which were located in the center and “had no function.” The corners (or on the cosmograph, the four axes on the Earth plate) stood in for the missing stems or branches, thus bringing the number up to 24. Major *Heaven and Earth*, pp. 40ff, 88-90. See also Needham *SCC* 3, pp. 402-403.

⁷¹ Marc Kalinowski “Instruments Astro-calendériques”, pp. 374-381 calls these the Four Corners.

⁷² *Tiangang* is another name for the *jia* and *ji* stems, and combined with certain branches forms the main north-south axis on a “time circle.” *HQJ* 11.110; *WJZY* 21.2196.

Ten Celestial Stems: jia 甲 yi 乙 bing 丙 ding 丁 mou 戊 ji 己
 geng 庚 xin 辛 ren 壬 gui 癸

Twelve Earthly Branches: zi 子 chou 丑 yin 寅 mao 卯 chen 辰 si 巳
 wu 午 wei 未 shen 申 you 酉 xu 戌 hai 亥

Sexagenary cycle by decade (reading down)

甲子 jiazi	甲戌 jiaxu	甲申 jiashen	甲午 jiawu	甲辰 jiachen	甲寅 jiayin
乙丑 yichou	乙亥 yihai	乙酉 yiyou	乙未 yiwei	乙巳 yisi	乙卯 yimao
丙寅 bingyin	丙子 bingzi	丙戌 bingxu	丙申 bingshen	丙午 bingwu	丙辰 bingchen
丁卯 dingmao	丁丑 dingchou	丁亥 dinghai	丁酉 dingyou	丁未 dingwei	丁巳 dingsi
戊辰 mouchen	戊寅 mouyin	戊子 mouzi	戊戌 mouxu	戊申 moushen	戊午 mouwu
己巳 jisi	己卯 jimao	己丑 jichou	己亥 jihai	己酉 jiyou	己未 jiwei
庚午 gengwu	庚辰 gengchen	庚寅 gengyin	庚子 gengzi	庚戌 gengxu	庚申 gengshen
辛未 xinwei	辛巳 xinsi	辛卯 xinmao	辛丑 xinchou	辛亥 xinhai	辛酉 xinyou
壬申 renshen	壬午 renwu	壬辰 renchen	壬寅 renyin	壬子 renzi	壬戌 renxu
癸酉 guiyou	癸未 guiwei	癸巳 guisi	癸卯 guimao	癸丑 guichou	癸亥 guihai

Orphans in each cycle:

xu/hai shen/you wu/wei chen/si yin/mao zi/chou

Figure 6.2. Heavenly stems, earthly branches and the combinations and orphans of the sexagenary cycle. Adapted from Schipper and Wang 1986, 204.

outermost row, the thirty-six Heavenly animals, associated with the Earthly branches (three by twelve). The rows on the Earth plate, therefore, create a 5-7-9 numerical relationship, and an implied axis on the cardinal directions.

The cosmograph incorporates the Heavenly branch/Earthly stem system that the Chinese used for time-tracking on the sexagenary calendar. The ten Heavenly Stems and the twelve Earthly Branches combined to produce a sixty, not a 120-year cycle (Fig. 6.2).⁷³ Each branch is combined with a stem, and always the same set of stems, to determine the day of the year, the ten-day “week,” and in certain situations, the month.⁷⁴ The Nine Palaces (*jiugong* 九宮) or the Luo Writing (*luoshu* 洛書) is a “magic” square with rows, columns, and diagonals that all add up to fifteen. The eight trigrams of the *Book of Change* (*Yijing* 易經) were laid out on the numerical positions of the Nine Palaces, each trigram associated with a position and direction.⁷⁵ (Fig. 6.3) In addition, the hexagrams incorporated time associations, and were assigned to various temporal phases of the Heavens.⁷⁶

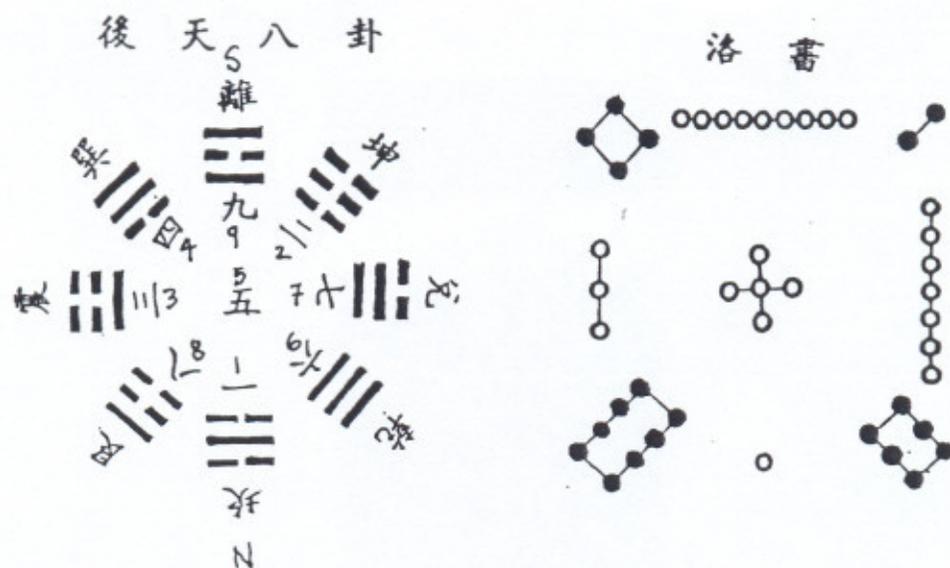
Judging from records about the Hidden Period in texts such as the *Compendium of the Five Phases* (*Wuxing dayi* 五行大義) (late 6th c.), the Tang and Song military manuals, *Classic of the Talismanic Response of the Hidden Period* (*Dunjia fuying jing* 遁甲符應經) (submitted to the court between 1034 and 1037 by Yang Weide, the author of the divination sections of the *Comprehensive Essentials*), and the Ming dynasty *Practice and Meaning of the Hidden Period* (*Dunjia yanyi*

⁷³ A practice that was in use by at least at the end of the Han dynasty. See Needham *SCC* 3, p. 398.

⁷⁴ The 12 branches were often used in singular for the month, however. A seven day week was adopted at the end of the Song. Needham *SCC* 3, p. 398.

⁷⁵ The trigrams and their directions are: *li* 離 south; *xun* 巽, southeast; *zhen* 震, east; *gen* 艮, northeast; *kan* 坎, north; *qian* 乾, northwest; *dui* 兌, west; *kun* 坤, southwest.

⁷⁶ This is especially true in alchemical elixir preparation; Nathan Sivin and Joseph Needham “On the Theoretical Background of Elixir Alchemy.” in *SCC* 5.4, pp. 264-268.



九宮

4 四	9 九	2 二
3 三	5 五	7 七
8 八	1 一	6 六

遁甲基本盤

Figure 6.3. The Nine Palace layout and its relationships with the trigrams, direction and number. Above right: The Luo Writing. Above left: The eight trigrams correlated with the Nine Palace layout. Below: The Nine Palaces shown as a magic square. (from Duan 1995, 72).

遁甲演義), there seem to be few major variations between the Six Water Cycles and Hidden Period cosmographs.⁷⁷ The Hidden Period system was based on the same metaphysical principles, and used a similar method of “four reckonings” (*sike* 四課) for taking readings.⁷⁸ There were many different methods to the technique, used according to one's circumstances.

How does the Hidden Period work? To oversimplify somewhat, the object of the reading is to line oneself up with one of the “Three Irregulars”, the locations of the *yi*, *bing* and *ding* Heavenly Stems.⁷⁹ Then, depending on which of the Eight (Earth) Gates is open at the time, one uses the Irregular Opening to its potential.⁸⁰

The Hidden Period was derived from Heaven's “orphans and empties.”⁸¹ Because of these, it was believed that one could travel backward and forward along time within the Hidden Period system. Kristofer Schipper and Hsiu-huei Wang explain the “orphans” and “empties” (*guxu* 孤虛) as cyclically impossible stem and branch

⁷⁷ These texts are the *Wuxing dayi* (translated in Kalinowski *Cosmologie*) and *Dunjia fuyingjing* (*DJFYJ*). In *HQJ* 12.115-126, the Six Water Cycles technique appears to be used in concert with the Hidden Period. In other words, the Song sources themselves blur the distinctions between the methods.

