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In and Outside the Square:
The Sky and the Power of Belief in Ancient China
and the World, c. 4500 BC – AD 200

Volume III:
Terrestrial and Celestial Transformations in Zhou and
Early-Imperial China

by
John C. Didier

Victor H. Mair, Editor
Sino-Platonic Papers
Department of East Asian Languages and Civilizations
University of Pennsylvania
Philadelphia, PA 19104-6305 USA
vmair@sas.upenn.edu
www.sino-platonic.org

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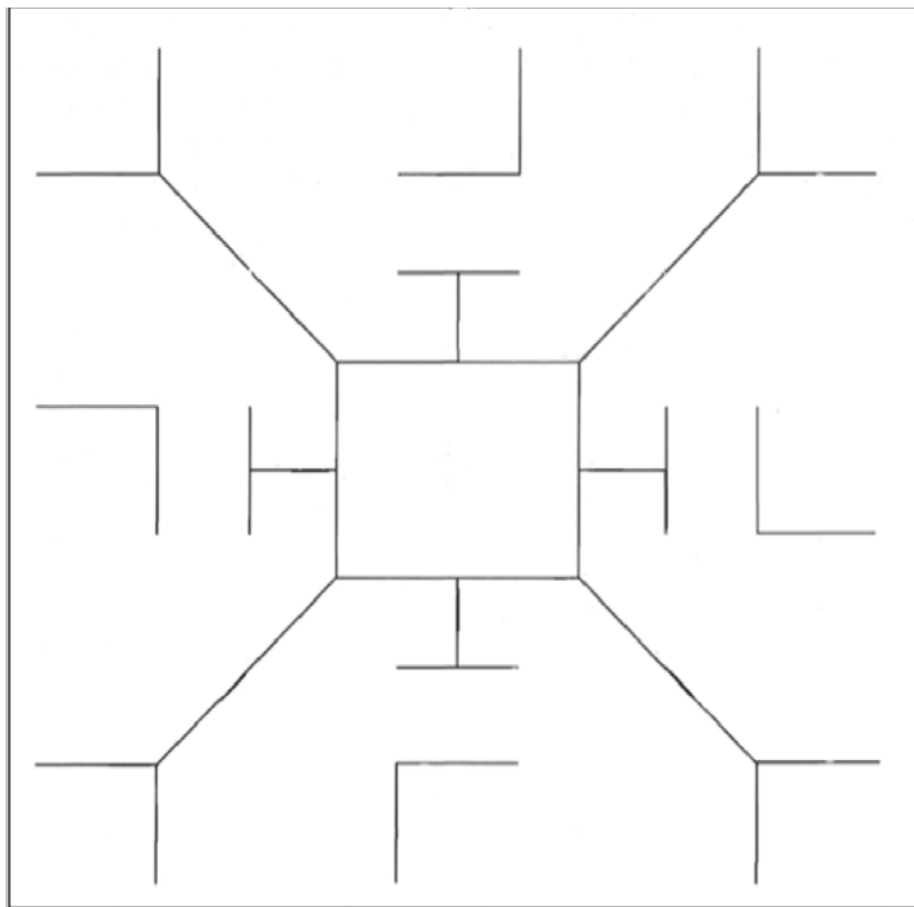
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Volume III

Terrestrial and Celestial Transformations in Zhou and Early-Imperial China

JOHN C. DIDIER

IN AND OUTSIDE THE SQUARE



VOLUME III
TERRESTRIAL AND CELESTIAL
TRANSFORMATIONS IN ZHOU AND
EARLY IMPERIAL CHINA

Chapter 1: Transitions through the Western Zhou, c. 1045–771 BC

The Meaning of Tian 天, "Heaven"

When the Zhou took over from the Shang in approximately 1045 BC their greatest task was to convince those loyal to the Shang now to allow the Zhou royal house to lead them. One of the ways to do this was to equate their generic godhead Tian with the similarly generic Shang god Di.

Working in the Han, Xu Shen catalogued Tian 天 under the section of characters deriving from the basic character *yi* 一. Xu reasoned that,

Tian is *dian* 顛 ("top"), the highest and unexceeded. It derives from the characters *yi* 一, "one," and *da* 大, "big."¹

Xu saw the top line as *yi* and the remainder of the character as *da*. Obviously, he considered the superior line to impart graphically the abstract concept of "above" or "atop": heaven is what is above what is big, the latter of which presumably referred to the earth. Xu further considered that both graphically and phonetically *tian*, "heaven," i.e., what is on top of all else, and *dian*, "summit" or "top," were intimately related. The phonetics, according to *later* pronunciations, indeed are close.² However, Xu did not explain how or why *dian* could explain etymologically that *tian* means something similar to specifically the "top" that *dian* denotes. That is, if *dian* is being compared to *tian* as a *phonetically* related character, then, we must ask of Xu, by what logic did *tian* derive its *meaning* from *dian*? There seems to be no answer. In fact, the specious attraction of the tidy explanation whereby "heaven" is explained as "above," and "above" is explained by indicating a line attached to the top of a character meaning "big" and which apparently has been

¹ Quoted in Zhou Fagao, *Jinwen gulin* (Hong Kong: Chinese University of Hong Kong, 1974): 29.

² Axel Schuessler, *ABC Etymological Dictionary of Old Chinese* (Honolulu: University of Hawaii Press, 2007): 211, 495.

considered arbitrarily to refer cryptically to what is the greatest thing of all below heaven, the earth, should remain just that, specious only.³

On deeper consideration Xu’s etymology does not hold water. For one thing, what Xu did not note and to some degree could not have known is that the archaic character for *tian* took several forms, in both oracle-bone and bronze scripts. The most common among the many such forms are displayed in **Table 1**. We note immediately that in place of the single line of *yi* is often found either a set of *two* horizontal lines or, filling in the verticals connecting them, a box — our familiar rectangle or square — or a circle (the latter surely having been, in bronze graphs, a shortened form of the square). We will return to these forms further below. But most troubling about Xu Shen’s etymology for *tian* is that the earliest uses of the character had nothing to do with “top” or “above.” For the Shang, who, as far as we know, invented the character, what we now call *tian* (1) was the name of a place where the Shang king hunted, (2) seems to have been a given name, and (3) was loaned at times to replace the Sinitic form for *da* 大, “big.”⁴

Still, later scholars have mostly agreed with Xu’s etymology of *tian*, adding explanations to round out an understanding of how the character meant “heaven” in both the spiritual and physical senses. Wang Guowei, for instance, added that, “*Tian* originally indicated the top of a person (the head). Therefore, it resembles a person’s form.”⁵ Considering the circular- and square-topped forms of the character, he also proffered that this enlarged cap was intended to exaggerate the human form, presumably to clarify that this was its real-world referent. This follows Xu closely, departing only in specifying the nature of the thing being capped to indicate “above” or “top” (i.e., a person rather than the earth).⁶

³ Xu also explained somewhat nonsensically that, “Heaven (*tian*) is great (*da*), earth is great, and humanity is great” (quoted in Zhou [1974]: 29). This is a stretch, for if all of heaven, earth, and humanity are equally great, then how could heaven (*tian*) then necessarily be above what is *da*, “great,” which includes heaven (*tian*)?









⁴ See its uses in Yao Xiaosui and Xiao Ding, eds., *Yinxu jiagu keci leizuan* (Beijing: Zhonghua shuju, 1988; hereafter *LZ*): 84–85.

⁵ Zhou (1974): 30.

⁶ Schuessler has largely followed Xu’s phonetic-semantic derivation for *tian* (2007: 495).

As we know from the chapters of the preceding volume, indeed the superior square, or its elliptical forms, i.e., the circle and the two lines, indicated in *Shang* Sinitic Ding, Di, and tens of other graphs the meanings of "top," "above," and, apparently in its root usage, the square formed from stars at the NCP and, by extension, on the one hand stars of the heavens and on the other the spirits that resided at the NCP and the apparati on earth among humans that were devised to communicate with them. However, in the *Shang* the graph for *tian* was not employed to indicate any such meanings. Thus, the *Shang* graph for *tian* could not have developed according to Xu's etymology of graphs or graphic components.

Table 1. Sinitic Forms of the Chinese Graph *Tian* 天 (approximations)⁷

				
Period I, early	Period I	Period I	Period I	Period I
				
Late period, bronze	All periods	All periods		

⁷ Sources: Gao Ming, *Gu wenzi leibian* (Beijing: Zhonghua shuju, 1980): 28; Zhou Fagao (1974): 24–27; idem, *Jinwen gulin bu* (Nangang: Zhongyang yanjiu yuan, Lishi-yuyan yanjiusuo, 1982): 93; and LZ: 84.

In the West the most influential theorist of *tian*'s etymology was Herrlee Creel. Creel's etymology is interesting, because he appears to have arrived at a largely correct understanding of *tian* but through some faulty turns. Arguing that Tian was a Zhou invention, Creel posited that, as a variant of *da*, "big," it meant something like "big men," i.e., the most powerful men, which in turn indicated the Zhou ancestral kings. The reigning king, known throughout the Zhou as the *tianzi* 天子, "Son of Heaven," according to Creel thus literally was exactly this, the son of the great kings who constituted Tian.⁸ Robert Eno has critiqued Creel's mistakes, and I will not repeat his work here except to agree that there exists no specific evidence to support the crux of Creel's argument, which is that graphically *tian* indicated, in its role as a variant of *da*, the great men who were the ancestral kings.⁹

On the other hand, Creel was correct in a number of things. First, the *tian* that the Zhou employed to indicate their high power had to have been a Zhou invention, even though, as we know, the character appeared previously in Shang oracle-bone script. Second, as again we know, *tian* was loaned for *da* in oracle-bone inscriptions. Third, as we shall see, *on one level tian* surely was the group of royal Ji clan ancestral kings and predynastic ancestors, and the reigning *tianzi* on earth literally was the son of *this* particular level of *tian*.

Gao Hongjin contributed to the theoretical discussion of the origins of archaic *tian* when he connected the form 𠄎, that is, the archaic Sinitic form of the Chinese *ding* 丁, with the form of *tian* bearing a 𠄎 on its top. While we need note again that Gao's recognition of the semantic value of *ding* 頂, "the top [of something]" for the square at the top of the character *tian*¹⁰ could only apply to the Zhou character for *tian* based on the Shang attribution of meaning to the form 𠄎 as it appeared individually in OBIs or as a graphic component in more complex Shang OBI graphs, it is true that likely the Zhou devised their graph for *tian* on the same basis that the Shang construed their graphs involving or including *ding* 𠄎, which was the quadrilateral at the Neolithic-early

⁸ Herrlee Creel, *The Origins of Statecraft in China*, Vol. 1 (Chicago: University of Chicago Press, 1970): 502.

⁹ See Robert Eno, *The Confucian Creation of Heaven. Philosophy and the Defense of Ritual Mastery* (Albany: SUNY, 1990): 181–183.

¹⁰ Zhou Fagao (1974): 33.

Bronze NCP. Gao and others who connected the free-standing 𠄎 with the square-topped archaic *tian* character were on to something, and this is the likelihood that the Shang character *tian* was derived phonetically from the *pronunciation* of 𠄎, or *ding* (*teen). As many have commented, including, as we saw previously, Xu Zhongshu, the two characters are phonetically close.¹¹

Still again, this does not overcome the basic hurdle in explaining the origins of the Zhou god Tian, which is that the Zhou use of the graph *tian* to advert to a spiritual power Tian simply does not occur in Shang inscriptions. Therefore, the Zhou either (1) momentarily fabricated their spiritual Tian at the time of the conquest of Shang, which is unbelievable and highly unlikely,¹² (2) adjusted its written expression to accommodate the forms of the *tian* characters already in use by the Shang, or (3) possessed their own symbol for Tian, inscribed / drawn in ways similar to the Shang graphs for *tian*, but which had developed independently of the Shang graph and, unlike that graph, did *not* derive *phonetically* from *ding* 𠄎. Most probably (2) and (3) explain the Zhou use of *tian* to express graphically their god Tian. Thus we can understand that *tian* developed along two trajectories that ultimately converged: the Shang graph for *tian* was constructed of a phonetic element, *ding* (*teen), and also the form *da*. The Shang Sinitic graph's most identifiable element, its crown that appears as a square, a circle, or two horizontal lines, therefore does not recreate pictorially the northern celestial pole (even though its borrowed graphic constituent, *ding* 𠄎, seems to do so), since it derived its element that most closely mimics the old polar rectangle, i.e., *ding* (*teen), as a phonetic, not a semantic, loan. The Zhou graph, on the other hand, had to have derived directly from the appearance of the pole. The Zhou appear simply to have adapted their graph to the visibly similar graph *tian* of the Shang. Only in this way can be explained the simultaneous Shang lack of a spiritual Tian and the Zhou's possession in the 11th century BC of a fully developed spiritual concept and identity in the graph.¹³ When they wrested the political

¹¹ For such pronunciations see now Schuessler (2007: 214 [*ding*], 495 [*tian*]).

¹² Support for this objection can be found in Cho-yun Hsu and Katheryn M. Linduff, *Western Chou Civilization* (New York and London: Yale University Press, 1988): 107.

¹³ That the Zhou already possessed, in the 11th century BC shortly after the conquest, a fully developed spiritual or deistic Tian is known from the character's use in this sense in the He zun 无尊 bronze inscription. For

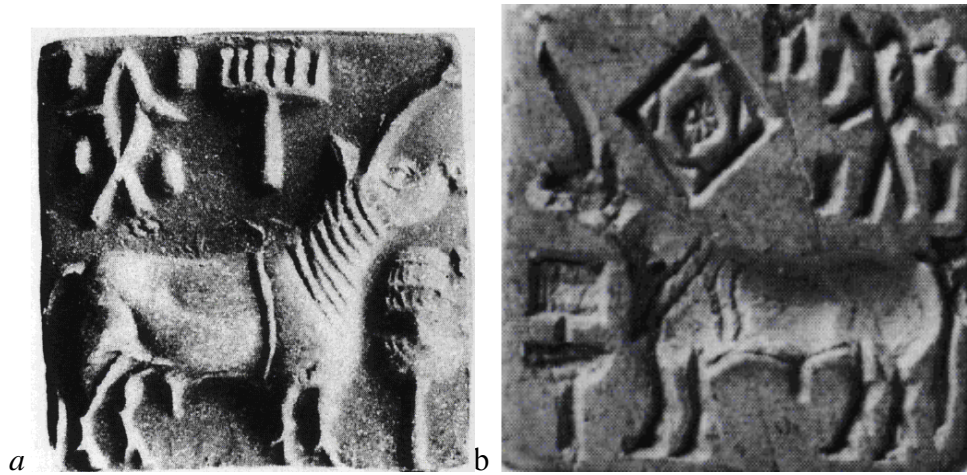
center from the Shang, then it may be that the Zhou derived the pronunciation of their character *tian* from the phonetic value of its constituent *ding* (*teen). But the *graph* of the Zhou character itself must have derived ultimately from the same referent as did the Shang characters *ding* 𠄎 and *di* 𠄎, that is, the stellar patterns at the northern celestial pole. This is because the Zhou, who indeed were in regular contact with the Shang some 150 years prior to the conquest and whose dead ancestors likely helped to constitute the greater Di godhead,¹⁴ recognized the same universal sky power as did the Shang, which apparently was represented in the stellar pattern at the old northern celestial pole. But while the Shang drew those patterns in a way that created the various forms of the character *di* and described the power Di as they saw it, the Zhou drew it in a variant form that looked much like the Shang's Di but which yet retained a distinctive form, 𠄎.

We may note in support of this view that even as far away temporally and spatially as Harappan India in the 3rd-2nd millennia BC not only the rectangle but also other stellar patterns found at the ancient northern celestial pole served as the source for a character that apparently denotes the — or a very — high god of that culture. We saw in Volume I, Chapter 4 how square and rectangular pendants recovered from the ruins of that civilization, significant already in their square shape, depicted figures of high gods in the forms of bulls and other animals. We recall that in southwest Asian traditions the bull in particular widely represented the stellar patterns of the Dipper near the old northern celestial pole that centered on Thuban / 10 Draconis. We also have seen that on as many as 10% of the Harappan tablets a particular fish-like character appears within a square formed from four dots or points, which dots can sensibly be understood to represent the individual stars that comprise our now-familiar polar quadrangle. On the basis of both evidence uncovered in this study and arguments made independently by scholars of the Harappan civilization, we reasoned in Volume I, Chapter 4, that the ribbonesque figure falling within the square represented a fish, and that this fish likely identified the (or a) high god, of fertility and sufficiency, of the Harappan civilization. **Figures 1ab** show this character appearing on Harappan seals. In one case, shown in **Figure 1b**, an additional square, here turned 45° to be a diamond,

the He zun, see Shirakawa Shizuka 白川静, *Kinbun tsûshaku* 金文通釋 (Kobe: Hakutsuru bijutsukanshi, 1962-): 48.*HoI*: 171.

¹⁴ See Hsu and Linduff (1988): 48.

appears alongside the loop-in-stars character and the bull, and, remarkably, within this square diamond is a wheel, showing hub and spokes, that most reasonably can be considered to depict the cosmogonic celestial wheel that in the later Indian Vedic-Hindu tradition came to be known as *samsara*, or the wheel of creation-destruction. As such, the hub of this spoked wheel could be none other than the bright star at the northern celestial pole of the 4th–3rd millennia BC, Thuban. From all of the borrowed bull, fish-in-square, censer, and spoked-wheel-in-square iconography we can reason that the northern celestial pole was the center of these people's religion, as it was to become also for the Vedic-Aryan people who quite apparently inherited central elements of the Harappan beliefs.



Figures 1ab. 1a: The Indus loop figure. 1b: The Indus turned square with central spoked wheel, accompanying the fish-in-square, censer, and bull figures. From <http://www.harappa.com> (December 2002).

Most interesting for our present purposes is the fish-in-stars character, which we have reasoned recreates our familiar stellar patterns at the pole (**Figure 2**). This character employs essentially the same geometry as do the Sinitic characters for *di* and *tian*, since we note that there occur in each case particularly not just the square but the same outwardly arced legs. And although in the heavens the legs and arms of the loop character extend below the square formed by our familiar polar stars, whereas in the graph on the pendants they yet fall mostly within the square formed from the stars (but note in **Figure 1a** that the legs of the fish character extend beneath the

bottom of the square formed from the four dots), this discrepancy should not trouble the identification. For the graph appearing on the Harappan pendants is just that, a graph, and typical of mature, standardized graphic representations of physical objects in graphic systems across the world, it represents a graphic *modeling* of the original, physical, real-world stimulant for the graph's creation.

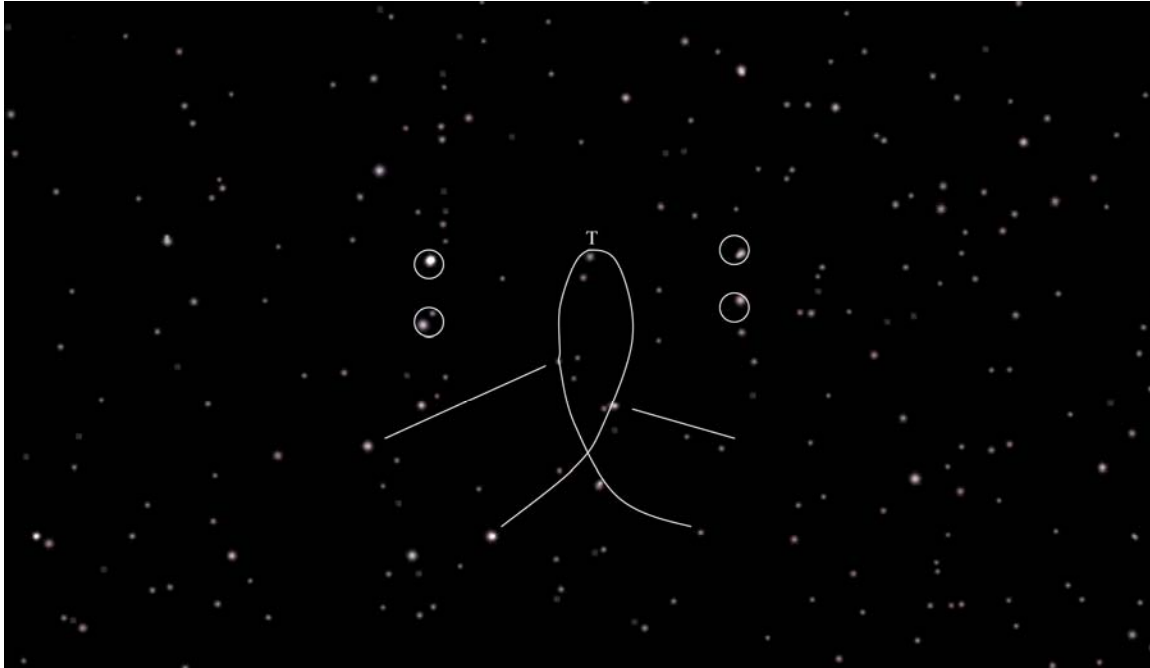










Figure 2. Indus fish-in-square figure as drawn in the stars of the pole of 2800 BC. "T" identifies the pole star Thuban at the top of the loop figure, while the circled stars are those that comprise the polar quadrangle.

We may consider our own modern English alphabetical letters, the Roman S and T, and their ancient Southwest Asian Phoenician root characters, W and X, respectively, as examples of such transformation; or we may regard any of a number of Sinitic-turned-Chinese characters, including, to draw at random, the variable forms in Sinitic of the Chinese *kaishu*-script character *deng* 登, "to lift" or "to raise," as further examples. Originally written variably  and  in OBI Sinitic c. 1200 BC, the Sinitic graph depicted directly one or more people lifting sacrificial goods onto or above an altar. Another example is the *kaishu* character *xing* 興, similarly meaning

“to raise” ritual goods in sacrifice (and, in passing, we note how the square in the center once more represents the altar at the center of ritual activity), whose Sinitic graphs were drawn thusly: , . These graphs’ transformations by 300 AD into the modern *kaishu* characters 登 and 興 are, particularly in the latter case, much more radical than what appears to be the polar geometry transformed in the Harappan graph for the fish-god-in-polar-square. From these examples we can understand how a picture transforms into a modeled graph.

Thus it seems likely that due to both their particular brightness and highly descriptive shapes (i.e., the square, circles, and arcs), in both Harappan India and Neolithic-Bronze China (as well as the many other civilizations and cultures whose quadrilaterally based representations of high power we reviewed in Volume I, Chapter 4), the polar stellar geometric patterns were seen to emblemize the high power and thus were the objects of people’s projections of fairly elaborate godly images. Therefore, that the Shang and Zhou characters that depict this high god formed of the geometric patterns at the pole, while extraordinarily similar, manifest slight differences is only natural and expected.

We may posit, therefore, that while the Sinitic *di* and *tian* characters appear very similar, which explains some fundamental commonalities in the way scholars historically have perceived their etymologies and construction, they do differ pictorially, and this manifests each culture’s idiosyncratic way of representing the pole in pictorial or graphic form. This explains why not only the Zhou, in early bronze inscriptions and later-recorded texts, maintained both characters and used them in the same passage nearly interchangeably, but also why the Zhou virtually equated their meanings. The reason is simply that in meaning they *were* the same — almost.

The difference lay in the fact that the  of the Shang at the center of Di could not serve the Zhou.  contained the Shang royal ancestors who certainly would not have supported the Zhou conquest of their descendents. Therefore, eventually the  of Shang had to be winnowed out.¹⁵ However, as we have seen, for the Shang another name for  was Shangdi 上帝, or “High Di.” It

¹⁵ And, yet, it is known from oracle bone inscriptions recovered from the Zhou palace at Zhouyuan 周原 that on several occasions the Zhou court divined or sacrificed to Shang ancestors Dajia, Cheng (Tang/Dayi), Diyi, and Xiangtu 相土. See Hsu and Linduff (1988): 46–49, and below, Chapter 6.

is also true that the Di that the Zhou *apparently* equated with their Tian was specifically this ultra high power "Shangdi."¹⁶ Therefore, if there was propaganda to the Zhou method of speechifying, it was to convince the remnant Shang people and others of the defeated Shang alliance that (1) the universal sky power at the northern celestial pole representative of an eclectic collection of high powers, which was Di to the Shang and Tian to the Zhou, and (2) the high council of Di consisting of Shang royal ancestors, that is, 𠄎 or Shangdi, had deserted the last Shang king, Zhou 紂, and thus the Shang cause was lost. It was now the case that the high council of Tian, which was the 𠄎 in the superior position of the character 天 and newly occupied by the Zhou Ji clan high ancestors, would throw its support behind their descendents on earth to settle the realm peaceably once again. In this way one can see that Creel was correct in surmising that Tian consisted of the Zhou royal ancestors, but only partially. Just as had Di, Tian also represented broadly all the people under this polar umbellate high power of the sky.

Tian and Di are therefore quite equivalent in that they represented powers broader than those defined narrowly by the royal clan's high ancestral cult. And in each of Tian and Di an internal and definable element comprised of those central dynastic ancestors occupied its central position. Again, in Di this was indicated in written statements as 𠄎, and also apparently on occasion Shangdi, while in Tian this central element was, as in the case of Di, *drawn* as a 𠄎 (or its shortened forms 二 or 〇), but in textual context it was identified solely as Shangdi. Shangdi was thus a superior subset of Tian, just as 𠄎, and Shangdi, had been of Di.

The Zhou *Shi Jing* (*Book of Odes*) offers support for this view of Shangdi and Tian whereby the former helps, as a superior subset, constitute the latter. This occurs most apparently in the poem translated as "Distant" by Arthur Waley. Therein we may observe the author's clear recognition of a distinct "God on high" ("Shangdi") that, because of the king's misrepresentation of himself and his people, has distanced itself from the Zhou people's plight and thus also has

¹⁶ In bronze inscriptions see, for instance, "Shi Qiang Pan," in Edward L. Shaughnessy, *Sources of Western Zhou History: Inscribed Bronze Vessels*. Berkeley: University of California Press, 1991: 2. For transmitted texts, see below.

failed to forestall the descent of the wrath of a broader power on the heads of the people, a broader power identified explicitly as Tian:

Oh, how distant is God on high (Shangdi),
The folk down below all suffer.
Your words bear no truth in them,
The plans you make are not farsighted.
Helpless are we without a sage to lead us,
Insubstantial is your honesty.
Since your plans are not farsighted
Thus I offer this dire warning.

Heaven (Tian) has brought on this hardship;
Do not be so complacent.
Heaven has brought on this turmoil;
Do not be so garrulous.
If your words were harmonious,
Our people would join together;
If your words were uplifting,
Our people would be tranquil.

...

Heaven draws the people on
Like a clay whistle, like a bamboo flute,
Like a stone scepter, like a jade tally,
As if holding them, as if in hand,
In hand and with nothing more,
It draws people on with great ease.

The people can be very wayward;
You should not be wayward too.

Great men are our fence,
The multitudes our wall.
The powerful states are our screen,
The royal clans our rafters.
Those of virtue (*de*) are our peace,
The clan heirs our fortress.
Do not let this fortress fall;
Do not stand alone in fear.

You should hold in awe Heaven's wrath,
And dare not to be so playful.
You should hold in awe Heaven's changes,
And dare not be so bold.
Mighty Heaven, they say, is bright,
And with you wherever you go.
Mighty Heaven, they say, is enlightened,
And always with you as you sport.¹⁷

Shangdi, "God on high," clearly served as the pivot in the fragile relationship that existed between the Zhou royal house — and specifically the king — and the greater Tian, "Heaven." This triadic relationship mirrors precisely the relationship apparently enjoyed by the triad of the Shang king, 𠄎, and Di. Again, 𠄎, or Shangdi, was the pivot.

¹⁷ Translation modified slightly from Arthur Waley, *Book of Odes*. Revised edition. Joseph R. Allen, ed. (New York: Grove Press, 1996): 258–260.

By the time the initial Zhou polity, the Western Zhou, came to its demise in 771 BC, in both a religious and political sense the Zhou had lost its center and power: it no longer wielded the power of either suasion or force to cohere the periphery with the center ideologically or socio-politically. The Zhou's power had diffused centrifugally from the old center to inhabit the capitals and altars of elite lineage heads. The Zhou's decline occurred over some 200 years, from about 950 BC, and it can be understood to reflect natural demographic and socio-political developments that gradually reduced the Zhou court's economic and social strength to the extent finally that it could not respond effectively and appropriately to ever-evolving internally and externally generated challenges.

Some have argued that the Shang also lost their center and that this is the reason that they forfeited their allied polity to the Zhou conquest.¹⁸ The evidence cited to demonstrate this is the Shang's lack of concern for the will of Di after Period I, or after the reign of Wuding, about 1189 BC: having thrown off their high god, nothing remained of the necessary religious core of the dynasty to support its political and military might; consequently, this might was lost. But this view is based on an outdated conception of Di as a single high deity that responded only to the Shang and which to the Shang was the high center of their religion. We know from the foregoing chapters that none of this was true of Di. Furthermore, the temporal gap between the end of Wuding's reign and the success of the Zhou conquest in 1045 BC is large. It is too long a period of having "lost the center" to accommodate the fact that the Shang maintained their power for some additional 144 years after 1189 BC. In fact, as the previous chapter in particular has shown, if anything the post-Wuding Shang state religion became *too* centered on the will of the Shang's own ancestors. The attendant lack of concern for the broader Di was a symptom of a culture that had become overly self-centered such that the universal powers outside of the Shang center that helped comprise Di were no longer consulted. Therefore, we can posit that the Shang polity lost its power because it became overly centralized, or self-centered, and thereby lost the allegiance of erstwhile

¹⁸ Many scholars have considered late-Shang changes in ritual activity to signify a loss of center. See, for instance, David Pankenier, "The Cosmo-Political Background of Heaven's Mandate," in *Early China* 20 (1995): 121–176, whose views on this we have reviewed previously, and David Keightley, "Shang Divination and Metaphysics," in *Philosophy East and West* 38.4 (October 1988): 367–97.

allied or tolerant people. Its ideology of power certainly did not become diffuse, but rather narrow. A similar trend might have helped to cause the failure of the Western Zhou state by 771 BC. That is, as naturally developing centrifugal forces extracted ever more real socio-political, economic, and military power from the Zhou court, it may be that the Zhou reacted by attempting to recentralize power and that this hastened the fall of the Zhou in 771 BC.

The Socio-Political and Economic System of Western Zhou Rule, c. 1045–771 BC

The Zhou socio-politico-religious system was pyramidal and founded on gradations in privilege in the ancestor cult. At the apex was the Zhou royal Ji family that, similar to the central Shang royal Zi clan, enjoyed the exclusive privilege of offering ritual sacrifice to (1) Tian and Di (Heaven and Earth); (2) Shangdi (High Di); and (3) their own royal and pre-dynastic high ancestors. All others enjoyed lesser cultic / ritualistic privileges, to be described further below.

Following the initial conquest of the Shang in the middle of the 11th century BC, in the two critical regions of the new state, the Zhouyuan Plain in the west that embraced the area of the confluence of the Wei and Yellow Rivers, and the old Shang regions of the central Yellow River Valley in the east, subordinate princely branches of the Ji clan were established on prime lands to hold the territory and its wealth and population for the central Zhou state.

Some decades after the initial conquest, during the reign of King Cheng (r. 1042/35–1006 BC) in the 11th century BC, a rebellion by a combined force of Shang descendents and Zhou princes forced the Zhou court to engage in a reconquest of the region east of the Guanzhong pass, which resulted in many changes there. First, a new Eastern Capital was established at Luoyi, consisting of two cities on the banks of the Chen River, in order that the Zhou royal court in the Wei/Yellow River Valley in the West could maintain a closer scrutiny on affairs east of the pass.¹⁹ Second, more Ji princely branch lineages were established throughout the East all the way to the

¹⁹ On the establishment of the two parts of the Eastern Capital Luoyi, called Wangcheng and Chengzhou, see Li Feng, *Landscape and Political Power in Early China. The Crisis and Fall of the Western Zhou, 1045–771 BC* (Cambridge: Cambridge University Press, 2006): 62–66.

Shandong peninsula. It has been estimated that among seventy-one known estates or states of the Western Zhou some sixteen to twenty-six major Ji lineage estates were founded in the east by the end of the 11th century BC,²⁰ among them the state of Lu in modern Henan and Shandong that was established by the Duke of Zhou (Zhou Gong), who was the founding king King Wu's brother and who served as regent for his underage nephew and King Wu's son, King Cheng.

The Ji estates were located strategically both militarily and economically: their militarily strategic value lay in their placement in either the central Yellow River Valley or valleys of rivers that fed the Yellow, where they served as bulwarks against invasions from the east, north/northeast, or south/southeast. Their strategic military value can also be seen in the way that they were consistently grouped in these valleys in threes, either linearly or triangularly, forming a defensive node difficult to permeate to gain access to the central Zhou realms. Economically they were strategically located in the best agricultural lands of the valleys, on the peripheries and away from the flood plains.

The leaders of the Ji princely families that controlled these large eastern or peripheral estates mostly were entitled *hou* 侯, and in their geopolitical establishment at the realm's periphery they resembled marquises of the European feudalism of much later times. Estates led by non-Ji families, whose ranking members often intermarried and thus became allied with the localized Ji princely lineages, occupied the economically less valuable lands in the flood plains.²¹

In the Zhouyuan capital region, royal and subordinate Ji lineage estates were interspersed among the estates of aristocrats, i.e., those leading non-Ji families that had played a salient role in the conquest of the Shang. Scions of such families, along with capital-region Ji princes, staffed the

²⁰ See Hsü and Linduff (1988): 150–163, and Li Feng (2006): 71–2. Li estimates that sixteen of the twenty-six of the large Ji estates/states were in the east. The number of twenty-six derives from one estimate of Western Zhou states offered in the *Zuo zhuan*; the *Zuo* elsewhere suggests that there were forty regional lineage "states." The *Xunzi* claims that there were seventy-one regional lineage states during the Western Zhou, fifty-three of which were said to be Ji lineage states. Chen Pan also identified altogether seventy-one states of the Western Zhou, including all Ji and non-Ji states (Chen Pan, *Chunqiu dashibiao lieguo juexing ji cunmiebiao* 春秋大事表列國爵姓及存滅表 [Taipei: Zhongyang yanjiuyuan, 1969]: 16).

²¹ Li Feng (2006): 74–76.

royal bureaucracy. Zhou royal and aristocratic power interpermeated deeply, which is apparent particularly in the interspersal of royal and aristocratic estates that helped to establish and maintain a substantial and close-knit socio-economic-political interlacery amid the five royal capitals of the Zhouyuan.²² The scions of these Ji and non-Ji states in the Zhouyuan region and the peripheral Wei and Jing river valleys to the west and northwest, respectively, were often entitled *bo* 伯, which title indicated that this head of the family was the first-born male of the lineage.²³

The origins of the *fengjian* 封建 system of the Zhou, often misconstrued to have been "feudal," are to be found in the period of reconquest in the latter decades of the 11th century BC. The term *fengjian* can be understood to refer simply to the establishment of landed allied lineages by means of royal dispersal of plots with clearly marked boundaries. In the west, in and near the Zhouyuan capital region, land parcels given to or transferred between *bo* and other ranked royal and aristocratic lineages were known early on as *feng*, or measured and marked tracts. The term *jian* denotes the establishment on specific large eastern lands of the lineages of the *hou* and other ranked lineages. Both terms, then, refer specifically to the assignment to elite lineages of royal lands that the lineages subsequently held and protected on behalf of the Zhou king. Such lineages farmed the lands and thus gained revenue from them.

In the Zhou system the lineages did not pay taxes to the Zhou court from the profits they earned on their protectorates. The Zhou royal family maintained itself and the state coffers on profits from the royal family's own land holdings mostly in the Zhouyuan and proximate areas. It was only in the Warring States period that the two terms *feng* and *jian* were conjoined to describe the complete land-holding and land-granting system of the early Zhou, and it is this late conflation that has caused later students of Zhou history to have become confused about the true nature of the system, often mislabeling it — mostly for the sake of convenience but with an unfortunate and

²² Li Feng (2006): 55–58. Li identifies the five capitals of Zhouyuan to have been Feng, Hao, Qiyi (Zhou), Zheng, and Du Pang (p. 56).

²³ See Li Feng (2006): 57–77, 112–113, 122. See also Lothar von Falkenhausen, *Chinese Society in the Age of Confucius (1000–250 BC: The Archaeological Evidence)* (Los Angeles: Cotsen Institute of Archaeology, University of California, Los Angeles, 2006): 64–70; and on Fu Sinian's contribution to the understanding of the differing roles of the *hou* and *bo*, see Hsü and Linduff (1988): 171–2.

unintended result of uncritically redefining the Zhou system mistakenly to be a form of — “feudalism.”²⁴

The royal Ji family was organized according to a system known later as the Lineage System (*zongfa* 宗法). Over many successive generations the number of first-born sons of course increased such that branch, or minor, lineages (*xiaozong* 小宗), had to be split off from the major or trunk lineage of the royal house, or Great Lineage (*dazong* 大宗). The minor Ji lineages were given all of land, attached populations, and ritual bronze sets so that each newly formed branch lineage could, under the leadership of its lineage head, a Zhou prince, carry out rituals that identified it with the Zhou elite’s ancestral cult system while it colonized new lands and acclimated local populations to the Zhou culture. The newly landed Ji branch lineages thereby brought under the influence of Zhou elite culture local populations that previously had not contributed economically to the Zhou realm but otherwise would or might have competed politically or militarily with the expanding “state.” While theoretically all such conferred lands and populations belonged to the Zhou king or royal Great Lineage in the capital, in fact the king / royal family relinquished his/its claims to the land and its wealth in return for a given branch lineage’s acknowledgement of the Great Lineage’s suzerainty and its avowal of loyalty to the royal house. Furthermore, as noted above, the branch lineages served as strategically placed buffers against invasion or attack from non-Zhou peoples, tribes, or political entities.²⁵

Little is known of the organization of non-Ji lineages that helped comprise the greater Western Zhou state, though archaeological evidence from bronze hoards, temples, and tombs suggests that they followed at least roughly this same pattern of pyramidal lineage structure. That is, it is assumed that, like the Ji lineage system, non-Ji lineages over successive generations split off from the main or trunk lineage many branch lineages, which sub-lineages, now landed on

²⁴ On the *fengjian* system see Hsü and Linduff (1988): 150–163, 171–177; Li Feng (2006): 110–116; and von Falkenhausen (2006): 246–248.

²⁵ For a general discussion of the *zongfa* system see Hsü and Linduff (1988): 163–171; and Li Feng (2006): 112–113.

territory originally belonging to the trunk lineage, then helped to produce wealth and hold the land both on its own behalf and, at least theoretically, for the benefit of the greater lineage.

Critical to maintaining close relationships among the various lineages spread across North China that comprised the greater Western Zhou polity was the bronze vessel-centered ritual system attendant on the Zhou ancestral cult. Cast at bronze foundries in both the Zhouyuan and at the capitals of the eastern states, the bronze vessels employed in the ritual propitiation of ancestors both expressed a commitment to the elite culture of the Zhou and simultaneously served to maintain a close sense of belonging among all elite participants in the cult. These bronze vessels originally were distributed to lineage heads when the latter went to establish themselves on lands that the Zhou had granted them. Lineage heads employed the bronzes to communicate with their ancestors through ritual feeding: the comestibles cooked and presented in the bronze vessels on the lineage altar were thought to attract the ancestors to descend into the temple, altar, and vessel to feast together with their descendents.

Although the specific policies of the early Western Zhou court regarding bronze casting and ownership are unknown, from recovered hoards and specimen arrays found in tombs particularly in the Zhouyuan it is understood that bronze vessel casting and ownership were standardized by the central Zhou court. Stricter regularization seems to have begun to occur sometime after 950 BC. Part of this regularization was the specification of the precise array of bronzes (including numbers of bronzes of particular shapes) that a lineage could own and employ in its ritual propitiations of its ancestors. Later, in the Middle Western Zhou, bronzes were also cast locally in lineage foundries,²⁶ but still they accorded with centrally devised or accepted standards, and the lineages were confined ever more strictly in the numbers of functional types or shapes of vessels that they could own and employ in ritual.²⁷ Decoration cast on the bronzes seems to have been little regulated early on in the dynasty, and it is uncertain whether changes that begin

²⁶ Jessica Rawson, "Western Zhou Archaeology," in Michael N. Loewe and Edward L. Shaughnessy, eds. *The Cambridge History of Ancient China* (Cambridge: Cambridge UP, 1999): 416–17.

²⁷ On the archaeology of bronzes see Rawson (1999): 364–375; Lothar von Falkenhausen, "Issues in Western Zhou Studies: A Review Article," in *Early China* 18 (1993): 201–207; von Falkenhausen (2006): 209–222; and specifically on the Middle Western Zhou (after c. 918 BC) see Hsü and Linduff (1988): 173.

to appear in bronze decoration after c. 950 BC reflect the establishment of policies or simple popular decorative trends among the elites.²⁸ We will return to this topic further below.