⁷⁸ There is some contention over whether the cosmograph was actually in use by the Song. Marc Kalinowski “Instruments Astro-calendériques”, pp. 404-5 proposes that a set of tables were used more commonly than a cosmograph during the Song. Excerpts from the *TSJC* suggest that tables did exist. The *WJZY* contains tabular information for the Six Water Cycles; however, it appears to have been used in conjunction with a cosmograph.

⁷⁹ *DJYY tiyao*. 1v-2r; Schipper and Wang “Progressive and Regressive”, pp. 201-202.

⁸⁰ In the most auspicious case, the performer lines up one of the Three Gates with one of the Three Irregulars. To do so, the performer uses a pointer called the “direct talisman” (*zhifu* 直符) shown on the face of the cosmograph. He lines it up with the current time stem and finds the “direct talisman” deity that corresponds to that stem; *Taibo* 9.248; *FSCD* 309; Fei Bingxun *Qimen dunjia*, pp. 22-25; Duan *Qimen dunjia*, pp. 15, 57, 120. This process is repeated until four pairs result. These four pairs are then laid out on the Nine Palace diagram, correlated with one of the Five Phases, and the mutual production/conquest operation applied until one pair results. This “conquering pair” reveals the location of the Irregular Opening. *Taibo* 9.249-250 <*keshi*>. See Kalinowski “Instruments Astro-calendériques” for a step-by-step example of the four reckonings on a Han dynasty Six Water Cycles board. For further explanation, see also Ho Pengyoke “Cong kexue”.

⁸¹ *SS* 461.13495.

combinations. The disparities in number, time, and space made the Irregular Opening possible. The stems and branches combined with each other in the same pairs, leaving two unused branches in each cycle. For example, in the *jiazi* decade, *xu* 戌 and *hai* 亥 were unused. These are called “orphans”. When the branches are laid out on a circle, the branches directly across from the two orphans are called the “empties.” Each branch “corresponds to a given direction and hour of the day”; in this case, *xu* and *hai* are in the northwest and take up the hours from 7 to 9 pm and 9 to 11 pm, respectively (Fig. 6.4).⁸²

The Hidden Period *ju* 局 (circumstance, situation, specific case, board, arrangement on the face of the cosmograph) is composed of three interlocking time cycles; the upper “origin” (Heaven), the middle “origin” (human) and the lower “origin” (Earth), each associated with a time element—in the form of stem and branch combinations and three seasonal nodes, a number, and a hexagram, which contains both time and number.⁸³ The upper, middle and lower origins form the north-south, northwest/southeast, and southwest/northeast axes of the cosmographic circle, the latter two axes corresponding with the Four Secondary cables mentioned above. Related to the Heavenly Mainstay Cable, a deity that stands in for the *jia* 甲 and *ji* 己 Heavenly stems, these “origin” *ju* form a Heavenly net, cast in terms of space and time (Fig. 6.4). It is precisely the increased number of *ju*, or possible circumstances, that sets the Hidden Period apart from the Six Water Cycles; 1800 versus 720, respectively, resulting in the increasing segmentation of time and number, and hence its increased adaptability for human manipulation and control.⁸⁴

⁸² *HQJ* 11; Schipper and Wang “Progressive and Regressive”, p. 201. See the latter pp. 198-203 for a full explanation and an example of how the Six Ceremonies and the Three Irregulars are laid out.

⁸³ *WJZY* 21.2193-4; *Taibo* 9.245-7; *HQJ* 11.110.

⁸⁴ But see *DJYY* 1.1v-2r for calculations that yield 4320 *ju* for the Hidden Period.

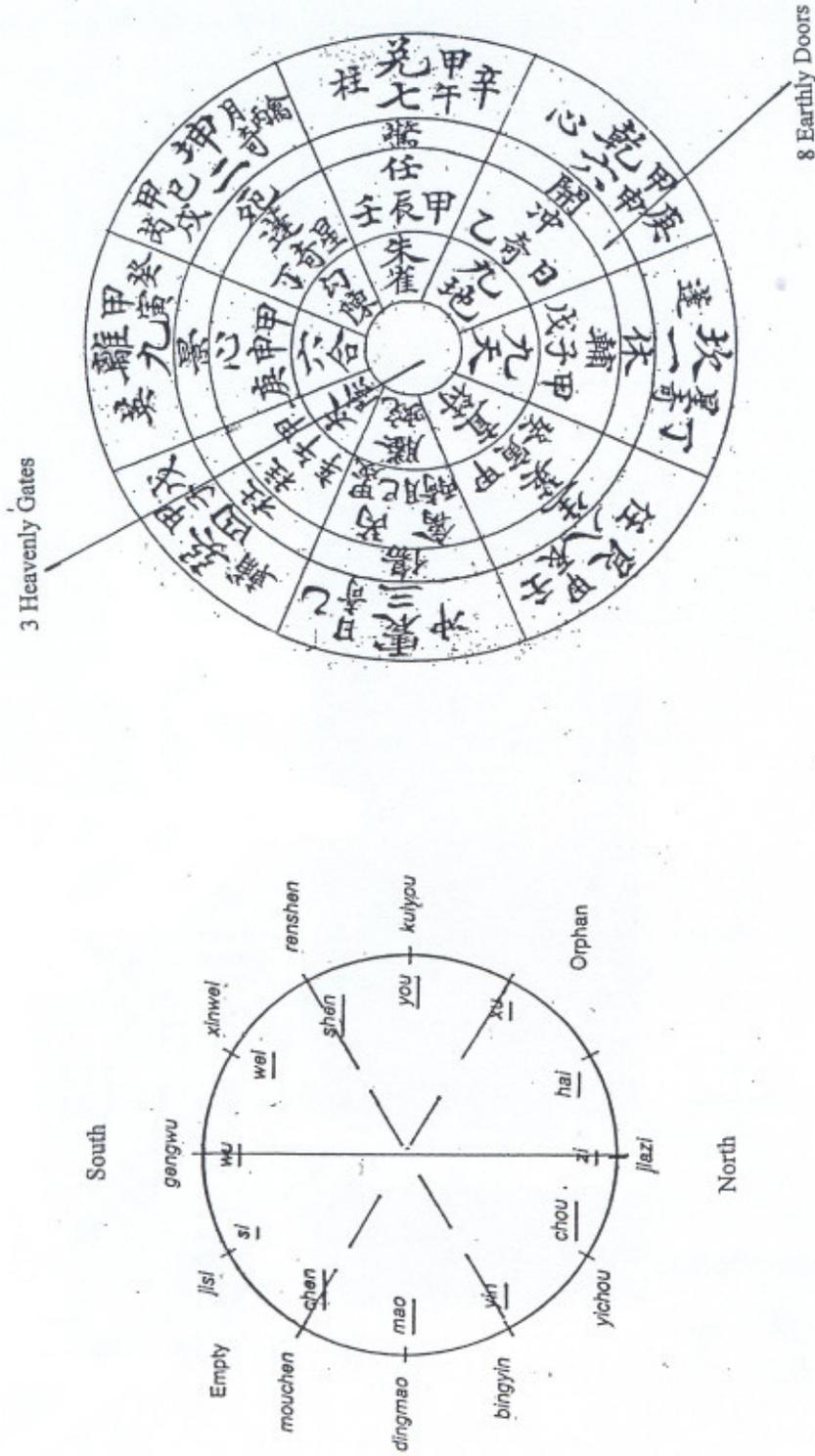


Figure 6.4. Hidden Time, Hidden Space. (Left) Time: The layout of the *yuan ju*, corresponding to the Four Secondary Cables (dotted) and Tian Gang, the Main Cable (solid), shown for the *jia* period 10-day week. (Right) The Hidden Period layout, showing the fifth *ju* (circumstance, layout) of the hidden yang (*yangdun*). (From *DJFYJ* <xia> I Ir. and adapted from Schipper and Wang 1986, 202.)

The *ju*, in its sense of changing circumstances, floats on this Heavenly net, connected by two sets of doors; the Three Gates (*sanmen* 三門) that float around the center, and the Eight Gates (*bamen* 八門) that reflect the earthly situation of the diviner. (Fig. 6.4) Associated with these doors are deities, beings that moved around the territories of space and time simultaneously, each governing a realm of human existence divorced from both space and time.⁸⁵ This excerpt from the *Comprehensive Essentials* shows the lining up of super-phenomenal Heaven and Earth passages to locate the deity, the Jade Maiden.

The Jade Maiden reverses and closes the potential circumstance (*ju*).

This method relies on using tallies and enacting the scheme for finding the Heaven Gate and the Earth Door where the Jade Maiden is located. The head commander enters through the Earth Door and comes out the Heaven Gate; by obtaining the Jade Maiden's assistance, this will unite the army so that the enemy will be defeated. There will be nothing that will not bring certain victory.⁸⁶

Note that the passage gives the sense of the commander physically moving through the *ju* in this performance. On the cosmograph, the potential for supernatural acts is possible by the *ju* (circumstances, particular case), and comes from the disparities in the relative positions of the various cosmic elements. These include numerical disparities in divisions of eight (trigrams) and nine (palaces and asterisms) and their prime divisors; spatial disparities resulting from assigning twenty-two stems and branches onto nine palace locations; and disparities in the time of the lunar year of twelve months (the Earthly branches), the solar seasons (twenty-four) and the lunar lodges (twenty-eight). Using these disparities and their ability to produce power from potential is related to cultural views of space and time and changing views of phenomenal reality during the late Tang and early Song.

⁸⁵ *HQJ* 11.111-112 <Yuejiang>. Xu talks about the deities and their “essences,” usually referring to an elemental force that they controlled. For instance, the deity, Liuhe, one of the 12 “Moon Generals,” governs progeny and wealth. *HQJ* 11.111-12.

⁸⁶ *WJZY* 2219. There is another version involving tallies and chanting in *DJFYJ* *xia*.9v.-9r.

As geometry, the cosmos behaved according to *shu*—number, regularities—yet superimposed onto “irregular” (*qi* 奇) or impossible configurations using “regular” time (Fig. 6.4).⁸⁷ Finally, one of the Song innovations in the *shi* as cosmograph was to add a third layer to the Six Water Cycles design. The new design of the cosmograph reflected the Song interest in accurate time prediction, and their concern with more refined and detailed protocols (see next section). Perhaps more important, the addition of this layer had to do with the role of the Three Potentials (*sancai* 三才; i.e., Heaven, human, and Earth) in Song cosmological revisions, in addition to its role in warfare, especially in reading landscape, *qi* 氣 (universal essence), and Heavenly timing.⁸⁸ “The top layer symbolizes Heaven and displays the Nine Asterisms; the middle layer symbolizes humans opening the Eight Gates; the bottom layer symbolizes Earth and is laid out with the Eight trigrams for subduing the Eight Directions.”⁸⁹ Thus, the Three Potentials organized the cosmograph and determined the ultimate efficacy of the end reading.

Transgressing Markers

Anthropologist Edmund Leach wrote: “A boundary separates two zones of social space-time which are *normal, time-bound, clear-cut, central, secular*, but the spatial and temporal markers which actually serve as boundaries are themselves *abnormal, timeless, ambiguous, at the edge, sacred*.”⁹⁰ Leach’s statement could not be more true than when speaking about the Heavenly stems and Earthly branches, markers that the Chinese used in their sexagenary calendar and key elements for the

⁸⁷ See *MXBT*, cited in *TSJC Yishudian*.746.51v-51r.

⁸⁸ *HQJ* 11 <*Tianshi*>.

⁸⁹ *DJFYJ shang*.1v.

⁹⁰ Edmund Leach *Culture and Communication* (Cambridge: Cambridge University Press 1976), p. 35 (italics in the original); Boon *Verging*, p. 202.

production of power in Three Cosmographies techniques. By manipulating these markers, the Three Cosmographies performer could influence Nature and the Heavens. The indeterminate attributes of these markers enabled such influence by making it possible for the performer to transgress phenomenal limits, and invert or “interrogate” the very same boundaries that they represent.⁹¹ Transgression via Three Cosmographies rituals was especially efficacious for crossing from the phenomenal into the supernatural world. The power of the Three Cosmographies for crossing the boundaries of Nature, the power to perform supernatural acts such as jumping universes, and even disassembling the body (as in the “Duke of Thunder method” below) was possible by means of a series of markers that were themselves devoid of meaning. Because they are void, their emptiness can take on many sorts of referents. *Jiazi* 甲子, a year or month in the calendrical cycle, for example, is often interpreted as highly auspicious, presumably because this pair heads the entire sexagenary cycle. In the form of an individual’s Eight Characters (*bazi*, 八字; the four pairs of markers denoting the year, month, day and hour when one is born), they stand in for all that comprises an individual—health, intellect, emotions, affect. This set of eight markers is at work in the “Duke of Thunder Method”:

Obtain the enemy commander’s name, year, month, day and hour of birth. All in one breath (*qi* 氣), write them in red writing. According to [whichever] *Sha* 煞 deity governs the year, twist the cosmograph to the Ghost gate with the left hand, and with the right hand turn the cosmograph to the Heavenly Mainstay Cable (*Tiangang*) and push on it. Using the Heavenly Mainstay Cable, order the enemy to submit [to us] out of terror; from this they will be defeated. This method is taken from the *Classic of the Jade Maiden Achieving Subjugation*.⁹²

Just as the time markers can be used to create holes or gateways in an otherwise seamless universe, so these same markers, grouped as Eight Characters, can be used to

⁹¹ Boon *Verging*, p. 202.

⁹² *WJZY* 21.2173; see *HQJ* 12.123 for another technique that uses the commander’s birth year.

penetrate or disassemble the physical and psychological components of the person in question. In this example, these signs take on meaning from a spectrum of possibilities that is embodied by all that stands behind the face of the cosmograph: the hexagrams of the *Book of Change*, the positions of the Nine Palaces, and the direction, color, element and so forth that corresponded with both. Because of the indeterminate nature of these markers—as separators and limina, as sacred and profane, what they represent and how those representations fit in with universal schemes—they gave dimension to time and collapsed space into time, so that both could be manipulated.

Time obviously figures largely into the cosmograph layout. Because of the associative framework using the trigrams of the *Book of Change*, time and space collapsed through the medium of the trigram. The trigrams laid out on the Nine Palaces had spatial attributes. Each is associated with a direction, and has positions of inner and outer. Each trigram has a time aspect, associated with season, generation and cosmic cycles of time.

Furthermore, the trigrams are inherently numerical. Each line of a trigram is constructed using a process that reduces a large number of yarrow stalks to a one-digit number through a repetitive process. The number that results therefore embodies a series of larger numbers while representing qualities of the line (*yin* or *yang*, static or dynamic). Number, therefore, functions as an emblem that marks “series of things which are qualitatively related.”⁹³

In the introduction to the Hidden Period, the *Comprehensive Essentials* states that the creation of the stems and branches resulted from inferring the “numbers” of Heaven and Earth.⁹⁴ The markers are powerful precisely because they are empty, since they can be invested with layered and indeterminate referents. But we saw that, as

⁹³ Sivin and Needham “Elixir Alchemy”, p. 264.

⁹⁴ *WJZY* 21.2192-93.

produced from number, these markers are also emblematic. The patterns (*li* 理) described above were a sort of immanence that ran through all things, concrete and abstract. That immanence links all things in the phenomenal world and manifests its representations via *shu*; that is, number as category and emblem, which are the means to work within and among patterns. By taking part in and “harmonizing with the patterns (*li*) of Heaven and human,” all that is “damaging and blood-letting” will turn out auspiciously.⁹⁵ During the Song, warfare was seen as part of that pattern.⁹⁶

The cosmograph techniques used disparity to produce power from potential. This was possible because of the views of phenomenal reality developed in the early Song. In particular, the Song concept of *li*, translated as “pattern” or “principle” and likened to the pattern in wood or jade, meant that all things possessed a pattern. One could get into a network or matrix of patterns through number as a quality, as a category, or as a regularity. In this light, the Hidden Period used the difference in number as a path from one pattern to another.⁹⁷ The disparity in number apparent on the cosmograph drove the cosmograph techniques. In light of the emblematic quality of number, the Hidden Period allowed one access to a series of Heavenly qualities and enabled one to act on those qualities. In other words, the system can be viewed as actively patterning Nature with number.