In the early Zhou, inscriptions on the bronze vessels largely presented the named descendents and their reports on lineage affairs to the named ancestors. In this way, through common ownership of ritual utensils and their use in ritual practice, the lineages' use of the bronzes in these rituals congealed the ties that each lineage shared with all others in the pyramidal Zhou system. The bronzes also were critical to the maintenance of the lineage ancestral cult that tethered tightly together all members of each lineage internally as the lineage head, representing all of the relatives of his lineage, communicated with and fed the lineage ancestors and, in return, from them received blessings and guidance for the entire family.²⁹

As far as we know, beginning about 950–900 BC and continuing through about 850 BC someone (The Ji royal house? An alliance of powerful lineage heads, both Ji and non-Ji?) imposed upon the entire Zhou socio-political organization a lineage hierarchization that was followed fairly strictly, though in locally divergent ways throughout the Zhou realm particularly after 850 BC.³⁰ Now not only first-born sons were entitled, but also second-, third-, and fourth-born sons of trunk and branch lineages, with the following formal titles: *bo* 伯 (first-born), *zhong* 仲 (second-born), *shu* 叔 (third-born), and *ji* 季 (fourth-born). Probably the number of branch lineages had grown so large and the socio-political lineage system so complex that relative statuses among siblings had to be identified and honored. In addition, it appears that certain rules were imposed for branching off sub-lineages from trunk lineages such that a branch lineage was established after five generations of a family's removal from the main lineage. Furthermore, while the trunk lineage was allowed to

²⁸ For the first extensive and synthetically summarizing analysis of the changing decorative styles of Western Zhou bronzes from the Zhouyuan, see Jessica Rawson, *Western Zhou Ritual Bronzes from the Arthur M. Sackler Collections. Ancient Chinese Bronzes from the Arthur M. Sackler collections*, Volume II (Washington, D. C.: Arthur M. Sackler Gallery of Art; Cambridge, MA: Arthur M. Sackler Museum; Cambridge, MA: Harvard University Press, 1990): A:21–107. For a critique of Rawson's work, see von Falkenhausen (1993).

²⁹ For a helpful discussion of the use and meaning of ritual bronzes and their socio-religious functions, see von Falkenhausen (1993): 139–226 (and particularly 146–161).

³⁰ On local divergence in the East, see von Falkenhausen (2006): 74–126.

maintain ancestral sacrifices to all ancestors, from the founding ancestor to the most recent deceased ancestor, branch lineages were allowed to engage sacrifices to only their branch founding ancestor and the five most recently deceased family heads. Moreover, branch lineage heads were ranked one social level below the head of the trunk lineage from which they had been split.³¹

The eventual outcome of all of this splitting was a highly complex social hierarchy that included many levels of pyramidal ranking both within and apparently without the Ji family. In addition, since non-Ji and Ji family heads also served in the Zhou royal bureaucracy and received royal lands in return for specific services rendered the state, several further subordinate levels of landed and ranked administrative officials, i.e., the *daifu* 大夫 ("Great Men") and *qing* 卿 ("Great Officers") known from later texts and bronze inscriptions alike, evolved, particularly beginning during the reign of King Mu (c. 956–918 BC).³²

By the end of the third decade of the 8th century BC this hierarchized Zhou socio-economic-religious system affording the Great Lineage of the Ji royal house exclusive access to the spiritual powers of Heaven, Earth, and the high royal ancestors (Shangdi) quite apparently had lost its ability to affect real socio-political matters and military affairs throughout

³¹ See von Falkenhausen (2006): 64–70. Hsu and Linduff (1988: 150–185) provide a slightly different account of the overall *zongfa* system, whereby the chiefs of Lesser (i.e., branch) Lineages (*xiaozong* 小宗) were allowed to sacrifice to only the most recent four generations of ancestors. Both von Falkenhausen's and Hsu and Linduff's accounts are based primarily on later texts, and particularly the *Liji*, which 1st-century BC compilation contains slightly conflicting accounts of the early Zhou system that source in different authors and temporal strata of the Warring States and early-Han periods. von Falkenhausen comments that bronze inscriptions confirm generally the system that he has described on the basis of text in the *Liji* and further that this system outline should be seen as an ideal that surely was more complex in its actual application in the society of the Western Zhou.

³² Edward L. Shaughnessy, "Western Zhou History" (in Loewe and Shaughnessy, 1999: 323–6) and Li Feng (2006: 92–4) report that investiture inscriptions on bronzes began to appear in the mid- to late-10th-century BC during the reign of King Mu (r. c. 956–918 BC), first in the realm of military appointments following the disastrous loss of both the Zhou's capital military, the Six Armies, and the Zhou king King Zhao (r. 977/75–957), in a campaign against the Dongyi, Eastern Yi peoples, in the Han River region (Shaughnessy remarks that the campaign was against the southern state of Chu, while Li identifies that adversary as the Dongyi). von Falkenhausen (2006: 29) proffers that these changes apparently began some 100 years later, c. 850 BC.

the Zhou realm. While as far as we know no one questioned the exclusive ritual privileges that the royal clan enjoyed in its own temples and capitals, the Zhou's actual power to influence social-political-economic affairs among the elites (landed *hou*, *bo*, aristocratic families, etc.) and military events indeed had drifted from their center centrifugally to the periphery. As we shall see below, the cause of this diffusion of power was the various lineage heads' simple loss of faith in the ability of the Zhou royal Ji family and court to exercise decisive and authoritative leadership throughout the social-political-economic-religious system of elite hegemony over lands and populations of the Zhou realm.

Many interrelated social, political, economic, and military factors both internal and external to the Zhou, to be reviewed further below, contributed to the lineage heads' loss of loyalty to the Zhou superstructure and the consequent tendency for Zhou power to dissipate centrifugally from the center to the periphery, but the single critical factor consequent to the real-life failure of the Zhou court to address the lineage heads' concerns and the one that resulted in the failure and final fall of the Zhou in 771 BC could be only that the participants no longer believed sincerely in the basic thesis of the Zhou royal court's supremacy, or the foundational ideology justifying its right to rule all other subsidiary and allied lineages through an imposed socio-political structure defined by ranked ritual privilege, which was the Mandate of Heaven (*tianming* 天命). As is well known, it was the Mandate of Heaven that the Zhou is said to have employed to persuade its allies and the peoples of the conquered Shang that the Zhou's rulership was legitimate: the Mandate had shifted from the Shang to the Zhou because the Shang had abused its power and privilege as the holder of the Mandate. The Shang thus no longer possessed the *de* 德, or what often is misunderstood to be the "moral fortitude" but which at this time was something more akin to an "integrity" or "doughtiness" that qualified one to grasp the reins of centralized power,³³ to rule as Heaven's agent.

³³ On the translation of the amoralistic early use of the term *de* as "doughtiness" or "integrity," see Victor Mair, "[The] File [on the Cosmic] Track [and Individual Dough[tiness]: Introduction and Notes for a Translation of the Ma-wang-tui Manuscripts of the *Lao Tzu* [Old Master]," *Sino-Platonic Papers* 20 (October 1990): 23–5. Professor Mair now also stresses the original etymological meaning of Latin *virtus* ("manliness," "valor," "resolution," "steadfastness," etc.) as a suitable rendering for the early meaning of *de*. He further points out that both *virtus* and *de*

As we understand from prior chapters, for the Shang we might as well call this the Mandate of Di, as well, though the Shang are not known ever to have expressed explicitly or even implied such a phrase. But from those same chapters above we know that this is precisely the way in which Di worked: Di's will could disfavor the Shang as easily as it could favor them, and the Shang needed to propitiate Di to bend it to the Shang's own will, by propitiating — or bribing — its component spirits. Below we will consider carefully this pivotal relationship of power between the living and their deceased ancestors that defined power politics among the living.

In the Western Zhou period the ideological capstan on which the Zhou royal family's power revolved was the certain quality of power of a person, *de*, that was said to be monopolized by the scions of the Great Lineage of the Zhou royal Ji family. In order to determine as clearly as possible the meaning of *de* in the context of the early-Zhou ideology of ritual legitimation, we will compare both (1) Zhou ritual attitudes with those of the Shang, and (2) the Zhou's and Shang's ideologies of self-legitimation to rule.

Shang and Early Zhou Authority to Rule

Vassili Kryukov has argued that the Zhou turned the axis of political power inward, both physically and psychologically, from the Shang's externally oriented conception of power. First, Kryukov indicates that while inscriptions adorning Shang bronzes appeared on the outsides of the vessels, Zhou inscriptions appeared on the insides, thus suggesting the importance for the Zhou of the interior ritual space in the conduction of power. Second, the Zhou concept of *de*, the axial "spiritual potency" of rulership, or, as Kryukov translates it, "grace" or "mana," becomes an internally generated power that employs ritual to express it. Zhou ritual, he argues, differs from Shang ritual in that the Zhou employed a "metaphysics of mana" to communicate with the ritual recipient, while the Shang employed a ritual expression of this power by concrete action through a concrete mediator. As I read him, Kryukov wishes finally to demonstrate that the Zhou interiorized

later evolved to express the connotations of "moral excellence," "virtue," or "goodness." Victor Mair, personal communication, April 13, 2009.

from the Shang's externally or action-oriented communication the ritual attention by which this power was maintained and expressed. By comparing the Shang and Zhou graphs for *de* (the Zhou's differing with the addition of the "heart" radical *xin* 心) and their uses in inscriptional context, Kryukov points out that the Shang *de*, lacking any reference to the heart radical, indicates in oracle-bone inscriptions both a military punitive expedition and a sacrifice, which Kryukov takes to emblemize the bloody and "brutal, excessive, orgiastic" nature of the ritual sacrifice of the Shang cult. Further, but with no apparent specific evidence to support him, Kryukov then claims that this Shang *de* necessarily is an act of communication via ritual violence that employs an "external" object (the sacrificial victim) to communicate with gods, while the Zhou-period *de*, with its *xin*, "heart" radical, necessarily implies an internal, non-violent process of communication with the gods.³⁴

We will review these points in turn. Overall Kryukov's article is informative and full of helpful insights, and it offers important contributions to the field by employing little-read Zhou bronze inscriptions to assess the early Zhou intellectual climate. However, he makes a number of unsupported claims for, and unreliable leaps in reasoning regarding, Shang and Zhou belief systems, which render his arguments unconvincing. A few of these are relevant to our quest for understanding the variances in Shang and Zhou conceptions of centralizing power.

First, Kryukov proffers that the Zhou subordinated Shangdi (Kryukov's "High God") to Heaven. There simply is no support for this claim. The relationship between Tian and Shangdi that the Zhou posited in both transmitted texts and bronze inscriptions is one of vague equality, though in fact, as we have seen in the poem "Distant," Shangdi was the superior level of the broadly defined Tian.

Kryukov also claims that Shangdi was "the ancestor of the Shang kings and the central object of a cult that provided mass human sacrifices."³⁵ As far as we know, and as we have seen in our previous discussion, the specific term "Shangdi" was in use only very rarely during the Shang,

³⁴ Vassili Kryukov "Symbols of Power and Communication in Pre-Confucian China (On the Anthropology of *De*), Preliminary Assumptions," in *Bulletin of the School of Oriental and African Studies* LVIII: 2 (1995): 326.

³⁵ *Ibid.*: 320.

and no cult was offered directly to this so-named entity. Furthermore, no evidence whatsoever suggests that Shangdi was singular. On the other hand, since Shangdi appears to have been 𠄎, then, as we know is likely, it *was* a group of *multiple* Shang ancestors and *did* in fact receive massive cult. But Kryukov was unaware of and thus not referring to 𠄎, so his reasoning is, or his reasons for making his statements are, unclear.

Let us regard now Kryukov's various claims for the Zhou's having internalized, from the Shang externally-oriented ritual, the process by which the power to rule, *de*, was attained and maintained. First, there may have been any number of reasons for the difference in positioning of text on or in bronzes between the Shang and Zhou, and we should note particularly that text in fact was cast on both the internal and external surfaces of ritual bronzes, in both the Shang and Zhou.³⁶ Otherwise, we know that as literary culture developed rapidly under the Zhou, text certainly came to play a more prominent role in ritual. Text thus moved physically to the center of the bronze, since this provided the largest uninterrupted space. Or perhaps a technical or aesthetic (artistic) reason directed the positioning of text — possibly the Zhou people did not want the text to interrupt the religiously pregnant or decorative art emblazoning the exterior of the vessel. At any rate, the appearance of internal text does not by itself suggest an internalization of ritual space, but rather an increasing importance of text in ritual. And, anyway, the vacuous ritual space of the ritual bronzes always was interior, with or without text.

On the nature of *de* itself, from the early-Zhou (11th–9th centuries BC) bronze inscriptions that Kryukov cites, what becomes readily apparent is that this *de* of the Zhou, precisely like the power of the Shang (whatever the Shang called it, but which was not *de*), was not internally generated but in fact externally appointed. The clearest and most significant example comes from the previously cited late-10th-century or mid-9th-century BC *Shi Qiang Pan*.³⁷ The first sentence on that bronze makes the claim for the Zhou's initial wresting of power from the Shang that, "In

³⁶ On Zhou inscriptions see Rawson (1999): 364; and von Falkenhausen (2006): 53–6. In the Shang, we may note, owners' names were inscribed on the interior surfaces of ritual bronzes, as in the case of King Wuding's consort Fu Hao.

³⁷ On the later dating, to specifically the reign of King Xiao (r. 872?–866), see von Falkenhausen (2006): 63–4.

antiquity King Wen first brought harmony to government, and High God (Shangdi) sent [him] down the great support of perfect *de*.”³⁸ This *de* can be understood to mean not so much simply “grace,” as Kryukov reads it, but, more pointedly, *authority*: Shangdi offered its grace in the form of authority to rule from the top.³⁹ In this it is perfectly synonymous with the Shang concept of receipt of power via the upper court of high Shang ancestral spirits who constituted □ within the greater council of the more broadly representative Di. Here we can see how the Zhou inherited directly from the Shang the placement of one’s own high ancestors in the high court of the universal spiritual construct that oversaw all peoples (“Tian” for Zhou; “Di” for Shang), in order to ensure that one’s own clan owned an advantage in the manipulation of political power on earth. This authority was *not* self-generated exclusively via a process of internal reflection. It was thus *not* purely internal, but still, rather, equally external. It originated equally both externally and internally: one needed socio-politically to *be* a certain someone related to the exalted dead ancestors even to be a candidate for receipt of this authority, while internally such a candidate also needed to prepare himself ritually for his magical absorption of the ancestor-bestowed authority. I believe Kryukov reads too much of the late-Zhou (Warring States) development of the concept of *de* into this early-Zhou use of the graph, when indeed the internal process of ritual purification became, in idealized philosophical discussions, the only qualification necessary for receipt of such authority.

Finally, *both* the Shang and Zhou employed concrete ritual violence to communicate with the higher powers in the heavens. Both systems of ritual were externally oriented and involved sacrificing living things (this is violence, whether in the hands of the Shang or the Zhou) to those powers. Kryukov’s argument that the Zhou created a ritual “symbolic surplus of signification”

³⁸ *Ibid.*: 320. “(Shangdi)” is my own emendation. Compare Shaughnessy’s translation (1991: 3): “Accordant with antiquity was King Wen! (He) first brought harmony to government. The Lord on High sent down fine virtue and great security.”

³⁹ Kryukov’s own evidence again supports this view of *de*, as when he reminds the reader of the terrifying aspect of *de* and quotes inscriptions to demonstrate it (*ibid.*: 320).

from the Shang's "brutal, excessive, orgiastic" external mediation⁴⁰ does not follow from the basic similarities of the two systems. Both were symbolically pregnant, and as far as we know both involved a significant amount of sacrifice to be made to the high powers thought to be responsible for delivering the dynasty's political power.⁴¹ Change indeed occurred over the shift from Shang to Zhou, and as Kryukov rightly demonstrates, this included an interiorization of the *justification* for receipt of the high powers' *de* that enabled the Ji clan to rule, but that authority still *originated* in the *external* high seat of Heaven, which as we have seen is the celestial polar quadrilateral housing the high ancestors. In addition, in both Shang and Zhou, communication that resulted in the bequeathing of *de* or its equivalent authority to rule always rested on physically — i.e., externally — operated ritual, and took as its essential interconnect the fact that kin was speaking ritually with kin, through ritual violence. In both dynastic systems, then, all of the source of power, the source of the ability to communicate, and the means of communicating were in fact *both* external, physically, and internal, spiritually: The *external* locus in the pivot of the sky was where the *internal* blood kin, the ancestors of the high clan, resided. Authority did not depend *fundamentally*, but only *secondarily*, on the king's internal cultivation of his mind-heart or person. That the Zhou royal Ji clan continued to be recognized as the rightful possessor of the Mandate of Heaven for more than five centuries following their loss of internally (in the mind-heart [*xin*]) justified possession proves that possessing the Mandate was still primarily a matter of kinship, not internal self-reflection on the part of the Zhou king.

To a large degree, then, the Zhou treatment of Tian and Shangdi is equivalent to the Shang treatment of Di and □ (Shangdi), though three significant differences are apparent: (1) as far as we know, from the very beginning the Zhou focused their attention most concertedly on appeasing and bribing their own ancestors in the Shangdi of Tian to maintain their Mandate, which is evident in the fact that the Suburban Sacrifices to Tian and Di (Earth) occurred only on an annual basis,

⁴⁰ *Ibid.*: 326, 332.

⁴¹ On the ritual violence that in fact clearly served the Zhou civilization as an ubiquitous critical central act that adhered the civilization both ritually and socially, see Mark Edward Lewis, *Sanctioned Violence in Early China* (Albany: SUNY, 1990), *passim*.

whereas the parallel self-centeredness occurred only late in the Shang; (2) for the Zhou, Tian, the composite and universal high power, was more immediate than the individual non-Ji-clan spirits that logically and likely helped comprise it, and Tian thus received cult directly from the Ji royal center, while for the Shang, although concern for divining Di's will was strong in the Wuding period (to ca. 1189 BC), nearly always the individual spirits or 𠩺, and not Di, received cult, and after Wuding's reign concern for Di's will waned. Such a loss of interest in the overarching sky power never occurred during the Zhou, even though perceptions of and beliefs regarding what this power was changed dramatically, as we shall see in subsequent chapters; and (3) despite the highly centralized and privileged nature of Zhou ancestors in Shangdi, Tian was a concept much more philosophically inclusive and encompassing than Di, even though for all we really know perhaps *politically* it was *less* inclusive in the early period. This likely was due to the fact that the Zhou had to convince the vanquished to settle into the renewed peace under the newly dominant clan. We can consider such inclusiveness to represent the conquerer's successful promulgation of propaganda, even though, as we noted previously, the Zhou belief in the equivalence of the constructs of Tian and Di, and, in the center, their own ancestral Shangdi with the ancestral 𠩺 (occasionally "Shangdi") of the Shang, should not be considered to be cynical propaganda but instead to represent the Zhou's natural inheritance of the comprehensive religious system of the political center that they understood implicitly for their having been a part of the order — we know at least to some degree — under the Shang. They merely adjusted the system to their own use.

Loss of Center: Earthly and Heavenly Causes

Less than 100 years following the Western Zhou's founding, already by 957, in the final year of the reign of King Zhao, the fourth Western Zhou king, the Zhou court faced serious problems. In that year King Zhao and his Six Armies, which capital force constituted an entire half of the Zhou royal forces, were lost in a battle against certain foreign Dongyi peoples at the Han River in the Middle Yangzi region. Suddenly the expansion that for the previous eighty or so years had seen the founding of eastern Zhou Ji-lineage and allied Zhou estates all the way to the coast of

the Shandong peninsula came to a halt. The Zhou were now on the defensive, and only once again, briefly during the final decades of the 9th century BC, were they to regain the upper hand in their struggles with border peoples and peripheral states.

While the Six Armies were soon rebuilt under King Mu (r. 956–918 BC) to maintain security in the West while the Zhou's Eight Armies regulated security among the eastern states from their station in Luoyi, both further external and new internal challenges inexorably weakened the Zhou court and by 771 caused it to topple under a combined internal-external military force from the Upper Jing River Valley in the northwest. With the sacking of the Western Capital in 771, the Zhou court moved east over the Guanzhong pass to resettle in Luoyi, restricted now to a small region surrounding the capital that supplied its now much-reduced economic and military needs.

Between c. 950 and 771 BC the power of the Zhou court attenuated consistently as the royal center sought to apportion its limited resources to manage troubles along borders in the East, South, and West, and also internally. First, communications with the eastern allied estates began to wane c. 950–900 BC when, inscriptional evidence demonstrates, the eastern estate leaders stopped visiting the king's court in the Zhouyuan capital region on their appointment to be chief of the trunk lineage of their family that ruled the local estate.⁴² By the middle of the 9th century BC such lack of social integrity between the parts and center led to rebellions arising against the Zhou among both the eastern Zhou estates, which at this time could be called emerging states, and foreign polities/tribes all along the eastern and southern borders. At the same time, from the northwest a former allied people, the Xianyun, or a group thereof, turned increasingly hostile to the Zhou and caused successive kings to expend enormous resources in maintaining the security of the Zhouyuan capital region, which lay only a few days' march from the growing hostility of these foreign armies at the northwest border.

Compounding the effects of these external pressures and emergencies were internal political crises that during and after the 870s BC only intensified over time. Such crises include both kingly and eastern marquissate (*hou*) succession issues that resulted in an apparent illegitimate

⁴² Rawson (1999): 419; Li Feng (2006): 116–121, 139–40.

kingly rule (that of King Xiao, r. 872–866?)⁴³ and the seemingly unsuccessful attack by a Zhou royal army during the reign of King Yi (r. 865–858 BC) on the eastern state of Qi that began over a dispute between the Ji lineage of Qi and the royal court regarding appropriate succession to the marquisate of the Qi ruling lineage and state;⁴⁴ border troubles, including a very serious attack from the southeast by the Marquis of E (E Hou) apparently during the reign of King Li (r. 857/53 - 842/828) that could be quelled only with the substantial help of the private army of the capital-region aristocrat Duke Wu;⁴⁵ and a capital revolt that ended in 841 BC with the exile of King Li (who died in exile in 828) and an interregnum regency under an aristocrat, Gong He (r. 841–828).

If not causal then at least critically exacerbating of these internal troubles, the very system of land ownership under the Zhou and the workings of the alliance and service agreements between the royal house and its allied lineages weakened the Zhou court and royal family the longer that the dynasty survived. Specifically, once the court had given land to its own subordinate or allied elite aristocratic lineages, it could not retrieve it, and gradually the lineages came to understand the economic and political implications of this redistribution of resources that favored them: with land resources naturally limited, the more that the Zhou court and royal family distributed to the allied but increasingly competing lineages, the stronger such lineages grew at the expense of the Zhou.

Exacerbating this problem for the Zhou, in the Zhou system there existed neither payroll nor taxation system. Thus, while the king recovered no revenue in the form of taxation on the elite lineages' production of wealth, for every service he wished performed he was required to gift his

⁴³ A succession dispute erupted after the death of King Yih (r. 899/97–873 BC), and for the first time the king's own son did not inherit the Zhou throne. Rather, King Yih's uncle, a son of King Mu, took the throne and reigned as King Xiao (r. 872–866?). Later, when Yih's son did succeed to the Zhou throne, in 865 as King Yi (r. 865–858), King Xiao's reign seemingly was deemed illegitimate. See Li Feng (2006): 99–100. The dispute highlights that the Zhou royal system had by the 870s and 860s already become a target of manipulation by non-royal elite lineages.

⁴⁴ See Li Feng (2006): 97–99.

⁴⁵ *Ibid.*: 103–4, 130–131.

property to the family scion who would perform the specific service. Furthermore, in this land-for-service arrangement by which aristocratic and other elite lineages gained royal land in return for a specific service performed or to be performed on behalf of the court, the court had to increase the size and value of its gifts of land (and/or other valuable property) just to continue to entice the elites to perform services for the court. In the end, the royal domains in the Zhouyuan over which the court and royal family exercised direct control became parceled and fragmented. Ultimately, by the 8th century BC, the court and royal family were running out of resources through the persistent gifting of which they might have ensured the continued loyalty of the now-competing elite lineages. This system of the exchange of goods for service and loyalty, whereby increasing rewards given to competing aristocrats in the capital region brought diminishing returns to the court, was a form of royal suicide that was embedded in the system from the very founding of the dynasty and thus was inescapable.⁴⁶

Between c. 900 and 842 BC and apparently very specifically c. 850 BC the Zhou court or those who controlled it implemented what has been called a Late Middle Western Zhou Ritual Reform that appears to have been intended to restructure the Zhou lineage system to enable it to endure and recover from its slow decline and disintegration. The specific purpose may have been to recentralize authority in the hands of the king. The reform seems to have been stimulated by a socio-political system increasingly chaotic as a consequence of simple demographics: not only were the scions of leading lineages, and most particularly the heads of the lineages in charge of the states and their rituals in the physically distant eastern territories, now several generations removed from a close kin association with the Great Lineage of the Zhou royal house in the Zhouyuan, but also the number of families within each trunk lineage had now multiplied to the extent that some form of status ranking within the trunk lineages had to be implemented in order to maintain socio-political control both internally within and also between the many trunk lineages. From analyzing the bronzes recovered from both hoards that the great Zhouyuan lineages buried near the Zhou capital as the capital fell and tombs of the many lineages of Ji and non-Ji allies in the eastern and western territories, archaeologists have for decades now identified a significant reform

⁴⁶ *Ibid.*: 122–140.

that occurred in Zhou ritual and related sumptuary laws that seems to have been intended to address the problem of disarray within the trunk lineages.⁴⁷ The reform's first apparitions surface late in the 10th century BC but climax very abruptly c. 850 BC soon after the accession of King Li to the Zhou throne.⁴⁸ It was perhaps King Li's sudden reform of the ritual and sumptuary systems that helped to bring about the capital revolt against him that in turn led to his exile from which he did not return.

According to a picture that Li Feng has composed from both textual and inscriptional evidence, King Li seems to have made a concerted effort to recentralize power in his hands by extorting and juggling aristocratic wealth for the benefit of the royal house.⁴⁹ Otherwise, King Li was criticized in Zhou-period textual sources for having "monopolized wealth." King Li's monopolizing of wealth is consistent with the implementation of sumptuary laws that effected the ritual reform of the Late Middle Western Zhou. Like the ritual reform, King Li's various apparent moves to reconcentrate wealth in royal hands could be seen to have constituted an attempt to tilt the balance of power in the Zhou's favor. In fact, Lothar von Falkenhausen has recently identified from bronze inscriptional evidence the middle period of King Li's reign (r. 857/53–842/28 BC), or c. 850 BC, as the moment when new sumptuary laws that implemented fresh differentiations in elite lineages' ritual privileges likely were enacted.⁵⁰ Such a move would have been intended, it seems, to have subdued the elites by locking their statuses relative to one another and the Zhou court in order to offset the tendencies inherently having developed from the Zhou socio-economic

⁴⁷ On the basis of his study of Western Zhou bronzes, Bernhard Karlgren was the first to have called attention to the great changes that occurred in Zhou ritual, in his "Yin and Chou in Chinese Bronzes," in *Bulletin of the Museum of Far Eastern Antiquities* 8 (1936): 9–156, and "New Studies on Chinese Bronzes," *Bulletin of the Museum of Far Eastern Antiquities* 9 (1937): 1–117. Jessica Rawson (1999) articulated much more carefully what the changes of this "ritual revolution" were, and she placed them solidly within historical social and artistic context; both before and since then, Lothar von Falkenhausen (1993, 2006) has made significant contributions to the study of what he calls the Late Western Zhou Ritual Reform.

⁴⁸ von Falkenhausen (2006): 60–64.

⁴⁹ Li Feng (2006): 105, 126–134.

⁵⁰ von Falkenhausen (2006): 58–64.

and political structure over two centuries' time that had created the inexorable centrifugal seepage of economic, social, and political power from the Zhou center.

King Li's gamut did not succeed, and through his harsh reaction to an apparent capital revolt he tipped the balance against him, whereupon an aristocrat, Gong He, ran the Zhou capital government until he resigned in 828, on the news of King Li's death, to allow the rightful Zhou successor to inherit the Zhou throne. This successor king, King Xuan (r. 827/5–782 BC), with internal elite Zhou allies in both the northwest and southeast, secured the Zhou borders in major campaigns of 823 and 816–5 BC. King Xuan also attempted to reconstitute the internal Zhou order and the Zhou court's prestige through various diplomatic means, including intermarriage between the royal house and peripheral eastern lineages and active interference in the internal succession affairs of the eastern states of Qi and Lu. While successful in effecting a resurgence of Zhou prestige and power in the final decades of the 9th century BC, by the time that King Xuan's reign ended in 782 BC the borders had once again become unstable and insecure with the successful incursions by the Xianyun and Rong foreigners in the northwest. His successor, King You (r. 781–771 BC), made the serious mistake of cavalierly replacing as his heir apparent his son born of his aristocratic primary wife of the powerful family of Shen, Prince Yijiu, with the son born him by his apparent favorite consort Bao Si. Senior court officials rallied in protest around their court leader, Huangfu, but in 777 BC Huangfu's faction was defeated, and he fled to the east while Prince Yijiu removed to the domain of the Western Shen, which likely was in the Upper Jing River Valley, i.e., the northwest frontier. Over the next six years the Western Shen developed an alliance in the Upper Jing River Valley with both the polity of Zeng and the foreign Western Rong people, the latter likely related to the Zhou's now long-time enemy, the Xianyun. In 771 BC this alliance marched southeast from the Upper Jing River Valley and sacked the capital.⁵¹ The Zhou court fled to the Eastern Capital, Luoyi, along with an unknown number of aristocratic Zhouyuan families. The Eastern Zhou, established in Luoyi in that year, never regained anything close to the centralized power or wealth that the Western Zhou had enjoyed, and for all practical purposes the states and estates of what was to become China began a 500-year journey through socio-political

⁵¹ For a careful retelling of the fall of the Western Zhou, see Li Feng (2006): 141–232.

and military instability. This long period of socio-political and military upheaval ended only with the unification in 221 BC of all of the seven surviving large Zhou states by a subject of the Western Zhou that had been closely allied with it in matters of northwest border and frontier defense, the Qin.

Thus, like the Shang, the Zhou seem to have lost their center entirely when they attempted to centralize power too exclusively. In both cases, then, one extreme political movement begot its opposite and destructive extreme. In the case of the Zhou, an unrealistic arrogation of power by a center that did not any longer rightfully possess that power — possessing neither the territorial nor economic nor socio-political status any longer to justifiably insist on or successfully implement such an arrogation over the long term — created a flimsy and rigid center that, no longer supported by those whose now rightfully possessed power had been usurped by the center, crumbled all too easily with the slightest implosive pressure. On the basis of our findings regarding the Shang that have been reported in both the current and previous chapters, we might surmise that a similar process unfolded in the last 150 years of the Shang.

Thus far we have identified the socio-economic-political changes that ensured the loss of the Zhou center, and from the above review we would not be remiss in summarizing superficially that the Zhou lost its center in 771 BC. On the basis of this most apparent political evidence, Wang Aihe has indeed identified that year to mark the point at which the earthly Four Quadrates (*sifang*) eclipsed the center in the Zhou socio-geo-political world.⁵² However, to so assume hastily on the basis of superficial appearances or major political events is to neglect significant changes that had been afoot since approximately 977–950 BC. We have seen as part of our review above how troubles for the Zhou indeed had begun even before 950 BC, and in fact the royal family had once entirely lost its grasp of the center to the “Four Quadrates” (but, really, not at all the Four Quadrates but rather a capital-region aristocratic coalition) as early as c. 842–828 BC: peripheral power in the form of non-royal aristocrats (e.g. the leader of the aristocratic faction that took

⁵² Wang (2000): 75–78; 92–104. See also Constance Cook, “Scribes, Cooks, and Artisans: Breaking Zhou Tradition,” in *Early China* 20 (1995): 241–78.

control of the Zhou court in this period, Gong He) sustained the court during this period quite literally from near the periphery, standing in the center only temporarily likely for the inability to grasp momentarily viable alternatives more palatable than the Zhou court's continued nominal occupation of the socio-political center.

Quite apparently, by even 842 BC the ideological center of the Zhou power structure had already evaporated; if it had not, then neither the revolt against the king and his subsequent fourteen-year exile nor the fourteen-year regential interregnum would have been possible. Whatever specific gravity it was that had held the satellites in their respective stations stably and consistently revolving about the central locus of the system's gravitational field was lost.

In seeking to understand what this specific gravity might have been, we need to consider the changes that occurred from about 977–950 BC in the system of socio-political coherence that most clearly constituted and thus can still reflect the identity of the center of Zhou gravity. This system is that of the ritual cult to the ancestors to which all Zhou elites belonged and in which without exception they participated. And it is in the deepest and also most visible and tangible artifacts representative of the ancestral cult, the bronze ritual vessels, that we find the only real evidence for the changes in the Zhou socio-political system that were reflected in the Middle to Late Western Zhou ritual reform.

Just as the Western Zhou was being thrown onto a defensive posture in the middle of the 10th century BC, the décor gracing Zhou ritual bronzes began to change from its earlier tendencies. From the beginning of the Western Zhou through about the 950s ritual bronze décor followed quite closely the trends of the Late Shang: the dominant motif remained the zoomorphic face traditionally known as the Taotie that was framed within a rectangle on the sides of bronzes. The only noticeable Western Zhou innovation in this period was a certain gaudiness or flamboyance in vessel design, the individual expressions of which still could be seen to represent variations on Late Shang styles: flanged and angular vessels were the vogue, with extensive individual variation in both the accepted shapes and the popular décor, within the confines of reproducing the accepted motif of the Taotie, being the norm.

Beginning during the 950s the variation in vessel shapes and specifically the use of flanges and angular design reduced considerably. In addition, the Taotie motif gave way gradually during

this period from c. 950 through 900 BC to designs that favored rather birds, dragons, and other animal representations placed still either within the large rectangles or in triple horizontal bands across the faces of the bronze vessels — still rectangles. Between 900 and 850 BC, or, as von Falkenhausen suggests, specifically and suddenly during the 850s, the still zoomorphic bird and other animal designs disappeared altogether as such motifs loosened and transformed into abstracted geometric shapes.⁵³ Overall, aesthetic attention focused now on the composition of the complete surface of the bronze rather than on the central iconographic motif adorning it.

At the same time, many significant changes occurred in the numbers and types of bronze vessels that were included in standard ritual sets distributed to or allowed among the elite lineages. Overall the number of food-offering ritual vessels increased while the variety and number of wine-offering vessels changed and diminished. While von Falkenhausen suggests that wine vessels ceased to be included in ritual sets altogether, which to him appears to represent a cessation of all wine offerings and therefore a seismic change from perhaps an ecstatic shamanistic to a more sober performance-oriented ritual communication with ancestors, Rawson has indicated that in the reformed ritual sets in fact wine vessels such as the *hu* replaced the earlier *you* and *zun* wine-offering vessels and that the *hu* was enlarged, its stylistic varieties were increased, and its numbers in ritual sets augmented.⁵⁴ Surely such a change does indeed reflect a notable transformation in ritual practice — and thus also religious belief — but it is unclear what the change in types of wine-offering vessels and their number mean. It is not at all clear that inclusion or exclusion of wine offerings in ritual was related in any way to the presence or lack of an ecstatic “shamanic” element in ritual performance. In fact, the ability of wine to induce in a person a trance-like ecstatic state that is critical to producing the shaman’s spirit journey or ability to possess a spirit within her/himself is minimal to nil. Alcohol does not heighten or intensify the state of awareness of either the mind or the senses, which hallucinogens that induce shamanic and other ecstasies do; rather, it dulls and blurs the mind and senses, making it very unlikely that the role of wine in ritual had anything to do whatsoever with whether or not there was at any time in

⁵³ Rawson (1999): 358–364; von Falkenhausen (2006): 39–42, 58.

⁵⁴ Compare von Falkenhausen (2006): 49, with Rawson (1999): 415.

Chinese institutional religion a role for the shamanic or ecstatic element. Therefore, I am convinced that another type of religious shift occurred through this period.

Over the course of the period of the Middle- to Late-Western Zhou ritual reform there was further a tendency overall to lessen the quality of the bronzes while simultaneously increasing their numbers in a ritual set. Furthermore, new — southern and perhaps also external western / northwestern — influences in Western Zhou ritual are apparent in the inclusion now of jades and bronze bells in burials. Moreover, the two bumps that represented the eyes of the Taotie motif that typically appeared on bronze bells transformed unrecognizably to become three bumps. In addition, a trend toward simplification of bronze vessel design is apparent, which derived from a tendency to imitate simpler, archaic ceramic and reed- or grass-woven designs. Both von Falkenhausen and Rawson view this to represent perhaps a simplification of ritual on the basis of a deliberate archaism and, perhaps, an effort at austerity.⁵⁵

Bronzes were also enlarged at the same time that their designs were simplified, their numbers were increased, and their quality was cheapened. Furthermore, beginning with the introduction of appointment inscriptions dating to the middle of the 10th century BC, inscriptions by the time of the Late Western Zhou ritual reform became standardized and formulaic. No longer did they represent proud records of family accomplishments in the service of the Zhou. They now represented rather family-centered and individualized records of accomplishments that no longer conveyed a deep sense of sincerely felt ritual or religious commitment to a shared belief system.

In short, the ritual changes apparent in the sundry aspects of the bronzes of particularly the Late Western Zhou reflect a ritual system that, having represented since the beginning of the dynasty the underlying Western Zhou social-political-religious system that served as the singular glue permeating Zhou elite society and tethering together tightly all of its members, had become all of standardized, formulized, simplified, archaized, foreign-influenced, cheapened, public- or performance-oriented, and distant from its participants. With regard to the latter, particularly the increased size and decreased quality of the bronze vessels of the newly standardized ritual sets suggest that the focus of ritual was now on the public display of wealth, social status, and ritual

⁵⁵ Rawson (1999): 435–9; von Falkenhausen (2006): 49–50.

participation rather than on the deeply religious motivation that originally had driven the elites' ritual acts by which they exercised and identified their inclusion in the elite Zhou cultural system.⁵⁶ The inclusion of full sets of bells might be understood to further suggest that ritual had become more directed toward performance and display, and less concerned with sincere participation in communication with ancestors,⁵⁷ although one might just as well argue that an apparent increased devotion to the aural elements of ritual might display rather an ecstatic or spiritually resonant quality of the new ritual that previously had not been present.

Both Rawson and von Falkenhausen consider the ritual reform to indicate that vast changes had occurred in the Western Zhou society and political system. But on what these changes were they disagree: Rawson sees social strata within the elites as having flattened,⁵⁸ while von Falkenhausen, along with Li Feng writing with a different purpose in mind, considers, on the basis of strong evidence that we have reviewed already above, that the stratification among the elites increased dramatically on the basis simply of the natural surge in population within the families and that, consequently, as branch lineages were hived off from the trunk lineages, some new or updated and more elaborate system of social-economic-political ranking had to be implemented. To von Falkenhausen, this system consisted in sumptuary policies that defined both between and within the greater lineages the rituals, represented by the ritual bronze sets (and other elite-identifying goods such as jades, chariots, and chariot fittings), that any given trunk or branch lineage among the overall Western Zhou elite could perform.⁵⁹

Where Rawson and von Falkenhausen are in particularly close agreement is in their conclusion that the socio-political changes that must have occurred during the Middle and Late Western Zhou also reflect clearly a fundamental shift in religious belief and values, and ritual performance and attitude. Rawson wrote that, "The new ritual set is likely to have been embedded

⁵⁶ Rawson (1999): 435–8; von Falkenhausen (2006): 48.

⁵⁷ von Falkenhausen (2006): 47–8.

⁵⁸ Rawson (1999): 419.

⁵⁹ von Falkenhausen (2006): 64–70, 74–161; Rawson also proffers that the ritual reform seems to indicate an attempt by someone centrally to impose a social order via ritual (1999: 438).

within a world view rather different from that in which the earlier sets were located."⁶⁰ von Falkenhausen has concurred with reference to specifically the disappearance from the sides of bronzes of the zoomorph, or Taotie:

The Western Zhou transformation of the Shang-derived animal décor into "pure ornament" must reflect an attenuation of its original religious meaning, whatever that may have been. Eventually, this meaning was forgotten or became irrelevant to religious practice. This development, I would argue, indicates a profound change in the conceptualization of the vessels as well as their ritual use, and it intimates a fundamental religious shift in the sphere of the ancestral cult....⁶¹

Elsewhere von Falkenhausen becomes more explicit about precisely what the shift in the aesthetics of the bronzes during the reform seems to have both indicated of and entailed for the relations between the royal house and the elite lineages:

Simplified decoration and emphasis on their arrangement in orderly sets — suggests a ritual environment that had, by 850 BC, become less concerned with religious experience than with correct performance. The king was no longer thought to rule exclusively by virtue of his backing by supernatural forces; his religious authority became less personal and more abstract.⁶²

While I am not convinced that the changes in the Western Zhou ritual system reflect that "correct performance" had become the primary concern of elite ritual, it does seem apparent that a significant departure in the religious construct that underlay Zhou ritual had occurred. What had happened? Can we identify how the underlying values of the unifying Zhou ancestral cult

⁶⁰ Rawson (1999): 438.

⁶¹ von Falkenhausen (2006): 48.

⁶² *Ibid.*: 156.

changed? With so little and such fragmented data we can only speculate, but combined with patterns that we have reviewed previously that evince the nature and practice of earlier belief systems and those that we will consider further below from later periods, the Western Zhou ritual evidence probably can be understood to underscore a fundamental shift that occurred in the institutionalized early (Neolithic-Shang) Chinese belief system that nevertheless remained firmly within an overall consistent continuum of belief from Neolithic times through at least the Han period.

The early Western Zhou ancestral cult followed closely the example of the earlier Shang cult to royal ancestors. We have argued already that for the Zhou, like the Shang, this entailed placing the royal ancestors within the rectangle found at the old NCP, and that together the Zhou ancestors, collectively identified as Shangdi, or High Di, were thought to constitute the high echelon of supernatural power accessible to human beings. This was, we discovered, virtually identical to the way in which Shang royal ancestors were thought to occupy the same rectangular asterism that identified the highest consular power of the sky and world, Ding, which godhead was otherwise but rarely identified in the Shang as Shangdi. We have surmised that when it conquered the Shang on the ground in the middle of the 11th century BC the Zhou then naturally also took over possession of and repopulated with its own high ancestors the rectangular astral Ding, calling it exclusively Shangdi. So what happened to this cultic system's underpinnings, and what has its changed status to do with Western Zhou history? Likely the two developments are intimately interrelated.