That cosmographic systems like the Hidden Period could develop also related to the traditional Chinese view that both time and space were relative and mobile. Nathan Sivin has shown that time occurred cyclically and nested in ever-larger cycles, uniting at certain junctures of astronomical occurrences.⁹⁸ There was always a

⁹⁵ *WJZY* 21.2192-93. Taking 祥 for 鮮

⁹⁶ *WJZY* <Renzong’s Preface>.

⁹⁷ See Kidder Smith and Don Wyatt, “Shao Yung and Number” in *Sung Dynasty Uses of the I Ching* ed. Kidder Smith et al. (Princeton: Princeton University Press, 1990), pp. 110-127.

⁹⁸ Sivin *Cosmos and Computation*.

potential to connect the different layers of time and space, an especially salient feature of Chinese alchemy.⁹⁹ But the layering of associations and correlations of the Hidden Period system meant that time and space constituted their own peculiar geography, one that encompasses and is encompassed by other sorts of geography. Time-space was a nesting of patterns and *the* pattern itself, part of an all-encompassing cosmic pattern. The Hidden Period system resulted from the relative and varied views of time and space and the way they fit into the cosmic scheme. The visual component of the cosmograph system renders time palpable so that it can be transgressed, crossed over, manipulated, and violated.

The founding myth of the Hidden Period as recounted in the *Venus Classic* is fraught with indeterminate objects, animals and ambitions, too. Wondrous animals emerged from the Sheng River 盛水 to deliver a bloody talisman written on a material that “seemed like leather, but wasn’t leather; seemed like silk but wasn’t silk.” But these same ambiguities of the founding myth appear to be balanced by numbers mentioned in the next passage: “the Two Hiddens (*dun* 遁),” “the Nine Palaces,” “the Eight Gates,” “the Three Irregulars,” “the Six Ceremonies”; all eventually “totalled the one thousand and eight hundred varied cases (*ju*).”¹⁰⁰ This numerical hedging shows up in most aspects of *shi* as an object (cosmograph) and as a performance (ritual).

The underlying principles of the cosmograph are indeterminate, blurring boundaries that yield power upon transgression. Time and space are collapsed, no longer really being separate operators. That is, time is conceived of as a space—the portals are hidden, only becoming exposed at liminal times, when one marker is on the cusp of the next. One takes advantage of the cosmograph during times that do not belong to any markers, times that belong to none of the categories represented by the

⁹⁹ Sivin and Needham “Elixir Alchemy”.

¹⁰⁰ *Taibo* 9.243.

stems and branches. It is only during a sort of non-time that the method works. Simultaneously, space is merely one of many levels of time, a place in a series of nested cycles. This only becomes obvious when a schema is laid out on it, as shown in figure 6.4. Space is a backdrop for this schema, a patch of time as a key into another time. This other time is a space defined by the motions and dispositions of deities. For example, the Heavenly Mainstay Cable (*Tiangang*) determines how far in or out of the houses the deities are, and the disposition, which is to say the mood, of the deity at that place determines whether one can use it or not.¹⁰¹ The nature of the event (time) and its circumstances (the kind of action)—expressed as conjunctions and correspondences, and both of which are prescribed by the manuals—were dominant operators in reading the Heavens and influencing their outcome.

Communication and the Limits of Authority

The layering of meaning of the term *shi* during the Song tested other sorts of boundaries. The conjunction of the two forms of *shi* 式—as cosmograph and its techniques and as legal, ritual protocols—arose during the Song. Therefore, they linguistically identified occult techniques performed on a cosmograph with a category of laws dealing with ritual communication and ritual objects. This section explores the underlying contradiction in the Song development of the *shi* (cosmograph, model, pattern) as an instrument for creative forms of occult practice and the closer association of *shi* (specification, model, regulation, protocol) with ritual instruments at the imperial level. It focuses on boundaries of authority, in particular, authority necessary to establish legitimate governance. The latter determines who can transgress moral and other sorts of codes that warfare entails.

¹⁰¹ *HQJ* 11.108-119.

This linguistic identification was an instrumental factor in the production of the military culture during the Song and at least one central factor in the Song concept of warfare. The social status of the military comes into play in the relations between *shi* rituals and the authority to legitimate governance. That is to say, the way that the Three Cosmographies mediated the authority of legitimate governance lies in the difference between the regulation of the *shi* as object and *shi* as performance.

The layered meaning of shi

Brian McKnight has noted that laws radically changed their form during the Song dynasty.¹⁰² At that time, a certain legal category, *shi* 式, “the least understood group [of four groups] of Song laws,” arose. Orthographically identical to *shi* cosmograph, *shi* as a legal category meant “rules...[that] specified certain physical aspects of processes of communication.”¹⁰³ *Shi* as a kind of legal rule changed emphasis from its Tang implications of action and behavior to *shi* as an object during the Song. This transformation from action to object, which occurred in the late Tang, “was accompanied by a narrowing in the focus of *shi* so that their connection with communication becomes unequivocal.”¹⁰⁴ *Shi* belonged to a legal category and a ritual category, both of which came into play in the manufacture of objects. As “rules”, *shi* were explications that refined the details of ritual propriety, especially the propriety regarding ritual objects and ritual communication. This propriety, McKnight says, comes not only from aesthetic concerns, but more important, stems from the idea that

¹⁰² Brian McKnight “From Statute to Precedent: An Introduction to Song Law and its Transformation” in *Law and the State in Traditional East Asia* ed. Brian McKnight (Honolulu: University of Hawai’i Press, 1987), p. 112.

¹⁰³ Brian McKnight “Patterns of Law and Patterns of Thought: Notes on the Specifications (*shi*) of Song China.” *JAOS* 102.2 (1982):323-331, pp. 322 and 326; on the Song shift in laws generally, see McKnight “From Statute to Precedent”.

¹⁰⁴ McKnight “Patterns of Law”, p. 330.

such details of propriety increased the efficacy of the ritual itself. If this is so, then the more specialized the concrete object, and the more limited the object became in outward appearance and function, the more efficacious the ritual performance. These details of physical objects with which *shi* as specification were concerned, then, were essential to ritual performance.

These protocols were concerned with the court—specifically with the emperor—and therefore represent official ritual. McKnight points out signal beacons as one example of *shi* found in the military. Although he does not cite them, occult rituals are the other, more prevalent type of *shi* noted in the manuals.¹⁰⁵ Aside from defining communication protocols, many of these *shi*, or regulations, dealt with plans and furnishings for ritual buildings and spaces, and ritual objects. McKnight points out that they emphasized the concrete aspects of ritual expressed in a range of regulations: “some idea of the vast size of these bodies of rules can be conveyed by noting that a collection of the rules concerning the Imperial Hall of Light, a ritual building used by the emperor, totaled twelve hundred volumes.”¹⁰⁶

At first glance, we can see how the cosmograph fits in nicely with *shi* as a legal category. Both types of *shi* are modes of communication. *Shi* as specifications specified how communication should be conducted, and the instruments with which it should be conducted. Both meanings of *shi*, as specifications and as cosmograph techniques, share the idea of ritual as a kind of communication. Similarly, the cosmograph as an object shares many characteristics of the *shi* as specification: it was highly specific, precise, and elaborately detailed. As an object, it was highly symbolic.

The Song revamped the cosmograph into three tiers, rather than two, to correspond to the Three Potentials (*sancai*) model of the cosmos. This revamped ritual

¹⁰⁵ *WJZY qianji*, 5.205. Compare with *shi* and *fa* as occult ritual in *WJZY* 21.

¹⁰⁶ McKnight and Liu *Enlightened Judgments*, p. 15.

object modeled the sacred and mediated communication with Heaven. This revision and the developed detail of the cosmograph no doubt resulted from Song philosophical discourse, especially from the formulation of the relations of universal forces according to Zhou Dunyi 周敦頤 (1017-73) that happened in the early Song. In this light, the limits of communication were expanded through *shi* (cosmograph) because it spanned epistemological categories. As an attempt at using human as mediator of the Three Potentials, the cosmograph expanded human potential and their role in transcending and transgressing the limits of nature. These characteristics of the cosmograph stand in contradistinction to the restrictions of *shi* regulations: how words and objects mean, and the corresponding increasingly restricted spectrum of interpretations, the ultimate result of *shi* in its mode as specification.

In addition, the directness of communication with cosmograph stands in contrast to the indirectness of that which resulted from the increasingly detailed communication and ritual protocols of the *shi* specifications. The cosmograph bypassed the emperor to communicate directly with Heaven, and even made it possible for the performer to traverse Heaven's geography, talents the emperor simply did not possess. The transformation of the *shi* in the legal mode also contrasts with the institution of the cosmograph techniques. The latter were made to be performed: incorporating the Paces of Yu and the Nine Palace layout, they were dependent on practice and action for their ritual efficacy. Conversely, we can interpret these as a higher level of refinement in communication, and the cosmograph itself as a refinement in receiving such communication.

The bifurcated meaning of *shi* was interpreted and acted upon differently according to court and military circumstances. As a new legal category, *shi* more closely defined communication, including that of the court with the general in the field and ad hoc imperial instructions. As Song innovations in occult forms, *shi* created a

potential for transgression. Imperial protocols and ritual specifications arose to restrict their use. Yet the more restricted the ritual, the more power it garnered in actual performance.

McKnight queries this Song preoccupation with accurate, even sacred, communication: “Was communication more important to [the Song]? Or were they simply less confident of their ability to communicate accurately in the absence of clear guidelines?”¹⁰⁷ Part of what underlay the rise of *shi* as “more closely defined communication” related to the Song policy that separated the civil and military branches of governance. The latter occurred concurrently with the rise of the *shi*, during the Five Dynasties-Song transition in the mid- to late tenth century.

The more closely defined communication that resulted from *shi* in its legal mode characterizes ad hoc imperial instructions and the Song court’s relations with the general in the field. Beginning in the early Song, the court restricted the range of decisions that the commander could make by requiring an extraordinary level of communication, in kind and degree, between the field command and the court prior to taking action on the battlefield. Furthermore, the Song court subjected the military system to an unprecedented degree of restriction.¹⁰⁸ This oppressive courtly circumscription of the field command, aside from contributing to the image of the Song military as ineffective, was incorporated into the entire military institution, expanded from *shi* as abstract rules to more concrete manufacture and distribution of equipment.

This expansion related to difference between *fa* 法 and *shi* 式. McKnight points out that the meaning of *fashi* 法式, correctly understood as a binome during the Tang when *fa* were major laws and *shi* minor by-laws, changed during the Song.

¹⁰⁷ McKnight “Patterns of Law”, p. 330.

¹⁰⁸ *WJZY qianji* 14. Wang Zengyu *Bingzhi chutan*, p. 279-283, 302, 327.

Usually rendered as “method,” *fashi* is, he says, more fruitfully understood as two independent words during the Song; *fa* being “organized, integrated bodies of rules on a particular topic” and *shi*, “legal rules” and specifications discussed above. Therefore, he asserts, the well-known text on buildings, the *Yingzao fashi* 營造法式, would be accurately rendered “The Specifications (*shi*) of the Organized Rules (*fa*) on Constructing Palaces (*yingzao*).”¹⁰⁹

McKnight’s distinction between *fa* and *shi*, between bodies of rules and specifications, sheds light on the dynamic between *shi* as cosmograph and *shi* as specifications and rules. In court discussions, *fa* and *shi* related to the manufacture of weapons and other equipment. There is a sense of *shi* as overall design, as outward appearance and as an aesthetic consideration of equipment. *Fa*, on the other hand, speaks of more objective physical attributes, such as precise dimensions of a particular object and the molds for casting it.¹¹⁰ *Fa* refers to the system of how soldiers will occupy a place, also; for instance, the number of soldiers to a ten-household group (*bao* 保) and a hundred household group (*jia* 甲) in the local *baojia* defense system, the quantity and kind of payment soldiers receive for particular type of service, etc.¹¹¹ Not only did the court regulate military objects by incorporating them into a system of *fa* and *shi*, but these objects assumed a ritual aspect by that same incorporation.

The Song court used these integrated bodies of rule and specifications, for instance, to align equipment with the ritually defined hierarchy of the military organization. Military equipment manufacture and distribution followed an entire network of *fa* and *shi*.¹¹² The court instituted punitive measures and more severe legal

¹⁰⁹ McKnight “Patterns of Law”, p. 326.

¹¹⁰ SS 197.4918, 4919.

¹¹¹ SS 191.4749; referencing private *fa*.

¹¹² SS 193.4803; 197.4914-4922 passim.

categories when *fa* and *shi* specifications and bodies of rules failed in certain manufacturing locales. In 1049, for instance, in a discussion of weapons, the *fa* and the *shi* for manufacturing and supplying weapons changed from a rule (*shi*) into a statute (*ling* 令) in those provinces manufacturing weapons that ignored *fa* and *shi* prescriptions.¹¹³ In this network, which was closely debated in court, weapons, geography and battle arrays were categorized according to both *fa* and *shi*. Such results of *fa* and *shi* in their legal and manufacturing modes are especially apparent in battle array schema (*zhentu* 陣圖), in which the place of manufacture, the name of the schemata, and the type and quantity of equipment distributed was all highly specified and carefully aligned.¹¹⁴ No doubt this reflected in part Song organization for equipping troops and measures to prevent weapons from falling into private hands, which appears to have been a problem.¹¹⁵ But the distinction between *fa* and *shi* was important in incorporating the military into the ritual network. How?

Weapons and other equipment, such as armor and military vehicles, were viewed as ritual objects. In 1104, Li Fuxian spoke of the ritual aspects of warfare—in mounting war vehicles, to be specific—in connection with a debate about the *shi* that should be used to manufacture military vehicles.¹¹⁶ Similarly, in 1117, Yuwen Cuizhong 宇文粹中 (n.d.) submitted a memorial in which he argued that Taizu and Taizong set aside weapons and equipment stored in the Imperial Martial Warehouse (*wuku* 武庫) so that the suburban army would respect ritual. They set them ahead of the other ritual implements, Yuwen said, so that there would be knowledge of the

¹¹³ SS 197.4919.

¹¹⁴ SS 197.4912, 4918.

¹¹⁵ SS 197.4910, 4912.

¹¹⁶ SS 197.4918.

military arts.¹¹⁷ In other words, ritual, *shi*, *fa* and knowledge were all tied together in the martial context.

The distinction between *fa* and *shi* clarifies the relationship of equipment, specifications, and ritual to each other. It shows how deeply the Song wove such relations into the organization of the armed forces. This gives some insight into how the Song court constructed such ritual relations and the role those relations played in maintaining hierarchy; in this case, the court's own authority vis-à-vis the military organization.

Shi at court

This distinction between *fa* and *shi* also appears in the court discussions of the cosmograph techniques. It first arose in the Tang, when the court built a cosmograph-like altar, requested and laid out by occult artist Su Jaiqing 蘇嘉慶 in 744. This event, documented in the Tang history, is quoted verbatim in the histories of the Five Dynasties, Qidan Liao and the Song.¹¹⁸ For the Song, the passage was invoked in 1035 by court scholars requesting that the *fa*—system or body of organized rules—for the “flying positions” (*feiyi weici zhi fa* 飛移位次之法) as part of the worship for the Noble Deities of the Nine Palaces be re-instated at their own altar, located outside the eastern gates of the capital.¹¹⁹ (The Tang had ceased the practice of rotating the positions of the deities circa 758.) Their request recounts Su Jiaqing's *fa* for

¹¹⁷ SS 197.4920. On the Imperial Martial Warehouse, see SS 6.164.2892-93; Chen Gaochun *Zhongguo gudai junshi wenhua dacidian*, p. 957; Chang Fu-jui *Fonctionnaires des Song* (Paris: Mouton & Co. 1962), p. 507, #855; Charles O. Hucker *Dictionary of Official Titles in Imperial China* p. 565, #7683 and p. 571, #7779. The Martial Warehouse was part of the Court of Imperial Regalia (*weiwei si* 衛尉司).