The death in battle in 957 BC of King Zhao and his entire Six Armies during the campaign of the Han River surely rocked the entire Zhou realm. Perhaps most shocking was that a Zhou king was, after all, fallible and killable. Moreover, the simple fact that in this one campaign a full half of the royal armed forces were wiped out must have created a new tension within the Zhou territories and its elite lineages, for the Zhou system had hereby been proven to be assailable and destructible. The changes apparent in the Zhou ritual bronze décor that followed on the heels of this critical defeat of a Zhou king and his army, whereby non-cultic but artistically developed bird, dragon, and animal motifs increasingly replaced the Taotie zoomorph, could be interpreted to reflect that the ability of the Zhou ritual and socio-political center to bind the elite lineages had weakened, its

cultic directives attenuated such that it gradually lost the ability to impose its ritual standards on the elite lineages' ritual practices. In ritual meaning, the change in bronze décor can be interpreted to reflect the loss of significance of the Zhou center, the royal ancestral cult, in the ritual performances carried out at the altars of the elite lineages.

Since the Zhou was known now to be fallible and ultimately unable to defend the lineage estates against external invasion, it is likely that the interests of the lineages turned more insular as they began to grapple with matters of self-defense and, therefore, also self-enrichment. Simple demographics also likely contributed to the loosening of the periphery's sense of community with the center: as generations passed, the inheritors of the peripheral territories and lineages naturally felt far less affinity with their now-distant royal kin in the Zhou capital.⁶³ Furthermore, culturally they had year by year become ever more localized, even though it is known that the Zhou elites also spread Zhou culture throughout the populations of the territories that they had essentially colonized in the 11th century BC. In sum, the king and his court in the central Zhouyuan had lost their intimate relationship with the peripheral relatives and allies, either as a cause or result of demographic, cultural, military, and economic changes that had occurred since the establishment of the dynasty and the reconquest of the East some decades later.

The shift in ritual bronze décor from one that focused the viewer's attention on what probably was a symbolic representation of a Zhou royal ancestor's imagined spiritual visage, the Taotie zoomorph, to one more purely expressive artistically, typically a bird, probably reflects the overall loss of direct concern among the elite lineages with the Zhou ancestral cult. One may argue that the zoomorph should be understood to have represented not a Zhou ancestor but rather more likely a lineage ancestor, and it may in some or many cases have done so, but to deny that many or most of the recreations of the Taotie on bronzes presented the face of a Zhou royal ancestor would fail to account for the centrality of the symbolism of the Zhou royal ancestral cult in binding the entire elite Western Zhou ancestral cult — and thus also the Zhou socio-political system — together. There had to have been a center, and this has to have been represented on or in the palpable artifacts, the bronzes, that most emphatically embodied and broadcast the shared cultic

⁶³ Shaughnessy made this point (1999: 323–25); Li Feng has supported it (2006): 91–93, 107, 115–121.

tradition that bound all of the elite lineages together with the royal house of the Zhou. But with the failure of the Zhou king and his armies on the southeastern battlefields in 957, demographic development, economic centrifugalism, and personal / cultural drift of the periphery, this binding symbolism of the center seems to have lost its significance to the elite lineages who shared in the system, and thus it gradually and increasingly failed to sustain the centrality of its representation on the surfaces of shared ritual embodiment, the bronzes.

It is noteworthy, however, that the new, artistically more open and diverse décor that graced the bronzes, usually was still contained on the sides of the bronzes within what is essentially a rectangular frame. It is possible that the elite lineages retained a respect for the asterismic godhead that the rectangle represented. Perhaps they began to consider that their own ancestors occupied a place in that rectangular central godhead — thus, we might ask, did the bird and animal motifs replacing the Taotie visage within the rectangular display space on the bronzes represent now the elites' own lineage ancestors? Since, as we know, "the bird" had, in the M45 grave at Puyang, Henan, since c. 4500–3500 BC been associated with the South, i.e., the periphery, and even during the Shang "the bird" (Niaoxing) asterism had been recognized to be a stable asterism associated with the South (or simply the area outside of the center), perhaps the rise of the motif of "the bird" in Zhou bronze décor represented a spiritual-astronomical challenge to authority by those outside of the center. Perhaps the other animals cast now on the sides of bronzes likewise represented totemic (astronomical?) images of lineage ancestors, displayed as a signal of local ancestral and lineage authority. Though an interesting possibility, we cannot know whether or not this might be accurate.

It may otherwise have been the case that the rectangular frame had lost its direct religious significance with the defeat of the Zhou king and army in 957. After all, by this time the rectangle no longer spun at the pole, and its central star, Thuban, sat at an angular distance of $10^{\circ}26'40''$ from the northern celestial pole. It might be that the shock of the Zhou's enormous military loss jolted elites generally from an erstwhile firm and habitual belief in the power of the old polar rectangle that they had inherited, it seems, from thousands of years of tradition. It very well could be, then, that the rectangular frame was retained on the sides of bronzes out of either simple habit or its continued usefulness and/or aesthetic value in framing the bronze artisan's — or the donor's

or owner's — artistic expression. Perhaps the rectangular frame's retention followed from both impulses.

When c. 850 BC the second stage of the ritual reform was imposed, it probably resulted, as we have suggested above, from a concerted push by King Li to recenter social and political authority, and its foundation, economic strength, in the Zhou court in royal capital cities of the Zhouyuan. For approximately 100 years the authority and wealth of the Zhou court had gradually dissipated centrifugally from the center to reside ever more in the altars of the great and branch lineage heads. The devolution of the authority of the Zhou court is apparent in the fact that over the course of the period from c. 950 to 850 BC elites increasingly had concerned themselves less with Zhou deeds and accomplishments (which we know from inscriptions) than they did with displaying in life and carrying with them in death their own wealth, and the trend continued throughout the remainder of the Western Zhou, to 771 BC, and beyond, throughout the subsequent Eastern Zhou period.⁶⁴ That is, concern for the political center and its propaganda waned dramatically while local socio-economic (and thus also fundamental religious-ritual) interests turned truly local. This may have originated in the need by the lineages in their estates / states after 957 BC to prepare to defend themselves, since quite apparently after King Zhao's disastrous defeat and killing in battle they could no longer depend on the Zhou center and its armies to protect their borders from external attack, but it also likely resulted, as we reviewed above, from simple demographic and economic evolution, as well as perhaps a tendency for the families stationed in areas distant from the Zhouyuan to drift toward and into local cultural milieus.

The geometric and abstract regularization c. 850 BC of the bird / animal motifs dominant in bronze décor after c. 950 may well represent King Li's compromise reform of the ancestral cult, signifying that, while the Zhou would reassert its centrality in the socio-political system, it would not again attempt to impose the will of its ancestral spirits on the altars of the elite lineage heads. It is possible that the faceless and identity-neutral compromise, the geometrically regularized décor on the sides of the ritual bronzes, represents the limits of the power of the Zhou that prevented it from reasserting so personal and central a symbol of Zhou authority and cultic intimacy on the

⁶⁴ Rawson (1999): 448–449.

ritual practices and meaning of the lineages' own ritual centers and activities.

We note also that the rectangular frame that we have identified ultimately with the rectangle formed from stars surrounding the ancient northern celestial pole has now in this period mostly disappeared from its erstwhile role as "display case" for the décor on bronzes, or the essential defining structural component of the new décor. Its vestige remains in period pieces in the banding that continues to grace the bronze surfaces and in which the now purely artistic or geometrically driven designs still appear, but with the loss of the vertical line that within bands demarcated one rectangular section from another, the significance of the rectangular form in state cult ritual has now almost entirely dissipated. It is at this point, c. 850 BC and thereafter that, I believe, a thorough change in religious and ritual orientation in the Zhou worldview occurred. von Falkenhausen identifies the significant change to be a new this-worldly concern at lineage courts for the lineages' living descendants and life in the here-and-now rather than for its dead ancestors in an unseen world. But as for what caused this change, beyond the more obvious military, socio-political, economic, demographic, and cultural reasons outlined above, I believe that we can identify the loss of sincere faith in the Western Zhou ritual-focused ancestral cult as having originated with the fact that by c. 950–850 BC the old polar rectangle centering on Thuban had drifted too far from the pole to warrant, in a world in which the Zhou's economic, military, and socio-political ascendancy were now questionable, continued religious concern for the asterismic godhead that was dominated by Zhou royal ancestors.

Chapter 2: The Anthropocentric Appropriation of the Center of Heaven

Angus Graham enunciated in very specific terms that the most salient element of Warring States intellectual developments consisted in the separation of Heaven from humanity. He wrote,

The dichotomy of Heaven and man is one of the constants of Chinese thought. Whatever is within the control of deliberate action derives from man, whatever comes from outside it derives from Heaven.¹

Graham's point was that humanity had lost its faith in the ability of Heaven to provide concrete guidance in human affairs, but his words and, really, the hyperbole of his statement can be misleading. Warring States debate really split not over a separation of Heaven from humanity but over the issue of whether Heaven represented a moral force that could be understood rationally or an amoral force to be fathomed and followed only intuitively or mystically. Although this debate resulted in no apparent consensus — at least among the relatively elite philosophers whose works have been transmitted and thus who represent for us the Great Philosophical Tradition of the Warring States — regarding what was Heaven's role at the level of human macrointeraction with the mundane world, in fact Heaven and humanity truly united through a process initiated even prior to the beginning of the Warring States period.

To say that Heaven and humanity split in the Warring States period is to offer only the most superficial of treatments of humanity's relationship with Heaven during the period of c. 550–220 BC. On a deeper, ontological, level, already in Confucius (c. 551–479 BC), as represented in the *Analects*, Heaven was understood to be that which is inherent in at least human living things that makes them (1) capable of understanding what are the appropriate ways to behave rightly and live a right life, and (2) who one truly is. To philosophers of ancient China from Confucius' time forward, to "lose the Way of Heaven" did not mean that one became

¹ A. C. Graham, *Disputers of the Tao: Philosophical Argument in Ancient China* (La Salle: Open Court, 1989): 107–111.

literally dissevered from Heaven. Since already in Confucius and as was echoed in most Warring States thinkers thereafter, Heaven was thought to constitute humanity's inborn nature, it was thus possible to lose the Way of Heaven only metaphorically, and the separation of Heaven from humanity occurred only on the ontologically superficial level of behavior, not in one's nature. Indeed, the so-called "separation" that Graham noted in Warring States philosophical texts was merely contemporary thinkers' recognition and explanation of the fact that most people, particularly on the political level, did not behave according to what was theorized to be their inborn heavenly nature but rather strayed from it behaviorally and thus had brought the world to its miserable, fractured state. In fact, then, at this time Heaven already had begun to fuse as one with humanity, whereas previously its provenance relative to humanity had been for some 350 to 450 years fairly obscure. Thus, from an ontological — and therefore more germane — perspective, actually the opposite of Graham's claim is true: about the time of Confucius, and seemingly but not necessarily beginning with him, Heaven and humanity fused inextricably, never to be parted again.

How had the fusion of Heaven with humanity occurred? Over the course of the Zhou period, very gradually humanity at large simply appropriated all of Heaven, Heaven's powers, and Heaven's appearances for its own uses. This becomes particularly clear when we study carefully how during the course of the Zhou the iconography that was employed to identify Heaven and Earth transformed dramatically such that, by the end of the subsequent early-imperial period of the Han, that is, by c. 200–300 AD, what had throughout much of the Zhou, not to mention the prior Shang and Neolithic, periods consistently represented Heaven, that is, the rectangle or square, now symbolized Earth. This, I argue, resulted in no way from a separation of humanity from Heaven but rather its opposite, humanity's gradual usurpation of the powers of Heaven.

In brief, the transformation of Heaven began with the incipience of the Zhou royal court's loss of its social-political-religious, economic, and military centrality as early as the middle of the 10th century BC. This development was reflected almost immediately and increasingly over the subsequent 100 years in the removal of the zoomorphic or Taotie motif from the rectangular spaces on the sides of ritual bronzes. This probably can be understood to represent either the

removal of the Zhou royal ancestors from inclusion in the allied lineages' ritual propitiation of their own ancestors or the cessation of separate rites offered to the Zhou royal ancestors. That is, either way, from the perspective of the elite non-royal lineages, the Zhou ancestors no longer inhabited the square. In essence, this was tantamount to recognizing that either the Zhou did not possess the Mandate of Heaven or the Mandate was in fact baseless as a real social-political-religious concept. Likely the square itself also began to lose some of its religious significance, for it would have been only the combined weight of (1) historical tradition inherited from the Shang and (2) the success of Zhou propaganda in reviving that tradition, merely replacing the Shang ancestors in the square with its own, that would have convinced participants in the Zhou conquest of the Shang to continue to buy into what was probably an only slightly altered socio-political religion centered on the ancestral council of the northern celestial polar square, for recall that by this time the polar parallelogram was no longer truly polar at all. The nearest length of the rectangle (between Alioth and Kochab) had moved by 950–850 BC to spin around the NCP at a distance of approximately $5^{\circ}3'$. Then, after c. 950 and continuing over the next 200 years or so, the increasing social-economic-political-military irrelevance of the Zhou royal center would have eroded any tendency to believe in the religious and political potency of the polar rectangle.

The increasing vacancy of the center that had been associated with the square / rectangle did not, however, render the form of the square impotent, for habit and tradition are powerful influences on human culture and psychology. Indeed, the square continued through the Zhou and subsequent imperial history, and indeed through the present, to serve as a powerful symbol of magical efficacy. It is only the symbolic referent of its magical power that was turned on its head, through a very gradual process, during the period from about 950 BC to 200–300 AD.

How did the process of reassigning the meaning of the square occur? It seems a simple matter: unconsciously, over centuries' time, during both the Western and Eastern Zhou periods, humanity, finding its intimate earthly environs naturally more receptive to its needs than a distant and originally only indirectly accessible Heaven, for its own personal religious-philosophical and political use on Earth simply appropriated to itself the powers that it had once imputed to Heaven. In the process, Heaven was literally removed from "the above" to reside internally

throughout Earth and its most important (at least to them) occupants, human beings. This chapter demonstrates how and why (1) both the ontology and location of Heaven transformed and shifted, and (2) the square's symbolic essence and representation began to be transposed from Heaven to humanity on Earth.

Spring and Autumn Period (722–481 BC) Changes in Ritual and Religion

Well before A. C. Graham pronounced his purported separation of Heaven and Man, scholars of Zhou thought long had known that the meaning of Heaven had changed dramatically from the time of the founding of the Western Zhou to the period of the early Warring States (5th century BC), even though they had not always agreed — and still do not — on precisely what these changes were. A recent commentator on the matter, and one who invokes Graham's terminology and point of view in describing the parting of the Ways of Heaven and Man, Yuri Pines, underlines with evidence presented from the essential history of the Spring and Autumn Period, the *Zuo Zhuan*, Graham's position that over this period humanity, finding Heaven unresponsive to its needs, took possession of its own fate and in the process dis severed itself from Heaven's Way.

Pines suggests that through the Spring and Autumn period statesmen evolved for their own use in managing appropriately and peaceably both state and interstate affairs a system of social etiquette, *li* 禮, that constituted a new socio-political development of the period as the character *li* overtook in common usage the earlier descriptor of such etiquette-centered public behavior, *yi* 儀.² Regardless of what the system of etiquette that regulated socio-political behavior was termed at any time, it is far more probable that such a system evolved much earlier over centuries' time, during the Western Zhou period, and that it was this system that was largely

² Yuri Pines, "Intellectual Change in the Chunqiu Period: The Reliability of the Speeches in the *Zuo Zhuan* as Sources of Chunqiu Intellectual History," in *Early China* 22 (1997): 100–116; see also idem, *Foundations of Confucian Thought: Intellectual Life in the Chunqiu Period, 722–453 BC* (Honolulu: University of Hawaii Press, 2002): 89–104.

in place, after the promulgation of the Late Middle Western Zhou Ritual Reform c. 850 BC, that ensured the survival of the Zhou system when the royal center had imploded and for all practical purposes been vacated. Likely the system of social etiquette that regulated relations between members of elite lineages and their representatives, having evolved gradually, naturally, and early in the Western Zhou from the religious rites of the ancestral temple that regulated the relationships between dead ancestors and their living descendants, simply burgeoned as the gradual loss of a social-political-religious center after c. 957, 850, and again 771 BC made such regulations of interstate and interpersonal relationships necessary in order to maintain all of the pieces of the periphery of the Zhou state, the elite lineage-led states, as a headless but still socially integrated assemblage. And we recall that the ritual reform of c. 850 BC had the effect of delineating sumptuary privileges largely within the elite lineages that controlled what were now really independent polities. Such careful parsing of social, political, religious, and economic privileges would have both confirmed the socio-political rites of etiquette already evolved and further contributed significantly to the elaboration of ritualistic socio-political behavior that maintained a proper civility among so many explicitly graded classes of the elite.

Like Pines, Lothar von Falkenhausen, in the portion of his remarkable survey of Zhou-period archaeology and religious ideas that analyzes mortuary practices of c. 600–400 BC, may have been influenced unduly by Angus Graham's pronouncement that Heaven and Man had by the beginning of the Warring States period split. When von Falkenhausen argues that mortuary practices apparent in tomb evidence of c. 600 BC reveal that by this time contemporary Chinese believed that existence in the afterlife occurred in a world entirely separate — distinct and hermetically sealed from — the world of the living, it may be that he has absorbed Graham's notion of Heaven's separation from the living human world. von Falkenhausen considers such a projected separation to represent that a thorough and profound religious transformation in Chinese society had occurred by c. 600 BC and that it apparently affected all levels of society. I do not see that such a transformation occurred. For one thing, unearthed tombs of the period reflect not a distancing of the two worlds, the here and hereafter, but rather their ever more intimate fusion along a broader bandwidth of society. This, I will argue, developed alongside and as part of the significant shift in contemporary Chinese conceptions of Heaven whereby that

great source and return moved from the skies above to the Earth below and, on that Earth, specifically the human breast within.

Changes in the Relationship between Heaven and Humanity, c. 950–500 BC

The first change in the Zhou conceptualization of Heaven may have occurred as early as c. 950 BC when, as we saw in Chapter 1 immediately above, the military and likely then also the notion of the social-political-religious and economic unassailability of the Zhou royal court was shattered with the battle deaths of King Zhao and his entire Six Armies. This change might be seen to be reflected in the drastic reduction thereafter in the appearance of the zoomorphic Taotie face on the sides of cast ritual bronzes. Seemingly the personalities of the Zhou founding and kingly ancestors came to hold little sway in the unbroken adherence to the Zhou ancestral cult that thereafter did continue to maintain the unity of the allied Zhou elite culture.

As mentioned above, it is reasonable to suggest that the space of the celestial rectangle initially believed to be populated with the ancestors of mostly royal but also probably high elite lineage ancestors now, for the peripheral elites, shed its royal inhabitants. The specific religious and political referential linkage that the Taotie, as a variably appearing symbol of any of the group of founding and other high Zhou royal ancestors, provided between the rectangle on the bronzes and the rectangle in the heavens was now severed. The Taotie thus no longer belonged on bronzes that did not any more represent this linkage between the rectangular ritual altar and its source model in the sky. And now that the Zhou did not any longer command respect for the primacy of its royal ancestors who largely had humanized the celestial quadrilateral and thus linked it, Heaven's center and defining element, with the elite lineage heads and the rectangular ritual spaces on the sides of their ritual bronzes (and altars, temples, and cities), then this parallelogram that now spun around in the northern sky at some distance from the pole and which thus was no longer central to anything, had lost much of its immediate meaning.

However, the rectangular space on the sides of the bronzes had, over millennia's time and on first the jade and later the bronze media, evolved to become the central and anchoring element

of an entire popular décor of ritual bronzes produced for and by the socio-political elites. The parallelogram, despite having now, after c. 950, apparently lost its original specific religious referent of centrality in the heavens, of course retained not only its defining role as a decorative element on bronzes and, later, diverse artistic/religious media, but also its magico-religious symbolic potency. It had been central and ingrained too long in the religious psyche of the developing civilizations of the Yellow and Yangzi watersheds to be discarded momentarily with the occurrence of critical but not revolutionary political transformations in the Chinese world. However, how explicit and/or deep a religious potency the parallelogram held for particularly the elite lineage heads we cannot know. Thus neither can we know what meaning the birds and other animal motifs that replaced the Taotie in filling the rectangular/square spaces on bronzes possessed, whether they also expressed strong religious values or symbols, such as the seemingly totemic representations of elite lineage ancestors specific to each state-possessing lineage, or if they should be viewed to be utterly irreligious decorative motifs. It may well be that the birds and dragons, being winged creatures capable of soaring in the heavens above, represented the aspirations of the owners of the bronzes and thus could be considered to reflect the inchoate cult of individual attainment of the heavenly, that is, an early cult of immortality. Otherwise, as we noted in the previous chapter, the bird and other animal designs now appearing on the sides of bronzes may represent a rebellious display of localism: these animals may represent symbolically the spiritual personalities of local, or estate lineage, ancestors, those to whom lineage elders outside of the Zhou center paid dedicated ritual reverence.

A second significant change in the use and apparent meaning of the rectangular space on the sides of ritual bronzes occurred c. 850 BC, when (1) it began to break down, to be replaced by a now-unbroken horizontal band circumscribing the bronzes; or (2) it was left as either undecorated space or filled in using repeated and standardized geometricized lines and forms. It is clear that the erstwhile significance of the rectangular space on the bronzes had by now begun to disappear.

It is, recall, instructive that only a few years following this apparently centrally imposed and sudden change in ritual bronze decoration of c. 850 BC King Li's throne was usurped, and he was banished for fourteen years, never to return to the capital in the Zhouyuan. Over these

fourteen years, from 842 to 828 BC, the court fell into the protective hands of a consortium of elite lineages. With these trends and events, the symbolism of Zhou centrality and the power of its centralizing religion, the cult of the ancestors that located ultimate power, that of Shangdi or Heaven, directly with the Zhou royal ancestors who resided in the rectangle at the NCP and in the derivatively central rectangular/square altar and temple of the Zhou royal house, dissipated and with it also the authority of the Zhou royal center to act as a true centralizing force among the lineages that now and thereafter would increasingly follow their own local courses.

Following the debacle of 842–28 BC, while the succeeding king, King Xuan, managed to bolster briefly the Zhou court's status in the last twenty-five years or so of the 9th century BC, likely the economic, socio-political, military, and ideological damage done the Zhou royal house was irreversible, and mismanagement of the court's affairs by the succeeding King You only hastened the end. As we have seen, obviously the events of 771 BC, by which the Western Zhou hegemony was ended and the court moved east over the pass to Luoyang, reduced drastically the authority of the Zhou royal house and, we assume, the residual ideo-religious power it may have managed to salvage following the serial troubles of 957 and 842–28 BC.

Not long after 771 BC the Zhou court's prestige was reduced quickly and precipitously again, through the agency of Duke Zhuang (r. 743–701 BC) of Zheng — the scion of one of the leading lineages supportive of the Eastern Zhou court and thus among the court's critical props. Stirred initially by a disagreement with King Ping (r. 770–720 BC) over the Zhou king's appointment of another lineage head to a high ministerial position in the Zhou court, which King Ping had arranged in order to balance against Duke Zhuang's increasing and threatening power, eventually, during the reign of the subsequent Zhou king, King Huan (r. 719–697 BC), in 707 BC Duke Zhuang led an allied interstate force against Zhou royal troops and defeated them, and King Huan was wounded in the course of the battle. Much as King Zhao's defeat and death at the hands of a foreign enemy in 957 BC seemingly had exposed the Zhou's weaknesses and thus reduced its status and authority, the attack and defeat of a royal Zhou army by an allied force mustered from among the Zhou's supporting vassal states, and the wounding of a sitting king during the battle, is known to have attenuated significantly the Zhou court's standing and authority. Thereafter, little thought was given to the Zhou king's authority to intervene in state or

interstate affairs, and Duke Zhuang of Zheng became, according to Hsü Cho-yun's account, effectively the first hegemon (*ba*, a surrogate leader over the states who supposedly acted on behalf of the Zhou king) over the Zhou vassal states in practice, if not in actual title.³

Hereafter, even though the Zhou continued to maintain itself and, through its simple presence, the superficial propriety of the overall Zhou ritual system, in fact the center of the Zhou world had collapsed completely. This circumstance is reflected in the Qin's apparent utter disregard for the sumptuary rules to which the many Zhou states generally adhered throughout the Spring and Autumn and Warring States periods, which can be observed not only in the enormous sizes of the Qin ruling lineage's tombs in its necropolis at Nanzhihui, Fengxiang, Shaanxi (a suburb of the old Qin capital of Yong), among which tombs many rival in scale the Shang royal tombs at Anyang, but also in bronze inscriptions on Qin vessels dating to the 8th century BC in which the ruler, Duke Wu, arrogates to his own ancestors the Mandate of Heaven and to himself the Zhou royal form of address and the right to govern the four quarters.⁴ Circa 600 BC the Chu king similarly began referring to himself not as *gong*, duke, but as *wang*, king. He, too, claimed to have received the Mandate of Heaven.⁵

In order to explain the evolutionary political process by which Spring and Autumn statesmen learned to navigate the violence and insecurity of their era, Yuri Pines has applied to the period what Angus Graham identified as the critical issue facing Warring States thinkers and to which they invariably responded. Graham, Pines notes, stated that, "[Warring States thinkers'] whole thinking is a response to the breakdown of the moral and political order which had claimed the authority of Heaven."⁶ Pines comments that thinkers' reconsideration of the role played by the divine (Heaven and deities) in mundane human affairs opened the door to their

³ Hsu Cho-yun, "The Spring and Autumn Period," in Loewe and Schaughnessy (1999): 562. The first historically recognized *ba*, hegemon, was actually Duke Huan of Qi (Qi Huan Gong, d. 643 BC).

⁴ Lothar von Falkenhausen, "The Waning of the Bronze Age: Material Culture and Social Developments, 770–481 BC," in Loewe and Shaughnessy (1999): 486–7.

⁵ von Falkenhausen (1999): 516–18.

⁶ Graham (1989): 3, quoted in Pines (2002): 55.

discovering "new departures in political and ethical thought."⁷ Pines thus attempts to relocate this departure described by Graham from the Warring States to the Spring and Autumn period, employing passages from the *Zuo Zhuan* to demonstrate his point. But I would place the occasion of the critical shift in the human perception of Heaven, or at least its center, even earlier, and I would reverse the cause and effect: the perceived authority of Heaven's center probably waned considerably with the significant loss of status of the Zhou royal court that began with the military debacle of 957 BC and continued with both the removal and exiling of the king in 842–28 and the sacking and move to Luoyang of the court in 771 BC. First the quite sudden removal of the zoomorphic Taotie design from the rectangular sacred spaces of the ritual bronzes after c. 950 BC and then, after about 850 BC, the increasing (but not universal) dissolution of the vertical lines demarcating the rectangle, which defined the edges of the sacred space once reserved for the Taotie image, within the horizontal band circumscribing the bronzes, suggest that the traditions of authority defined by the rectangle of the center of the heavens and which had served as the authoritative symbolism of the high power Heaven, or Shangdi, had already thinned and weakened dramatically by the middle to end of the 9th century BC. I would argue further that it was such a weakened core of the socio-politically centralizing Zhou religious belief system that made possible the exiling of the king and later the overthrow of the Western Zhou royal court. Then we should recognize that it was during this fairly early period, c. 950–771 BC, during which political leaders of the Zhou estates-turned-states had to begin to grapple with the immediacy of human affairs on the ground in order to maintain a certain level of civilization amid increasing disorder and violence. It was this difficult state of affairs of the 10th through 8th centuries BC, when a reliable center in both Heaven and thus also on Earth was known not to exist, that *caused* lineage heads and their appointed statesmen to question the role of the center of Heaven in human affairs. During the latter half of the Spring and Autumn period it was not, as Pines proposes, "thinkers' reconsideration of the role of Heaven and deities that made new departures in political and ethical thought possible." It was rather the forced new departures in socio-political realities, caused initially by the loss during the Western Zhou period

⁷ Pines (2002): 56.

of the religious-political center through the dissolution of the idea that Zhou royal ancestral spirits populated the rectangular center of Heaven, that made a reconsideration of political and ethical thought necessary.

This cause-and-effect relationship can be seen in a speech attributed to the 6th-century BC statesman from the state of Zheng, Zi Chan. Pines quotes Zi Chan's words from the *Zuo Zhuan* to demonstrate the new thinking with regard to the role of Heaven that he purports occurred at this time. I see in Zi Chan's words rather a simple iteration of the facts that the center has been lost and thus communication through it with Heaven has become impossible. Over Zi Chan's own refusal to follow the advice of an astrologer named Pi Zao to prepare for and thereby counteract an astrologically signaled disaster that Pi Zao said would befall the state of Zheng, Zi Chan explained to his assistant Zi Daishu,

The way of Heaven is distant, while the way of humanity is near. Without having reached it (Heaven), how can one know it (Heaven's way)? How can [Pi] Zao know the way of Heaven? Now, this man talks a lot, so why should some [of what he says] not be untrustworthy?⁸

Here Zi Chan reflects neither a new understanding of Heaven nor a departure in ethical thinking from earlier conceptions of the role of Heaven. He is, rather, stating the fact of what I have described above: in the present no one can communicate with Heaven, and thus, being unreachable, its way cannot be known. Why would this have been so? It is simply a reflection of the fact that there was in Zi Chan's time on Earth no agency by which to communicate with the center, Heaven, for the simple reason that the Zhou royal house, including the king, was no longer perceived to be the agent of either Heaven above or Earth, including humanity, below. Zi Chan's words thus record a snapshot of his reconciliation with the truth of the moment: the king and the royal court have defaulted in their duty to communicate with the center of Heaven, and consequently humans on Earth must deal with human affairs on Earth according to the only

⁸ *Zuo Zhuan*, Zhao Gong 18; translation my own; cf. Pines (2002): 69.

means accessible to them, through human action or inaction. It is not at all that the conception of Heaven has changed; to the contrary, Zi Chan's words reflect that the old Western Zhou understanding of Heaven was still current in the 6th century BC: Heaven and its motive force were still present as before but only incommunicable presently among men, because the only known conduit through which Heaven's will and way could be known, the king, no longer possessed the *de*, potency or authority, only bestowed by Heaven, to communicate with it. Furthermore, the erstwhile center of Heaven, the rectangle now so distant from the pole, could no longer convincingly serve as the center of anything.

What, then, was this Heaven whose way was sought? Zi Chan seems to have expressed that neither he nor anyone else knew even that, but his words presuppose the presence of a Heaven whose center had in former times been known. This is consistent with the understanding of that heavenly center that I have introduced in this book, that is, a heavenly apex of power, prestige, and influence that, until c. 950–850 BC populated by royal and elite ancestral spirits, had by Zi Chan's time become vacant and thus incommunique with the loss of belief in the efficacy or relevance of (1) the royal / elite ancestral spirits, and (2) the heavenly center's concrete visual apparition, the once-polar rectangle.

Thus, if anything, Zi Chan and others quoted in the *Zuo Zhuan* who speak of the question of Heaven's role on Earth betray a confusion, indecision, or ambivalence over what might have been Heaven's intent for them or anyone on Earth. Indeed, this uncertainty over Heaven's role in human affairs is, I would argue, the overarching sense of Heaven that a reader of the *Zuo Zhuan* takes from the text. Such confusion over Heaven in fact very neatly mirrors the socio-political and psychological confusion that we know from the same source occurred at that time on the ground in Zhou China among the human beings that struggled for survival. And this confusion over Heaven's will or role on Earth did not begin as a consequence of the political and military troubles on Earth during the Spring and Autumn period but rather caused them. When the center evaporated between 950 and 771 BC, so did any sense of security felt among human beings over the nature or existence of a central motive and/or moral authority that could guide human affairs. By the time of Zi Chan, the free-for-all had been developing for approximately 350–400 years, and no one, as far as we know, had thought yet to bring Heaven's voice to Earth to rest within

every person's breast. When this did in fact occur, only shortly after or even during Zi Chan's time in the late 6th century BC, the confusion over Heaven's role in human affairs had thereby been resolved at least theoretically to some, in that a new center for its residence had been postulated — not in the sky but in the human breast.

And thus it is not so that Heaven and humanity were mutually distant during the Spring and Autumn period; they were only seemingly, to some, incommunique. Further, it is not so at all that Heaven and humanity parted ways during the Warring States. Indeed, beginning about 500 BC, they began to be fused inseparably in the human breast. Finally, the way that combined Heaven and humanity turned out to be not a truly new conception but rather a reinterpretation for new times of the old religion of the altars and temples of the Western Zhou Great and Lesser Lineages. Really, only the locus of the critical element of that way, the now-abstract concept of the center of Heaven, had shifted its location.

The task for Zi Chan, as it had been for many of the officials and statesmen who had preceded him over hundreds of years, was merely to recognize this state of affairs that had prevailed already for so many centuries and respond to the real circumstances on the ground through (1) interstate diplomacy, relying on social rites that, probably since the 10th century BC (or earlier), had evolved from religious ritual of the ancestral temple and been elaborated gradually, to provide some order to relationships among states and their statesmen; (2) intrastate social ritual that provided order within the government and society of the state; (3) sound financial and economic management (including newly centralized methods employed in the age-old management of agriculture, trade, and markets, and the new systems of coinage and direct taxation of the citizenry); and (4) military battlefield etiquette as well as military preparedness and strategic planning. All such necessary management strategies would have evolved gradually and naturally as a response to the chaos created for the states by the loss of the center between c. 950 and 771 BC. A natural byproduct of the development of this need for sound management of the state, as many authors have described over the years, was the rise of expert managers among first elite lineages and then, during the Spring and Autumn period, the lower-elite *shi*, or knights, giving rise in turn to the social, political, and philosophical hemorrhages that occurred from the Spring and Autumn through the Warring States periods.

Two more points may be made regarding Zi Chan and other rationalists like him who steered Zhou states during the 6th century BC. First, in Zi Chan's words quoted above, we might be able to recognize the mind of not merely a rationalist but a truly rare fiercely stubborn experientialist. The verb *ji* 及 that he is quoted to have spoken to cast doubt on Pi Zao's knowledge of Heaven means "reach." With this verb Zi Chan declared that no one, not even a ritual expert in his day, could know Heaven, since (1) there existed no potent and legitimate earthly center from whose altar a communication with the center of Heaven could be achieved, and (2) physically reaching Heaven was of course impossible. He therefore cast doubt on any and all claims to knowledge of anything regarding Heaven that had not been directly experienced. Considering that he believed no one capable of achieving such direct experience, then he implies that, because it was unreachable and thus unknowable, it was thus also unrecognizable in his time.

Second, in his experiential extremism, Zi Chan was by no means typical of his or any time, and indeed the other people populating the context of the story surrounding Zi Chan's statement should be taken to reflect more accurately the typical understanding and reception of this force "Heaven" in 6th-century-BC Zhou China. From this context we know that all of those who populated Zi Chan's moment, including Zi Chan's assistant Zi Daishu, still believed strongly in the ability of a man such as Pi Zao to predict events on Earth from his observations and interpretations of astrologically pregnant astronomical events and alignments. And that such belief was a constant throughout the Zhou period, from beginning to end, is known particularly clearly from the consistent belief in the predictive power of specifically *fen-ye*, or "field allotment," astrology and its practitioners' ability to both (1) provide considerable accuracy in tracking stellar movements over hundreds of years to provide what was thought to be an accurate capability of event prediction, and (2) convince political-military leaders of the efficacy of their knowledge and predictive skills.

Fenye astrology appears to have been as ancient as the early centuries of the Zhou and was practiced continuously and afforded predictive legitimacy throughout the Zhou. According to this system that was based on the 12-year Jovian calendrical cycle, events in geopolitical sectors on the earth mirrored astronomical events occurring in their respective matching sectors

of the heavens, and therefore tracking astronomical events and predicting their occurrence enabled, it was believed, the expert *fenye* astrologer to predict local events on Earth.⁹ For examples of relevant and trusted use of *fenye* astrology, one turns in particular to, of course, the *Zuo Zhuan*. The example of Pi Zao, though he did not enjoy the privilege of convincing Zi Chan of his expertise and his work's relevance to events and affairs on Earth, provides just one such instance among many that we may find in the pages of the *Zuo Zhuan*.

And from that same source we find, as well, that, aside from their use of *fenye* astrology, many political and military leaders of the various Zhou states employed experts in interpretation of trigrams of the *Yijing*, *Book of Change*, to predict outcomes of state-, ruler-, or battle-level events. Still others, including King Ling of Chu (r. 544–541 BC), who, before he became king, employed tortoise plastron divination to elicit from Heaven an indication of its will, resorted to plastrimancy. We note, however, that when Heaven responded to King Ling's query over whether or not he would become king that indeed he would not, the future King Ling cursed Heaven and disregarded its warning. Later, against Heaven's better advice, he indeed fought savagely to and did become king of Chu, with disastrous consequences for himself. In King Ling we see, then, the confusion and indecision regarding Heaven's role in human affairs that I have argued for in these pages. He, like many others of his time, did not really know what to think of Heaven's ability to influence human affairs — but it is apparent that the author of the *Zuo Zhuan* did so believe in that ability, for he included in his text along with this anecdote of Heaven's accurate adumbration of human events or its warning of their appropriate course many other similar examples that through their narration attempt to demonstrate just how efficacious a guide Heaven was and ought to have been perceived to be.¹⁰

Consequently, we derive from the example of Zi Chan amid the context of the larger *Zuo Zhuan* several convincing reflections over the perception of Heaven among those politically

⁹ On the *fenye* astrological system that was current during the Zhou and perhaps was inherited from an earlier Shang system, see David Pankenier, "Applied Field-Allocation Astrology in Zhou China: Duke Wen of Jin and the Battle of Chengpu (632 BC)," in *Journal of the American Oriental Society* 119.2 (1999): 261–279.

¹⁰ For the story of King Ling's use of the tortoise plastron to divine earthly / human events, see *Zuo Zhuan* 24, Zhao Gong 4 (13th year of Zhao Gong, corresponding to 529 BC).

active in 6th-century-BC Zhou China. First, there was no reliable communication with the center of Heaven, and thus the will of the high and controlling element of Heaven (Ding or Shangdi) could not be known. This resulted from the loss of belief during the Western Zhou in the Zhou king's ability to communicate with the center of Heaven, the rectangle, and the consequent decline of belief in the stellar rectangle to represent directly anything central to humans and their affairs on Earth. Zi Chan's observation that anyone who has not reached Heaven cannot know Heaven's way reflects both (1) the lack of direct communication between the center of Heaven and its purported agent on Earth, the Zhou king, and (2) the fact that without that communication no means of reaching Heaven could have been achieved. Second, nonetheless, belief in Heaven continued, as did the belief in Heaven's involvement in human affairs and its tendency to adumbrate world events through various observable signs. Third, experts selling their skills in reading Heaven's intent using various artful but *peripheral* means, i.e., not penetrating the will of the *center* of Heaven through ritual performed at the Zhou king's ancestral altar, were abundant, their voices often heeded but sometimes not.

Therefore, it is apparent not that Heaven and humanity had become distant but that humanity had discovered various means to adjust to the loss of the human ability to divine accurately and consistently the will of the *center* of Heaven. Some, such as is found in the person of Zi Chan, kept the *peripheral* means of divining Heaven's will at bay and preferred instead to rely on human social and rational processes to thread a way through human events and affairs. Others, including those who set store by the *fenye*, *Yijing* trigrammatic, and *plastrimantic* divination techniques, believed in the human ability yet to tease meaning out of Heaven's omens. Still others, including King Ling of Chu, seem to have been unconvinced either way of Heaven's interventions in or signaling of Earth events. Significantly, one whom I would include in this latter category is the author(s) of the *Zuo Zhuan*: throughout this work there is no consistent pattern of supporting or discounting the role of Heaven in human affairs, for in the work we find plenty examples of both tendencies. This is why, overall, I suggest that, as far as we can know, the society itself was indecisive or confused about Heaven's distance or nearness. However, one thing seems clear: though in the late Spring and Autumn period reliable central and unitary

communication with Heaven was not possible, the attempts by those far removed from the old central altars and temples of the old Great and Lesser Lineages were constant and abundant.

I suggest that the reason for this is simply that the privilege of communicating with Heaven directly had by default drifted from the altars and temples of the elite governing lineage heads to lesser courts and even individuals throughout society. Though any certainty in the ability of anyone to communicate with Heaven's center had long been lost by the late Spring and Autumn, nevertheless, left to their own wits and abilities, people across the elite and lesser elite spectra of society, i.e., those of a now much more broadly defined series of classes that were involved in governance (heads of trunk and branch lineages of elite families, *qing* and *daifu* officials, and *shi*), now attempted as they could to devise means of teasing Heaven's intent from naturally occurring events in the physical construct of Heaven-and-Earth, i.e., the known universe of the here and now. Through this process of involvement, I suggest, quite naturally such people gradually developed both an abstracted understanding of a dispersed Heavenly power, i.e., now a force immanent in the created world, and the belief therefore that this force of Heaven was forever close, accessible and achievable, and perhaps scrutable.