¹¹⁸ *JTS* 24.929; *Liaoshi* 23.np; SS 103.2507; *WXTK* 80.731.

¹¹⁹ That is to say, these deities were considered outside deities, by virtue of their location. This altar is rarely marked on official maps. See Alfred Schinz *The Magic Square: Cities in Ancient China* (Stuttgart: Edition Axel Menges 1996), pp. 220-21.

establishing an altar to these deities. This altar imitated the Nine Palace arrangement in the form of nine individual altars “accorded with the Hidden Period markings,” each altar representing the deity that governed a particular palace. These deities changed from year to year, and this rotation around the altars was known as “flying positions” with “flying chessmen.”¹²⁰ “Flying chessman” tracked the positions, motions of Heavenly bodies correlated with the Nine Palaces altars. The arrangement consisted of an incipient cosmograph with the deities performing the Paces of Yu via these “flying chessman.”

Instituting a system of rotating altar positions of the deities meant that the disasters and prosperities of the “nine provinces” would be better inferred. Should the rotating system be used, they argued, “when inferring and calculating fate, the deities at the rear would not be neglected, they would be enticed to protect against and eliminate miasmatic *qi* 氣 (vital universal essence), and *qi* could be traced so that auspiciousness could be thoroughly examined.”¹²¹ These were not possible with a system of fixed positions. The request was granted. Later, in 1049, two levels were added to the Deities of the Nine Palace altar, which was 120 “feet” (*chi* 尺; 27 cm/*chi*) on a side.

The dialogic nature of the way that *shi* defined boundaries is evident from looking at the transformation of the term during the Song. *Shi* took on layers of meanings, some paradoxical. Yet both meanings—specifications and cosmograph—corresponded to issues of the limits of authority, control and how these were shared. The relationship between such limits and *shi* lay in its contrasting meanings; *shi* as specification, rule, model and object contrasted with its sense of occult ritual and the idea of event and performance that these rituals entailed. This divergence of meaning

¹²⁰ SS 103.2506-2507; *WXTK* 80.731.

¹²¹ SS 103.2507.

arose coincident with the separation of the civil and military branches of the government. In light of this development, the layered meaning of *shi* became invested with the limits of Song authority, especially as it related to methods of governance. The basis of the relationship of these two events lies in how each milieu—civil (*wen* 文) and military (*wu* 武)—interpreted and used *shi*.

Shi performances of the military and court differed in their motivation, dynamic and result, that is, the dynamic of their method and how each produced power. On one hand, *shi* in its legal mode resulted in increasingly finer distinctions within the official bureaucracy. I have suggested that these distinctions reified in the types and amount of communication between the court and the field command. The increasing ritual restrictions of *shi* were also an effort to regulate the hermeneutic of the sign, more closely defining object, image and meaning. Prior to the Song, the quintessential hermeneute, who transmitted their arts privately and orally (which is to say, “secretly”), existed outside of the court. The oral and private training that dominated transmission of the military arts meant that many occult arts, which early Song rulers were so anxious to recoup, were kept alive in the network of martial training. The nature of the performance of the *shi* as it occurred in the military, the characterization of the military, and the military as a collective all point to this phenomenon.

Shi in the field

The nature of the Hidden Period ritual is highly performative, usually including some sort of ritual body posturing, often the Paces of Yu, combined with incantations or chanting. For instance, in the Pacing the Potential Circumstance (*Ju*) Method, the performer holds stalk-like tallies (probably yarrow stalks) while hopping around a layout of the Big Dipper/Nine Palaces in the Paces of Yu sequence, chanting

an incantation with each step, throwing a tally, turning, and then calling out below the constellation associated with that location.¹²²

The oral and performative nature of the Hidden Period rituals points to an older tradition that was transmitted orally and therefore, ‘secretly.’ This is evident from the rhyming and seemingly nonsensical mnemonic devices for the performance layouts.¹²³ In the rituals, as in the founding myth, there is a tension between the magical authority of writing and the efficacy of the performance through gestures, incantation, and the manipulation of (magical) objects, as in “The Jade Maiden reverses and closes the Potential Circumstance”:

. . . If the strength of the troops is flagging and it is desirable to retreat, call out praying to the Jade Maiden and go out the Earth Door. Holding a knife in the left hand, draw backhanded [on the ground] cutting through the Earth arteries; this will close the Earth Door. Still with the left hand, take hold of an inch of grass; shielding one’s middle half [with it], without turning back to look, go out [the gate]. Neither human nor demon will be able to perceive or follow [your path].¹²⁴

In the founding myth, the Hidden Period (*dunjia*) occurs as a talisman (directed to the eye of god and ghost), not a text. That it was delivered to the altar by a turtle and crocodile suggests that, like the River Chart and the Luo Writing, it was a magical schemata. The performance in the form of speech overrides writing; using the “the language for going in and coming out,” it is clearly incantation that makes the method work.¹²⁵ Symbols are necessary to get such language, but the goal of getting it is to say

¹²² *WJZY* 21.2220-21. Similar rituals are described in *DJFYJ xia*.13r-18v.

¹²³ *DJFYJ shang*.2r <*bujufa*> gives a rhyming chant for laying out the *ju*. Similar technique was used for laying out the Nine Palaces.

¹²⁴ *WJZY* 21.2219. Similar versions show a grid of four verticals and five horizontals drawn on the ground with the knife and includes chants as one draws; or the use of tallies and chanting *DJFYJ xia*.14r-15v and 9v-9r respectively.

¹²⁵ The *Venus Classic* connects the talismanic quality of the Hidden Period to incantation through the *sha* deities, which can be represented as number, and “bestow the language for going in and coming out.” *Taibo* 9.249.

it, not read it; the goal of saying it is to invoke action.¹²⁶ The cosmograph is read but reading alone won't produce a result.

Orally rhythmic but meaningless in writing, chants such as “the cow enters the rabbit garden and eats the sweet grass” are effective only when recited.¹²⁷ Lifted directly from alchemical meditation, the language of the Hidden Period suggests also the process of correspondence and harmony with *qi*.¹²⁸ Probably transliterations of Sanskrit, these incantations, like the Catholic Latin Mass, are magical precisely because they cannot be deciphered. These rituals in written form signaled the court's attempts to appropriate an oral and secret tradition. This fits with McKnight's suggestion that the Song instituted *shi* as legal rules in the tradition of Confucian “rectification of names” (*zhengming* 正名), “straightening and clarifying” meaning, or a more precise correspondence between the sign and its referent. Similarly, Michel de Certeau suggests that those in power—in his example, the doctor and the priest—define the sorcerer as insane in order to replace her indecipherable discourse with the understood and orthodox, what he calls a “text-off”.¹²⁹ Once written, of course, the rituals are static, controlled and standardized. Such was the case when the Three

¹²⁶ The use of the *zhifu* (“direct talisman”) and the *zhishi* (直使 or 事; “direct envoy” or “direct affair”), related the Yellow Thearch's talisman (*fu*) written in blood on a mysterious material, are another sort of empty marker, usually associated with a numerical quality. Both were used as pointers for reckoning on the cosmograph. The *zhifu* is associated with Venus, and is the first of nine *sha* (malevolent) deities, each of which is associated with element. See Kong Richang *Qimen dunjia*, p. 5; Duan *Qimen dunjia*, pp. 15, 57, 226.

¹²⁷ *WJZY* 21.2220-21.

¹²⁸ Ware *Nei Pien of Ko Hung*, pp. 279-300; Sivin and Needham “Elixir Alchemy”, pp. 264-268. This alchemical language embedded in the Hidden Period performance above may indeed be a remnant from its Six Dynasties form, when it seems to have been more a method of achieving Daoist transcendence than a collective performance, or performed at least for the sake of a collective, as it was during the Song.

¹²⁹ Michel de Certeau *The Writing of History* (New York: Columbia University Press, 1988 (1975)), pp. 244-255.

Cosmographies were incorporated into the examination system in 1104, and later, in 1242, created as an official position.¹³⁰

The various meanings of *shi* are not simply a matter of polarized opposites. Rather, *shi*/occult ritual stands as a symbolic inversion of specifications, yet simultaneously regulated by them. *Shi*-as-object displays characteristics of the legal mode. Yet as object, *shi* was ultimately interpretive because of its regulation via number as empty marker and emblem. The ritual performance of *shi* expresses this interpretive aspect. This collapsing of ritual object and legal specification ultimately increased its power to transgress. It no longer merely crosses phenomenal boundaries, but also the bounds and “rules” invested in it by the court.

The performance of *shi* rituals transgressed further by circumventing the cosmograph altogether:

The Mystery of the Occult Woman says: When the enemy [is planning] an ambush or mounting a surprise attack, and reckoning [on the cosmograph] there is no Gate to secret [oneself] within (lit., no Hidden or *dun* gate), the head commander of the army takes this as the method: Calling out to the gods, cast the tallies; first complete [this] for the Heaven Gate, then complete it for the Earth Gate. In the midst of the sixth secret call, invoke the Jade Maiden to come out of the gate. [Even if] the enemy has massed ten-thousand or one-hundred million, there is nothing that they will be able to do [to defeat us].¹³¹

This ritual performance dispenses with the cosmograph, resorting instead to other magical objects, number and incantation in the form of “six secret calls”, the human performer standing in for nature’s correspondences. In a sense, these performances extract the essence of the cosmograph—its ability to align symbols, universal forces and phenomena—to transgress and transcend, acting upon dire circumstances vis-à-vis the enemy. Symbolically, the performer escapes the control exerted remotely by the

¹³⁰ SS 157.3686-87.

¹³¹ WJZY 21.2219.

court, the latter intrinsic to the cosmograph as an object ritually and hierarchically aligned.

Descriptions of court uses of the Three Cosmographies emphasize its layout and its derivation from Heavenly numbers. Military descriptions of the Three Cosmographies emphasize performance; how to throw or hold various objects (tallies, yarrow stalks, etc.), when to chant and from what position. These differences result in part from historiographical practices of the imperial Chinese. Surely, though, depictions of ritual content and its occult attributes associated with the martial and not the civil in these sources is significant. These depictions were effected by the differences we can detect in the rise of the civil official in contrast to that of the military official. The picture of the rise of the military man remains a murky one, while that of the civil servant is much clearer, both in fiction and in historical sources. During the Song, the civil servant became well entrenched, socially as well as politically. In many ways, this entrenchment of the civil official probably did contribute to the downgraded status of the soldier. How did the Song conceptualize the military as a system? To what degree did soldiers and officers and military practices stand outside of “ordinary” society and structures?

In order to answer to these questions and address the issue of how *shi* might interrogate the limits of authority, one must look at the Chinese military vis-à-vis the civil side of Song governance. Secondary scholarship often suggests that the military occupied a marginal position within Chinese society, a disposition that first arose during the Song, and was related to the civil-military (*wen-wu* 文武) split in the Song scheme of governance. While some scholars claim that this distinction in the structure of the Song government was mostly only on paper (for instance, many posts remained unfilled throughout most of the dynasty), the Song court certainly took great pains to make sure individuals in the armed forces, especially at the command level, did not

acquire enough autonomous power—i.e., troop loyalty, wealth, equipment, and authority—to rebel.¹³² The Song restructuring of the government, therefore, helped create the military as outside and marginal.

The military system was very much woven into the *shi* legal category. We have seen that the Song court made great efforts to incorporate the military organization into the ritual network. Through *fa* and *shi*, that organization was subjected to an inordinate number of rules and specifications. The “flying positions” and “flying chessmen” method that the court instituted in 1035, overtly directed at the Heavens, smacked of control over its commanders at one remove, too. The compilation of the *Comprehensive Essentials* in 1044 resulted in part from an effort to restrain maverick transgression and to keep its ritual practices within the purview of the court. However, the incorporation of occult techniques into the *Essentials*, being a training manual among other things, officially condoned the practice of these rituals far afield from the court. While this issue cannot be definitively settled here, there are two other points that bear on these events and the civil/military relationship during the Song.

First is the conceptualization of warfare as *guidao* 詭道. Writers of military treatises as early as Sunzi’s *Art of War* (*Sunzi bingfa* 孫子兵法) defined warfare as a *guidao*. Ralph Sawyer renders this as “Warfare is the Way of deception (*gui*).” *Gui* is discussed in the manuals and other military treatises as a complement of *zheng* 正, regular or upright.¹³³ Commenting on this line, Cao Cao 曹操 (155-220) wrote: “Warfare is without fixed form; it takes cunning and deceit (*guizha* 詭詐) as its Way,”

¹³² Wang Zengyu *Bingzhi chutan*, ch. 8-9.

¹³³ Ralph Sawyer *Sun-tzu: Art of War* (Boulder: Westview Press, 1994), p. 168; Samuel Griffith *Suntzu: the Art of War* (London: Oxford University Press, 1963), p. 66, #17.

an image of *gui* as water-like, flowing and flexible.¹³⁴ In this sense of ever-changing, *gui* means mysterious or secret.¹³⁵ In its context of the Way (*dao*), *gui* suggests an affinity with occult, the reality that undergirds empirical reality.¹³⁶ Both the *Comprehensive Essentials* and the *Tiger Seal Treatise* reiterate this conception of warfare as *guidao*. The *Essentials* emphasizes *gui* primarily as deception, responsiveness, and the unexpected.¹³⁷ The *Tiger Seal*, the earlier, privately authored work, tacitly elaborates *guidao* in relation to Heavenly timing, yin and yang, empty and substantial.¹³⁸ The Three Cosmographies, in particular the Hidden Period, were also defined as a *guidao*.¹³⁹ In the sense of the unpredictable, *gui* techniques were a counterbalance to *shi* “specifications”. By virtue of being recorded and imperially issued, *guidao* became part of the canon (*jing* 經) and the upright (*zheng*) Way. To incorporate the *guidao*—the deceptive, unpredictable and tricky—into a regularized set of behaviors and norms, such as that typified by canon, the upright Way, the Song bureaucracy and the examination system, suggests the social and epistemological formalization of alternate means of attaining the Way. The military organization was one of the few that could straddle such categories.

In and of itself, this conceptualization of the military arts and its organization is not decisive in determining the attitude toward or status of its constituents. But it

¹³⁴ *Bingzhe guidao ye* 兵者詭道也. *Sunzi bingfa* in *BSJC* v7.421.

¹³⁵ *ZWDZD* v8.972.#36300, #36300.27, #36300.36.

¹³⁶ Charles Poncé *Game of Wizards: Psyche, Science and Symbol in the Occult* (Baltimore: Penguin Books, 1975), p. 12 defines the occult as “another dimension tangential to reality, one invariably defined as the motivating principle of the universe and therefore superior to empirical reality.”

¹³⁷ *WJZY* 3.1284-1290; Liu Lexian and Peng Mingzhe, ed. *Chuanshi cangshu: ziku; bingshu* (np: Hainan guoji xinwen chuban zhongxin and Chengcheng wenhua chuban youxian gongsi, 1995), pp. 503-504.

¹³⁸ *HQJ Biao*.1; 4.30; 11.105-106.