Archaeological evidence supports this assessment very firmly. Reviewing and assessing Western and Eastern Zhou material culture remains, both Wu Hung and Lothar von Falkenhausen have identified what appears to be among the most significant changes in the Zhou human world evident in particularly the Eastern Zhou period, or after 771 BC. Its influence likely was greater than that of any other single change that occurred throughout the Zhou. This change was the shift in focus and application of the energy and wealth of the living from the larger lineage to first the family unit and finally to the individual. Wu Hung first noted this trend to have occurred during the Eastern Zhou period, from the Spring and Autumn through the Warring States and into the Han, as expressed generally across Zhou culture, in a significant shift in investment of resources and concern from the lineage temple to the elite individual's tomb.¹¹

von Falkenhausen has further identified within this trend an intermediate shift in concern

¹¹ Wu Hung, "From Temple to Tomb: Ancient Chinese Art and Religion in Transition," in *Early China* 1988 (13): 78–115.

and investment that occurred in lineage cemeteries. He has noticed that while in the early centuries of the Zhou, through about the 9th century BC, in these cemeteries individual graves were grouped randomly together without concern for their ordering according to gradations in allowed sumptuary privileges, in the later Spring and Autumn period graves in cemeteries of greater lineages were now separated by groups according to sumptuary distinctions as evident in tomb size, tomb and coffin style and elaboration, and quality and quantity of mortuary goods.¹² Within a larger lineage cemetery, then, both family graveyards and richly appointed elite tombs of individuals became common, which von Falkenhausen attributes to the effects of the Late Western Zhou Ritual Reform. He postulates that, when, according to the reforms of c. 850 BC, limitations were placed on the numbers of individual ancestors to whom ritual offerings could be made in the lineage temples, living elites realized that their spirit eventually would be one among those to whom offerings of oblations would not be executed. In order to ensure that one's spirit would be well endowed in the afterworld and would therefore survive, scions of elite greater and lesser branch lineages who could afford to do so began to divert investment from the collective lineage temple, at which ritual feedings were allowed to be offered to only the lineage's founding and most recent five generations of ancestors, to his own tomb.¹³ Or perhaps, as far as we know from the little evidence we possess of lineage temples in the first half of the Eastern Zhou period, new investment resources were simply directed toward the individual tomb without there having been a concomitant reduction in investment in lineage temples. At any rate, as the trend toward investing ever more heavily in individual tombs gained momentum over the centuries, tombs became the primary exhibition of elite status.

In addition, wealth in the Zhou states generally increased dramatically during this period after c. 850 BC (and even after 950 BC), and even as the sumptuary restrictions imposed at that time as part of the Late Western Zhou Ritual Reform differentiated privileges according to a newly installed system of social distinctions among the sub-lineages of any greater lineage, the wealth spread throughout the less privileged sub-elite branch lineages and families. In short,

¹² von Falkenhausen (2006): 300.

¹³ See von Falkenhausen (2006): 300.

increased wealth was distributed broadly across Zhou society, at least at levels above that of the commoner. The consequence of the development of both the new social differentiations and the increased wealth enjoyed among all strata of the elite lineages was a spreading of privileges as those now possessed of some wealth could afford to imitate the mortuary practices of the very wealthy high elite. The status of the tomb owner commonly came to be expressed through not only tomb size and design but also the number of ritual bronze vessels of certain types (particularly *ding* bronzes) and other grave goods that were interred with him or her. However, as the privileges of the high elite dissipated throughout lesser branch lineages and families, the highest elite differentiated themselves anew by creating ever greater and richer tombs and c. 600 BC reasserting their jealously guarded ritual sumptuary privileges inherited from the Late Western Zhou Ritual Reform. On the basis of particularly the appearance about that time in high elite tombs across the Zhou realm of new, "special," ritual assemblages appearing alongside the previously interred, or "ordinary," assemblages, von Falkenhausen postulates that the elite imposed a Middle Springs and Autumns Ritual Restructuring to reassert their high status.¹⁴ In essence, it appears that through this ritual restructuring the high ruling elites were differentiating themselves afresh from those who had presumptuously imitated their mortuary habits and privileges.

In sum, the archaeological evidence from the Spring and Autumn period demonstrates these both flattening and redifferentiating socio-economic trends in the following ways: (1) in lineage cemeteries graves were grouped by families or sub-lineages according to status and the varying sumptuary privileges that differentiated statuses allowed; (2) tombs of high or ruling elites of the lineages enlarged significantly and became particularly richly furnished with bronzes and other valuables; and (3) the interment of grave goods with the deceased spread much more widely across social strata; that is, the practice of enriching the tomb with grave goods for use in the afterlife expanded down into social strata that previously had not enjoyed such privileges.¹⁵

From the previous chapter we recall that, beginning with the first changes in Zhou ritual

¹⁴ von Falkenhausen (2006): 338–57.

¹⁵ von Falkenhausen (2006): 300–320.

bronzes that occurred from about the middle of the 10th century BC and continued through and beyond the Late Western Zhou Ritual Reform, ritual bronzes began to be made more inexpensively even as their sizes increased and their external decor became less standardized. Many observers have commented that the reason for these changes appears to be that ritual at the ancestral altar became a larger and more public event than previously it had been, with an emphasis now on providing a grandiose display viewed publicly from a distance rather than on the earlier focus of a close and closed ritual experience and the internal religious efficacy of the rituals themselves.¹⁶

Wu Hung has independently demonstrated a similar long-term trend toward openness in ritual space and performance from the Western and through the Eastern Zhou and Han. Comparing plans of Western and Eastern Zhou temples, tombs, and city plans, he has documented that the closed, secretive ritual space and performances of the early Zhou, which augmented both the mystical experience of the ritual and the bonding that it induced in the restricted number of privileged elite participants, gave way gradually by the time of the late Spring and Autumn and Warring States periods to an openness and public orientation of ritual space and ritual.¹⁷

Effects of the Economics of Security on Religious Practice

The general trend toward ritual openness and superficial display is consistent with what otherwise we know to have occurred socially, economically, politically, and religiously during the same period, which is that political, social, religious, and economic concern shifted from the Zhou center to the local society and its welfare. This is evident in all of (1) increasing localization in bronze décor; (2) local economic self-enrichment as expressed in the increasing

¹⁶ All of Rawson (1999), Shaughnessy (1999), and von Falkenhausen (1993, 2006) have expressed this view.

¹⁷ Wu Hung (1988): 78–115.

size and number of tombs and the augmentation of the wealth invested in them, as well as a significant growth in locally based trade and increases in the number and the physical expansion of towns and cities; and (3) increased personal concern for the well being of one's own spirit in the afterlife, as expressed in the shift in emphasis from temple to tomb.

In these trends toward both (1) the local and public orientation of ritual activities and concerns and (2) the privatization of the afterlife, there appears to be a common thread: among Zhou elites outside of the royal family there occurred from c. 950 BC a fundamental shift in investment of resources for the purpose of maximizing the investment return, and the maximum return was to be found in freezing or reducing one's investment in the traditional ritual program as promulgated by the Zhou royal center while concentrating the bulk of one's resources locally. Probably the localizing and publicizing trend did not result from conscious decision-making but naturally and unconsciously on the basis of need. This need would have been, simply, security. When to its allied elite lineages in 957 BC the Zhou court demonstrated with its colossal battle loss its vulnerability to foreign incursion and inability to protect its allied houses, the elite lineages in control of the states in particularly the East had to have realized that the security of their holdings depended hereafter mostly on their own preparedness to defend themselves. With this realization, their attention quite naturally turned from maintaining the socio-politically binding ritual program practiced in common among the Zhou elite toward rather developing their military ability to defend their borders. In turn, a military build-up of course would have required the amassing of wealth through the enhanced control of available and future resources, including primarily reorganizing and expanding organs of control of the population and its various economic activities: horticulture, husbandry, and fishing; labor, crafts, and weapons making; trade; mining and smelting; and developing the capacity to augment resources, which would have involved investment in infrastructure (town and city walls; transportation links; hydraulic control systems; new systems of local governmental organization and social control).

This so far explains the turn toward local investment, but what of the coterminous moves toward public ceremony or ritual, involving constructing public ritual spaces, and the investment in individual grandiose tombs for members of the high elite ruling families of the states? This brings us back to the matter with which we began this study, propaganda. Toward the end of

increasing local security through local means, the propaganda of the central Zhou regime, that is, the closed, exclusive, and secretive performance of ritual by and for only the high elites, would have lost much of its value, for the Zhou's ability to provide security in return for this investment had greatly diminished. Thus as the states turned to demand more of their populations in order to be able to augment the state's security by employing their own resources, the direction of each state center's appeasement and entreaty had to shift as well from the Zhou center to the local populace, including primarily lower and related elites (the increasingly numerous branch lineages) but also, we may surmise, tradespeople, farmers, fishers, miners, smelters, artists, craftspeople, workers, and other commoners who contributed to the actual and potential resource pool of the state. To this end, the rulers had to both (1) include in state ritual those formerly excluded from its shrouded and secretive performances inside the ancestral temple at the center of the capital, and (2) awe the populace with the might and wealth of the state and the ruling individual and family, in order to encourage in a sense a nationalistic coherence under a wealthy, robust, and trusted leadership. Consequently, investment in the overall state ritual apparatus had to be both inclusive and therefore for public display, and it had also to be on a grand scale to impress the populace with the stability and security of the state/local center.

These shifts in the focus of ritual attention, which would have stimulated the development of local economies and military might, had only to do with geo-political circumstances on the ground in Zhou China from about the middle of the 10th century and on. Then, bringing this matter full circle, we may understand that the polar rectangle, having been the purported lodging place of the Zhou founding and later royal ancestors — as well as, perhaps, the high founding ancestors of the local ruling elite lineages in the states — lost its significance with the natural and geo-politically stimulated turn toward local development in the states.

Further evidence supports this thesis propounding the fundamental determinism of matters of security and economics as it can be read from ritual and mortuary evidence. First, the trend toward cheapening mortuary goods continued and in fact accelerated. Partly this was due to the fact that lesser wealthy people, as noted above, in imitation of the wealthy, could afford to inter in their tombs goods of limited quantity and quality. Thus an industry developed to supply

the demand for grave goods that these newly enriched people created. Where bronzes were present in such tombs, those of lesser quality quite consistently were used. However, even high elites increasingly had interred with their corpses bronzes of quality inferior to the ones that were employed ritually still in the lineage temples,¹⁸ even as the numbers of bronzes increased c. 650–475 BC with the “special assemblages” that accompanied the Middle Springs and Autumnns Ritual Restructuring. Many bronzes, particularly in the northwest border state of Qin, had become so removed from actual ritual usage that they were not at all functional in actual ritual.¹⁹ They were, then, essentially substitutes that may be called *mingqi* 明器, or “spirit vessels,” for which see below.

Second, increasingly the goods buried in tombs were made not of bronze but of low-quality, low-fired ceramic that in form usually imitated the standard bronze shapes and styles. This occurred in tombs of all of low, middle, and high elite social levels. These substitute *mingqi* had been in use since the Neolithic and through the period under discussion, but until the middle to late Spring and Autumn period they had not been consistently or prominently used.²⁰

Third, mortuary goods made of yet other, cheaper, materials became widely used in interments even in the graves of commoners. Such cheaper media included most prominently the now ubiquitous lacquerware, which from the 6th century BC and on was produced industrially and therefore very inexpensively.²¹

At the same time, tombs of rulers and their families continued to be enlarged, and during the 5th century BC a preference developed for erecting above such tombs goliath pyramidic earthen mounds topped by a temple structure.²² Furthermore, monumental palace architecture in

¹⁸ On this particular development see Wu Hung, “Art and Architecture of the Warring States Period,” in Loewe and Shaughnessy (1999): 727–43.

¹⁹ von Falkenhausen (2006): 302–309; and Wu Hung (1999): 707–708, 727–739.

²⁰ Wu Hung (1999): 708; von Falkenhausen (2006): 302.

²¹ Wu Hung (1999): 685, 700.

²² Wu Hung (1988): 88–95; Wu Hung (1999): 708–727; von Falkenhausen (2006): 306–312.

the capitals of the states developed three-dimensionally, i.e., now vertically, and publicly oriented central ritual and ceremonial monuments that formed the nexus of such palaces displaced in the centers of the capitals the old temple of the ruling elite lineage. Most noteworthy among such structures are the *tai* 臺, tower or platform, the *que* 闕, pillar gate, and *guan* 觀, tower.²³ During the Warring States, it was from these centrally erected and imposing structures that public rituals were performed and public announcements made. We can reason that they served to augment in the populace both awe of and — at a suitably awe-inspiring distance — participation with the state and its ruler in state security and enrichment. Their increasing centrality in state ritual reflects the maturation of the development of publicly oriented ritual begun already in the 10th–9th centuries BC. That is, these structures' construction and use, including all of the tombs and the towers, gates, and platforms, clearly represent the virtual completion of the move away from the private ritual of the secretive ancestral temple to both (1) publicly oriented ritual ceremony in the center of the capital, and (2) a focus on the individual in mortuary affairs. Still, one must not overstate the case, since the ancestral lineage temple of the elite families continued to be maintained and utilized for lineage-exclusive ritual. And yet the focus of attention and investment among the high elites had indeed changed dramatically since the 10th century BC from private ritual concerns to publicly shared ritual ceremony.

Lothar von Falkenhausen considers several of these changes, including specifically the substitution of lesser for the earlier higher quality goods in tombs, the wider use by all strata of grave goods, and the development of both large pyramidal tumuli above rulers' tombs and elaborate underground catacomb tombs for rulers that replicate the palace, to signal a revolutionary change in Zhou religious values that he believes occurred beginning c. 600 BC. He considers that these changes demonstrate that the world of the dead had become fundamentally and thoroughly dis severed from the world of the living, hermetically sealed from the here and now.²⁴

I do not see this as having occurred at all, either autochthonously or under the stimulus of

²³ Wu Hung (1999): 665–675.

²⁴ von Falkenhausen (2006): 300–304, 316.

external influences. Internal circumstances and changes can explain all of these noticeable shifts in mortuary practice without our having to postulate that a fundamental transformation in the nature of Chinese religion occurred. And while without doubt external trends entering from the west, northwest, and north of the Zhou borders did influence Chinese religion, artistic expression, and thought probably continuously from Palaeolithic times forward, other than in the arena of astronomy and astrology these influences do not appear to have effected a fundamental change in Zhou Chinese religious belief and values. The matter of external influence on Chinese religion, thought, science, and culture will be treated carefully in the final chapter of this volume.

Rather than revolutionary religious change stimulated from any source, I consider only that all of the (1) substitution of lesser-quality, and the increased quantity and broader use of, grave of goods in Spring and Autumn and later tombs, (2) creation of the enormous public ceremonial monuments in the centers of capitals, and (3) the increases in size and elaboration of rulers' monumental tombs, can be explained to have developed simply in terms of the determinative economics of military spending for security purposes.

While von Falkenhausen has suggested that the substitution of cheaper grave goods, including both bronze and ceramic / earthenware *mingqi*, was certainly not a result of limitations of resources,²⁵ I believe that it was. While it is true that from superficial appearances the monumental costs of building both the enormous and elaborately furnished rulers' tombs and the grandiose central public ritual spaces in the capitals of the states suggest that resources available to rulers of the states were limitless, in fact it was their very investment in these enormous projects, along with the ever-increasing and crippling expense of maintaining large and well armed military forces to fight the incessant and increasingly violent and large-scale wars among the states, and a parallel vast expansion of the states' administrative apparatus to muster necessary resources for armies and campaigns, that would have forced persons at all levels of society above commoner status (and probably even them) to conserve and restrict alternative investments. Those alternative investments of which we possess evidence are the tombs and their internal furnishings.

²⁵ von Falkenhausen (2006): 302–304.

For recall what was mentioned above regarding maximizing the return on one's investment, which is an essential principle that all living things on earth in all of their activities every day must heed: survival and enrichment depend on conserving investment in areas that bring little or lesser return while intensifying investment in the targets that bring a greater return. Now, what was the return that rulers sought? Most simply, in a centerless world that offered little or no security, they sought and worked assiduously to augment their own and their state's security. And the means to provide oneself with security was the mobilization and augmentation of resources to support military preparedness and defense. In turn, the securing of resources depended directly on the mobilization of one's population, which once again in turn pivoted on the ruler's and ruling elite's ability to provide opportunities for people to make a decent livelihood and, most importantly, convince the populace of the great might, protective capacity, and ritual / religious legitimacy of the ruler and ruling family. It is for this reason that rulers now, in the Spring and Autumn and Warring States periods, invested heavily in publicly oriented ritual and awe-inspiring visible monuments, including in the Warring States period rulers' large tombs resting beneath a monumental structure consisting of an imposing earthen pyramidal tumulus topped by a temple complex, and invested relatively little in the grave goods that, hidden within the tomb, did not inspire awe or encourage participation in the state's concerns among the populace and therefore did not contribute an economic or social return sufficient to justify an input of significant resources.

The same analysis can be applied to understand why temple ritual bronzes, or *jiqui* 祭器, were maintained as high-quality and usable ritual wares:²⁶ they brought a significant return on the investment of resources because they served a public purpose now of inspiring awe of and instilling confidence among the populace in the ruling elite who controlled and performed the rituals. At the same time, while lineage temples were maintained for the private ceremony of the lineage elites, they no longer served so critical a role in maintaining the public propaganda of rightful governance, for they had receded to a more private role in sustaining the life of the ruling lineage. Investment clearly had come to be concentrated where it would provide the greatest

²⁶ Wu Hung (1999): 728–9.

return both personally and politically, in the individual tomb and in public ritual monuments.

A Dispersed and Accessible Heaven

The question then remains how the understanding of Heaven had transformed from (1) its concrete representation, through c. 950–850 BC, by a stellar rectangle that spun ever more distantly from the pole, to (2) its new meaning by the late-6th and early-5th centuries BC to represent an abstractly conceived power or force that existed both inconcretely and diffused in the created universe and psycho-physically inborn in the breasts of human beings. The answer lies in our understanding of the differences in apparent ritual and mortuary practices evident in the significant changes that occurred in the realm of mortuary goods from the Western Zhou to c. 500–400 BC.

There are particularly two changes to recognize, both having been reviewed above. First, the abandonment of the practice of locating the center of the heavens in the heavenly quadrangle itself helped to disperse the concept of Heaven and create confusion over the nature of Heaven and its role in human affairs. Originally a finite destination of the high ancestors of royal and perhaps related and allied Zhou lineages, and one in the historical — and supposed contemporary — center of the night sky from which control over affairs in both Heaven and on Earth was wielded, when the Zhou court's early military and other later economic, political, and social losses on Earth created doubt about the Zhou royal center's claim to legitimate primary occupation of the heavenly rectangular center, the idea of a central heavenly power remained while the practice of identifying it in concrete representation as a rectangle diminished — but was not yet lost. The rectangle therefore also began to lose its position as a meaningful focus of ritual attention and thus also as a source of legitimation of political power. While the square or rectangle remained, out of human habit and on the basis of long ritual and artistic traditions, the most potent symbol of magical or religious power, its direct and apparent connection with the power of the heavenly center, and with it the efficacy of the power of the purported earthly center, the Zhou royal court, was severed. Heaven was now cut loose from its moorings in the center of the sky and was free to roam in meaning and location as the minds of those for whom

the center was lost considered differentially its meaning and place in human and other natural affairs.

Second, the archaeological record of the Late Western Zhou and Spring and Autumn periods demonstrates that, simultaneous with this displacement of Heaven from its original physical location and human context, not a religious transformation but a simple diffusion of religious privileges, of access to attempted communication with an increasingly diffused Heaven, occurred among all of those who could afford to engage in such communication. Access to communication with Heaven was not any longer restricted to the king, the elites, and their ritual experts at the Zhou and lineage ancestral altars (assuming that the scions of the high elite lineages at one time had been sanctioned to communicate directly with Heaven through the medium of their high ancestors who might have helped to comprise the rectangle of Shangdi or high Heaven). In fact, as von Falkenhausen and Wu Hung have most recently described and supported with evidence, but which has been long known, as the Spring and Autumn period wore on, kinship had less and less to do with political and social access to power and well being than did simple wealth.²⁷ In turn, wealth also bought one access to communication with Heaven. This we know from the increasing regularity and wider dispersal of mortuary goods occurring in graves of all social strata above the level of commoner by the end of the Spring and Autumn and into the Warring States periods. The presence of mortuary goods in these graves should be understood to represent precisely what they had represented exclusively in the tombs of high elites of the Western and early Eastern Zhou, that the people interred in the tomb were being equipped for an afterlife in Heaven, an afterlife that, though mimicking the life on Earth, still was not a physical existence but one immaterial while also remaining just as real as the here and now.

This terrestrial appropriation of Heaven explains, then, the fact that funerary goods tended increasingly to be cheap, non-functional, and miniaturized forms or mere likenesses of

²⁷ von Falkenhausen (2006): 291–298; Wu Hung (1999): 651.

their real and functional counterparts that remained in use ritually among the living elite.²⁸ It further explains why tombs for those who could afford such things evolved into multi-room catacombs and thus came ever more to resemble, for rulers, palaces, and, for lesser people, living quarters, replete with goods needed in the afterlife that mirrored in cheapened and/or miniaturized form those that the tomb owner had needed and used in his or her physical existence in life. In short, anyone now had direct access to Heaven; anyone's animus or spirit could achieve the transition to this afterlife that previously had been the exclusive destination of the spirits of the high ruling elites, as long as one had the wealth to supply him or herself with a tomb and the implements of necessity, including objects of daily use, ritual vessels, and *mingqi*, for a life in that heavenly afterrealm.

The means of communicating with Heaven had been dispersed from exclusive central control and use by the high socio-political elite for not just the dead in the afterlife but also the living in the here and now. This we know from our prior review of communication methods employed by Pi Zao, King Ling of Chu, and others of the 7th–6th centuries BC as described in the *Zuo Zhuan*. While determining Heaven's will once had been the exclusive prerogative of the Zhou royal and high elite, these now peripheral methods of divining Heaven's will from its secondary manifestations in the physical and visible patterns of the heavens in correlation with reflective patterns among humanity on Earth now were available to any person who could afford to (1) expend long years of study to master a technique such as the *fenye* system or the literate system of the *Book of Change* (as well as the *Odes*, which also could be employed to predict future events on the basis of patterns of human behavior and interaction, and natural phenomena), or (2) gain access to what surely were rare and highly expensive turtle plastrons to conduct *plastrimancy*. It was, as in all other matters, simple economics. Just as in death, in life, as well, wealth bought one access to the powers of Heaven.

²⁸ It is also true that in the wealthiest of graves, such as that of Marquis Yi of Zeng dated to c. 433 BC, elaborate, expensive, and functional ritual bronzes did occur, often in great numbers. Thus we know that the old practice of sending real riches to accompany the souls (*ling* or *shen*) of deceased high elites continued through this period, which is consistent with von Falkenhausen's ritual reform of c. 600 BC, through which the high elites reasserted their special sumptuary privileges. See Wu Hung (1999): 675–681, 689, 707–744.

In passing it is interesting to note that in these changes, the loss of the ability of the Zhou people to communicate effectively with the center of Heaven through the center of the Zhou, the Zhou royal family and its ancestral cult, we can probably locate the origins of the necessity of establishing the alternative communication or divining methods such as the trigrams and hexagrams of the *Book of Change*, the sixty-four permutations of whose basic trigrammatic symbols, the book and system claim, can be understood to reflect Heaven's permutations in the created universe. That is, the *Book of Change* reflects this peripheral, not the old central Zhou royal temple ritual, claim to divining Heaven's will. The other peripheral systems likely developed as well from the initial stimulus of the loss of the Zhou center beginning in the 10th century BC.

Chapter 3: Heaven's New Square in the Center of Old Patterns

Confucius' Absorption and Redirection of Contemporary Ideas about Heaven

As the 6th century BC wound down and the 5th century began, warfare among the states of Zhou China did not abate but grew yet more intense, as the race for resources among an ever more populous and socially unraveling ruling elite class hastened forward. In such a climate, thinkers of mostly the lower-elite class of *shi*, knights, began to reflect on some of the changes in the understanding of Heaven that they absorbed from or witnessed in their social and physical surroundings. In response to such reflections, they expounded new ways of conceiving of Heaven to accommodate the realities of humanity on Earth.

Confucius was, as far as we know, the first of such deeply reflective and systematic thinkers, but ironically Confucius made his enormous intellectual imprint not by following along with but rather rejecting the economic determinism at the bottom of the contemporary changes in ritual and mortuary practice and in ideas about access to the afterlife in Heaven. Surely it is true that the import of his words and practices reflects, as von Falkenhausen insists, the opening up of erstwhile high-elite ritual and mortuary practices to lesser elites and even commoners.¹ And indeed Confucius absorbed from his contemporary Spring and Autumn world the increased significance and elaboration of socio-political ritual, or *li*, that Yuri Pines has averred influenced his thinking and teachings.² We can also state safely that Confucius reflects directly what was probably fairly universally a contemporary understanding of Heaven to be a diffuse and unclearly identified force in the world. Moreover, that Confucius understood Heaven to be potentially accessible to all derives from these intellectual, social, and economic changes that he inherited naturally as an inhabitant of 6th–5th century BC Zhou China. We witnessed in the previous chapter how peripheral, and no longer central, means of communicating with Heaven

¹ von Falkenhausen (2006): 297; 302–304.

² Pines (2002): 89–104.

had proliferated by the 6th century BC. Confucius, as represented in the *Analects*, seems to reflect this trend.

Often Confucius has been considered a radical for having accepted students from all social strata. While as far as we know he was the first teacher from among the *shi* class to open up his teachings to those outside of his lower-elite class, in this he still really only responded to the growing social openness of his times.

Confucius could be considered any of conservative, radical, or moderate, depending on the perspective from which one views his teachings and behavior: considering him in socio-political context, as a product of the trends in Zhou thought and society, his responses seem natural and moderate. His (1) insistence that virtue is not inborn but earned, and (2) his conveyance of the related concept of a diffuse Heaven that is not directly connected exclusively with the royal and high-elite houses but potentially open to all, further reflect his contemporary socio-political and intellectual climate.

Viewed from another angle, however, Confucius can be considered simultaneously both ultraradical and ultraconservative. His focus on the internal improvement of the individual, the anyman, as the pivot of his hope for a renewed peaceful unity, is new. Confucius invested himself in the idea that a single perfected person, the *junzi* 君子 (literally and prior to Confucius understood to be "a son of a lord," i.e., a prince), might serve as a font of decency and humaneness that a beleaguered world would mimic to transform itself into a model society.

Where Confucius is most radical vis-à-vis his contemporary world is in his utter rejection of both (1) Heaven as an ideal for the afterlife (while he promoted rather the idea of a Heaven attainable ideally in this life, in this world), and, thus, also (2) the perceived leverage of wealth on one's success or failure to achieve Heaven, whether in this or the afterlife. In other words, his most radical turn was his rejection of the economic determinism that assumed that one's attainment of Heaven pivoted on one's investment of considerable wealth in his own afterlife's home, the tomb, and that thus Heaven was attainable only in death and only by the wealthy and powerful.

On the other hand, Confucius is ultraconservative in the alternative that he proposed would make possible one's achievement of his radical conception of Heaven in the here and

now, which was his insistent advocacy of a return to the internal and secretive religious traditions of the old Western Zhou royal and elite temples and altars, the tradition of the square and center that, to him, offered an opportunity to communicate once again directly with Heaven. He essentially rejected the idea, manifested in his contemporary world by the proliferation of tombs and mortuary goods among lesser elites and even commoners, that wealth or status bought access to Heaven. He proffered instead the idea that only through internal ritual communion with the principles that both Heaven and, derivatively, ritual embrace might one attain Heaven in the here and now, and not necessarily in death.

As represented in the *Analects*, compiled in the centuries after his death, Confucius is the first known systematic philosopher of China, and in the course of teaching his principles to his students he rent wide open the intellectual and emotional tensions that underlay and engulfed all human life and activity in the warring late Spring and Autumn period. He represents the beginning of the consistent trend among Chinese thinkers of this and the following Warring States and early Han periods (5th through 3rd–2nd centuries BC) to search for philosophical means to establish a new claim for rulership, the latter on behalf of either a new state or the individual living spiritually outside of the state, by which the world or the individual might again alight on the "correct path" (*zheng dao* 正道) of unity. Thus beginning with Confucius developed the great flourishing of Classical Chinese thought.

The Return to and Reformulation of Heaven's Center

The philosophical efflorescence of the classical and early imperial periods in China can be seen as a successful attempt to refill the square of the old polar center and, along with it, metaphorically also the ritual vessels of the square / rectangular altar, with timely and useful content. In a sense, then, classical Chinese philosophers recreated the old polar center, but away from the pole itself and, until the 2nd century BC, without any real reference to or concern with the actual pole. For the 400–450 years preceding the Warring States period had created in a sense

an ethical and cosmological *tabula rasa* on which the new breed of thinkers could arrange a fresh metaphysics and epistemology. On the other hand, these thinkers inherited their *tabula* from the Western Zhou religious superstructure and its contemporary quality of *rasa* from the changes to that structure effected through the events of the Western Zhou and the Spring and Autumn periods that had essentially cleared the *tabula* of both content and noise. It is therefore not surprising that one might be tempted to see the Warring States thinkers' developments to reflect a renewed focus on the northern celestial pole, but in fact in them only the abstract ideas of centrality and potency remain from the old pole, a mere shadow of the old ancestral cult that placed the dead royal and perhaps also high-elite ancestors physically in the concretely visible rectangle at the old polar center.

It is no accident, then, that across at least eight of the most seminal texts of the Warring States and early Han periods (c. 400–100 BC) one detects a pattern of abstract thinking that philosophically both mirrors and replaces the old polar high power in the center — but it does *not* recreate a concern with the northern celestial pole. These texts include sections of the *Mencius*, *Guanzi*, *Laozi*, *Zhuangzi*, *Xunzi*, *Huainanzi*, *Zhongyong* ("Doctrine of the Mean"), and *Xicizhuan* ("Commentary on the Attached Verbalizations") of the *Zhouyi*. In these texts the recreated or redeployed center might be seen as a direct replacement for the polar godhead or center, and perhaps one would wish to consider that it still takes as its implied point of departure the northern celestial pole, but now instead of a concrete image of a godhead at the pole, here we find all of an abstracted (1) ontological or creative source; (2) secular cosmology; (3) source and goal of self-deliverance that at its clearest merely implies a polar referent only metaphorically; and, where relevant, (4) an abode of the spirits.

However, the development of this Classical Metaphysics did not eventuate the thorough jettisoning of the old traditions of the pole but rather paralleled them. The old polar godhead continued to exist in a religious dimension but now mostly outside of elite interest. We find its expression in Warring States popular — or non-state-cult-centered and non-elite — expressions. As we shall come to understand through this and the subsequent final chapters of this study, it was only in the imperial cosmogony / cosmology / cosmography developed through the imperial Qin and Han regimes that the new philosophically abstracted center and the old Western Zhou

state cult-centered polar godhead were merged and reconciled to fit tidily in a both philosophically and religiously potent syncretic imperial state cult. In the following account of what I have termed the Classical Metaphysics that initiated the changes that resulted in a new imperial Qin-Han convergence of the old and newer traditions I can provide only an overview of its workings, since to present a full text-by-text analysis would require several hundred pages that otherwise already have been published and will be published anew separately.³

Recently David Pankenier has suggested that the stimulus for the development of the Warring States philosophy that centers on *wuwei*, "doing nothing," and *wu*, "nothing," was what he identified to have been the starless pole of the prior two millennia. He cited the famous metaphor in *Laozi* 55, whereby the nothing at the center of the wheel hub is said to be that which makes the wheel function, to suggest that,

It can hardly be coincidental that during the preceding two millennia while this mystical vision was taking shape there was no distinctive pole star, no physical presence at the pivot of the heavens, so that the marvel of an efficacious nothing at the center of the rotating dome of the heavens was nightly on display, inviting wonder.⁴

Pankenier is right to call attention generally to the fact that long-term changes in the pole eventually stimulated new thinking during the Warring States, and his point supports my own thesis broadly and indirectly, but as the prior and present chapters have demonstrated and we shall see again in Chapter 4 below, not until after the turn of the 1st millennium BC had Thuban and the rectangle that it helps to constitute wandered so far from the pole that the traditions

³ For a full text-by-text development and analysis of this classical metaphysics see John C. Didier "Way Transformation: Universal Unity in Warring States through Sung China--The *Book of Transformation* (*Hua Shu* 化書) and the Renewal of Metaphysics in the Tenth Century" (Princeton: Princeton University Ph.D. dissertation, 1998): 58–346. The texts employed to demonstrate this metaphysics include *Guanzi*, *Zhuangzi*, *Laozi*, *Huainanzi*, *Mengzi*, *Xunzi*, the *Zhongyong* chapter of the *Book of Rites*, and the *Xicizhuan* section of the *Book of Change*.

⁴ Pankenier (2004): 220.

associated with their direct worship were abandoned and replaced eventually by a derivative but philosophically entirely distinct system of unitary import. Thus, to say that the pole was starless for 2000 years prior to c. 500–400 BC does not paint an accurate picture. Thuban and its quadrilateral were until soon after c. 1000 BC still proximate enough to the pole to warrant continued devotion to them as the manifestations of the pivotal god, as long as the religious-political agency of communication with that godhead remained a viable center of human reverence on earth. We saw in the preceding chapters that it was essentially the military and political failures of the Western Zhou court that stimulated what ostensibly was a shift away from sincere concern for the religion centered on the old polar rectangle, and that ultimately it was the peripheral states' need to protect themselves militarily that caused an economic determinism that persistently drove the scions of the elite lineages to tend more to the here and now than to the old rectangular icon in the sky that, now spinning some distance from the actual celestial pole, no longer could inspire devotion to it and its putative representatives or agents on earth.

Furthermore, to place the development of the mysticism apparent in the very abstractly developed *Laozi* at any time in history prior to c. 450 BC does not reflect what we know of actual religious practices current between 2500 and 500 BC. There is no indication whatsoever in any sources predating the *Laozi* that such a mysticism was evolving during this long period. The mystical thought expressed in the *Laozi* was, rather, firmly grounded in the changing socio-political and religious circumstances of the Zhou through c. 450 BC, and it followed directly from the teachings of Confucius as he promulgated them in the late-6th and early-5th centuries BC. Its development indeed ultimately involved the change in the pole that, indirectly, by the 5th century BC had produced turmoil among intellectuals searching for a new center, but the most critical element involving the pole was not that there was nothing there but rather that a specific something no longer was there. The old polar rectangle simply no longer mattered, even though, as we shall see, its rectangular or square form continued to communicate in sundry media a heavenly potency and thus was employed to symbolize and sympathetically bring its bearer magico-religious power. Ultimately, in fact, the Classical Metaphysics, including the mysticism

of *Laozi*, derived not from the new starless pole but rather the ancient pole centering on Thuban and the polar quadrilateral. This will become apparent as we review the matter in depth below.

The Origins of Classical Metaphysics in the *Fang* of Confucius

The immediate stimulus of the development of the Classical Metaphysics that would reinstitute a center in Chinese socio-political organization is found in the words of Confucius as recorded in the *Analects*. Although from two statements that Confucius made in reference or allusion to the pole it might appear ostensibly that his contemporary starless pole stimulated him and, by extension, others to develop a philosophy centered on *wu*, *wuwei*, and *xu*, "vacuity," in fact the stimulus for both his own and, through him, Warring States thinkers' constructs based on *wuwei* was in the ancient Thuban-centered pole and the ritual associated with that polar godhead's propitiation.

Confucius (551–479 BC) twice referenced the principle of the northern celestial pole's behavior, *wuwei*, "no action," to illustrate a human agency, which was the employment of *de*, potency, in governing. He is purported to have said, "To enact government (*wei zheng*) by employing virtue (*de* 德) can be likened to the [region of the] northern summit (celestial pole; *beichen* 北辰): it remains in its place while all of the stars salute it."⁵ Elsewhere Confucius likened the mythical ancient sage Shun's model *wuwei* governance to the northern pole only implicitly: "Of those who have ruled by doing nothing (*wuwei er zhi zhe* 無為而治者)," he is to have said, "consider Shun: What did he do? He merely gathered himself reverently and faced directly south (as does the northern celestial pole)."⁶ We may note that Confucius referred to neither a concrete polar entity nor, therefore, stellar patterns or a vacancy of stars at the polar

⁵ *Lunyu* 論語 (*Analects*) 2:1. All translations from the *Analects* are my own. We do not know if Confucius actually said this. For a detailed study of the *Analects* as an accretional text that developed in layers from approximately 479 BC to 249 BC, see E. Bruce Brooks and A. Taeko Brooks, *The Original Analects: Sayings of Confucius and His Successors* (New York: Columbia University Press, 1998).

⁶ *Analects* 15:4.

position in his time, but only the principle of the pole's mechanical behavior vis-à-vis the remainder of the sky, its not moving. That is, he did not refer to the pole as a palpable or concrete (i.e., non-metaphorical) source of positive, actual, locatable values on which to establish good governance but only as a metaphorical example to demonstrate his principle that the center should remain motionless (*wuwei* 無為) when one engages in (*wei* 為) government. He did not comment on or otherwise express any notion of the actual or physical "nothingness" (*wu* 無) or "vacuity" (*xu* 虛), or what might in the present be interpreted mistakenly to mean the "starlessness," of the pole (if anything, his *beichen* referred to the later-known asterism of that name, though in his time the later-named *beichen* was quite some distance from the actual astronomical pole; thus it is most likely that his *beichen* referred non-specifically to the functional pole, not to particular stars there at any given time). His concern was with expressing the view that a ruling man possessing *de* acts in a steadfast and unwavering manner at the center of human affairs. That is, *wuwei* neither is nor implies either *wu*, "nothing," or *you*, "having" (the state of there being something there). *Wu* and *wuwei* are separate concepts and constructs. Confucius' metaphorical reference to the pole thus clearly has nothing to do with its physically representative appearance in his time but only its well known and obvious mechanical behavior of *not moving*.

It is thus clear as well that for Confucius his contemporary pole thus was not an object inspiring either awe or devotion. It was simply a naturally occurring and readily comprehensible phenomenon demonstrating the principle of a still center, and it should be taken no more literally than Confucius' other natural — and now earthly — metaphor for the employment of *de*: elsewhere he is to have said, "The virtue (*de*, here meaning something close to "nature") of the noble man is like the wind, and the virtue of the common folk is like the grass. When wind blows over the grass, the grass lies down."⁷ The difference between the two metaphors rests in movement or its lack: whereas the pole lacks movement and thus exemplifies one principle of employing *de*, i.e., *wuwei*, the wind is by its nature movement, or *wei*, and it thus represents another, *wei*, aspect of ruling appropriately.

⁷ *Analects* 12:19.

The concurrence in Confucius of *wei* and *wuwei* is critical. In his statement referencing the *wuwei* of the pole Confucius spoke specifically of governance as being *wei*. This is consistent with what he otherwise said of the ideal learning that leads one to be *de* in the living of his life: it is both inactive or tranquil (*jing* 靜) and active (*dong* 動), among other pairs of complementary fine qualities.⁸ However, we may note that in the metaphor involving the wind, the wind is self-motivated, which is unlike the grass that is motivated from without itself. This, I think, reaches the heart of Confucius' concept of *wuwei*, which is that movement should be self-generated and borne of a steadfast reverence, and should not be reactive. Such consistent, steadfast movement is like the pole itself, whether starless or starred: it never alters (*wuwei*) its mechanical or responsive behavior (*wei*) and as such it is both *wei* and *wuwei*, both active and quiescent.

In Confucius *de*, virtue, is an endowment from a vague Tian, Heaven. Confucius is reported to have said, "Heaven (*tian*) gave birth to the virtue (*de*) within me. What could Huan Tui (a would-be assassin) do to me?"⁹ He seems to have referred with the second self-reference to Heaven's virtue within him, and not Confucius' mortal person, since Confucius knew that of course Huan Tui or another certainly could kill his person. In other words, Heaven is a larger force than a single creature can encompass, and it therefore cannot perish. Confucius thus saw his critical identity to be that endowed by Heaven, and this Heaven in him was his *de*, virtue, that made him human.

It is noteworthy that Confucius very apparently inherited from the early-Zhou system the construct of a Heaven that bestows *de* on the individual. However, the differences are significant. First, in Confucius it is no longer the Zhou royal ancestors who embody Tian. Tian, though apparently still embodying ancestral spirits, is not the exclusive provenance of the royal and

⁸ "The wise delight in water; the humane delight in mountains. The wise are active (*dong*); the humane are quiescent (*jing*). The wise are happy; the humane are long-lived." (*Analects* 6:21) His point was that one should endeavor to be both wise and humane simultaneously and thus all of active and quiescent and happy and long-lived.

⁹ *Analects* 7:22. Cf. 9:5 for a similar point about Tian being a force greater than the individual person and active in human culture and affairs.

other empowered Zhou elite families, and it appears to embody all human ancestral spirits.¹⁰ Second, *de*, though inborn in all human beings and not merely in the Zhou royal ancestors, must be cultivated in order for one to consummate the humane Dao of the ruler of which Confucius speaks — we see now in the *de* of Confucius the “interiorization” that Kryukov projected into early-Zhou royal *de*. Finally, Tian now retains no specific reference or relevance to the pole, whether the old or the new. Shangdi, the stellar quadrilateral that housed Zhou royal ancestors, is never mentioned.

In another famous instance quoting Confucius, the *Analects* essentially defined Heaven to be merely the natural creative way of the universe, encompassing both the physical heaven and physical earth: “Does Tian say anything? The four seasons follow one after another and all things are produced. Does Tian say anything?”¹¹ Confucius said further, “The superior man respects three things. He respects Heaven’s decrees (*tianming*), ...,” by which he again appears to have adverted to the creative and destructive power of the natural force of the universe.¹²

However, to Confucius Heaven was not a morally neutral force. It was the source of an ethical human culture, a culture that he felt he had inherited from the Zhou founder, King Wen, and, he believed, it had for him a purpose.¹³ Still, it was not a conscious entity but rather both the creative and a moral force with which Confucius in one instance intimated he enjoyed a mystical connection: he exclaimed to his disciple Zigong, “Alas! No one knows me!... Only Heaven knows me!”¹⁴

We note that in no instance of any discussion of the source of either the virtue that is endowed by Heaven or Heaven’s decrees over the fate of the created, or, for that matter, in any mention of Heaven itself, do we encounter any reference to the contemporary northern celestial

¹⁰ *Ibid.*: 3:12, 3:13.

¹¹ *Ibid.*: 17:19.

¹² *Ibid.*: 16:8.

¹³ *Ibid.*: 9:5.

¹⁴ *Ibid.*: 14:37.

pole. To Confucius the pole did not matter except as a metaphor to exemplify successful employment of a human capability built on the foundation of an innate quality that originates in the creator, the vague and universally apparent and efficacious Heaven. This is, then, already a revolutionary change from the old worship of the ancestors ensconced in the godhead at the pole of the physical Heaven: it is neither a concrete object of worship nor a godhead whose propitiation and influence are reserved exclusively for the dynastic royal lineage and its associated great families.

On the other hand, there remain in Confucius vestiges of the belief in the value of the virtues inherent in the quadrilateral that had once sat and revolved centrally at the ancient pole. One such apparent remainder of the old way arises in Confucius' discussion of his enlightening of others through his teaching, when he says, "If I have held up one corner [of the square] and [the student] does not return with the other three, then I will not again [teach him]."¹⁵ Confucius again made reference to the square, here to denote metaphorically the [social ritualistic] restraints that one's life's learning places on his behavior, when he described the ideal levels of personal attainment over decades of one's life. Of one's ideal achievement by the age of seventy, in Confucius' estimation the final accomplishment in one's life, Confucius is to have said, "At seventy, one releases his mind [from restraints] to follow its desires, and yet he does not exceed the carpenter's square."¹⁶

Considering what we have discovered of the great significance of the quadrilateral in Chinese intellectual history up to, through, and beyond Confucius' time, it seems instructive that Confucius would have employed the metaphors of both the four corners of a square and a carpenter's square to illustrate his teachings and the goal he set for individual achievement.

Confucius' metaphorical use of the square seems meaningful particularly in light of the story told in Chapter 6 of the *Zhuangzi* in which Confucius is made to describe himself to be "one who travels inside the square" (*you fangzhinei zhe*) in contradistinction to "those who travel outside the square" (*you fangzhiwai zhe*). The context of the supposed comment is enlightening,

¹⁵ *Ibid.*: 7:8.

¹⁶ *Ibid.*: 2:4.

as well. Those outside the square against whom Confucius compared himself were two untrammelled types named Meng Zifan and Zi Qinchang who, thoroughly disregarding the funerary rites normally appropriate at the time, were scolded by Confucius' disciple Zigong. In response Meng and Zi laughed at Zigong, telling him that he has misunderstood the meaning of the rites. Zigong then returned to Confucius to report what was essentially this sacrilege, whereafter Confucius made his comment about the square defining the boundaries of his teachings.¹⁷

Two points are critical here. First, that both Confucius self-described and another identified his teachings with reference to the square suggests that indeed there existed a difference between teachings identified to be either within or without the square. Second, the nature of the teachings by which Confucius defined the square is telling. These teachings were the rituals attendant on the death of a human being and, thus, the expression of reverence for a spirit (but also, of course, in Confucius' living-centered world, for the living humans on whom both practicing appropriate mourning and witnessing such mourning were believed to have a beneficial, humanizing effect).

Traditionally the square has been understood to have meant in this context "mundane," such that throughout subsequent Chinese history the phrase "intellectuals within the square" (*fangnei zhi shi*) has referred to "mundane intellectuals" who generally followed the traditions of state-centered and Ru-oriented ("Confucian"-oriented) learning and service, while "intellectuals outside the square" (*fangwai zhi shi*) denoted those "extramundane intellectuals" who exceeded the boundaries of the Ru-, state-, and public-oriented learning.

Willard Peterson offered a different interpretation of *fangnei* and *fangwai*. He proposed that the learning of those within the square was so-called because it was confined to the square of the earth: such people were bound within the limited earth-based square learning amid a greater structure beyond it. Conversely, Peterson suggested, those outside the square can be said to have

¹⁷ *Zhuangzi jiaoquan*, Wang Shumin, ed. (Taipei: Zhongyang yanjiuyuan lishi yuyan yanjiusuo, 1988): Vol. 1, p. 250.

traversed the greater circle of heaven that exceeds the boundaries of the square earth, and thus they wandered and learned freely and without limit in the great universe.¹⁸

The trouble with so projecting this paradigm of the earth-square and heaven-circle backward to the time of Confucius and Zhuangzi is that, despite an interpretive tradition lasting some 1400 to 1800 years that has dominated thinking about ancient Chinese cosmological constructs through the present, in their time the square did not yet represent earth; it still vestigially symbolized heaven and the magic derived therefrom (or inherent therein), and particularly the power of heaven's absolute center, the quadrilateral at the old northern celestial pole that centered on the pole star Thuban. In Chapters 4 and 5 I will demonstrate how the square-earth interpretation of classical texts is utterly mistaken. Thus *fangnei* and *fangwai* at this time adverted neither to "mundane" and "extramundane" nor "earth-bound" and "heavenly unbounded" but something quite different, though the implications of the former pair by extension approximate the meanings of *fangnei* and *fangwai* in the *later*, Warring States, period.

In order to understand better what these terms must have meant in the time of Confucius, let us retrace our steps even further back in time, to the early Zhou, when the square was still a vital, central concern of the Zhou central court. Though as far as we know at this time the descriptors *fangnei* and *fangwai* had not yet been coined, we know that to be within the square would have meant literally that one was a dead Zhou high royal dynastic ancestor, but on earth those who directly offered, participated in, and assisted in the ritual feeding and propitiation of those ancestors, that is, the members of the royal Ji clan and other high elites and their ritual experts, also participated in what was within the square, i.e., the ritual of the ancestral altar. As such they became well versed in what was *fangnei*, or the ritual learning of the empowered. Thus, *fangnei* would have meant simply this, "centrally ritualistic" and, by extension, "initiated," and thus "empowered." Contrarily, *fangwai* would have indicated generically "uninitiated" and, therefore, "disaffected" from and "ignorant" of the privy code. However, such a *fangwai* person would have mattered so little to the state-supporting religious regime that s/he would not even

¹⁸ Willard Peterson, "Squares and Circles: Mapping the History of Chinese Thought," in *Journal of the History of Ideas* 49.1 (January-March 1988): 47-60.

have attracted comment, much less a consideration of their being *fangwai*. By the time of Confucius, though certainly present, those engaging in *fangwai* activities may still have mattered little to those who were *fangnei*. Thus, for instance, as far as we understand him, Confucius expended little of his breath criticizing competing teachings but rather remained concerned mostly with the ill behavior of the various feudal chieftains (some already, as we have seen, and others soon to be, self-named kings of their fiefdoms-cum-states) and their administrators. That is, he was concerned with an element that, having originally derived its power tangentially from the old *fangnei* power and ritual practices of the Zhou royal court, still participated in an extended sense in the state-supporting ritual of *fangnei*. Confucius still focused his attention on *fangnei*, and therefore that is how he illustrated his teachings, as being *fang* or *fangnei*.

By the time that the *Zhuangzi* 6 story was written, perhaps in the late-4th or early-3rd century BC, voices that competed directly with the *fangnei* teachings were, of course, numerous. At this time, the terms *fangnei* and *fangwai* would have been coined specifically to describe generally the perceived two poles of extant learning, one the old state-tethered ritual teachings, now becoming known as Ru, and the other that which had escaped its perceived shackles, or non-Ru. These terms *fangnei* and *fangwai* must then have intimated some combination of the following pairs contrasting the nature or direction of one's teachings: "central" and "peripheral," "attached" and "unattached," "institutional" and "maverick," "empowered" and "disaffected," "ritualistic" and "non-ritualistic," "initiated" and "uninitiated," "privy" and "external," "traditional" and "new," "conservative" and "iconoclastic," or "inherited" and "devised," in that they referred back to the old state-centered power structure surrounding the ritual propitiation of dead dynastic ancestors who had been during the early Zhou still in charge near, and supposedly at, the pole. Those outside the square originally, during the Shang and early Zhou, by default could not engage in the practices "inside the square," and as such they were not empowered by/within, but disaffected from, the center. By the time of the Warring States, however, one could choose to follow teachings either within or without the square. Such "*fangwai*" people now were "untrammelled," freed from the bounds of tradition that, while now available widely across the social spectrum, did not represent the only means of empowerment. At this time, then, to describe "inside the square" still as empowerment would be inaccurate. As the social

accessibility of originally restricted systems changed and new options opened up, the implied meanings of the terms necessarily changed, as well. The irony, as we shall see, is that even the Warring States *fangwai* derived their learning ultimately from *fangnei*. They all were intellectual descendents of *fang*.

In light of both (1) all of the evidence presented in preceding chapters that identified the square or quadrilateral as (a) the locus of dead royal ancestors at the old pole in both the Shang and Zhou state religious systems, (b) the destination of constant ritual propitiation that was offered to the ancestors in order to earn and maintain their good favor, and (c) the altar or ritual apparatus in the quadrilaterally shaped temple on or by which these propitiations were invested in the polar ancestors, and (2) the import of the three statements or episodes, reproduced above, that were recorded in Warring States literature and that identify Confucius' teachings, and even more specifically his teachings involving appropriate ritual behavior both regarding the living and for the sake of the dead, with specifically the square, we can suggest that Confucius and those like him, i.e., those men who were *fangnei*, or "inside the square," had, as the religious privilege under the Zhou disseminated and dissipated during the 9th-6th centuries BC from the Zhou royal center and high elites to middle and lower elites who literally had been "outside the square" in the early-Zhou period, inherited the traditions of the polar square whereby it defined the object of reverence.

There is thus in Confucius an emerging bifurcation in religious and intellectual understanding. On the one hand, he has been freed from the polar square, in that his awe is directed now not toward the physical pole and the quadrilateral godhead that once had inhabited it. The object of his awe is a power that originated at the pole but which he now has redefined to describe a diffuse, unpersonified, and, in the particular, unseen power responsible for creation and destruction. However, this redefined power, Tian, we must keep in mind, originated in the pole, and in its graph the uppermost square or, in simplified form, two horizontal lines, maintained a vestigial reminder of the old high polar ancestors of both the Shang and, after them, the Zhou. In addition, Confucius maintained a direct link with the old teachings of the polar godhead of the square, which we understand because both (1) he illustrated his own teachings using the form of a square, and (2) others, apparently recognizing the association of both ancient

ritualistic teachings with the square and Confucius' teachings as deriving from them, had Confucius characterize his own teachings as occurring within the square. Confucius thus simultaneously both embodied the old teachings of the square polar godhead and transcended them in a revolutionary way. He thereby opened up a dualism in Chinese thought that would not be reconciled in a unitary system until the 2nd century BC.

Those "outside the square" did not participate in either the ritual practices associated with the old and now disseminated or extended religion of the center or, therefore, the transmission of this knowledge to others. They thus formed yet another departure from tradition, one more radical than the one Confucius initiated, even though their departure derived from the changes that Confucius, or others like him whose names and words have not been recorded, had set in motion. However, they shared this departure with "those inside the square," and really they all derived their stimulus from Confucius or his similarly *fangnei* but unnamed predecessors and contemporaries. Consequently, as we shall see, they were as yet influenced by the old religion, but in terms less of practice than abstracted models.

In the *Laozi*, *Zhuangzi*, *Mencius*, *Guanzi*, *Xunzi*, *Huainanzi*, "Doctrine of the Mean" (*Zhongyong*) of the *Liji*, and the "Commentary to the Attached Verbalizations" of the *Zhouyi* (*Xicizhuan*), among other texts, there evolved over the course of the Warring States the Classical Metaphysics to which I referred above. Some of these texts, including *Laozi* and *Zhuangzi*, represent the work mostly of those traditionally identified to be *fangwai*, while others, such as the *Mencius*, *Xunzi*, "Doctrine of the Mean," and the "Commentary," are the work of those normally considered to be *fangnei*. Below I summarize the elements of their Classical Metaphysics that are germane to the current discussion.

The classical Chinese metaphysicians did not develop the foundation of their metaphysics on the now starless pole. However, they appear to have been fully aware of the godhead that had occupied the pole for some 2500 years prior to their time, or c. 3500–1000 BC. This godhead was Taiyi. David Pankenier has identified the god Taiyi specifically with the Dao that these thinkers professed, having interpolated the *yi*, "One," of such texts, and the occasionally occurring specific name of "Taiyi," into their expatiations concerning Dao, *de*, *tian*, *wu*, and

wuwei.¹⁹ However, to so identify *yi*, One, with Taiyi in Warring States texts is incorrect. In Warring States literature and iconography there occur two Ones, one the old Taiyi still physically in the heavens and the other a newly conceived abstract that replaces Taiyi at the center of Chinese metaphysics in a system whereby the god Taiyi becomes usually a tertiary, and at best sometimes secondary, creation of the primary *yi*, One. In Warring States elite philosophical literature, although an awareness of Taiyi the god is vaguely implied, he is utterly unimportant and irrelevant. Only in the Han do these two concepts, one a concretely referenced god of the physical heavens and the other an unidentifiable and mystical power that generates all, become formally acquainted in text and then reconciled in a new universal system that embraces both speculative thinking and religious devotion. But in fact they never become themselves unified in a single "one."

Indeed, the Warring States metaphysicians sought a means to replace the old polar center that, now quite distant from the pole, had served for at least the early Zhou, the Shang, and likely earlier political entities as the foundation, that is, the absolute center, of the cultural and political unity. The old god Taiyi was a central feature of that old pole, but he, along with the once concretely central polar asterismic gods of Ding, Di, Shangdi, and Tian, with which he was intimately associated, were now irrelevant to anyone but the Zhou royal ancestors who continued in their now purely ceremonial role as possessors of the Mandate of Heaven whereby they propitiated the high Zhou ancestors who had populated the quadrilateral of Shangdi — but it seems apparent that by the time of the demise of the Western Zhou in 771 BC even the Zhou court had abandoned the old polar quadrilateral as the home of their ancestors. Otherwise, the old godheads constituted the pivot of nothing at all and thus they no longer could serve as the grounding center of a renewed human political or personal unity.

However, many of the concepts and terms that the Warring States metaphysicians adopted and employed derived from Confucius' own usage, and otherwise several of these concepts derived from the old teachings of *fangnei*. For example, Yi, "One," in the Warring States philosophical literature replacing the polar god Taiyi, was now an abstract representing the

¹⁹ Pankenier (2004): 218–220.

sought unity and, as the foundation of that unity, the source of cosmogonic creation and power into which an individual or ruler could tap. In their deliberations on this Yi, the Warring States thinkers probably borrowed from Confucius' having said of his teachings that, "I thread them with one [constant]" (*yu yi yi guan zhi*), and his disciple Zengzi's having explained of this "one" that, "the Way of the Master (Confucius) is merely *zhong* (centeredness) and *shu* (reciprocity)."²⁰ We note that in addition to the term *yi* and its abstracted conception of Yi, "One," from this and similar statements the Warring States thinkers derived not only the loaded term Dao that describes the Way that one teaches but probably also the essential unitary implications of both terms Yi and Dao that in Warring States and Han texts so often advert to the same thing.

Neither was Tian, as a concept inherited from Confucius, irrelevant, and in fact it formed a central part of these thinkers' abstract systems. Still, we continue to note that the character *tian* inherently embodied a picture of the old polar center despite the move away from polar models and the old polar gods themselves. Furthermore, they, as did Confucius, maintained the early-Zhou connection between Tian and *de*, while now in their writings *de* (*tian*) must be understood to be fully an inherent nature in all people that enabled them to perfect themselves for the purpose of serving the public (or personal, private interests) in a sagely and transformative manner, interfacing with the external world, and achieving personal physical and spiritual attainment.

These thinkers created an *abstract* One, Yi 一, that they identified very literally with the newly abstracted concepts of (1) Tian, (2) *de*, "potency" or "doughtiness";²¹ and (3) *jing* 精 "quintessence," among other terms such as (4) *xin* 信, "steadfastness," (5) *cheng* 誠, "sincerity", (6) *zhen* 真, "perfection," (7) *xingmingzhiqing* 性命之情, "the identity / essence of nature and allotment," and (8) often the newly metaphysical Dao 道, "the Way." The identification of Tian with *de* was natural given that Tian always had been, during the Zhou, the source of *de*. In many texts, such as in parts of *Mencius*, the *Zhuangzi* Inner Chapters, *Xunzi*, the "Doctrine of the Mean" of the *Liji*, and the "Commentary" of the *Zhouyi*, the Dao was equated with *de* and its

²⁰ *Analects* 4:15.

²¹ On the translation of *de* as "doughtiness" see Mair (1990): 23–25.

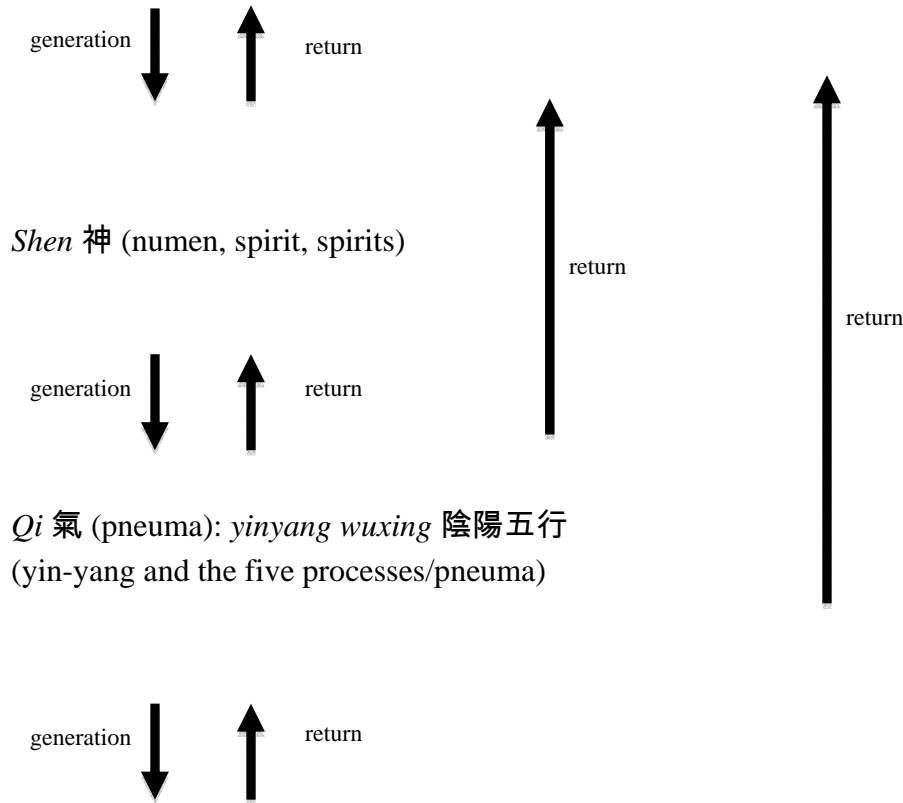
cognates; in others, such as *Laozi*, *Guanzi*, and parts of *Huainanzi*, cosmogonically Dao often preceded the mutual cognates of Tian, Yi, *de*, or *jing* (etc.) as a principle on which the universe, created on behalf of Dao by its agents Tian, Yi, *de*, or *jing*, continued to rely for its functioning.²²

Figure 1 below depicts the cosmogonic relationships shared among these elements / concepts, from the birth in the metaphysical to completion in the physical and in return.

²² Didier (1998): 104–336.

Figure 1: The Classical Chinese Metaphysics of *Qi* 氣, *Pneuma*²³

Xujingqi 虛靜氣 (vacuous and quiescent pneuma): *dao, de, yi, jing, tian, zhen, cheng, qing* 道, 德, 一, 精, 天, 真, 誠, 情 (way, potency, one, quintessence, heaven, perfection, sincerity, identity / essence)



Yuzhou wanwu 宇宙萬物 (the myriad things of the created universe)

It is noteworthy that all of these terms were ethicized, whereas earlier in the Zhou at least Tian and *de* (as well as similarly Shangdi in the Shang and Zhou, Di and Ding in the Shang, and Taiyi

²³ Digested from Didier (1998): 104–336.

in and after the Neolithic) certainly connoted a potentially violent and fear-inspiring force that, bestowed by Shangdi, could be employed to unify and maintain the earthly realm on the basis of raw heavenly authority. This ethical development was due precisely to the fact that there existed *no* awe-inspiring force at the center of either the universe or the Zhou polity — the godhead, whether called Tian, Taiyi, Di, or Shangdi, had vacated its central post of authority and no longer mattered as a concrete object of awe and devotion. Thus the only alternative for the Warring States / Han political philosophers was to create another avenue or agent of attaining a pacified unity on the basis of awe, which was an abstract ethical power that could strike fear in people's pivotal mind-hearts (*xin* 心).

What made this power ethical (but, depending on the thinker, either morally charged or amorally neutral) was the need for an individual to attain it not by birth into the authoritative clan that possessed it via either (1) first violence and then heredity in the Western and early Eastern Zhou, or (2) wealth in the Spring and Autumn and Warring States periods, but rather by a long and intensive self-cultivational process that posited that, by establishing oneself psychospiritually in a *functional state* of vacuity and quiescence (*xujing* 虛靜), one gained in the mind-heart this mighty and authoritative — but in the case of the *fangnei* also intensely moral — *actually* vacuous and quiescent power of Tian, Yi, Dao, *de*, or *jing* (etc.) that enabled him to exert numenic (*shen* 神) power over the world in order to unify it peacefully. "Vacuity and quiescence" as both a state and a reality was entirely internal in the human being, the Heaven within.

This vacuous Tian, Yi, Dao, *de*, or *jing* (etc.), as both the creative force immanent in its created universe and embodied fully in the mind-heart, invariably was thought to remain always vacuous and quiescent. That is, while it was none other than the primordial creative force of the universe, it did not itself engage in the creation of things. It was rather *shen*, spirits, or the force of spirit, "numen," that carried out the actual creation and stirring of things, on behalf of or in agency for the vacuous and quiescent One at the center. By parallel, so would the *shen* of the individual who had attained the purely vacuous Yi, Tian, *de*, or *jing* in his mind-heart carry out actively on behalf of the One and the individual vessel possessing it the tasks that could call the world to order and maintain it securely. In this way the vacuous and quiescent within always

remained both functionally and actually vacuous and quiescent. Such was the authority of the Great Man (*daren* 大人). Such was the power of the Perfected Man (*zhenren* 真人).²⁴

It might be tempting to search for the impulse to begin and end the process in vacuity and quiescence in the starless pole of the 1st millennium BC, but to do so would fail to account for the history of the development of such ideas from the deep ritualistic traditions of the square that Confucius inherited and transmitted to the Warring States metaphysicians. Above we have analyzed already how the metaphor of the pole was referenced for the readily visible but simplified model it provided of consistent, steadfast quiescent movement of rotation that was the same whether the pole was occupied or not. Below we will trace Confucius' role, as identified through utterances attributed to him and collected in the *Analects*, in the transmission of the traditions of the old square that demonstrate that it was the *old* and *occupied* pole that had to have accounted for human understanding of the value of the *wuwei*, *wei*, *xu*, and *jing* of the pole position as a guide in human affairs.

In addition to Tian and *yi* as abstracts and Dao as a description of the one Way of one's teachings, the Warring States philosophers also derived from Confucius much of their terminology and many of the basic concepts that they employed to develop their metaphysics. These include *xing* 性, "nature," *ming* 命, "allotment," *xin* 信, "steadfastness," *cheng* 誠, "sincerity", and, of course, *wuwei*, but also the related and foundational *wu*, "nothing," *xu*, "vacuity," and *jing*, "quiescence." Furthermore, Confucius even established the essential parameters within which the discussion employing this terminology would take. For Confucius the issue was now individually psycho-spiritual and even, as we saw, mystical. He was concerned with how people possessing mostly the same inborn nature could diverge so extremely in their developed persons and behavior, resulting in a terribly chaotic human world.²⁵

²⁴ Didier (1998): 104–337; for a summary review of the relative uses of these terms in these texts, see p. 338–346.

²⁵ Confucius said that "In nature [all people] are similar; in habits they diverge" (*Analects* 17:2). Elsewhere he seemed to elaborate on this, as, for instance, when he stated that "All people are born upright" and that those who live in ways contrary to this inborn trait spend their days simply avoiding one disaster after another (*Analects* 6:17). But he also noted that only the extremely well or poorly endowed were different from most people, thereby

He wished through his teachings to direct all people to develop humane, just, bravely ethical, and reverent inner mind-hearts (*xin* 心) such that in their interactions a peaceful, ordered, humane, and right (or appropriate: *yi* 義) coexistence could be achieved. The essence of his teachings was internally directed, and he perceived that at the foundation of the virtue (*de*) that enables one to influence others to develop within themselves a humaneness (*ren* 仁) — much as the wind gently bends the grass — is the possession in his mind-heart of deep and resolute steadfastness (*xin* 信) and centeredness (*zhong* 忠). As Confucius said, "Concentrating on steadfastness and centeredness (*zhongxin*), adjust your course toward rightness (*yi* 義). This is [the means to achieve] the highest virtue (*de*)."²⁶

His teachings otherwise were identified contemporaneously to consist of four elements, including "culture (as expressed in the written classical tomes and enacted in ritual behavior), virtuous conduct, centeredness, and steadfastness." (*wen, xing, zhong, xin*)²⁷ As we saw immediately above, the latter two, *zhong* and *xin*, lay at the absolute center of Confucius' program of personal — and thus also social and political — improvement. For Confucius, a person who maintains a thoroughgoing internal steadfastness and centeredness in his mind-heart forever will, in his demeanor, words, and conduct, reflect an empathic concern for others, or a sense of reciprocity (*shu* 恕). As we have seen above, this was the "one Way" of his teachings.

In essence, Confucius advocated that one develop a deeply and ethically reflected mind-heart self-aware in its core to the degree that in its understanding of and commitment to what is right or appropriate this mind-heart would forever remain resolute and unmoved by ethically distracting and selfishly tempting events and things.²⁸ He described such a humane mind-heart to

indicating that he believed that though all inherit from the creator an uprightness (*zhi*) or a *de* that constitutes their nature, the quality or quantity of that inheritance could differ (*Analects* 17:3). Indeed he elaborated further, saying that people are born in gradations of mental-spiritual capacity, from those born with knowledge to those who study but cannot learn (*Analects* 16:9).

²⁶ *Analects* 12:10.

²⁷ *Analects* 7:24.

²⁸ See *Analects* 1:14: "The noble man eats without seeking fullness, domiciles without seeking comfort; he is reverential and diligent in carrying out his affairs and is measured in his words; he has a Way and abides by it; he

be quiescent (*jing* 靜) and likened it to a mountain.²⁹ In a similar vein, his disciple Zengzi described an ideal state of mind and behavior to include "having (*you*) but seemingly not-having (*wu*); being full (or concrete: *shi* 實) but seemingly vacuous (*xu* 虛)."³⁰

In both content and terminology employed, Confucius' ideal state of mind and being is virtually identical with the foundations of the practices of self-cultivation as expatiated in the Warring States Classical Metaphysics. The quiescent, resolute, still, focused, steadfast, centered, vacuous (*xu*), quiescent (*jing*), and empty (*wu*) mind of the ideal man who, having recognized and cultivated his Heaven-endowed virtue (*de*: recall that he claimed that "Heaven made the virtue within me."), is able through his *de* to influence others as wind flattens grass, resembles nothing if not the Daoist True Man and the Warring States / Han Ru Noble or Great Man whose vacuous (*xu*), empty (*wu*), quiescent (*jing*), and steadfast (*xin*) mind-heart serves as a purified vessel in which the potency (*de*) or quintessence (*jing*) of One that is Heaven can reside and which therefore can, from the power that this One works through him, employ magically effective numen (*shen* 神) to transform the world while remaining in his mind-heart vacuous and quiescent. The difference between them is merely that for Confucius and his Ru intellectual descendents, *de* must also be engaged actively, and his *de* requires a patterning of the mind-heart in a ritual culture that results in the steadfastness whereby *de* can be perfected in the first place and thereafter extended. To the *fangwai* inheritors of Confucius' system, *de* can be cultivated only by emptying the mind-heart of all of the distracting learned patterns of human culture, including the old *fangnei* ritual apparatus. To the *fangnei*, heaven is patterned; to the *fangwai*, it is truly *metaphysically* vacuous.

As Confucius is to have said of himself, "I have transmitted but have not created."³¹ He

can be called one who loves learning." In short, his mind is set on serious affairs and cannot be distracted by enticements of personal comfort, i.e., self-centered wishes and desires.

²⁹ *Analects* 6:21.

³⁰ *Analects* 8:5. Zengzi explained that "a friend" had possessed these and other fine qualities; the friend is usually thought to have been Zengzi's fellow Confucian disciple, Yan Yuan.

³¹ *Analects* 7:1.

transmitted directly to Warring States philosophers a set of concepts and processes that they and Chinese thinkers through the next 2500 years would essentially follow. Whether Confucius did in fact coin many of the terms he employed, loaded them with meaning, or manipulated their usage in new ways we cannot fully know, because we do not possess records of his contemporaries' similar teachings reflected in their own or their disciples' words, and as far as we really know Confucius wrote nothing — the majority of what we know of him and what he taught is recorded in the *Analects*, a text compiled by members of Confucius' disciplinary lineage in the centuries following his death. What we do know is that the basic concepts that Confucius taught and transmitted indeed were not his creations, except primarily his Tian, which now for him was no longer a godhead but rather an ethical and immanent creative and moral force that one could locate within his own breast while he lived.

Rejecting the contemporary idea that Heaven was accessible through expenditure of wealth or through what largely were *fangwai* methods of peripherally divining Heaven's will, Confucius offers at once a throwback to teachings whose foundations were closely derived from the traditions of ritual propitiation of elite royal ancestors that had through the five centuries transpired since the incipience of the Zhou gradually disseminated among the fiefs, cities, and estates of the Zhou feudal chieftains and their relations and administrators. As elite traditions had spread among the nouveaux riche, for those newly included the core ideas that Heaven (1) was a state or location to be achieved at death and which, through the presence there of spirits of former humans with whom the living could communicate, (2) possessed a will that was directed at and could affect human affairs, remained. However, access to Heaven had opened up to the spirits of a much wider bandwidth of the populace, and access was gained solely on the basis of wealth that was invested in mortuary ritual and grave goods to buy a spirit's way into Heaven. Confucius could not accept such an economically determined afterlife or achievement. Confucius therefore turned back to the core element of the ancient system through which what he perceived to have been reverential, non-economically-driven communication with Heaven had been achieved, temple ritual at the ancestral altar.

At their source, then, the critical Confucian traditions were those of the ritual system originally devoted to maintaining the power of the polar quadrilateral, the high council of Zhou

royal ancestors who, members of Shangdi, had sat at the apex of Heaven and once assured the unity of the Zhou polity below on Earth. Confucius thus transmitted the essence of the tradition of the *fangnei*, or those inside the square, and this is particularly apparent in Confucius' fundamental approach to oneself and the world, which reflects directly the reverent state of mind in which one must place himself prior to, during, and following the enactment of a formal ritual: one approaches the ritual with an empty, vacuous, steadfast, and centered mind so that it can attract the spirit invoked by the ritual to enter the ritual vessel.³²

Here it may be pertinent to note that the character *zhong* 忠, "centeredness," depicts the form of the old polar quadrilateral resting above the mind-heart, suggesting that the quality of centeredness derives from carrying out ritual sincerely at the altar to the ancestors — originally ancestors of the Zhou royal Ji clan and related high elites, of course, but now extended to advert to one's own ancestors, to whom the rituals to which Confucius mostly adverted were enacted and offered. The character depicting the other quality of the one thread or Way of Confucius' teachings, *shu* 恕, "reciprocity," which quality follows from and depends on the presence of a prior and continuing centeredness, also contains a square resting above the graph for the mind-heart. Although in both cases the upper portion of the graph provides the graph's phonetic value as its word is now pronounced, its selection to help constitute graphs so heavily laden with ritual meaning must also have derived from the presence of the ancient ritually pregnant square. Confucius, it seems, never strayed too far from the essence of the teachings of the old ancestral cult centered on the square.

However, a significant change that occurred in and through Confucius in the traditions of the square is that the vessel that the heavenly spirit entered had now become not the bronze ritual vessel on the altar of the ancestral temple of the Zhou royal elite but rather the individual mind-heart that, having been made steadfast, centered, empathic, right, and humane, and therefore possessed of great *de*, could transform the common folk magically *as if* numen, or a spirit (*shen*).

³² Confucius said that (1) without humaneness (*ren*) there can be no *li* (ritual, or rites), and (2) ritual must be preceded by simplicity, which has been taken by commentators to mean that approaching ritual one must first possess the *de* that is achieved only through the qualities and state of mind characterized by centeredness and steadfastness. See *Analects* 3:3, 3:8.

The Warring States philosophers derived their program from him literally and simply intensified (significantly) the mystical quality of the state of ritual reverence (*xu, jing, wu, wuwei*) that could amplify in oneself the power of Tian, *de, jing*, Yi, and Dao (etc.) such that he could transform the world through numen (*shen*) while remaining reverent. It all came from the teachings of the *old* polar square, but with the departure of that godhead from the pole, while the value of the teachings remained and were thus disseminated throughout the Zhou society, the pole had disappeared as an entity of any significant power or value. It was now thoroughly irrelevant, its contemporary starless quality having had nothing to do with the development through Confucius and the Warring States philosophers of the Chinese Classical Metaphysics.

Consistency Amid Change: The Chinese Center-Plus-Agency Cosmogonic Construct

Despite all of the change that we have witnessed occurred over the first five centuries of the Zhou, astonishingly the very core pattern developed abstractly in Confucius and the classical metaphysicians whereby agential *shen*, or numen / spirit, surrounds and acts on behalf of the central and pivotal power seems consistently to appear pictorially on many of the various artifacts that we have reviewed in the course of this study, from the Neolithic and on. From them we can see how this pattern might have evolved from the existence of the old godhead at the pole.

First, three of the later-named Four Spirits (*sishen* 四神) of classical Chinese tradition, being the dragon, tiger, and apparently the bird, surround the singular pole in the sky-mimicking Puyang M45 burial at Niuheliang.³³ Second, three fish and additional antennal satellite figures surround the central polar Banpo quadrilateral-in-circle visage. Third, pictorially slightly less directly related, the Hanshan rectangular jade clearly shows activity moving out from the square that we have posited was the pivotal quadrilateral at the pole, perhaps demonstrating an evolutive

³³ Feng Shi (1990) has also argued for this identification.

or creative cosmogonic process emanating from the rectangular pole that is represented by the eight-point star.

Fourth, of the Liangzhu AZ motif Elizabeth Childs-Johnson has seen in the four-corner simplified faces that adorn the four square corners of many *cong* the meaning of the spirits of the Four Quadrates of the Shang.³⁴ In support of this indeed we find that in the AZ motifs appearing in these corner representations the anthropomorph's face is simplified to become only two simple large eyes and a mouth, while the zoomorph's face is as complex as when surrounded by the anthropomorph in the full-featured motif. (**Figures 2 & 3**) This suggests that the zoomorph is an adjutant spirit active in the four corners (throughout the universe) out from the center that works visibly, while within and behind it the governing source of this energy, the anthropomorph, powers that movement and activity. The zoomorph thus appears to act as the agent of the anthropomorphic power of the center (note that the same human-zoomorph arrangement occurs in the polar environs as reconstructed in the Puyang M45 grave).

³⁴ Elizabeth Childs-Johnson, "Dragons, Masks, Axes, and Blades from Four Newly Documented Jade-producing Cultures of Ancient China," in *Orientalism* (April 1988): 37.

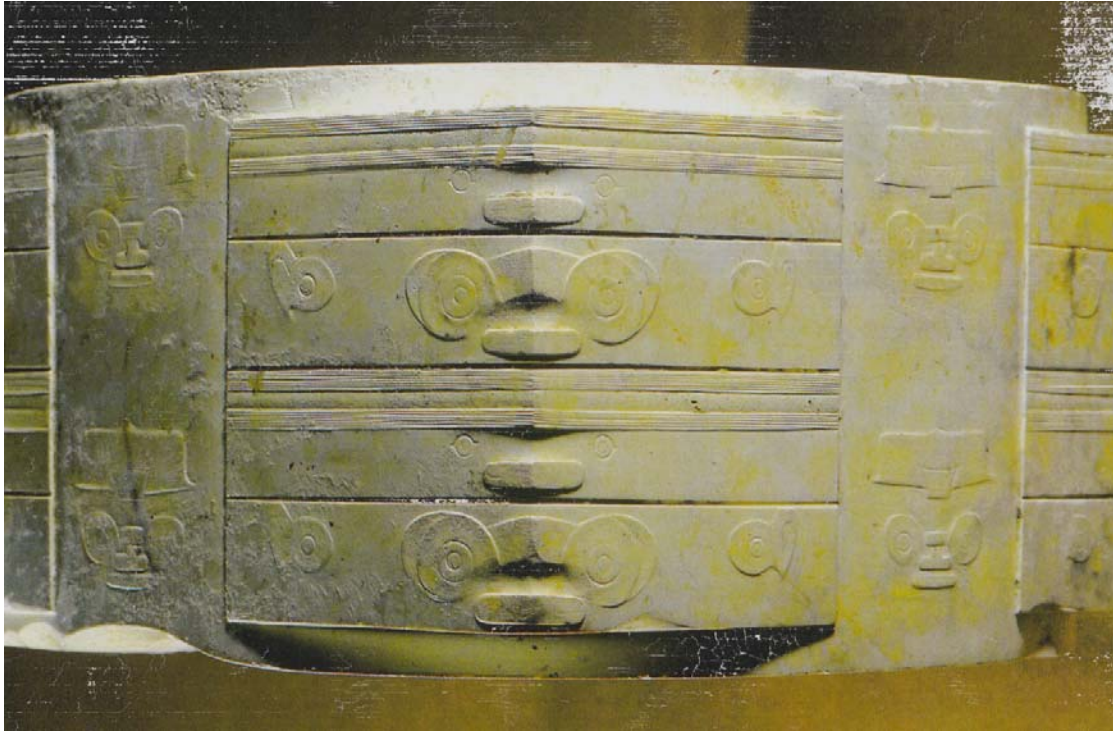


Figure 2. Large cong showing AZ motif appearing at corners (center of photograph) that consists of a simplified (eyes and mouth) anthropomorphic form above a full zoomorphic form. From LZWHYQ (1989).



Figure 3. AZ motif appearing at the corner of a cong, showing the simplified anthropomorph (superior) and replete zoomorph (inferior). From DFWM (1998).

A related pattern that strengthens the sense that the anthropomorph's fully crowned visage was the central power behind the spirits of the corners or quadrates is the way that, on some *cong*, while the simplified motif appears at the corners of the vessel, the complete, detailed version (including the crowned and embodied anthropomorph) appears in the center of each of the flat sides of the vessel, suggesting that it possesses a centrality (within the *square*) and power over the corners (see again **Figure 2**). The fact that in the replete forms of the AZ motif the anthropomorph obviously controls physically the zoomorph (**Figure 4**) strengthens the idea that the former is the governing power and the latter the adjutant spirit.



*Figure 4. Full AZ motif showing the superior anthropomorph controlling the inferior zoomorph.
From LZWHYQ (1989).*

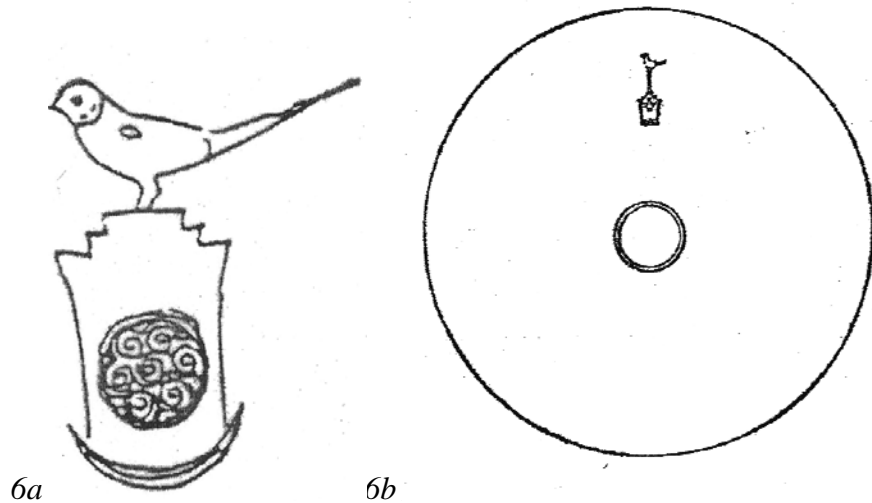
Du Jinpeng has argued for a similar understanding of Liangzhu iconography. He has made a very strong case for differentiating the AZ motif, what he considers to be the high god, from the bird / sun motif, mentioned previously in Volume II, Chapter 2, when the latter appears in the company of the AZ high-god motif on both Liangzhu jade *bi* disks and other jades (**Figures 2 & 5**). Du further identified the bird / sun as a secondary or helper spirit to the AZ high-god motif.³⁵ This makes sense, for we may reason that the sun is a mobile object of the day sky, while the center of the nocturnal celestial sphere is immobile. Recalling for instance the construction of the Stonehenge megalith, where the rectangular Altar Stone appears, as a model

³⁵ Du Jinpeng 杜金鹏, "Liangzhu shenqi yu jiyun" 良渚神祇与祭坛, in *Kaogu* 1997.2: 52–62.

of the polar quadrilateral, to anchor in the nocturnal polar center the entire structure of the diurnal sky, we know that the sun moves across the sky as a guest, while the nocturnal celestial pole governs the sky as master and never leaves its position in the center: the celestial pole defines the stage for the movements of all other heavenly bodies, including the sun. Therefore, immobile and permanent, while others scurry beneath it, the celestial pole seems naturally to be a higher figure. Further, we may support Du's findings by recognizing that the identification of a clearly earthly bird motif, i.e., the non-imaginary realistic bird that is often carved onto a sun-like jade disk (**Figures 6ab**), with the sun is to reflect merely a natural phenomenal association: migrating birds follow the sun's ecliptic. That is, when in the winter the sun moves far south, birds follow it; when in the summer the sun returns further north, the birds return with it. Furthermore, since in the northern hemisphere the ecliptic always lies to the south to a degree related directly to one's distance from the equator, then the bird becomes, through its connection with the sun, also associated with the south; it thus served in both earlier Yangshao (Puyang M45) iconography and later cosmography and theosophy (and astrology / astronomy) as the southern of the Four Spirits, the Vermilion Bird. To summarize, mobile appendages to the immobile center of the night sky, other celestial bodies appear to engage in the world actively while the pivot above governs always quiescently and remotely.