¹³⁹ *DJFYJ shang*.1v; Duan *Qimen dunjia*, p. 2.

assumes a greater meaning when posed against the social context of the troops and their leaders. Song recruits were tattooed, a mark shared with many criminals during the Song. Historian Fang Hao notes that recruits perceived tattooing practices to be onerous. Many recruits signed up for the food, money, and shelter but escaped when faced with the brand. Believed to sear the bone, such practices affected the soldiers' social life and after-life (more important, I argue elsewhere, it affected their *yin* 陰 power). Troops tended to be socially marginalized in some way, too. Some were landless, poverty-stricken, or victims of famine, and enlisted as a survival strategy. Others were criminals, fugitives, and escapees. These factors, combined with corrupt practices of the higher echelons of the military, sometimes pre-disposed soldiers as socially disintegrated. Such is the picture presented in *The Water Margin* (*Shuihu zhuan* 水滸傳), the well-known historical novel about the Song.¹⁴⁰

Troops were socially marginal to some degree, and therefore, potentially constituted their own collectivity. In Turner's theoretical scheme of ritual, liminal social states accommodate what he calls *communitas*, a sense of community "as a social modality" that arises from states of existence that are socially marginal. He proposes that longer term, relatively permanent relationships can form from mutual experience of such ritually or socially liminal states. This is especially true when social reintegration of a ritual process fails to result, or when the individuals concerned hold a status that is marginal, denigrated or excluded from the main body of a social or ritual community.¹⁴¹

There are a few reasons that this may have been the case for the Song troops. First, the troops were directly involved in at least some of the rituals of the Three

¹⁴⁰ Fang Hao *Song shi* (Taipei: Zhonghua wenhua chubanshiye weiyuanhui, 1954), ch. 4. Wang Zengyu *Bingzhi chutan*, pp. 212-15. Fang Hao confirms the historical accuracy of this particular aspect of the novel.

¹⁴¹ Turner *Process*, pp. 94-130.

Cosmographies. The Supreme One (*taiyi*), one of the Three Cosmographies, was acted out using troops with flags, “the ritual 禮 both before and after being rites 儀 of motion and stillness.”¹⁴² Battle arrays themselves were ritually constructed, incorporating over ten thousand troops. The collective engagement in these rituals meant that those within the organization were connected by a topography of belief. Second, the military was a group large enough to construct a charismatic leader. It appears from the military manuals that the diviners were usually higher level officers. They directly engaged the troops in ritual, and the commanders occupied a location constructed as sacred via battle array schema. Their position was officially appointed, but these commanders were collectively constructed, too.¹⁴³ Combined with the potential for corruption, it is not difficult to imagine that the commander as ritual specialist assumed the highly ambivalent position of magician; revered, feared, respected, despised, he nevertheless possessed powerful techniques for controlling the cosmos. Just as the taxonomic indeterminacy of the term *shi* and the Three Cosmographies was dangerous, so the commander/magician, socially indeterminate, posed a danger all the more real for the human collectivity under their control. To return to my original point, the layering of meanings of *shi* signaled practices that related to differences in how the ‘specialist’ was defined and constructed, and how their authority was constituted in the civil and military branches.

To return to the issue of *shi* and how it relates to the limits of authority: in the case of *shi*, symbols, ritual performance, and the objects associated with these rituals were coded and acted out according to varied circumstances and social groups. Both the symbolic manifestation of authority and the actual ritual trappings of authority are

¹⁴² *WJZY* 18.2006-7; Liu and Peng *Chuanshi cangshu*, p. 635.

¹⁴³ On the collective construction of the sorcerer, see Mauss *General Theory*.

encompassed by the term *shi*. To move between cosmograph and protocols is to move from symbolic schema to more concrete aspects of authority and governance.

Song innovations in cosmographic occult forms (*shi*) created the potential for transgression of boundaries established by nature and the court. One of these boundaries was the oppressive restrictions embodied by imperial protocols that resulted from increasing and perhaps even over-ritualized bureaucratization during the Song. These were not opposed, but like *wen* and *wu* themselves, both necessary components in the construction of authority and authority-sharing. The Song court sought to distribute power and authority through creating increasingly finer distinctions within their bureaucracy.

The linguistic layering of *shi* points out the idea that transgressing borders is authority-dependent. In the cosmograph techniques, the ritual performer was collectively constituted by the margins; intellectual, geographic and social. Transgression (of tabus, etc.) usually results not in vilification of the transgressor but in an acquisition of new status; the thing or person transgressed upon is vilified, made superfluous, or even nullified.¹⁴⁴ Using the military organization as transgressed *upon*—that is, outside of the upright Way (*zhengdao* 正道) and therefore, socially marginal—and as the transgressor of the upright Way, the court tried to create the cosmic power necessary for, if not success, at least avoiding defeat. By instituting ritual protocols, they hoped to ensure that that power could be only temporary.

Conclusions

The conjunction of the principles that the Three Cosmographies entails with new universal constructions prevalent during the Song—Change, correspondence, mutual production and conquest, complementary forces of yin/yang, reciprocity of

¹⁴⁴ As Sahlins articulated so well in his *Historical Metaphors*.

Heaven-human-Earth, number (*shu*) and patterns (*li*)—reified in innovations of the cosmograph instrument. The incorporation of a third plate reflected the importance of the Three Potentials to Song universal constructions, as did the rise of the Hidden Period, splitting time into ever more discrete units. Thus, boundaries and limens—sacred, ambiguous, indeterminate markers—between these units increased, affording more opportunities for communication with and physical apprehension of alternate universes, both phenomenal and divine. Such refinements in instruments that manipulated the phenomenal borders of the perceptible, human realm increased the inherent potential of the cosmography techniques to transgress those borders. Similarly, the more abundant transgressible thresholds inserted the human as a mediator of supernatural power in the Three Potentials triangle. Rituals of transgression ultimately connect complementary forces both natural and divine, in contradistinction to other sorts of ritual, which polarize and separate those forces (e.g., death rituals, divination, court rituals and so forth). Rather than simply reading change and Heaven's portents, the Three Cosmographies established human control over these previously untapped powers.

It was precisely the ability to transgress the borders between the readily perceptible, phenomenal world and imperceptible and sacred realms that produced the sorts of power that identified the Three Cosmographies as a military technique. The Three Cosmographies were, and still are, identified with sanctioned violence typified by *wu* (martial). In some senses, the cosmography techniques and *wu* shared characteristics that were similarly coded, both vehicles of power that represented indeterminate states, a suspension of order, danger. As sanctioned violence, *wu* signifies conflict and a broken order, particularly in contrast to *wen* (literary, civilization). Though *wu* was necessary to establish order, it was *ordering*; temporary, active and performative: *wen*, on the other hand, was *ordered*; stable, tranquil,

mimetic, as characters on a page. Similarly, both *wu* and cosmography techniques incorporated transgression as its underlying operator.

The fact that the content of Three Cosmographies rituals were primarily documented in military manuals contours the set of relations between the court and its military arm. During the Song, there was a great effort to recover and refine these cosmograph rituals. This reflected the Song court's concern that these rituals would be used to subvert their own newly-established state. Proscriptions of the techniques were directed, initially at least, internally, at their own more mobile society and especially at the army that hoisted them to power. As the Song court coalesced and was increasingly bureaucratized, interest in the Three Cosmographies grew, resulting in their development into seven different schools by the mid-eleventh century.

The term '*shi*' assumed a layering of meaning during the Song. The contradiction inherent in those meanings and in its actual functions were instrumental in the production of the military culture and the Song idea of warfare. Paradoxical developments in *shi* as cosmography techniques and as legal and ritual protocols testified to court recognition of these rituals as efficacious and powerful. As protocols, *shi* were limits that the court wished to impose on ritual practitioners, especially those in the military. By instituting *shi* as a legal category, the court hoped to establish an active role in placing its own limits on military use of cosmography rituals, performance of which occurred outside their direct control. At the same time, such oppressive restrictions marked practitioners as both powerful (because transgression into the divine was the strict purview of the emperor and the transcendent) and socially separate. Given the status of the Three Cosmographies as proscribed and dangerous, practitioners could garner their own social collectives from within the military organization, collectives that were defined both by tradition and practice as being outside the upright Way. Song approaches to warfare, then, were not only

territorially defined. Rather, the Chinese sphere of influence as defined by warfare extended to include the moral, ritual and cosmic spheres also. In other words, the military use of *shi* signifies not only the classical search for alternates to active warfare—typified by ancient military treatises such as Sunzi’s, which emphasize stratagem over battle—but also the middle imperial conception of warfare as a sacred influence whose end results were more than physical.