Figure 5. Jade crown-shaped pendant showing two bird figures flanking at the corners the zoomorph of the AZ motif. Cf. Figure 2 above, which shows the bird figures flanking the simplified AZ motif of the cong's corners but also appearing at the corners of the sides themselves and adjacent to the full AZ motif appearing in the centers of the flat sides of the cong. From LZWHYQ (1989).



Figures 6ab. Bird-and-sun motifs, on Neolithic jades. 6a from Du Jinpeng (1997); 6b from Zhang Minghua (1994). For further examples see Volume 2, Chapter 2, Figures 1a-c.

Moving a step inward, a more focused interpretation of the bird motif, and with it the circular *bi* disk, might be possible. We recall that the bird motif has always apparently represented something astronomically / astrologically out from the center, and particularly something associated with or representative of the south, from the cowry shell "bird plumage" found in the M45 grave at Puyang, through the Liangzhu jades (**Figure 5**), the Shang recognition of the Niaoxing (Bird asterism), and to the identification of the southern Taiwei sector of the sky with the Vermilion Bird (Zhuniao) asterism in the Han (e.g. in *Huainanzi* 3; see above, Volume I, Chapter 3). It may be, then, that a bird asterism was recognized in the Yellow and Yangzi valleys and effluvial plains as early as the 5th millennium BC and that it was identified roughly with — and symbolically identified — the southerly solar ecliptic. Then the *bi* jade disk may well originally have represented a horizontally informed conception of the universe of the sky, its hollow hub or center depicting the northern celestial pole and the bird motif signifying the solar ecliptic that lay always out from the center. The *bi* may thus depict a composite representation of both the night and day skies, its two symbols, the central hole and the bird motif, signifying respectively the two most salient elements of the overall circular diurnal-nocturnal sky universe, the northern celestial pole and the day star, the sun. Here again, then, we seem to witness an early representation of the center-plus-agency paradigm: the procreative or cosmogonically / cosmologically fundamental northern celestial pole rests quiescently and quintessentially in the center while the agential bird / sun spirit revolves throughout the sky universe to carry out the life-giving and -nurturing mission directed from the primary font of power that forever rests in the center of the sky.

Finally, quite striking is the appearance on Shang bronzes of the very same center-plus-four-corners pattern of spirit visages and figures that is found on Liangzhu jades (**Figures 7a-d**). According to our thesis, the rectangle on the sides of bronzes represents the high council Ding (the square) of Di positioned in the sky at the NCP, and this high council Ding comprises various high royal Shang ancestral spirits. From the same positioning on Shang bronzes as on Liangzhu jades of the similar but smaller, simplified, versions of the central motif we may consider the four-corner (and leg-adorning) spirit figures on the bronzes to represent secondary spirits of Shang centralizing religion, v.i.z. the various non-Shang-ancestral component spirits of Di that

populated the celestial *sifang* and other outlying reaches beyond the central polar Ding. David Pankenier's unproven proposition that the visible five planets acted as servants to the high god (*di wuchen* 帝五臣) during the 2nd millennium BC supports vaguely the position that Shang cosmology followed the center-plus-agency pattern. However, in this case the planets would have been not *shen* (spirits or spiritual forces) but rather administrative agents of the high central power. Unlike *shen*, these functionaries would not have shared in the power of Di, but only helped to exercise it.

Figures 7a-d. Shang and Zhou ding, gui, and yan bronzes with central Taotie and peripheral corner- and/or leg-adorning spirit figures.



Figure 7a. Shang square ding vessel. From Rawson (1996).



Figure 7b. Early-Zhou ding vessel. From Li Xueqin (1995): 121.



Figure 7c. Early-Zhou gui vessel. Aside from the horned animal figures gracing the base of this vessel, we note that the base is a square. From Li Xueqin (1995): 144.



Figure 7d. Late-Shang yan vessel. From Li Xueqin (1995): 120.

Therefore, considering the evidence from the Puyang and Banpo Yangshao, Hanshan, Liangzhu, and Shang civilizations that seems to demonstrate the consistent significance in those civilizations of the center-plus-peripheral-agency design of the spiritual realm, we may make the following suggestion. The abstract philosophical pattern found in Classical Metaphysics derived from Confucius' *fangnei* teachings that in turn originated in the early-Zhou ritual propitiation of the Zhou royal ancestors invested in the old polar quadrilateral. As an updated philosophical

adaptation of this old cult ritual regimen, this Classical Metaphysics proposes, in matters of cosmogonic creation, cosmological maintenance, and human self-cultivation and governance, that (1) Tian, Yi, *de*, *jing*, and/or Dao exists as the vacuous, quiescent, immobile source power in the center, and (2) *shen* 神 (spirit, spirits, numen) serve(s) that power actively out and away from the center. This pattern of projection and belief found in the Classical Metaphysics, whereby peripheral or secondary spirits carry out creative or sustaining action on behalf of the still source of power that remains in the center, appears to be traceable consistently to the Chinese Neolithic and Shang periods.

A Popular Zhou Expression of the Center and Periphery: *The Chu Silk Manuscript*

This identical structure of power and agency also appears in popular Warring States traditions, suggesting even more strongly that a single evolving ancient source pattern informed all levels of belief and thought in Zhou-period China. The first example is found in a manuscript dating to c. 400–300 BC that robbers recovered from a tomb near Changsha, in Hunan, southern China, in 1934. Representing contemporary folk religious thought, *The Chu Silk Manuscript* (CSM), which is essentially a crude hemerological almanac dividing the spatial-temporal year into twelve months and four seasons, indicates that this metaphysical pattern found in Shang and Zhou elite literate cultures was transmitted from one period to the next not only through the elite court culture but also via popular religious belief. Although damaged and archaic, it is possible to read the CSM in a rough but confident way. (**Figure 8**)

The manuscript makes clear that a metaphysical hierarchy of belief existed whereby on high dwelled a corporate Di, including at least two members, Yandi 炎帝 (“Flaming Di”) and Lingdi 靈帝 (“Thaumaturgical Di”). Yandi is otherwise known from various transmitted mythological texts as having been among the early god-human rulers, and, according to Constance Cook’s research into the ancient book of lore, *Shanhai jing*, he was a Chu (southern

Chinese kingdom) ancestor.³⁶ We have seen in Volume I, Chapter 3 that, according to *Shiji*, Huangdi, the northern Yellow Emperor, vanquished Yandi during his process of civilizing the tribes of ancient China. Another character we will encounter below in a translated section of the CSM, Zhu Rong 祝融, who acts on the orders of high ancestor Yandi to regulate *shen*, spirits, was, according to the *Shanhai jing*, a later Chu ancestor, and thus he may be considered to have been as well a part of this corporate Di of the CSM.

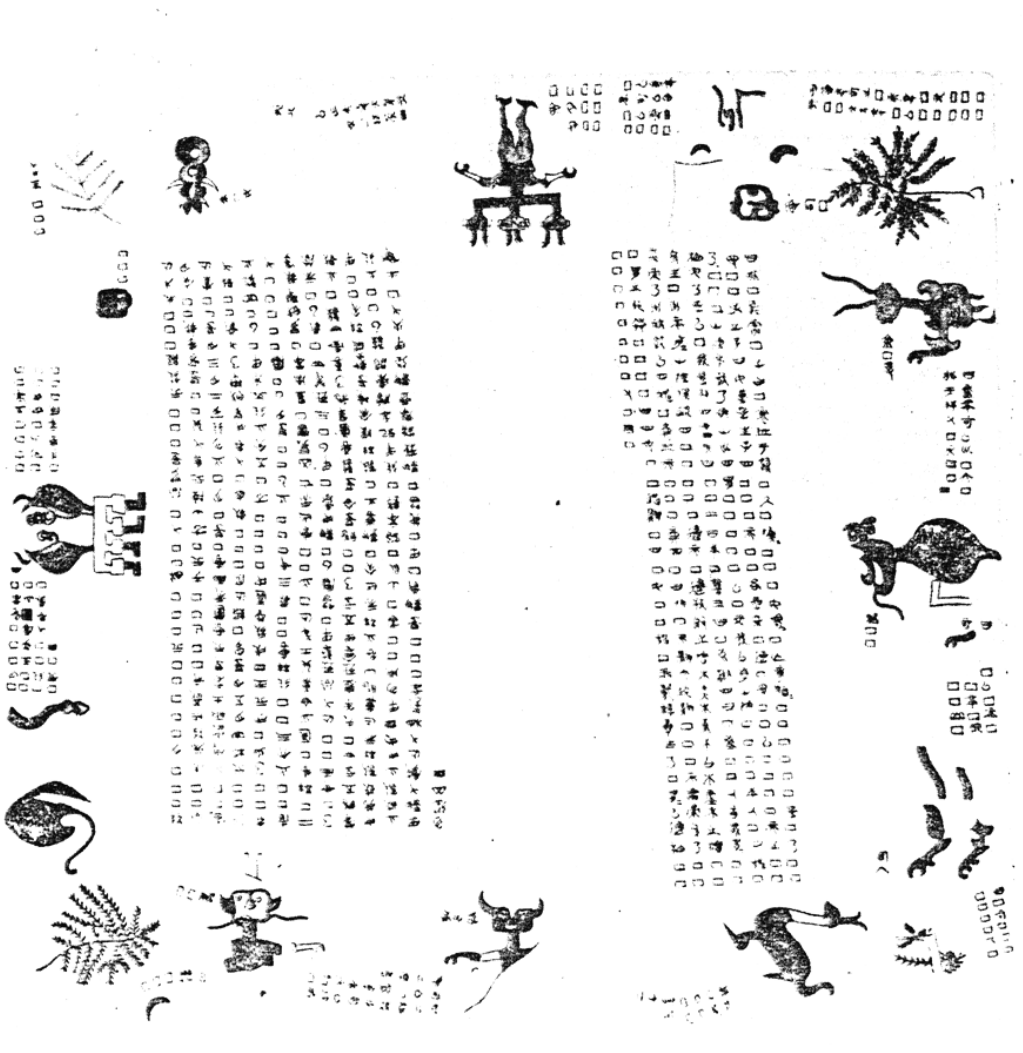


Figure 8. *The Chu Silk Manuscript*. From Li Ling (1985): 139.

³⁶ See Constance A. Cook, "Three High Gods of Chu," in *Journal of Chinese Religions* 22 (1994): 1–22 (esp. p. 1).

These members of Di ruled over all of the universe, including, on most high, Tian, "Heaven," which remains both a physical sky above (and here typically in numerous hierarchical levels) and the abode of spirits. Through Tian, Di clearly commanded progressively lesser levels of metaphysical and physical power, including, in descending order, the Four Spirits (*sishen* 四神), enumerated [physical] heavens (the Three Heavens, *santian*, and the Nine Heavens, *jiutian*), and the "Hundred Spirits (*baishen*), the Hills, and the Streams." It is worth noting for the purpose of narrowing the field of what Di might represent that only very low in the hierarchy and late in the cosmogony do the sun and moon appear. Further, the sense of agency that the various spirits played on behalf of Tian and, ultimately, the composite Di, is unmistakable in several passages of the manuscript.

The following translations from the CSM, which describe a cosmogony, serve to elucidate the most essential of these relationships. Both passages appear after a long cosmogonic section that traces the birth of first thaumaturgical and then physical elements of the universe.

[1] The Four Spirits (*sishen* 四神) then activated and returned to the side of Heaven (*tian*) to support and envelope it... Yandi thence commanded Zhurong to take (or employ) the Four Spirits and descend and stabilize the Three Heavens (*santian* 三天), carefully supporting and stabilizing [them], [and then] returning to their extremities (i.e., the four corners of Heaven).³⁷

[2] Yandi declared: "Ah! Revere it (Tian)! Do not fail in any way to [show] reverence [to Tian]! When Tian creates blessings, then spirits revere them! When Tian creates something magnificent, then spirits respect it!"³⁸

³⁷ See the text in Li Ling, *Changsha zidanku zhanguo chuboshu yanjiu* (Beijing: Zhonghua shuju, 1985): 157 (Yi 乙 5:11–6:19). Translation my own.

³⁸ *Ibid.*: 157 (*Jia* 甲 9:29–10:20). My translations, though based on imperfect reconstructions of the text, yet remain confident. Enough characters are clear and understood well enough to enable us to be quite certain in our understanding of the gist of the text. My reading follows from comparing Li Ling's and Noel Barnard's separate Chinese reconstructions of the *Chu Silk Manuscript*. For their reconstructions of these passages in modern graphs, see Li Ling (1985): 157; and Noel Barnard, *The Ch'u Silk Manuscript. Translation and Commentary. Studies on the*

This text reveals that the basic cosmogonic / cosmological understanding that existed among the people of the Chu region (the old South) accords with what describes the cosmogonic / cosmological constructs that seem to appear consistently among people of the Chinese Neolithic, Bronze Shang, and Zhou periods, the latter including all three of the state cult, popular religion, and elite philosophy. In section [1] the two ancestors Yandi and Zhurong, very apparently helping to constitute Di (in the case of Yandi, or Yan Di, which is the highest power revealed in this text, "di" helps to constitute his name), order a world in which Tian is the second power subsequent to and beneath Di, and the Four Spirits (*sishen*) carry out actively the workings of Tian on behalf of Di. Very interesting and revealing is the fact that here the ancestral corporation has been simplified from "Shangdi" to "Di," such that what was once Tian's equivalent, Di, now has become its superior or central creative and supervising force. Despite this traceable shifting of names, it is the parallel structure of both the Shang and Zhou state / popular cult systems, as well as the later Zhou philosophical system, that is most striking.

Finally with regard to the CSM, we note that it is laid out graphically in square form, and that its center is also a square formed from joining the two rectangular halves of the central manuscript. (**Figure 8**) Furthermore, the periphery depicts twelve spirits of the calendar who apparently dominate temporally during a month of a given year, *and*, we must recall, also spatially over a given region. For recall that an astrologically based (but not necessarily truly zodiacal) calendar, of which this is an example, describes not only time but also space because it is in fact a picture of the heavenly revolutions that allows for the understanding of an annual cycle of twelve according to which stars and asterisms set and rise in certain positions on the horizon consistently at specific moments of the year. Therefore, the square in the center of the calendar in which the text of the manuscript is found (including the passages translated above) represents the power of the ancient square at the celestial pole. By parallel, as the center of the cosmogony / cosmology expressed by that manuscript, the high power here, i.e., Di in its various ancestral manifestations (Yandi, Zhurong, Lingdi), also is represented by the ancient square at the pole. That the center, or pole, remains square in this calendar's depiction betrays that this

Ch'u Silk Manuscript, Part 2 (Canberra: The Australian National University, Monographs on Far Eastern History, 1973): 106–111, 162–165.

manuscript represents the very ancient tradition transmitted from Neolithic times through the Shang and Zhou whereby the center of the heavens was perceived and conceived to be a quadrilateral.

In summary, we can postulate that the metaphysics according to which the central high power represented the NCP, and according to which its peripheral *shen* agencies carried out creation or activity in the cosmos, was constant temporally and geographically in ancient China, from Neolithic times through the Zhou. The widespread distribution of this metaphysics thus demonstrates this pattern's deep and relatively permanent position in the mentality of the ancient proto-Chinese and ancient and classical Chinese peoples. Of course, variations in internal meanings of the elements of this metaphysics occurred, but most commonly from Shang (and, as we saw, probably from the Neolithic Liangzhu culture of the 4th–3rd millennia BC) and on the central polar square identified a consular ancestral high council that more or less allowed the unifying or dominant people of a given polity or socio-political organization an upper hand in influencing the greater corporate power of the heavens (i.e., Di or Tian) in which all spirits participated.

Taiyi and His Three *Shen* in the Warring States Period

Further evidence supporting this view is found in the form of a dagger-axe recovered from a grave near Jingmen, Hubei in 1960. It is known as the "Bingbi Taisui Ge" 兵避太歲戈, or "Dagger-Axe for Repelling the Great Year." (**Figure 9**) The relief portrait appearing on both sides of the blade of the axe shows a scale-armored figure in the form the character *da* 大 (i.e., *tai* 太) wearing a warrior's headdress and surrounded by three dragons, two of which serpents he clutches, one in each hand, and one of which coils beneath his legs. He stands on the sun and moon, evincing clearly that this is an astral figure that lies in the central position in the sky and that thus is superior to the ecliptics of those lesser celestial bodies. This symbolism, in addition

to the central figure's shape in the form of *da/tai*, has helped Li Ling identify this protective spirit as Taiyi.³⁹



Figure 9. "Bingbi Taisui Ge." From Rawson (1996): 150.

³⁹ Li Ling, "An Archaeological Study of Taiyi (Grand one) Worship," in *Early Medieval China* 2 (1995–6): 12–26.

Furthermore, Li Ling also sees this figure Taiyi to represent generally the northern polar region. As we know, it was the *ancient* Neolithic- / early-Bronze-period northern celestial pole, and not the pole of the Warring States period, that demonstrated in its stellar patterns the character *da/tai* (such as forms the body of the character *tian* 天). We note as well that this figure's headdress forms two arcs that bear a striking resemblance to the ungulate-horn arcs and Shang Taotie horns that we traced to the stellar arcs that emanate outward from the old Neolithic-Bronze polar quadrangle centered on the pole star Thuban (see Volume II, Chapters 1 and 2). This, then, demonstrates once again that the tradition of the polar Taiyi appears to have descended from thousands of years before the Warring States period in which this religious sentiment was expressed, a point underscored also by the fact that unlike Warring States philosophical discussions of Yi (一) or Taiyi (太一) as an abstract and ethicized concept utterly divorced from the contemporary pole, this Taiyi of the dagger-axe, with his martial bearing, martial context (appearing on a talismanic axe symbolic of martial protection against nefarious spiritual influences), martial armor, and martial headdress reminiscent of those of the Liangzhu AZ motif, Longshan carved jade monster face visages, and the Shang Taotie, is fully martial and thus fear- and awe-inspiring. Such a martial religious concept was more primitive and concrete than the abstraction of the gods (such as Tian) that occurred at the hands of Confucius and later, Warring States, philosophers, betraying again that this ritual weapon reveals that a very ancient religious belief system centering on the high and fearsome power of the ancient celestial pole still was practiced some two to four thousand years after its inception in the proto-Chinese Neolithic period.

The "Bingbi Taisui Ge" also reveals that the center-plus-*shen*-agency pattern of belief applied very consistently across ancient and classical Chinese religious-philosophical experience. The three dragons surrounding the martial high power Taiyi, as well as the sun and moon, very clearly represent helper *shen* spirits, just as we have seen appear elsewhere in Neolithic-Zhou representations of metaphysical or religious thinking. The "Bingbi Taisui Ge" fits perfectly into patterns otherwise clear in early proto-Chinese and later Chinese thought and artistic representation of belief.

Taiyi Bore Water

Taiyi appears commonly in Warring States and Han demonstrations of both religious belief and philosophical speculation. From one example of its appearance in classical thought we may consider the role that Taiyi played in creating and sustaining the shape of the cosmos. For this we turn to a manuscript recovered from a grave at Guodian, Hubei that dates to sometime between the middle-4th to early-3rd centuries BC but no later than 278 BC.⁴⁰ This is the *Taiyi sheng shui*, or "Taiyi Bore Water," text whose cosmogony remarkably seems to bear little concrete resemblance to other Warring States cosmogonies, for it posits, as we know from the title, the birth of water prior to all other elements of the universe but for water's creator, Taiyi. However, *Taiyi sheng shui* in fact provides important clues for understanding deeper and older levels of meaning in other, received, Warring States and early Han texts, and really it is consistent with them. We read from the beginning of the manuscript that,

Taiyi bore water. Water in return comingled with Taiyi; thus was formed Heaven. Heaven in return comingled with Taiyi; thus was formed Earth. Heaven and Earth comingled; thus was formed Spirit and Light Energy (*shenming* 神明).⁴¹ Spirit and Light Energy comingled; thus was formed *Yin* and *Yang*. *Yin* and *Yang* comingled; thus was formed the Four Seasons. The Four Seasons

⁴⁰ For this dating see Sarah Allan and Crispin Williams, eds., *The Guodian Laozi: Proceedings of the International Conference, Dartmouth College, May 1998* (Berkeley: Society for the Study of Early China and the Institute of East Asian Studies, University of California, Berkeley, 2000): 119.

⁴¹ We know that the phrase "*shen ming*" consists of two independent terms, and not one phrase meaning "radiance of spirit" as it does in some other Warring States/Han texts such as parts of *Huainanzi*, since we understand from the expression "one another" (*xiang* 相) in the subsequent serial phrase, "*Shen* and *ming* comingled with one another," that a plurality of elements is acting, one on the other. The plurality of *shen ming* is known as well from the parallelism of plurality established by the occurrence of only plural actors in this entire series of parallel phrases of this section: Tian and Di, Yin and Yang, the Four Seasons, Cold and Hot, and Moisture and Dryness. Li Ling has similarly interpreted *shen ming* to be two individual terms; see Allan and Williams (2000): 170.

comingled; thus was formed Cold and Hot. Cold and Hot comingled; thus was formed Moisture and Dryness. Moisture and Dryness comingled; they formed time and then stopped....

Therefore, Taiyi is contained within water, and it courses through time. It cycles through once and begins all over again, taking itself to be the mother of all things. It is at once empty and at once full, taking itself to be the thread that courses through all things. It is because of this (the threading of Taiyi through all time and space) that Heaven cannot be killed, Earth cannot be buried, and *Yin* and *Yang* cannot be completed (*cheng* 成, i.e., exhausted)....

Below is soil, which is called Earth. Above is pneuma (*qi* 氣), which is called Heaven. "Dao" is its (Taiyi's) agnomen (*zi* 字); "Clear and Turbid" is its cognomen (*ming* 名).⁴²

Like the One, Tian, *jing*, *de*, or Dao of many received Warring States philosophical texts, here Taiyi, i.e., The Great One, both bears all and courses through all existence at all levels at all times, cycling incessantly through its agents and objects of creation as they too cycle through their life-and-death processes. But whereas the received texts invariably speak of the universal stuff of creation out of which One/Dao (etc.) creates all creation as being *qi*, "pneuma," the *Taiyi shengshui* identifies this stuff rather as *shui*, "water." On the other hand, the well-conceived common translation of *qi* as "pneuma" reflects that in the translators' minds it has been interpreted, correctly, to be, like water, liquid or pneumatic in its rarefied form. And we note here in particular that toward the end of *Taiyi shengshui* the text identifies what is "above" in Heaven, in whose center the water-bearing Taiyi resides, as none other than *qi*, while what is "below" on Earth is soil. In fact, from the received Warring States / Han textual tradition we know that soil and *qi* both are products of the most rarefied *qi* of all, *jingqi* 精氣, or "quintessential pneuma," which is cognate with One, Tian, *de*, *jing*, and often with Dao. In fact,

⁴² For the text of *Taiyi sheng shui*, see Jingmen City Museum (荊門市博物館), ed., *Guodian chumu zhujian* 郭店楚墓竹簡 (Beijing: Wenwu chubanshe, 1996): 125. Otherwise see its reproduction in Allan and Williams (2000): 228–231.

Taiyi shengshui explicitly equates Taiyi with Dao. Then *Taiyi shengshui* really differs little from the received Warring States philosophical tradition in its description of the essential construction of the universe: all pneuma, from which all creation at many levels arises, itself is born of an ultimate One (Dao), a quintessential and rarefied pneuma that always is present in all of its created pneumatic constructs and in fact through its created pneuma (including *shen*, numen/spirit[s]) always powers all life in every recess of the universe. As we shall see in Chapter 6, however, this Taiyi of *Taiyi shengshui* is quite distinct from the Taiyi of both the ancient Shang and contemporary Warring States popular religious traditions as evinced above through the description of the Taiyi of the "Bingbi Taisui Ge."

Chapter 4: The Changing Symbolism of the Square after c. 500 BC

In this chapter we will review the changing iconography of the quadrilateral occurring in both pictorial and textual media during the latter half of the Zhou, the Qin, and the Han periods, or c. 500 BC to 200 AD. The changes that occur reflect that while the quadrilateral never lost the essential magico-religious potency that derived from its having originated in the apex of the heavens, its specific referential meaning shifted considerably over time and across varied media. We will see that these changes reflect directly the diffusion of the location and meaning of *tian*, "heaven," and its representative quadrilateral from their erstwhile position and significance at the northern crown of both the northern night sky and the politico-religious system of the Zhou, as described in preceding chapters. This diffusion in turn reflects consistently the dissemination of socio-political and economic power, and consequently also religious access to "heaven," that had occurred during particularly the first half of the Zhou period.

The eventual destinations of heaven's magical powers as represented in and by the quadrilateral form are diverse. They include the greater sky (the heavens), human-centered ritual and ritual events, the human breast, the spiritual realm most usually but not necessarily associated with the sky, and the earth. Pictorial or artifactual as well as textual evidence indicates convincingly that the mandalic square form, migrating together with magical heavenly power, represented in each of these destinations the potency of a heaven that was now understood in its diffused sense. As we shall see in Chapter 5, ultimately, sometime between c. 100/200 and 700 AD the trend of diffusion — and confusion over the meaning — of the square's referent symbolism ended when a square-earth cosmographic thesis gained ascendancy and eventual dominance. Through this process of absorbing and coöpting the originally square form of the apex of heaven, the earth came to possess heavenly magical power. Later readers of classical texts, assuming the square always to have represented in Chinese traditions a terrestrial geography, have interpolated the relatively late-developing square-earth thesis into classical and early-imperial texts and artifacts. The problem with doing so is that there simply is no clear evidence dating to before 2 BC that supports an ancient or classical Chinese square-earth

cosmographic or terrestrial geographic postulation, and even then, in 2 BC, the text that ostensibly appears to identify a square earth really, on deeper investigation, does not seem to do so. In Chapter 5 we will review all texts having been interpreted mistakenly to promote a square-earth cosmography, and we will find that in fact none of them actually do so promote a square earth.

In the last two chapters we saw that while Confucius inherited the early-Zhou ritualistic tradition of the square, or the *fangnei* tradition, and he transformed it to describe a heavenly square that, now representing the old court- and square-centered ritual dedicated to the royal ancestors resident in the celestial polar quadrilateral, he relocated to within the human breast, other contemporaneous divinatory systems located heavenly power diffuse either visibly or invisibly in the physical heavens. Such traditions include those of specifically *jiuye* astrology, as well as plastrimantic and *Yijing* trigrammatic divination. Although we cannot know the physical shape of the heavens that *jiuye* astrologers assumed, it is very possible that the nine sectors of the heavens with which, beginning not long before or at about the time of the establishment of the Eastern Zhou in 771 BC,¹ the nine sectors of earth were paired described overall a squarish shape, for we notice that the tortoise plastron, used of course all of before, during, and after the Shang to divine the will of the high god (whether Tian, Taiyi, Ding, or Di at the apex of the night sky, or associated heavenly spirits), is both squarish in shape and divided naturally into nine square scutes, or sections. **(Figure 1)** Further, we note that the trigrams of the *Yijing* are both *square* in shape and that they each represented already in early- to middle-Zhou times cosmological moments in space-time as revealed in the movements of the forces of the *heavens*.²

¹ See David Pankenier's reasonable estimate of the date of origin of specifically the *jiuye*, nine-field, system (1999): 266.

² Although late-Warring States and Han traditions correlated *yin* with the power of earth (and *yang* with the power of heaven), *yin* did not represent the earth; nor did *kun*, the hexagram comprised of six broken lines, represent the physical earth. *Yin*, along with its complement *yang*, was a Warring States accretion to the *Zhouyi*; *yin* and *yang* represented even through the Han a pair of complementary forces born of the singular ultimate procreative power — the One, *de*, *tian*, Mystery, *jing*, etc. — that through their intermingling in turn created the physical heaven and earth

In addition, the mystical and magical import in classical Chinese thought (and particularly in the *Zhouyi*) of the number nine in representing the active mode of the heavenly or *yang* aspect of the universe should be noted as having derived most likely from the nine scutes into which the squarish, plastronically shaped heavens were understood to be divided.



Figure 1. Nine-scute tortoise plastron showing oracle inscriptions and diamond- (or rotated square-) shaped center scute.

and all formal things inhabiting the physical universe. In case there were any doubt about the *Zhouyi*'s relevance to ascertaining specifically the will of *heaven* (and this refers not to the physical construct of heaven but rather the One, *de*, *jing*, etc. that creates and energizes it), one should consult (1) mid-Zhou uses of the *Zhouyi* as demonstrated in the *Zuo Zhuan* (and for an example of this, see above, Vol. III, Chapter 2), and (2) the role of *yin* and *yang* in the representative cosmology of Yang Xiong's *Taixuan Jing* of 2 BC, as revealed below in Chapter 5.

In a closely related vein, as we shall review further below in this chapter, pictorial representations of the heavens produced to reveal meaning in divinatory traditions dating to the Warring States and Han periods also demonstrate that within its overall domical circumference heaven was portrayed in both its center and overall shape to be square. Such square-heaven traditions may have begun with the *jiuye* and its precursor correlative astrological systems themselves: when the Western Zhou royal court's power waned and finally crumbled between 950 and 771 BC, it may be that all geo-political sectors on earth (i.e., states) represented by the *jiuye* segmentation and correlated with a matching sector of heaven no longer needed to or could recognize a central Zhou authority represented by the square that originally had been identified with the quadrilateral formerly resident at the northern celestial pole. That is, it is possible that the perceived power of the quadrilaterally shaped center diffused in the *jiuye* system to encompass all sectors. All sectors may have been envisioned at this point as sharing equally in the power of the square that once had delineated the center, and together the nine *jiuye* squares comprised an overall squarish shape of the sectioned heavens. Put another way, it may be that individual state rulers of the Zhou, with the quadrilateral now off-center in the heavens and the Zhou royal court likewise off-center on earth, inherited directly all of (1) a millennia-long tradition of associating metahuman and metaphysical power with the quadrilateral shape, (2) real and independent local political and military power, and (3) traditions such as the *jiuye* that obviously for some time already had recognized the superhuman powers of the domical heaven and its astral bodies. It would have taken little imagination to associate inextricably all of the quadrilateral shape, heavenly power, the ability to access meaning in astral bodies' movements, and one's own newly found political and military power on earth. This also could explain in part how eventually, during and after the 2nd century AD, the square began to symbolize the earth: since the earthly sectors paralleled the heavenly sectors, it may have occurred to some that whatever was heaven's shape ought also to have described earth's idealized, if not actual, shape.

Other factors may have encouraged the eventual shift in the square's symbolism to denote the earth rather than either the center or the overall internal shape of *tian*, "heaven." For one thing, people's various modelings of the square on earth would have helped to associate the square with the earth. In the early Zhou, as I have argued, all of the altar, temple, palace, and

tomb were religiously potent quadrilaterals modeled originally on the polar quadrilateral that was the seat of the ancestral high gods. From modeling these earth-bound and earth-centered artifacts and structures on the celestial square form, by simple association over a period exceeding a millennium's time the square could have come to represent not only the primary heavenly power but also that power as it existed ritualistically and mandalically on earth. After the Former Han period the celestial, but not necessarily "heavenly" ("tian," in all of its loaded meaning, which forever remained associated with the quadrilateral), origin of the form could have been forgotten, or, less drastically, its original prominence may have faded.

There is, in addition to the squares on earth mentioned above, a greater square that, like the *jiuye* nine-square segmentation of heaven and earth, may have contributed to the eventual association of the square form with specifically earth, and in fact its form and use derived directly from the modeled squares of the altar, temple, palace, and city wall. This square is that of the enfeofed city, *guo* 國, which by the late Western Zhou period came to be extended in reference to denote the agricultural and other lands of the estate-cum-state that surrounded and supported the city. The sanctity of the square in the formation of the city, from the altar to the city wall, is quite obviously preserved in the external *square* semantic element of the character for *guo* itself, while the internal element of the written character in modern *kaishu* script, *huo* 或, supplies the spoken word's phonetic value. The religious significance of the square design of the ancient *guo* or capital city is borne out by the Warring States idealized plan of the city as described in the "Kaogongji" section of the *Zhouli* (Rites of Zhou): in the city center was the square palace, at the center of which lay the square altar sandwiched between the square ancestral temple and altar to the soil.³ However, we need note that as the term *guo* became extended during the early and middle Zhou to refer to not just the local satrap's sacred city but also his attached peripheral lands, i.e., to a "state," the square was *not* simultaneously extended to symbolize that state. It rather remained to represent the center and source, and not the territorial extent, of power, for only the square center was sacred.

³ *Zhouli* 41 (*Shisanjing zhushu* ed. [Beijing: Zhonghua, 1980]: 927–929). On this likely late-Warring States text and the ideal city plan it elaborates, see Nancy Shatzman Steinhardt, *Chinese Imperial City Planning* (Honolulu: University of Hawaii Press, 1990): 29–36.

Rectangular and square tombs excavated in the soil of the earth also would have encouraged the transference of the power and influence of the modeled polar quadrilateral directly to the earth, to such a degree that the *ya* 卍 shape of royal tombs of the Shang and Zhou periods has led even modern scholars, who have followed the later Chinese presumption, inherited from traditions that began only c. 200 AD or later, that the earth had in ancient Chinese traditions always been conceived to be square, to consider the square to have represented the earth all along, from Shang times and on. As we have seen in previous chapters, Sarah Allan attempted to trace the square-earth theory back to the Shang. To Allan, when the four missing corner quadrates (NE, SE, SW, NW) were added to the *ya* character, then the resulting square represented the Shang and later Chinese concept of the square earth. Allan linked this imagined square to the roughly squarish shape of the tortoise plastron, which of course was used for divination purposes, and proposed that the origins of the Chinese square-earth thesis could thus be found in a Shang belief in a tortoise-shaped cosmos, the round carapace representing the dome of the heavens and the squarish plastron the square earth.⁴ But as we have considered previously, in the Shang and Zhou the plastron was employed to divine the will or intent of the motive force resident in the *heavens*, not earth, and the *ya*-shaped tombs represented the political elites' wish to ascend to *heaven* via the only post-mortem means of which they could conceive, through a sympathetic modeling in the earth of the celestial rectangle. They did not aspire to descend into the earth, for on interment their bodies were already there. (And this bifurcation of elements of the immortal person / soul most probably represents the beginnings of the later tradition of the differentiation between the airborne or skyborne *hun* 魂 soul(s) and earth-bound *po* 魄 soul(s) that surfaced in the Warring States and Han.)⁵ The power was located where their ancestors resided above, at the power center of the known universe, in the corporate quadrilateral godhead Ding or Shangdi that existed at the stellar quadrilateral of the northern celestial pole.

⁴ Allan, *The Shape of the Turtle: Myth, Art, and Cosmos in Early China* (Albany: SUNY, 1991): 75–111. For a more recent treatment of the square, or *fang*, in Shang-to-Zhou transitions, but one that largely follows Allan's thesis, see Wang Aihe (2000).

⁵ On the *hun* and *po* souls see John C. Didier, "Systems of Thought and Belief," in Xiao-bin Ji, ed., *Facts about China* (New York and Dublin: H. H. Wilson Company): 99–100.

Furthermore, the basis of Allan's thesis in late-Warring States and Han textual evidence was thin and has, since the publication of her work, become even thinner: what at the time that she wrote was believed to be a 3rd century BC source and which Allan cited to support her thesis of a timeless square-earth cosmographic model, the *Zhou bi suan jing*, has been demonstrated convincingly to have been compiled only as late as the 1st and 2nd centuries AD,⁶ which period represents in cosmological thinking an era quite distinct already from the 3rd and 2nd centuries BC, not to mention from the Shang and early Zhou. Additional classical sources, dating to between c. 250 BC and the 1st century BC and inevitably cited to support the notion that the Chinese square-earth cosmography was ancient, actually do not propose a square-earth thesis at all. These texts we will review below in Chapter 5.

Considering the projected goal of plastrimancy to achieve communication with heavenly spirits or the heavenly will, it is only reasonable that the plastron's squarish shape, with one square scute among nine located at the tortoise's breast in the center of the plate (**Figure 1**), should have symbolized and been thought to have communicated magically with heaven directly. If anything, then, already in the Shang the greater heavens may have been thought in an idealized sense to be quadrilaterally shaped, even though they would have appeared to any rational observer to be actually round (and this cosmographic idealization versus rational observation may have played out already in the differences obvious in the square *cong* and circular *bi* produced by people of the Liangzhu Neolithic culture; see above both Volume II, Chapter 3, and Volume III, Chapter 3). It may be, once again, that the *jiuye* astrological system's cosmographic model was based on the squarish shape and nine-scute division of the typical tortoise plastron that was used for divination purposes in the Shang and Zhou periods.

⁶ Christopher Cullen, *Astronomy and Mathematics in Ancient China: The Zhou bi suan jing* (Cambridge: Cambridge UP, 1996): 138–148.

The Essential Consistency in the Square's Heavenly Symbolism During the Zhou Period

Throughout the Zhou the square remained firmly a symbol of heavenly power. Illustrative of this consistency is the fact that throughout the Shang and Zhou periods the basic rectangular shape of the tomb, whether for high elites through the early Eastern Zhou period or for lesser elite groups thereafter, did not change, despite the fact that innovations in grave and tomb styling were introduced throughout the period. Indeed, when both pyramidal and catacomb tombs began to occur among high elites in the Warring States period, critically all of the tomb spaces, including the underground catacombs, the pyramidal mounds, and the temple or shrine complexes that sat atop the mounds, remained quadrilaterally shaped.

We have reviewed already the process that occurred during the early Eastern Zhou period whereby attention and investment transferred from both the capital ancestral temple to the individual tomb and from the lineage group to the individual, but the development of the catacomb tomb in the late-Spring and Autumn and Warring States periods deserves further attention. Lothar von Falkenhausen has interpreted the square shape of the catacomb chambers of these usually high-elite tombs to represent earth as the polar counterpart to heaven.⁷ But there is no specific reason to so conceive of these tombs other than that the prevailing view is that the square-earth theory can be universally applied, without specific support, throughout pre-Han Chinese history. In fact, the religiously oriented literature that usually accompanied the deceased in the miniature palatial tomb complexes, consisting typically of divinatory charts and maps, sacred texts, almanacs, and day books, all relating hemerologically and calendrically (spatially-temporally) to the movements of the heavens, more convincingly points to the idea that the tomb still, through its quadrilateral shape, was meant sympathetically to escort magically the deceased's spirit to heaven above, just as it had all along, from probably Neolithic but certainly Shang times and on. Consequently, the development of these tombs does not, as von Falkenhausen considers, constitute a revolutionary change in Chinese religious practices or beliefs. It is a simple parallel extension of the same belief system that had existed among elites

⁷ von Falkenhausen (2006): 302–04, 312–16.

from likely no later than the 3rd, 4th, or even the 5th millennium BC, whereby the wealthy and privileged provided themselves with quadrilaterally shaped burial chambers populated with ritual and diurnal goods in order to send their spirits off to heaven's quadrilateral abode of the dead and supply their ritual and living needs there.

And as for the increased substitution of lesser-quality *mingqi* for higher-quality goods in graves of c. 700–500 BC and on, as we reviewed already in Chapters 1 and 2 of this volume, the increasing use of this inherited Neolithic practice in this period reflects considerations of simple economics, or the conservation of resources in one area, here being goods to be employed in the immaterial world of the deceased, to enable increased investment elsewhere — the elsewhere in this period being military, infrastructural, and administrative spending, and grandiose propagandistic ritual displays of legitimacy, strength, and wealth. Even the high elites' increased investment in their personal grandiose tomb structures, evidenced in the visibly ever more imposing architecture (e.g. the pyramidal multiple tomb and temple complex of King Cuo of Zhongshan, c. 300 BC), reflects not merely a wish to send oneself off with greater riches to a well endowed life in the world of the deceased, but also a need to propagandize one's population with the magnificence of the royal household and personage, with the purpose ultimately of maintaining control of and gathering more resources from the state's populace. Thus there is absolutely no cause to interpolate into the developments in mortuary practices of c. the 6th–5th century BC a significant transformation of the fundamental Chinese religious / belief system, a system that appears to have remained quite consistent from Neolithic times and on. In consequence, there is neither any cause to consider the nouveaux quadrilaterally shaped, i.e., pyramidal and/or catacomb, tombs to represent the earth. They remain targeted at the heavenly realm of the dead.

Further evidence from the Warring States period bears witness that at this time, c. 400–300 BC, in more popular traditions the square did not yet represent earth at all but rather continued to describe the power of heaven directly. From the pictorial and textual evidence supplied by the Chu Silk Manuscript (CSM) we know that both the old concept of a square center of heaven and a newer cosmographic conception of the entire internal extent of the heavens as being square were current in the 4th century BC in the popular imagination, when the

manuscript was buried. While the square form of the manuscript has been interpreted recently to represent the square earth,⁸ from not only the context of the present study but also the manuscript itself it is very clear that the overall square shape of the manuscript represents the heavens. (Chapter 3, **Figure 8**) The CSM then manifests in the context of popular religious tradition in Chu an intermediate stage in the diffusion of the power of the square heavenly center to encompass the greater heavens, or sky, but before the symbolism of the square had been applied to the earth.

As we noted in Chapter 3, the CSM is a hemerological almanac divided along its square perimeter into twelve sections, three to a side, corresponding to the twelve months of a year and the four seasons.⁹ A spirit is painted for each month along the perimeter, and propitious and unpropitious events are described for each month in a short text that accompanies each spirit's portrait. These twelve spirits dominate temporally during a month of a given year *and*, we must recall, also spatially over a given region, since the CSM is a temporal-spatial calendar.

In the center of the CSM are two rectangularly arranged texts that together both form a square and describe a cosmogony. The contents of these texts we have reviewed above in Chapter 3. Suffice it to say here that the cosmogony described in these texts represents a corporate Di's creation of heaven, heaven's subsequent creation of heavenly spirits, and the activities of these heavenly spirits, all prior to the creation of the sun, moon, or earth. In other words, spirits are heavenly, not earthly, things. While the square textual center of the CSM, apparently following ancient precedent and unbroken inherited tradition in Chu, obviously models the old quadrilateral home of Ding, the center of Di, at the northern celestial pole, the square perimeter likewise models the abode of the spirits, which is the greater heavens, or the sky.

⁸ Mark Edward Lewis, *The Construction of Space in Early China* (Albany: State University of New York Press, 2006): 261–262, 273, 277, and 280.

⁹ For independent reconstructions of the text of the CSM and illustrations showing its original state, see Li Ling (1985) and Noel Barnard (1973). For a brief discussion and a photographic reproduction of the CSM, see Harper (1999): 845–847; but for further treatment of the contents of the manuscript portion of the CSM, see also above, this volume, Chapter 3.

The Shift in the Square's Heavenly Symbolism in the Middle to Late Zhou

The eventual shift in the square's associated geography from heaven to earth may have begun or been assisted by the intellectual tradition that Confucius embraced or created, in which the square became symbolic of teachings sourcing in and centering on human, whether social or religious, ritual. In Chapter 3 we analyzed the relationship between the ritualistically originating program that Confucius taught, the square shape, and the movement, in Confucius' teachings, of heaven into the human breast. The square, then, came to symbolize the heavenly power within human beings. This removal of square heaven from its erstwhile locus in the sky, which was possible only following a centuries-long process of dissolution of the old Zhou political religion of the royal and ancestral center focused on the quadrilateral formerly located in the northern celestial pole, in essence may have begun the process of dragging heaven, or at least the power of heaven's magic, down to earth.

Emblematic of the changes that Confucius reflected in the traditions associated with the square are pictorial representations appearing on first bronzes and then lacquerware during the early Warring States period. In Chapter 1 we reviewed how real changes in the socio-political and religious circumstances at the courts of the Zhou center and its attendant states likely were reflected in bronze art. We noted that beginning about 950 BC, as the power of the Zhou center seems to have waned drastically, the Taotie motif that had graced the rectangular spaces circumscribing ritual bronzes was replaced increasingly by mostly depictions of birds and dragons. After c. 850 BC these motifs in turn gradually gave way to monotonously repeated and seemingly intellectually neutral geometric patterns. In many other cases, particularly after 771 BC, the rectangular space on the sides of bronzes was left vacant. Still later, in the Spring and Autumn and early Warring States periods, the space was filled with complex curvilinear interlacery.

But beginning in the 5th century BC, Wu Hung has noticed, there occurred first on bronzes and then lacquer pieces a noticeable trend to fill the horizontal circumferential band or

bands of ritual and burial pieces with scenes of human ritual activity.¹⁰ We note again that, of course, this band had once again been broken into discrete rectangular sections. On one specimen the weight of the religiously potent quadrilateral context for the ritual scene is magnified with the appearance centrally of an additional square frame in which a formal ritual is being carried out.¹¹ **(Figure 2)** On another item, a painted lacquer duck-shaped box recovered from the tomb of Marquis Yi of Zeng (433 BC), a square appears on each of the two long sides of the three-dimensional box in which a dance and a musical performance — both being human religious ritual activities — are portrayed.¹² **(Figure 3)** On yet another item, a human ritual narrative is portrayed through several discrete square frames into which the horizontal circumferential band has been segmented.¹³ **(Figure 4)**

¹⁰ Wu Hung (1999): 700–706.

¹¹ Charles D. Weber, *Chinese Pictorial Bronze Vessels of the Late Chou Period* (Ascona: Aribus Asiae, 1968): Figure 25; cited and shown in Wu Hung (1999): 702–706.

¹² Hubei shen bowuguan, eds., *Zeng Hou Yi Mu 曾侯乙墓*, 2 vols. (Beijing: Wenwu, 1989): vol. 1, Figure 224; cited and shown in Wu Hung (1999): 671.

¹³ Wen Fong, *The Great Bronze Age of China* (New York: Metropolitan Museum of Art, 1980): Figure 107; cited and shown in Wu Hung (1999): 704.

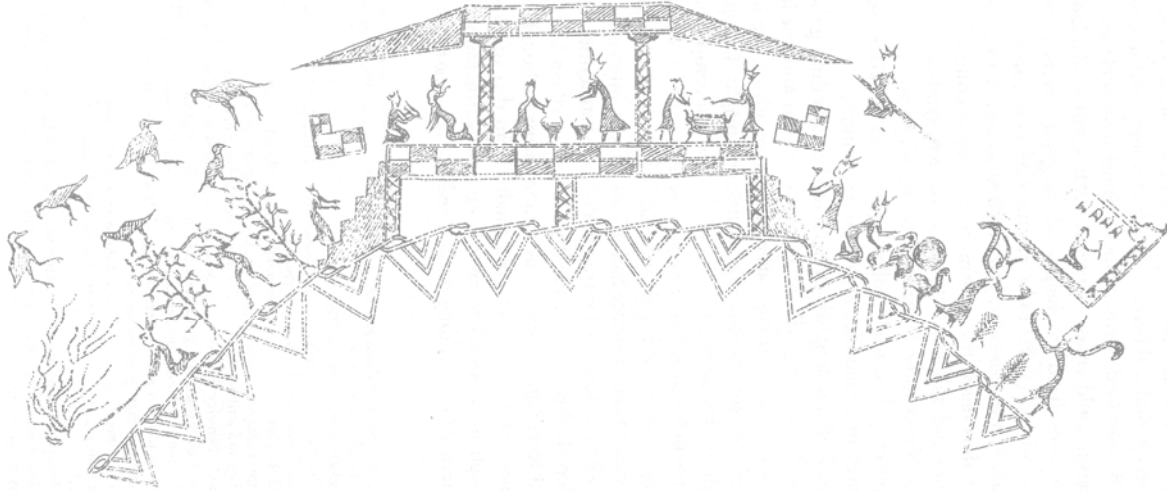


Figure 2. Ritual scene centered on a tai 臺 platform, depicted on an early-Warring States (5th century BC) bronze vessel. From Charles D. Weber, *Chinese Pictorial Bronze Vessels of the Late Chou Period* (Ascona: Aribus Asiae, 1968): Figure 25.

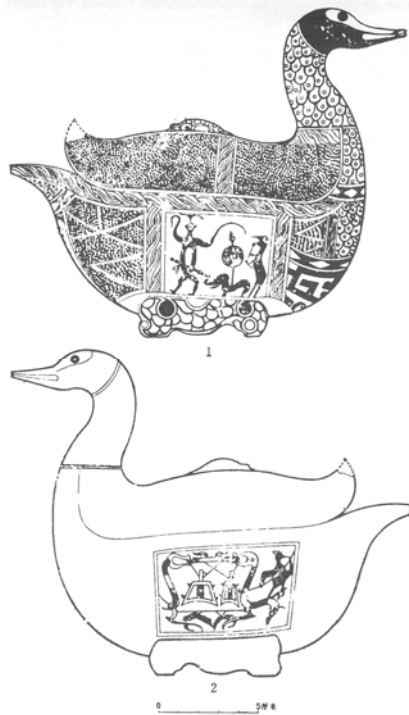


Figure 3. Late-4th century BC duck-shaped lacquer box with ritual scene framed within a rectangle. From Hubei sheng bowuguan, eds., *Zeng Hou Yi Mu 曾侯乙墓*, 2 vols. (Beijing: Wenwu, 1989): vol. 1, Figure 224.

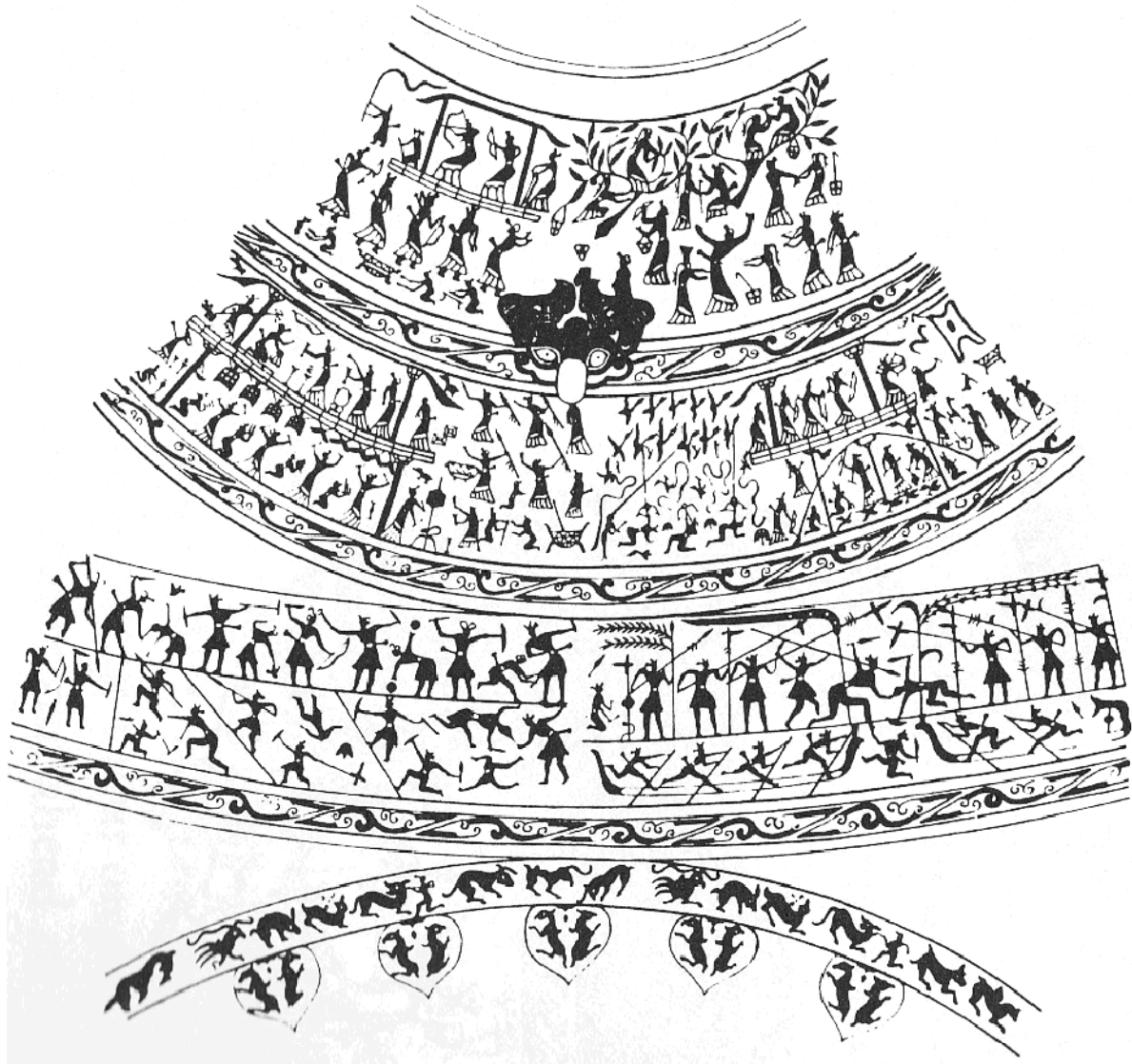


Figure 4. Rubbings from a bronze vessel showing ritual and other human-centered scenes demarcated as quadrangular spaces. From Wen Fong, The Great Bronze Age of China (New York: Metropolitan Museum of Art, 1980): Figure 107.

It thus seems that after a period of many centuries of indecision in ritual art regarding the meaning of the square, by the 5th century BC a consensus among at least some that proffered a relinking between the inherited power of the heaven-associated quadrilateral and specifically sacred human ritual activity was achieved, but now, while the quadrilateral continued to provide the communication to human beings of heavenly potency, the critical linkage of communication

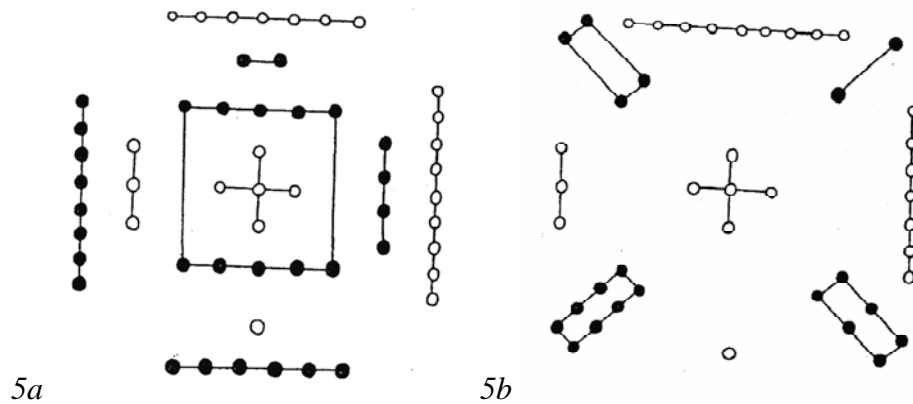
between heaven and humanity was no longer mediated by some heavenly ancestral spirit residing in the apex of heaven and represented prominently in the rectangular ritual space of the ritual piece, but rather directly by humanity itself through the enactment of human, mostly *social* but still sacred, ritual. Such a direct, unmediated ritual human linkage with heaven in the context of the square is precisely what we witnessed of Confucius' program of human self-attainment or -perfection of the potency originally endowed by heaven.

Squares and Circles in Warring States and Early Han Cosmographical Schema

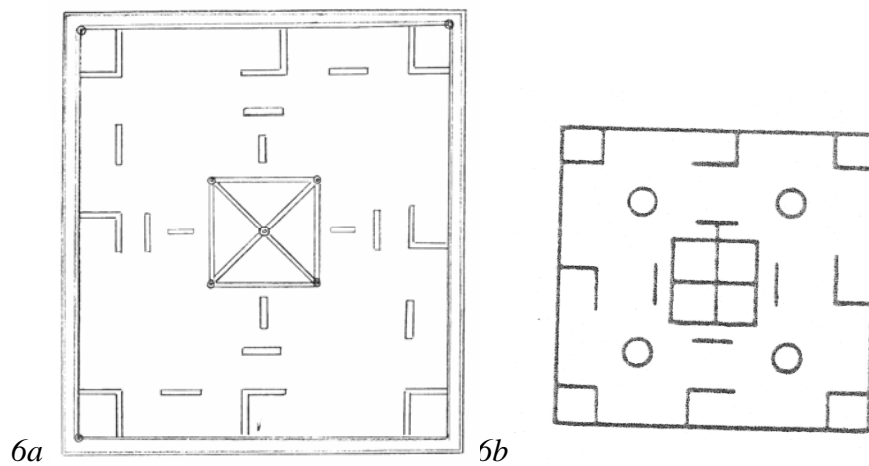
Since no later than the 1920s scholars worldwide have noticed and theorized about the meanings of squares and circles in Chinese history, and particularly with reference to the proliferative square and square-and-circle designs that began to appear during the Warring States and especially the Han periods. These designs and artifacts include the magic squares of the *Luo shu* (Luo River Chart) and *He Tu* (Yellow River Chart), square *liubo* game boards, square-and-circular diviners' cosmic boards (*shi*), and circular lodge dials, so-called TLV mirrors, and gnomon chronometers (loosely, sundials).¹⁴ (Figures 5ab, 6ab, 7, 8, 9, and 10) More recently recovered evidence has demonstrated that the square and square-and-circle motifs that relate directly to *shi* and *liubo* boards, TLV mirrors, Han-period chronometers, and the later (Song period and later) magic squares date to as early as the 5th century BC.¹⁵

¹⁴ Recognizing from earlier scholars' work the importance of the square motif in early-imperial Chinese iconography, Joseph Needham and Wang Ling (eds., *Science and Civilisation in China, Volume 3, Mathematics and the Sciences of the Heavens and the Earth* [Cambridge, England: Cambridge University Press, 1959]: 55–62, 304) collected, published together, and analyzed depictions of a number of such items.

¹⁵ See Donald Harper, "Warring States Natural Philosophy and Occult Thought," in Loewe and Shaughnessy (1999): 833–52. See further Marc Kalinowski, "The *Xingde* Texts from Mawangdui," tr. by Phyllis Brooks, in *Early China* 23–24 (1998–99): 138–145. On Warring States mirrors that also embody the square-in-circle motif (as well as many that do not), see Wu Hung (1999): 694–7 (illustrations on p. 695–6). For TLV mirrors see also Michael N. Loewe, *Ways to Paradise. The Chinese Quest for Immortality* (London: Greg Allen & Unwin, 1979): 60–85. For reproductions of many square-in-circle TLV, *shi*, and other designs dating to the Warring States

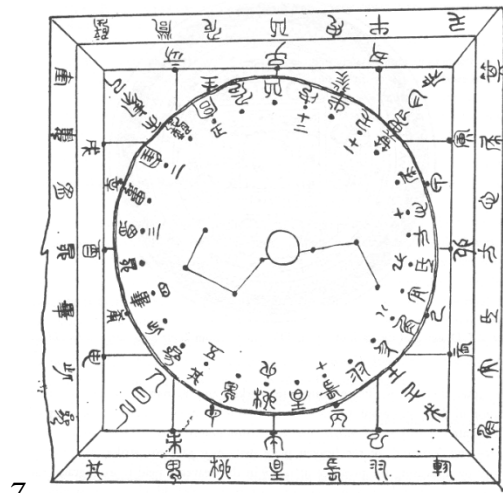


Figures 5ab. Hetu (5a) and Luoshu (5b) magic squares, which date to only as late as the Song period. From Needham and Wang (1959): 57.

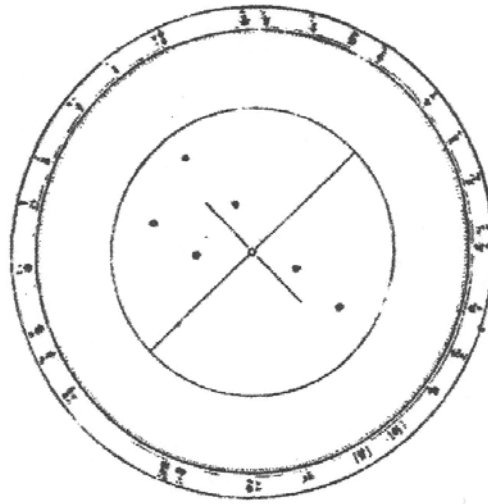


Figures 6ab. Liubo boards. 6a shows the structure of an elaborate late-4th century BC board (Rawson [1996]: 161). 6b is a rubbing from the Wuliang shrine, 2nd century AD (Needham and Wang [1959]: 304).

and Han see also now Lillian Lan-ying Tseng, "Representation and Appropriation: Rethinking the TLV Mirror in Han China," *Early China* 29 (2004): 163–215. For another example of a distinctive 5th century BC square-in-circle design, see Lewis (2006): 261.



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Figures 7 & 8. Shi cosmic board (Figure 6) and lodge dial (Figure 7). From Yan Dunjie (1978): 340.



Figure 9. Han-period TLV mirror. From Needham & Wang (1959): 304f.

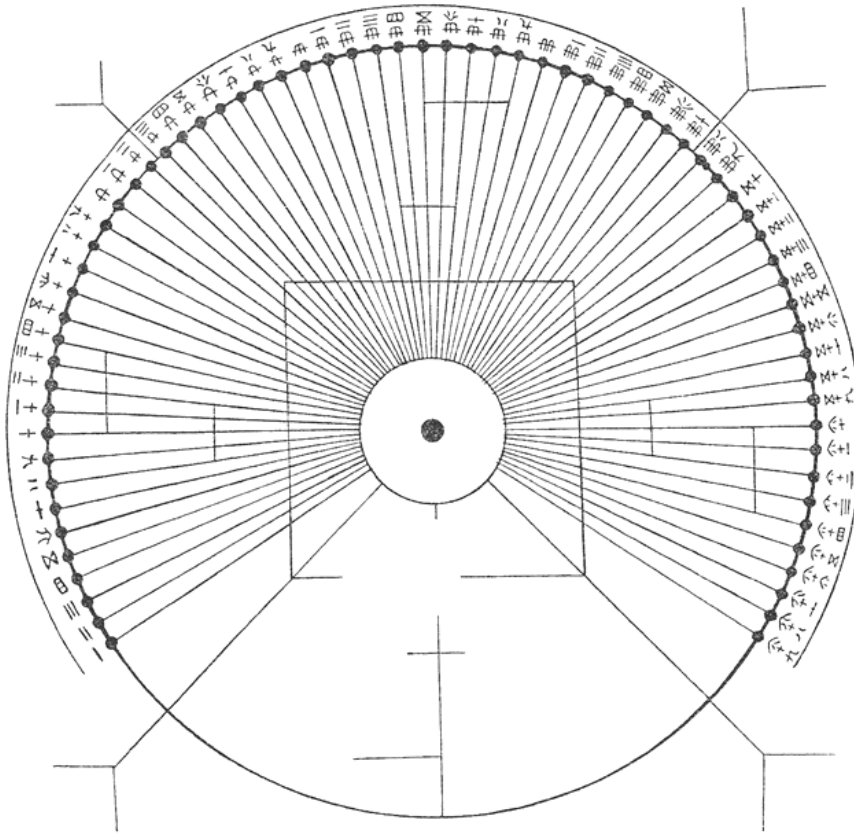


Figure 10. Han-period gnomon chronometer. From Yetts (1939): 155.

Most scholars contributing to the decades-long consideration of the designs have recognized that for Chinese of the Warring States and Han periods the square in particular represented mandalically a very powerful magico-religious cosmological force or power, and this certainly is the case. At the same time, however, almost universally modern commentators have followed inherited Chinese assumptions to interpret the square in these designs to represent the earth. The TLV mirrors, being more numerous and thus more accessible artifacts than any of the *liubo* and *shi* boards and sundials, have attracted particularly close scrutiny for nearly a century. Their central squares almost invariably have been interpreted to represent the square earth.¹⁶

¹⁶ For the earliest and most influential of the post-War studies of ancient and later Chinese symbolism, including that of the circle and square, see Shuyler Cammann's work of the late 1940s and 1950s, such as, "The 'TLV' Pattern on Cosmic Mirrors of the Han Dynasty," in *Journal of the American Oriental Society* 68:4 (1948): 159–167, and "Types of Symbols in Chinese Art," in Arthur F. Wright, ed., *Studies in Chinese Thought* (Chicago

Others have studied the TLV mirrors in tandem with *shi* and *liubo* boards, along with related cosmologically significant texts and artifacts of the late-Warring States and Han periods, and have concluded that all such squares represent the earth.¹⁷ Even the Ts, Ls, and Vs have been, in tandem with the conclusion that the central square of the mirrors and the squares found in the designs of *liubo* and *shi* boards represent the earth, interpreted to be angles residual of an ancient nine-square square-earth scheme.¹⁸ I find it difficult to accept that, in an ancient Chinese civilization that located the source of universal power and the seats of its high gods in the heavens above, the earth would have been considered to possess the greatest magico-religious or talismanic power that one could harness through sympathetic pictorial or physical representation.

The irony in this history of 20th-century interpretation of the square form in the related *shi*, *liubo*, TLV, and sundial designs is that, writing in the 1930s, W. Percival Yetts, among the first to systematically analyze in English the overall and component meanings of these artifacts, recognized in them not primarily an earthly but foremost a heavenly symbolism. He considered the overall mirror design to represent heaven and its component Ts, Ls, and Vs to signify both ancient measurement formalizations and, more symbolically, constellations; the central boss or knob of the mirror he judged represented most emphatically the northern celestial pole and only secondarily the corresponding central locus of the humanized earth. Yetts further connected the

and London: The University of Chicago Press, 1953): 195–231. In both articles Cammann, despite making pathbreaking connections between the various square-and-circle forms dating to particularly the early-imperial period, unequivocally identifies the square in ancient Chinese symbolism to represent the earth, and his views have been highly influential. See also Michael Loewe's review (1979: 71–75) of 20th-century interpretations of the TLV mirror designs and their compositional elements, including those offered by Walter Percival Yetts, Schuyler Cammann, A. Bulling, and Sidney N. Kaplan.

¹⁷ See, for instance, Hayashi Minao 林巳奈夫, "Kandai no zuhyô ni san ni tsuite" 漢代の圖柄に三について in *Tôhô gakuhô* 東方學報 44 (1973): 1–63; Loewe (1979): 83; and John S. Major, "The Five Phases, Magic Squares, and Schematic Cosmography," in Henry Rosemont, Jr., ed., *Explorations in Early Chinese Cosmology* (*Journal of the American Academy of Religious Studies* L:2; Chico: Scholars Press, 1979): 133–167, and on TLV mirrors particularly p. 155–159. The most recent contributor to the discussion dedicated to the interpretation of specifically these types of artifacts is Lillian Lan-ying Tseng. She has followed unreflexively the square-earth interpretation of the square found in TLV mirrors and *liubo* and *shi* boards (2004: 163–215).

¹⁸ Major (1979): 155–9.

TLV designs to *liubo* game and gnomon chronometer boards.¹⁹ He understood already that the mirrors in particular were designed to bring the bearer good fortune and that for this reason they often were buried with the deceased.²⁰ Considered later to be respectable but uninformed and archaic, his interpretations in fact are at least closer on target than those of virtually all who have followed. While he made mention of the fact that Chinese tradition identified the square in the centers of particularly the TLV mirrors to represent earth, he intimated that he did not follow this view, for in his review of the related "sundials" (gnomon chronometer boards) he distinctly identified the square to have originated with the physical stretching of an ox hide over a stone base, from which the chronometer was then created. That is, according to Yetts, the square resulted from the practical implementation of an apparatus used to measure *the heavens*, and not at all the earth.²¹

Beyond consideration of the various square-and-circle designs found on Warring States and Han artifacts, virtually all square figures occurring in any ancient Chinese artifacts and designs have been interpreted in an earth-bound manner. For instance, as we have seen in Volume I, Chapter 4, Paul Wheatley, while recognizing the central religiously potent significance of the square shape, assumed that the consciously designed quadrilateral form of the Asian city and *omphalos* derived from a measurement of the four cardinal directions of the earth. Most recently Mark Edward Lewis has revisited the designs of the square gracing all of the aforementioned types of objects of the Warring States and early-Han periods, adding reviews of scholars' attempts in recent decades to understand the nature and power of the square design. His evidence and discussion essentially update Needham and Wang's and Wheatley's studies of ancient Chinese items and structures revealing a square design, including the TLV mirrors and

¹⁹ W. Percival Yetts, *The Cull Chinese Bronzes* (London: University of London, Courtauld Institute of Art, 1939): 116–165; see particularly p. 164–5 for Yetts's conclusion.

²⁰ Yetts (1939): 120.

²¹ See Yetts (1939): 120, where he mentions the traditional Chinese interpretation of the square to represent the earth), and 149–165, where he builds his argument for the square's having resulted from stretching a hide that would be employed to measure the movements of heavenly bodies.

the ancient Chinese city, with more recently uncovered artifacts and scholars' interpretations of them. Lewis has further traced the development of the city as a political and religious — and thus also magical — center during the Warring States, Qin, and Han periods. Echoing Needham and Wang again, as well as John Major, Lewis also cited the classical Chinese idealized topographies of the earth that are universally believed to represent earth to be organized as concentric squares, center to periphery, to support the idea that all of the square designs denote a square earth. He further linked up the square-earth thesis and motif with the physically square arrangement of text in written works such as the Warring States or Han-period "Xuangong" (Dark Palace) section of the *Guanzi*, as that section was reconstructed spatially by Guo Moruo, and the *Chu Silk Manuscript*, the latter of which we already have discussed in this regard above.

Like Needham/Wang and many others, Lewis recognized the calendrical and thus also thaumaturgical significance of such squares, and he further reasoned along with most commentators since the 1920s that the source of the power of the square had something to do with the cosmos. However, along with virtually all other premodern and modern interpreters he did not seek the precise source of the square's real significance, and neither then did he seek the model form of the quadrilateral in the heavens itself. Thus, and in this perhaps he followed Wheatley specifically, he saw the power of the square as emerging from the ordering of the human environment on earth according to the earth-centered cardinal directions rather than from the heavens themselves.²² In fact, much of the evidence that he adduced to substantiate a square-earth cosmographic thesis for pre-Han and even Han times supports not a square-earth but rather a square-heaven cosmography for the pre-Han period. In the case of the CSM, we have seen this already. Other evidence we will review in subsequent sections of this and the following chapters.

Perhaps inspired in part by Needham and Wang's and Wheatley's work, as we know Sarah Allan even theorized that the square-earth theory could be assigned backward to the 2nd millennium BC. But as we are aware from the evidence presented in this study thus far, a square-earth geography, at least if imposed on periods prior to the Latter Han, does not reflect actual contemporary evidence. Furthermore, assigning to the earth the possession of power sufficient to

²² Lewis (2006): 135–188; 245–310.

overshadow the powers of the heavens simply overstates the earth's status in ancient and classical, pre-Han and Han, Chinese religious thinking.

The critical problem in studies of circles and squares and their relationship with developing ancient and early imperial Chinese cosmographies is in the basic presumption that the square always automatically represented the earth.²³ This has led to a secondary problem, the automatic linking of various elements of circle, square, and circle-and-square designs across types of artifacts and media either belonging to distinct eras or traditions or intended for dissimilar uses. While such linking has been a necessary step in the decipherment of the meaning of circles and squares in the evolution of Chinese thought and symbolic representation, it has helped to sustain this misconception that the ancient Chinese forever considered the earth to be square in shape, and this in turn has caused the original and forever-inherent heavenly power of the square shape and symbol to have been buried... in the earth.

Yetts was perhaps the first to link the designs on TLV mirrors with those on *liubo* and *shi* boards as well as particularly *gui* 晷 gnomon chronometers. Also in the 1930s Sydney Kaplan identified the Ts, Ls, and Vs with similar marks on the *shi* boards.²⁴ Hayashi Minao then traced these marks to statements made in the "Heavenly Patterns" third chapter of the *Huainanzi* (*HNZ*), completed in 139 BC. *HNZ* 3 describes two cords and four hooks that, respectively, crisscross the heavens from its edges at the cardinal points and at the inter-cardinal corners to batten down the edges of the heavenly canopy, all apparently imagined to prevent heaven from breaking apart:

From *zi* (north) to *wu* (south) and from *mao* (east) to *you* (west) are the two cords; from *chou* (north northeast) to *yin* (east northeast), from *chen* (east southeast) to *si* (south southeast), from *wei* (south southwest) to *shen* (west

²³ In very elegant words Shuyler Cammann very emphatically warned against simply following later Chinese ratiocinations to explain the original meanings of ancient designs and symbols. See Cammann (1953): 195–6.

²⁴ Sidney M. Kaplan, "On the Origin of the TLV Mirror," in *Revue des Arts Asiatiques XI* (1937): 21–4.

southwest), and from *xu* (west northwest) to *hai* (north northwest) are the four hooks.²⁵

Hayashi identified the angular forms on TLV mirrors, *shi* boards, and other Warring States-Han pictorial artifacts with these textually described cords and hooks.²⁶ In reality, a Chinese scholar named Liu Fu had in the 19th century identified the Ts, Ls, and Vs with this passage in the *HNZ*, and Yetts reviewed and accepted this identification, if only perfunctorily, to support his own thesis that the cords and hooks represented in real-time and real-space the hooks and cords that stretched and held an ox skin, on which the heavenly patterns were drawn, to the base stone that served as a foundation for the gnomon chronometer apparatus.²⁷ Loewe,²⁸ then Major,²⁹ and since then many others have followed Hayashi's interpretation (based on the work of Liu Fu that was brought to light by Yetts). Loewe further went so far as to identify the TLV mirror as a simplified or modeled mandalic representation of one auspicious moment frozen in a particular manipulation of specifically a *shi* board.³⁰ In all cases other than in Yetts's review, the square has been either explicitly or implicitly identified to represent the earth.

The general assumption, then, is that any and all angular or linear marks appearing on any circular or square-and-circular design dating to the Han period or before conform unquestioningly to the *HNZ*'s interpretation of these forms that dates to as late as 139 BC. But these forms, while mostly related, are not necessarily the same, and we should not assume that before or after the *HNZ* authors offered their cord-hook scheme the angular designs we find on

²⁵ *HNZ* 3 (Zhang Shuangdi 張雙棣, ed., *Huainanzi Jiaoshi* 淮南子校釋 [Beijing: Beijing daxue chubanshe, 1997]: 295).

²⁶ Hayashi (1973): 1–63.

²⁷ Yetts (1939): 154–165.

²⁸ Loewe (1979): 77, 80–83.

²⁹ Major (1993): 32–43.

³⁰ Loewe (1979): 75, 81.

Warring States and Han artifacts necessarily denoted the cords and hooks mentioned in the idealized description of the heavens in *HNZ* 3. After all, *HNZ* 3 does not attempt to identify its cords and hooks with any pictorial artifact. If we rather consider the historical development of the designs amid the context of their actual uses and purposes, we will find that the *HNZ*'s description of cords and hooks at best describes a newly stretched metaphorical interpretation of the angular forms found on these varied media. In fact, the angles, lines, and squared corners found on all of these related pictorial media dating to the classical and early-imperial periods all derive from and are remnants of the heavenly square itself.

An opportunity to identify more accurately the symbolic meaning of the component angles of the various square-and-circle designs arose with the publication in the 1980s and 1990s of three new inscriptions found on the perimeters of Han TLV mirrors. Each of the three inscriptions relates the mirror's design with specifically the *liubo* or *bo* arrangement.³¹ On the basis of these inscriptions, Lillian Lan-ying Tseng has taken Loewe mildly to task for his identification of the TLV mirror as a simplified mandala that recreates an auspicious moment identified using a *shi* board. The inscriptions surely do evince clearly that the TLV mirror design originates not in particular the *shi* but rather the *liubo* or *bo* vintage of the motif. But even without the inscriptions this seems readily apparent visually. We take note below of the ways in which the geometry of the TLV mirrors reflects much more closely and directly a heritage in the *bo* tradition.

First and most obvious, but so far overlooked in studies of these designs, is the fact that the TLV mirrors, *bo*-type boards, and some gnomon chronometers share the critical geometry of a square occurring in the center of the design. On *shi* boards and some chronometers the central square has been replaced by a circle whose center is occupied by the Dipper — and whose

³¹ (1) Nishida Morio 西田守夫, "Hôkaku kiku kyô no zumon no keifu: kokurô hakugyoku kyo fuyô no meibun motsu kyô ni tsuite" 方格規矩鏡の圖紋の系譜：刻婁博局去不羊の銘文もつ鏡について, in *Museum* 427 (1986): 28–34; Tseng (2004): 167, 184; (2) Zhou Zheng 周錚, "Gui jing yinggai cheng boju jing" 規矩鏡應改稱博局鏡, in *Kaogu* 1987.12: 1116–8; and (3) *Yinwan Hanmu jiandu* 尹灣漢墓簡牘, ed. Lianyungang shi bowuguan 連雲港市博物館, Zhongguo shehui kexue yuan jianbo yanjiu zhongxin 中國社會科學院簡帛研究中心, Donghai xian bowuguan 東海縣博物館, and Zhongguo wenwu yanjiusuo 中國文物研究所 (Beijing: Zhonghua, 1997): 171; all cited in Tseng (2004): 167–169.

absolute center is located at or immediately proximate to the star Alioth that helps to comprise the Dipper's handle. At the same time, the *shi* shares with the geometry of the *bo* board a square perimeter. Another point of similarity between the TLV and *bo* versions of the design, and one that has long been recognized, is the common occurrence of the Ts, Ls, and Vs in the intermediate space between the central square and the object's perimeter.

To Tseng the virtual identity of the TLV motif on the mirrors and *bo*-type artifacts is fundamental in identifying their more directly related origins. She has analyzed a Han-period *liubo*-related, or what should be understood as simply a *bo*, divination board unearthed in 1993 from a tomb at Yinwan, Jiangsu. (**Figure 11**)

The Yinwan divination board is square and covered with not only the Ts, Ls, and Vs in the same positions as on TLV mirrors but also angular lines emanating from the four corners of a large square set centrally in the board that connect the square's corners with the Vs in the inter-cardinal square corners of the perimeter of the board (the top of the board is labeled "South" *nanfang* 南方, obviating that the four sides of the board represent the four directions in space and thus also that the four corners denote the inter-cardinal directions). Along each length of linear space defined by the lines of the Ts, Ls, Vs, and the diagonals connecting the four perimeter corners with the four corners of the internal central square are brushed the sixty chronograms (binomial values of the sexagenary numbering system using the ten heavenly stems and twelve earthly branches).

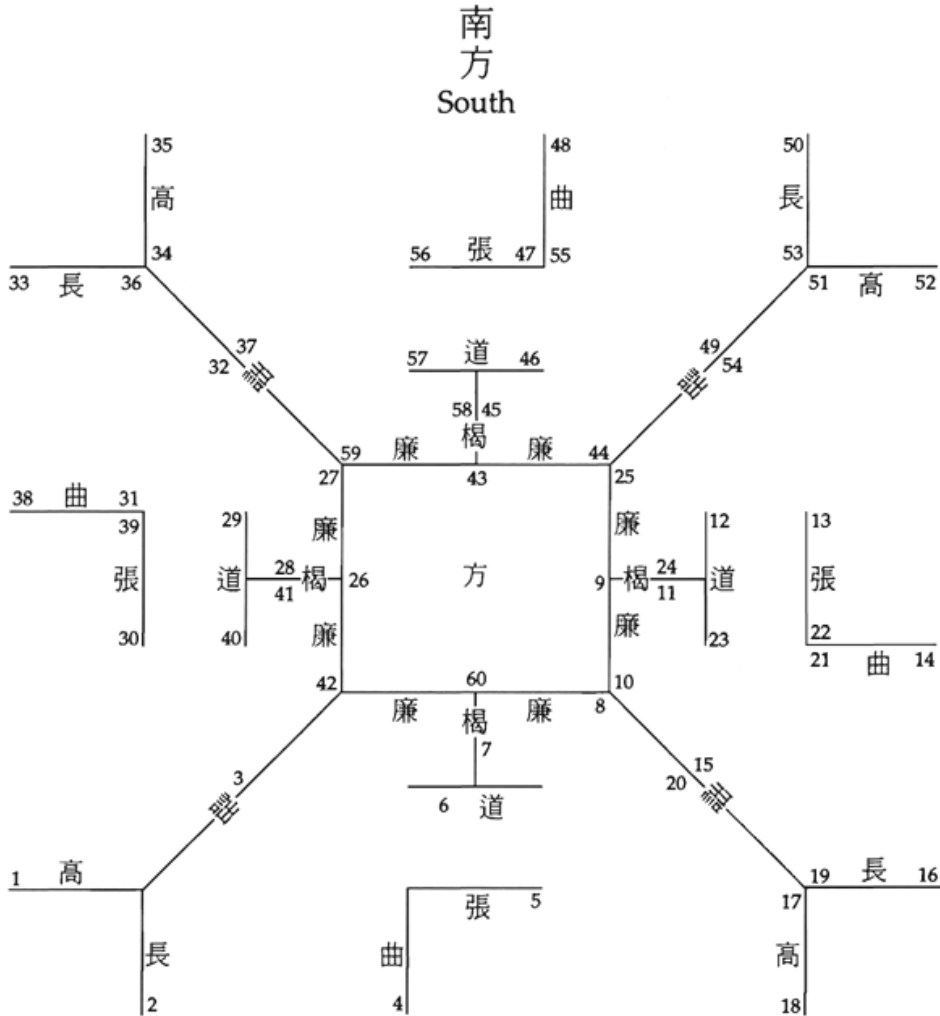


Figure 11. Diagram drawn from the Yinwan bo board. From Tseng (2004): 182.

In the center of the central square is brushed the character *fang* 方, “square.” Each chronogram represents one day among sixty plotted positionally in space along the lines traversing the board between the central and perimeter squares. From oracular prognostications relating to marriage, travel, imprisonment, and absconding that accompany the divining board it is known that the board’s intent was to provide hemerological guidance in selecting appropriate days on which to undertake action relative to these four types of activities or events. The key to using the board to divine such days is in the nine board-positioning terms under which individual prognostications relative to the four types of activities are listed. The problem in decoding the board’s actual usage has been that among these nine positions, which should be represented on the board itself,

only one, *fang*, was identified. The other eight are only listed in the prognosticatory text accompanying the board.

Faced with this conundrum, Lillian Tseng, on the basis of earlier attempts by Yang Lien-sheng and Lao Gan to decipher the nine *liubo* playing positions as identified in a 2nd century AD poem by Xu Bochang (the game otherwise has been largely opaque to anyone after about the Tang period), has decoded the Yinwan board at least theoretically by placing the nine positions identified in the prognostication section of the Yinwan board on the divination board itself, which enables at least a sense of how the board was employed: on the board one located the chronogram of the day in question; that chronogram, occurring in a given sector of the board identified also by one among the nine position terms, was then represented by the position term; turning to the prognostication text, one matched up the position term, found at the tops of nine vertical columns, with specific oracular text written under them relating to the four types of activities that are identified in four horizontal rows stacked beneath the position terms. In this way one gained oracular advice pertaining to action involving issues of marriage, travel, imprisonment, or absconding that one should or should not undertake on this day.³² In sum, the purpose of the board was to divine heaven's will.

After Yetts, Needham and Wang early on recognized the divinatory nature of all of these designs.³³ Marc Kalinowski has also emphasized their divinatory function, including specifically that of the Yinwan *bo* board. He further divined the similarity of the TLV designs in *bo* and mirror contexts, differentiating them from the "cord-hook" pattern that he has seen on other artifacts, including *shi* boards.³⁴ But while as we have seen in Tseng's work, and can readily appreciate when viewing mirrors and *bo* boards side-by-side, that the *bo* and mirror motif are quite obviously most closely related, really the *bo*/mirror and cord-hook motifs are mere slight

³² See Tseng (2004): 169–186.

³³ See Needham and Wang (1959: 304), where in captions under illustrations of the *bo* / TLV designs the authors describe each as a "Board for divination or the *liu-po* game..."

³⁴ Kalinowski (1999): 135–145.

variations on a single theme: they share the Vs in the four inter-cardinal corners of the perimeter square, and the Ts emerging from the cardinal sides of the central square along with the Ls placed in the middle inside of the cardinal lengths of the perimeter square (directly opposing the Ts of the central square) have been replaced with two cardinally oriented lines that form a simple cross intersecting in the center of the motif. In addition, in typical cord-hook forms of the Han period, the intersection of the perpendicular cardinally oriented lines has replaced the square in the center of the *bo* / TLV design. But as Kalinowski remarked perceptively, "What is clear is that they all were part of very ancient and widespread cosmological representations that were progressively refined and adapted to different uses."³⁵ What is also clear is that the *bo* / TLV/ cord-hook designs represent directly the heavens. That even in the quite late Han-period *HNZ* conception of the design the cord-hook weft strings are heavenly, and not earthly, is evident particularly in *HNZ* 3: "Heavenly Di (Tian Di) stretches out over the four weft-cords of Heaven and employs the Dipper to revolve through them."³⁶

Kalinowski suggested that the cord-hook design³⁷ appears to predate the TLV designs,³⁷ but the illustrations that he identified as cord-hook motifs and which he adduced to demonstrate that particular motif's primacy do not show this. While they are indeed the earliest known examples of any of these *bo* / TLV and cord-hook designs, they demonstrate rather a combination of elements of both styles, evincing that each style probably evolved independently from the basis of the patterns shown in these earlier, more roughly conceived, square-and-line designs.

The earliest of these ancestral combined motifs appears repeatedly on the sides of a chest found in the tomb of Marquis Yi of Zeng (c. 433 BC), which tomb, as we have seen previously, otherwise contained items, including the lacquer clothes box, that broadcast astrologically significant designs. (**Figure 12a**)

³⁵ Kalinowski (1999): 143.

³⁶ *HNZ* 3:340.

³⁷ Kalinowski (1999): 144–5.

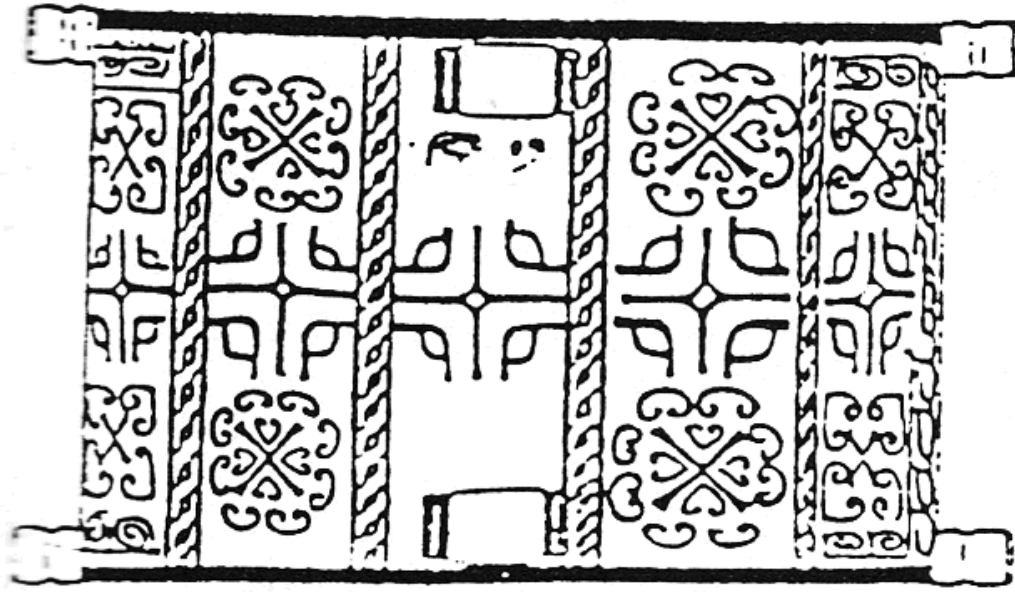


Figure 12a. Designs on a chest cover unearthed from the tomb of Marquis Yi of Zeng, c. 433 BC.
From Kalinowski (1999): 141.

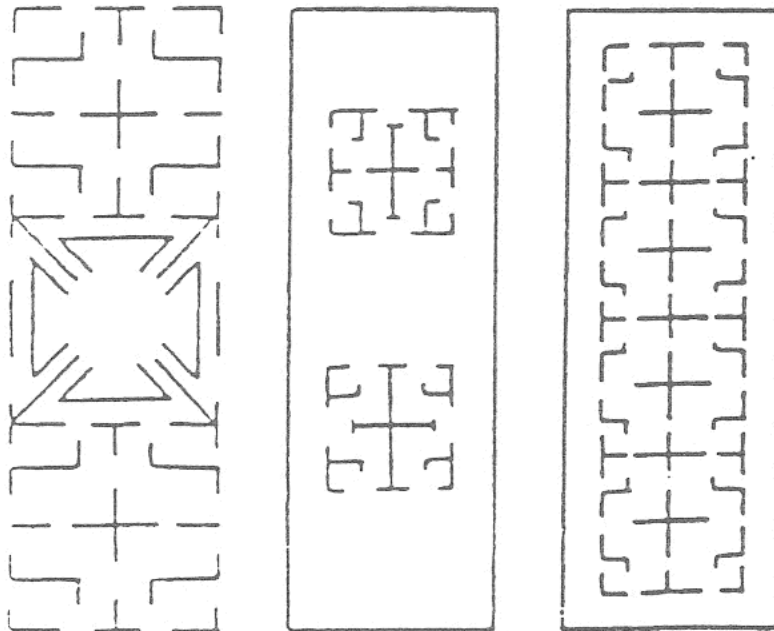


Figure 12b. Designs appearing on the insides of Warring States Chu kingdom coffins. From
Kalinowski (1999): 141.

The motif repeated numerous times on the box's exterior shows the corner Vs; a square in the center turned 45°; and the cardinaly oriented lines that, however, do not intersect but end at the cardinaly oriented corners of the central square.³⁸ It is, therefore, a form that combines equally elements that later both were embedded in the *bo* and cord-hook designs but also differentiated each design from the other. Fourth-century BC occurrences of very similar designs from coffins in Chu likewise display elements of each type of design (**Figure 12b**). In one instance a central square in the form of the ancient, Sinitic, *ya* character occurs amid the Vs and other perimeter lines, which evinces that this is a motif belonging to the same evolving family of *bo* / cord-hook motifs.³⁹

Now, one must note that a square design appearing on a quadrilaterally shaped object may be simply a space-filling decoration, and there is no reason that this cannot help to explain these designs. But as Donald Harper pointed out, the placement of these earliest forms of the *bo* / cord-hook motif on religiously potent mortuary objects suggests a "magico-religious, occult symbolism in the uses of the cord-hook design."⁴⁰ This is particularly apparent when we recall that the motif appears alongside additional astrologically pregnant designs appearing on other mortuary items in the tomb of Marquis Yi of Zeng, such as the heavenly map appearing on the coffin that shows a central Dipper flanked by two of the four divine beasts of the cardinal directions, the dragon and tiger, all surrounded by a ring comprised of the names of the twenty-eight celestial lodges. (Volume II, Chapter 1, **Figure 2**) And as both Harper and Kalinowski noted, the placement of the motif on boards lining the private domain of the *insides* of the 4th-century BC Chu coffins "testifies to the religious dimension attributed to these figures."⁴¹

Particularly Kalinowski's but also Harper's expatiations of the motif as it was employed functionally in the early 2nd century BC are therefore very valuable in demonstrating just what

³⁸ Kalinowski (1999): 141.

³⁹ Kalinowski (1999): 141. On the appearance of these designs in the interiors of Chu coffins see also Harper (1999): 839.

⁴⁰ Harper (1999): 839.

⁴¹ Kalinowski (1999): 142; cf. Harper (1999): 839.

this religious dimension of the *bo* / cord-hook design really was, for their groundwork established the foundation upon which Tseng was able to discern the oracular usage of the Yinwan *bo* board. In them, we can discern that the design seems to have been from its origins and on simply a temporal-spatial or calendric mapping of the heavens and their movements. We can further establish that the purpose of the design was to establish a grid for measurement of not the earth at all but the heavens and the movements of heavenly bodies through the sky, and the reason for doing this was, as we mentioned while reviewing the Yinwan *bo* board, to be able to elicit from the heavenly bodies' movements meaning for human beings' lives. We can understand that the purpose was hemerological, divinatory, and thus astrological.

Like the *bo* design, the cord-hook motif was a simple grid of the heavens. As Kalinowski and Harper showed, the functional meaning of the design can be appreciated in the context of its dominant appearance repeatedly in the early-2nd century BC *Xingde* 刑德 texts and diagrams recovered in the 1970s at Mawangdui. Its meaning in the context of its various hemerological applications here is simply in the mapping of the movements of astral spirits in many — but not all — cases associated with actual astral bodies, in annual, monthly, and diurnal cycles, for the purpose of charting auspicious and inauspicious points in time in the motive spatial universe. Correlated with cycles of sixty as represented by the chronograms created from combining the ten heavenly stems and twelve earthly branches, the grid, reproduced sixty times in a given systematic diagram to represent every one of the binomial combinations of the stems and branches (i.e., the chronograms), was used to map astro-calendrically the annual (solar) movements throughout the sky of the heavenly calendrical spirit Dayin (大陰, also Taiyin 太陰) with reference to the coterminous movements of Jupiter among the twenty-eight celestial mansions according to that planet's appearance (presumably at culmination, or meridian crossing) in certain celestial lodges at various points in its sidereal twelve-year, thirteen-month counterclockwise cycles. Again employing the sexagenary binomial system of stems and branches but also in conjunction with the Five Processes, the grid was also employed to determine unpropitious (*xing* 刑) and propitious (*de* 德) days or months for carrying out certain actions or events by tracing the movements of six *xingde* (including the spirits Xing and De) and

eight directional spirits among the nine (the central and eight directional) heavenly palaces.⁴² In the charts accompanying the *xingde* texts, one finds marks denoting the movements of Jupiter, Dayin, and *xing* and *de* on the grid of the cord-hook design, obviating that the design originally was, after all, simply a grid by which to demarcate sectors of the heavens in order in turn to locate celestial bodies and/or spirits in space and time. While by the Han the cord-hook design had jettisoned the central square in favor of a simple central crossing of cardinally oriented lines, all of (1) the earlier forms in which the central square appeared, (2) the retention of the central square in the *bo* form of the design, and (3) the corner Vs that appear in all versions of the design and which constitute a residue of an original three-by-three square grid, evince clearly that the *bo* / cord-hook design reveals itself to be, most simply, a square map of the heavens employing the residual remains of what was originally a nine-square grid. The fact that in the context of the divinatory use of the Yinwan board the sexagenary chronograms define precise points in space-time as they are revealed in the physical heavens within *nine* greater space-time sectors into which the heavens are divided only strengthens this decoding of the grid. The squares, whether central or peripheral in the nine-square grid, clearly represent sectors of heaven itself, and the overall square formed from the nine constituent squares constitutes a grid of the heavens on which the movements of astral bodies and spirits could be charted.

It is very surprising, then, that, having reviewed Kalinowski's work, Tseng, following dutifully the traditional post-Han earth-oriented interpretation of the square in Chinese cosmographic thinking, insisted emphatically that the square appearing in all of these designs represents the earth. She stated,

The TLV design and the cord-hook scheme are both meant to express the more general notion of "earthly bonds" (*diwei* 地維)... The TLV design is

⁴² Kalinowski (1998–99): 125–202; cf. Harper (1999): 831–852. For a contemporary textual description of the meanings of *xing* and *de* in the celestial context, see *HNZ* 3: 318, 373–374.

thus a composite metaphor that contains not only the layout of the square earth but also the imagery of the earthly bonds.⁴³

In identifying the *bo* / TLV linear designs with specifically earth, Tseng has first of all ignored the *HNZ*'s explicit identification of them as heavenly cords and hooks, not to mention all other evidence that shows clearly that the designs depict heavenly patterns. What's more surprising is that Tseng cited Kalinowski as her source for making each of the two statements quoted above. While Kalinowski did not explicitly identify the grid to represent the physical heavens, it is rather apparent from the nature of the use of the grid that he revealed that he must have understood it in this way, and he wrote nothing that could be construed to suggest that the grid represented the earth.

There remains the matter of the *shi* cosmographic divination board and its unique arrangement of circles, squares, branches, sometimes Five Processes and trigrams, and celestial lodges. The earliest recovered *shi* date to the first decades of the 2nd century BC, but their specific idealized cosmographic and divination scheme likely originated no later than sometime during the 3rd century BC, and conceivably earlier. As noted previously, the exterior geometry of the *shi* boards, like that of the *bo* boards, is square. However, the *bo* and *shi* differ in several ways. First, the center plate of the *shi* is round, and it spins atop the larger square bottom plate in order to aim the Dipper's arm or handle, which appears at the center of the round plate, toward any point along the interface between the two plates. The space of the square plate external to the round plate is usually divided into three concentric squares. In each square are found various sets of astro-calendrically significant terms, including the names of the twenty-eight celestial lodges placed in counterclockwise progression in the perimeter square, the characters identifying the twelve branches in the middle square, and eight of the ten stems in the inner square — sometimes accompanied by trigrams (the fifth and sixth stems were associated with the center of the circle but were not shown on the *shi*, of course, because Alioth and the Dipper occupied that

⁴³ Tseng (2005): 199.

space). The names of the twenty-eight celestial lodges also appear, again in counterclockwise fashion, on the outside perimeter of the internal circular plate.

The *shi* was not intended or used as if a recreation of the cosmos in miniature but rather as a diviner's tool that modeled the astrologically perceived functional variables of the movements, and thus also the hemerologically significant shifts occurring, in the heavens. This is known clearly from the fact that on both boards the twenty-eight celestial lodges are positioned all equidistant from one another. If they were to have represented an attempt to measure actual celestial movements, the names of the lodges would have been interspersed realistically and thus variably according to the inconstant actual number of degrees of the sky that each lodge occupied, as one finds on the contemporary "lodge dials" also recovered from early-2nd century BC graves. (**Figure 7** above) The latter resemble the *shi* but consist of two round discs, one floating atop the other and each sporting simply a counterclockwise circular enumeration of the twenty-eight celestial lodges, but here the lodges are spaced variably and accompanied by numbers indicating the degrees that each lodge actually occupies in the roughly zodiacal, or ecliptic, circle.⁴⁴ The lodge dials thus are instruments that were used for the purpose of making as best as could be achieved actual celestial measurements, even though their placement of the Dipper in the center of the upper disc, with Alioth resting still at its absolute center, makes it clear that the final purpose of the use of the apparatuses remained an astrological, not astronomical, one. However, their recreation of only a circular horizon for the purpose of making fairly accurate celestial measurements obviates that by contrast the *shi*, with square perimeter, was a symbolic recreation of the hemerologically potent meaning in the universe. The *shi* did not correspond in any precise way with the actual physical heavens. For it to achieve its astrological purpose, it was not meant to do so.⁴⁵

⁴⁴ For early reviews of the structure of *shi* board designs and the commonly perceived spatial and temporal meanings of their symbolism, see Harper (1979): 1–5; Cullen (1981): 31–39; John S. Major, *Heaven and Earth in Early Han Thought: Chapters Three, Four, and Five of the Huainanzi* (Albany: SUNY, 1993): 32–43; Kalinowski (1998–99): 139–42; and Harper (1999): 839–843. On the lodge dials, or Dipper dials, see both Harper (1979): 3–5, and Cullen (1981): 34–9.

⁴⁵ See Harper (1999: 834–7) for a brief account of the calendrical use of all such apparati.

Two types of *shi* boards dating to the early Han have been discovered, the *liuren* and Nine Palace (*jiugong* 九宮) types.⁴⁶ The latter has also been identified as a "Taiyi diviner's board" since it was used to locate the polar god Taiyi in his touring of the nine palaces (eight directions and center) of the heavens.⁴⁷ It is instructive that on both types of boards the cross-centered *bo* design has been minimized and its visual vestiges moved to the perimeter, or square, lower plate. That the *shi* was yet based on the *bo* design is clear from both these vestigial lines on the perimeter plate and the appearance on the backs of the boards of a complete cross-centered *bo*, or "cord-hook," design. Apparently the use of the central circular board with the Dipper-Alioth at its center to represent now directly the heavenly canopy and its motion necessitated the migration of the board's foundational substructure depicting a metric grid of the heavens to the sides and, more fully, the back.

This brings us to reevaluate the meaning of the *shi* board's specific geometry of the square and circle. Since no later than the late 7th century AD the *shi* has been universally interpreted to symbolize heaven and earth in totality, the circular top plate representing heaven's domical canopy over the circular horizon and the square earth.⁴⁸ It has thus come to be understood to consist of an early visual and structural demonstration of the *gaitian* 蓋天, "Covering Heaven," cosmography that after the 2nd century AD became the dominant Chinese cosmographical projection.⁴⁹ Even today this is the accepted interpretation of the geometry encapsulated in the design of the *shi*. The *gaitian* cosmography usually, and, seemingly only after c. 200 AD, consistently, has posited a square earth surrounded by a circular domical heaven. In modern scholarship the lower square board of the *shi* usually has been interpreted to represent an ideal plane of earth, that is, a square earth form built on the basis of the solstitial

⁴⁶ Harper (1999): 839–40.

⁴⁷ Kalinowski (1999): 138, n. 36.

⁴⁸ Harper (1979: 6, n.2) identifies Sima Cheng as being the one who began referring to the lower plate as the "earth plate" (*dipan*), in Sima Cheng's late-7th century AD commentary to Sima Qian's *Shiji*.

⁴⁹ For such an argument tying the design of the *shi* to the *gaitian* cosmography, see Major (1993): 38–43.

points (NW, NE, SW, SE).⁵⁰ That the square corners projected outward from the circle at the solstitial points do mark those points at least incidentally is certain, but this is not their only, or even their seminal, meaning. The source inspiration for the square design of the lower plate was not the solstitial points. Therefore, we must question the validity of interpreting the square geometry of the lower *shi* plate to represent the earth, whether ideal or actual.

For one thing, from the remnant lines of the *bo* design on the face of the board (lines at the corners and at cardinal midpoints of the four perimeter lengths) and the complete square-shaped *bo* design appearing on its back we know that the *shi* board was meant to accomplish a more visually representative and thus more usable form of the *bo* design, one that could mimic not only the hatched grid of the heavens, as the *bo* design did, but also the *motion* of the heavens. To achieve this a moving circular horizontal plate depicting the dome of the heavens had to be employed, but this then necessitated shifting the static structure of the heavenly grid, the *bo* design, off of the moving inner plate, to the edge plate. Moreover, the employment of the Dipper as the central pointer of the heavens left no visual space for either the central square or cross-hatch of the *bo* design. Lest this new application of the *bo* design be misunderstood such that the original heavenly nature of the square *bo* grid might be lost, the makers or users of *shi* boards inscribed on the backs of the boards the square *bo* design to ensure that the round-and-square geometry of the *shi* board's face would be interpreted correctly to represent in its totality the heavens. The irony is that this meaning was nevertheless lost fairly quickly.

A further clue to the true meaning of the geometry of the *shi* design is in a quirk of the *shi*'s representation of the Dipper that Donald Harper noted in 1979. On the *shi* the Dipper appears on the central circular board as a mirror image of — that is, opposite — its actual attitude in the sky as viewed from below on earth. Harper proffered that this reverse-view Dipper on the *shi* boards represents the Dipper as observed from above it in the heavens.⁵¹ Why would the *shi* have been so engineered? I believe that it is because the purpose of the *shi* was to recreate a model of the universe as viewed not from the human angle on earth but from the perspective of

⁵⁰ See Major's review of this element of the *shi* board's use and meaning (1993: 39–41).

⁵¹ Harper (1979): 4–6.

the source of universal power, the astrological northern celestial pole, which was the star Alioth on the handle of the Dipper. So, really, the perspective is not one anchored in the heavens above the Dipper but at the star Alioth on its handle, and the *shi* even marks this central pivot of the universe using a greatly exaggerated circle in place of a dot that would normally mark the position of a star. The makers and users of the *shi* seem to have believed that only from the position of the absolute center could the magical patterns of the universe and its movements be divined. In this case, which is difficult to controvert given its directly supportive pictorial evidence in the *shi* itself, then the square form of the perimeter plate very obviously and most emphatically has nothing to do with the earth.

Why? It is because, now looking down on the *shi* as if we were seated on the star Alioth, we can see clearly that the earth's circular circumference is very apparently already represented by the inner circular circumference of the bottom board of the *shi*, where the names of the twenty-eight celestial mansions demarcate at what points on earth's *circular* edge the circumference of the moving heavens, the latter of which is obviously represented by the inner circular plate of the *shi* at whose edge we find yet another set of the twenty-eight celestial mansions, meet it. The area of the lower square-edged board out from the inner circular circumference and within the square perimeter, then, is a purely notational palette on which mere technical data resides. It simply provides space for the placement of a computational rubric that was employed to assess the hemerologically potent moments of the universe in space and time as was imagined could be perceived from the viewpoint of the astrological pole at Alioth. In other words, this space merely houses a compressed, displaced, and annotated metric *bo* grid. All of its square perimeter, the chronograms appearing therein, the lines drawn from the perimeter's intercardinal and cardinal points, and the inscribed *bo* grid appearing on the backs of *shi* boards attest to this.

The square perimeter board of the *shi*, with its corners marking the solstitial points, represents then not earth at all but heaven's *implicit* geometry of motion in time through space. The square corners do denote the solstitial points, but they are only schematic annotations, not representations of physical or ideal geography. They represent only part of a computational schematic that identifies for metric purposes the solstices as temporal and spatial anchors of the

heavens' and heavenly bodies' movements. They do not represent at all either an actual or ideal plane of earth.⁵²

To review, the perimeter square plate of the *shi* board, out of necessity borne of the actual use of the *shi*, represents an attempt to reproduce the inherited magic of the square form while creating an instrument more astrologically or hemerologically useful than the simple *bo* grid. To accomplish the latter, the moving center plate had to be made round to recreate the well-understood actual circularity of the heavenly dome and its horizon, but this necessitated that the square be moved elsewhere, away from the center and in fact off of the circular representation of the horizontal heavens — and earth — altogether. With the Dipper and particularly its star Alioth marking the center of the circle of the heavens and serving as the all-important and hemerologically determinant heavenly pivot, the only logical and workable place for the displaced square was now at the perimeter, and it happened that the square form so employed also exaggerated and thus emphasized and clarified the abstractly extended rays that identified the locations on the horizon of the solstitial points, in turn thus enhancing the functionality of the *shi* board as a practical tool in the divining of hemerologically potent moments in space-time. In now representing the actual circularity of the heavens and installing the spatial-temporal pointer, the Dipper, in its appropriate place in the center of the heavens, all while retaining the metric grid of the heavens developed in the *bo* boards, the *shi* thus improved on earlier *bo* designs; it represented the heavens in their both motive and stagnant, or structural, aspects.

Therefore, aside from marking where the sun rose and set horizontally at its solstitial points in the year, the exaggerated solstitial corners of the square had nothing to do with the earth. The square was included in the design of the *shi* simply for this form's (1) consistently magical quality in the history of ancient Chinese religion and cosmographic geometry, (2) its historical use in the Warring States period as a grid on which the movements of the astral bodies of the heavens could be mapped, and (3) for the practical value that the area between the inner circle and the external square offered for placement of a complex computational rubric that had

⁵² For the thesis that the square perimeter of the *shi* represents an ideal plane of earth, see Major (1993): 41–3, 149.

been compressed during the process of its extrusion from its original centrally placed format in the *bo* grid. Really, the square of the *shi* board represents only a distended form of the implied but usually absent perimeter square line drawn all around the end points of the lines comprising the heavenly *bo* grid (on *bo* boards this line constitutes the square perimeter of the board). The functionality of the corners defined by the square perimeter as solstitial markers is coincidental to the design of the *shi*, just as it was in the case of the *bo* grid.

This understanding of the geometry of the *shi* also follows from what we know of the historical development of its geometric components. As we have seen, astrologically representative designs inherent in the *shi* board's geometry and markings already seem to have existed in the 5th century BC. In just the tomb of Marquis Yi of Zeng, as we have seen, both elemental motifs that comprise the *shi* already existed: (1) on the lacquer clothes box appeared the circular design of the twenty-eight celestial lodges surrounding the Dipper and its star Alioth placed at the center of the circle, and (2) on the sides of another box the square-centered and overall square *bo* heavenly grid design appeared repeatedly. Furthermore, already in the 5th century BC the two motifs of the circular horizontal perimeter and the square heavenly grid had been combined in a single design appearing on the lid of a lacquer box recovered some decades ago from a tomb in Shandong.⁵³ Finally, we know that the use of the *bo* heavenly grid (i.e., what otherwise has been identified to be the "cord-hook" design) for actual and explicit (i.e., not merely conceptual or theoretical) divinatory readings, with the heavenly stems and earthly branches marking the critical spatial-temporal nodes both in the center and at the cardinal and inter-cardinal points along the edges of the square grid, was already well established and mature in the Qin imperial period (c. 221–208 BC),⁵⁴ just as the *shi* surely was already being developed.

⁵³ For a description of this object, whose central motif forms a *ya* shape, see Lewis (2006): 261.

⁵⁴ Kalinowski (1999): 139–40.

The Matter of the Ideal Plane

As we have mentioned above in passing, what has been interpreted to be the square-earth geography of *HNZ* 3 and 4 has been considered by some to represent not a real square earth but an ideal square plane of earth, that is, a square plane based on the observation of the horizontal solstitial points and their ideal extension.⁵⁵ It has been suggested to me that the concept of the ideal (solstitial) plane may have traveled from the Greeks or Hellenes sometime c. 400–200 BC to the Chinese and thus stimulated the development of the square-earth thesis that came eventually to dominate Chinese cosmographical understanding. However, we must note that at no time did the ancient Greeks or Hellenes believe that the earth was actually square. The concept of an ideal plane originates in a modern — and, I would say, extensively stretched — interpretation of an obscure story buried deep within Plato's *Republic*.

The classical or even ancient Greeks did not themselves develop a concept of a cosmographical ideal plane. Quite to the contrary, from the 6th century BC and on, their observational, geometric, mathematical, and analytical trajectories conspired consistently to develop very specifically not only the sphericity of the earth but also its actual circumferential measurement. The myth that, until Columbus in 1492 proved, by sailing across the Atlantic to the New World and back to Europe, the earth to be round, the world's people all believed the earth to be flat, is just that, a myth. At no time did any known major ancient or classical civilization's people really believe the earth to be flat or square, whether in an ideal or real plane, and prior to the development among the Greek philosophers and mathematicians of a spherical earth thesis beginning in the 6th century BC, the only indications that we possess regarding ancient conceptions of the shape of the earth suggest that some believed the earth to be a disc, implying therefore a flat circularity but certainly not a squareness that could be associated in any way with the solstitial points on the horizon (see Volume I, Chapter 4). Consequently, it cannot be accepted that an ancient Greek idea of an ideal square plane of earth influenced the development of a Chinese square-earth topography / cosmography of earth, because, first, it did

⁵⁵ Major (1993): 149.

not exist in the ancient Greek / Hellenistic world to travel to China, and, second, the ancient Chinese did not develop a cosmography of an ideal square plane of earth, but rather, as we shall see further below in the following chapter, an idealized and circular projected island amid a sea of unknown and unimagined extent — and, as far as we know, they did not until sometime in the first two centuries AD develop even a concept of particularly a *plane* of earth.

The first several chapters of Volume I of this study demonstrated quite clearly that in early Western civilizations through the first half of the 1st millennium BC the shape of what we in the modern world call the earth was not an issue of concern but that the horizon created from the intersection of the domical heavens with the earth produced a circular region of concern beyond which topographical shapes and circumstances were of little significance in the idealized divine justification for hegemony in a geo-political realm. Second, at the center or axis of such circular or horizontal constructs we have found time and again the quadrilateral that, placed in the center of the ruler's temple or palace complex at the vortex of his ruling city, in its apparent mimicry of the quadrilateral at the NCP, recreated that divine polar power on earth. We reasoned further from pictorial evidence or were able to show textually that it was into this power that the earthly ruler claimed to tap to justify his authority. That the modeled quadrilateral rested on earth does not at all imply that the symbolism was intended originally to represent the earth. The purpose in recreating the quadrilateral in one's *omphalos* on earth was rather to draw to earth for the exclusive use by the elite and privileged ruler and those associated closely with his authority the source of the power that was believed to energize and move the universe, the quadrilaterally shaped pivot at the center of the ancient heavens.

One might argue that the sudden appearance in China c. 433 BC of the twenty-eight celestial lodges that surely were transmitted there from India during the 1st half of the 1st millennium BC indicates that (1) Western influence was present, and, therefore, (2) the idea of a square plane of earth could have been transmitted to the Warring States Chinese at that time. However, the development of the twenty-eight celestial lodges does not at all entail the necessary development or transference of a concept of an ideal quadrilateral plane of earth. Quite the contrary, as we indicated above, all Chinese representations of the twenty-eight celestial lodges

depict them as falling on a horizontal circle, not a square or ideal plane. Furthermore, the transmission of the scheme defining the twenty-eight celestial lodges does not at all even suggest a concomitant or later transmission of other ideas, including that of a square plane of earth. Most significantly, the ancient, classical, and early-imperial Chinese did not in their cosmographic schemes project a real or ideal plane of earth. Further, and most critical, the concept of a solstitially derived ideal plane of earth does not originate anywhere in the ancient world. It seems, rather, to be a modern interpolation. While it has been reported that Lucretius (99–55 BC) defined and promoted a thesis of a square plane of earth, in fact Lucretius recognized and stated the world to be round and situated amid an infinite universe.⁵⁶ This leaves only some Christian devotees in the early centuries AD who read from certain Old and New Testament text a divinely ordained flat — but not square — earth, while the rest of the civilized Southwest Asian world had come to understand clearly that the earth was spherical. Consequently, there is very significantly no precedent in the West from which the idea of “round heaven / square earth” could have emerged to traverse Eurasia west to east to alight finally in China during any time between c. 500 and 2 BC. It did not exist in the first place.⁵⁷

Indeed, the imagined ancient quadrilateral “ideal plane” of earth seems to be a purely conjectural modern reconstructive projection. We may trace it at least in part to Giorgio de Santillana and Hertha von Dechend, who wrote in the 1960s,

[I]t is necessary to explain again what this “earth” is that modern interpreters like to take for a pancake. The mythical earth *is*, in fact, a plane, but this plane is not

⁵⁶ Lucretius wrote, “Now since there is illimitable space empty in every direction, and since seeds innumerable in number in the unfathomable universe are flying about in many ways driven in everlasting movement, it cannot by any means be thought likely that this is the only round earth and sky that has been made (*hunc unum terrarum orbem caelumque creatum*)....” (*De Rerum Natura* II.1056). See Titus Lucretius Carus, *De Rerum Natura, with an English Translation by W. H. D. Rouse, Revised Edition by Martin Ferguson Smith* (Cambridge, Mass.: Harvard University Press; London: William Heinemann Ltd., 1982): 177.

⁵⁷ For surveys of Greek astronomical projections and cosmography, see (1) D. R. Dicks, *Early Greek Astronomy to Aristotle* (Ithaca: Cornell University Press, 1970), and (2) J. L. E. Dreyer, *History of the Planetary System, from Thales to Kepler* (Cambridge University Press, 1906).

our "earth" at all, neither our globe, nor a presupposed homocentric earth. "Earth" is the implied plane through the four points of the year, marked by the equinoxes and solstices, in other words the ecliptic. And this is why this earth is very frequently said to be quadrangular. The four "corners," that is, the zodiacal constellations rising heliacally at both the equinoxes and the solstices, parts of the "frame" *skambha*, are the points which determine an "earth." It is for this very reason that "ends of the world" are said to take place. A new "earth" arises, when another set of zodiacal constellations brought in by the Precession determines the year points.⁵⁸

One wonders, given the absolute paucity of ancient sources decidedly projecting a quadrangularly shaped earth, if De Santillana and von Dechend reflected in their statement, "this earth is very frequently said to be quadrangular," the consistent misinterpretation through over a millennium's time of early Chinese cosmographies, a misinterpretation that purports that the Chinese have since ancient times considered the earth to be square. This, then, might be a case of the tail wagging the dog.

At any rate, several exceptions can be made to applying De Santillana and von Dechend's construct to prehistoric China. First, I am not at all convinced that the proto-Chinese conceived of a "mythical earth" in contrast to the actual earth that was filled with mythical history, identity, and action. There is no reason in particular to suggest that they did and in fact there is ample evidence to indicate that they did not. For instance, we may consider the first several chapters of *Shiji*, where the mythology of the Five Emperors and Three Dynasties periods is described as occurring here on the actual mythologically rich earth, not on some other ideal plane. In the *Canon on Mountains and Seas (Shanhai Jing)*, too, pieced together probably not long before the *Shiji* from some of the same ancient traditions that informed Sima Qian's account of prehistory, the assumption is that the strange, immortal, superhuman, and divine are inhabitants not of ideal, abstract, or unreachable worlds but of a series of palpable fringe environments continuous with

⁵⁸ De Santillana and von Dechend (1969): 235.

the familiar and known local physical and human realm.⁵⁹ This hard-earth-centered mythology, which some have seen to be particular to early Chinese civilization, has continued into and throughout the Chinese historical period, as exemplified by the earth-bound and earth-centered, and particularly mountain-oriented, concepts endemic to Chinese *xian* 仙 immortalism.⁶⁰ I would take this much further to say that such earth-bound or, more accurately, physically bound conceptions of the strange and divine are reflected generally in many early religious belief systems found across the ancient world. Such systems of palpable, reachable divinity and other-worldness derive from the very psychological processes of projection from the known to the unknown, discussed in the introductory essays of Volume I of this work, that subconsciously enhanced the human being's sense of security and power in its largely unknown cosmic environment. A simple example is found in the Gilgamesh tale, in which being is conversant, and thus beings traverse, through all realms, from the underworld, through the human-occupied surface of the earth, to the abode of the gods in the stars of the heavenly canopy above. One may also cite as an example the belief in the conversance of all realms known to have dominated the ancient Egyptian religion. Naming and describing the unknown, even fancifully, reduces the fear or insecurity inspired by the unknown; the process allows the unknown to begin to become familiar and thus controllable. All "other" worlds, in resembling, being patterned on, and remaining contiguous with this world, are essentially physically modeled appendages to the physical. There is in such conceptualizations no ideal or idealized state of existence that lies outside the possibility of physical description. The physically modeled heavens and hells of many Eurasian religions offer yet more examples of these typically this-worldly other realms.

Finally, we may contest the idea that the ancient Greeks themselves developed a popularly promulgated theory and conception of an ideal plane of earth. De Santillana and von

⁵⁹ For a translation of *Shanhai Jing* see Anne Birrell, *The Classic of Mountains and Seas* (London and NY: Penguin, 2000). For a review of the topography, geography, cosmography, and demography described in this ancient work compiled during the Warring States and Han periods, as well as modern scholarship that parses its contents, see Lewis (2006): 284–96.

⁶⁰ For such a view see, for instance, Yu Ying-shih, "Life and Immortality in the Mind of Han China," *HJAS* 25 (1964–1965): 80–122.

Dechend traced such a concept to an obscure little story, the Vision of Er, found in Book 10 of Plato's *Republic*. In this tale, Er the Armenian and his fellows travel to the "other world." There they happen upon a straight shaft of light that "binds the heavens" (this described shaft of light stimulated de Santillana and von Dechend to import to their exegesis of the story the Sanskrit word and concept *skambha* to indicate an axial framework of the universe; likely the shaft of light describes the Milky Way). From just this de Santillana and von Dechend conceptualized the origins of a square "ideal earth" on the basis of the frame of the universe that, to them, Er's shaft of light necessarily implies.

In consideration of this construct, first we may note that de Santillana and von Dechend themselves conjectured and projected freely to develop this "ideal plane." Nothing in the story even begins to suggest such a thing. Furthermore, we must recognize that any geometrically conceived "ideal plane" bisected three dimensionally and perpendicularly by an *axis mundi*-like central line (the Sanskrit or Indian *skambha*) would not have been developed even at the time that the story of Er the Armenian was written, during the life of Plato (c. 427–347 BC), in specifically the Western civilizational sphere. The inspiration for conjuring up for Plato such a construct seems to be the development in the Greek world through these centuries of the parts of a system that would, c. 300 BC in the person of Euclid of Alexandria, become synthesized in a Euclidean geometry. The problem is this: while some time after Plato the developed Euclidean geometry may have offered a theoretical basis for constructing any kind of geometric conjuring of the world and universe, in reality the foundations on which this geometry was created, including (1) earlier mathematical and geometric theorems developed piecemeal by antecedent Greek philosophers, (2) the Babylonian development of the astronomically based calendar, and (3) the final recognition by this time of (a) the oblique circular nature of the solar and lunar ecliptics and thus (b) the globular shape of the earth, as well, compelled the classical Greeks not to embark on a fanciful detour into ideal cosmographic geometry but rather consistently and persistently to recognize the *real* sphericity of the earth. By the time of Plato and later Euclid, informed people already understood that the earth was spherical, and people did not — either before or after Plato and Euclid — believe in or promote a flat or square earth. They probably never had. The real game at this time was to conjure up an estimate of the size, that is, the

circumference, of the sphere of earth. There was no talk of an "ideal plane." The Greeks had moved in awareness beyond playing such games even before they had developed the precise tools with which to establish the games' rules. Their interest was in deduction from the real to understand the real, not in induction into the real from the imagined in order to impose on the real.

Anaximenes of Miletus seemingly began Greek speculation on a circular and spherical earth when he proposed that the earth was a short, fat cylinder surrounded by three concentric rings that held and transported the stars. In the 6th-5th centuries BC Pythagoras reportedly conceived of a spherical earth on not geometrically informed but aesthetic grounds. Given Pythagoras' apparent failure to construct a physically based argument, credit for the discovery of the earth's sphericity is usually given Parmenides of Elea (southern Italy) c. 500 BC.⁶¹

In the 5th century BC both Plato and Archimedes estimated measurements of the circumference of the earth, wildly overestimating it. Eudoxus of Cnidus is understood to have developed the first spherical astronomy whereby the cosmos was conceived in terms of multisphericity.⁶² Later in the late 4th century BC Aristotle noted that mathematicians had already estimated the earth's circumference to be approximately 40,000 *stades*, and he further deduced on the basis of rational observation that the shape of the earth must be spherical.⁶³ By Aristotle's time virtually all philosophers had accepted the earth's sphericity,⁶⁴ and c. 240 BC Eratosthenes famously measured the earth's circumference to be approximately 250,000 *stades*, or what is often thought to be 25,000 miles (the actual length of the *stade* employed is unknown

⁶¹ Otto Neugebauer, *A History of Ancient Mathematical Astronomy*, 3 vols. (New York, Heidelberg, Berlin: Springer-Verlag, 1975): V. 2, p. 576.

⁶² Albert van Helden, *Measuring the Universe. Cosmic Dimensions from Aristarchus to Halley* (Chicago & London: University of Chicago Press, 1985): 4.

⁶³ Aristotle, *On the Heavens*: 297a8–298a20, in Jonathan Barnes, ed., *The Complete Works of Aristotle, The Revised Oxford Translation* (Princeton: Princeton UP, 1984): 488–9.

⁶⁴ Neugebauer (1975): v. 2, p. 577.

and hence we really do not know how accurate Eratosthenes' measurement really might have been) — the actual circumference of the earth is approximately 24,902 miles.⁶⁵

Prior to the development in the West between the 6th and 3rd centuries BC of the idea and later proof of the spherical shape of the earth, as far as we know the earth was usually treated as if a pancake (Homer considered it a flat *disc*), but even in this there is no sense that the shape of the earth was ever conceived to be a square. Probably most people did not consider such things, and the people who did so, as we have seen in Volume I, seem to have conceived of the earth's — or the relevant part of the earth's — shape in a horizontal, and therefore circular, sense. Many historians of ancient astronomy believe that it was travelers who, carrying with them stories of the apparent curvature of the earth's surface, stimulated Greek philosophers to conceive of the idea of the sphericity of the earth, and, from the beginnings of such conceptualizing, Greek philosophers tended to theorize about the cosmos in terms of multisphericity, not planes.⁶⁶ They were moving in a direction thoroughly unrelated to a concept of a square plane of earth.

Therefore, it would be a far stretch indeed to apply the thoroughly interpolative modern interpretation of an obscure Platonic mytho-philosophical scheme of the 5th-4th century BC, without supportive or even suggestive evidence, to Warring States or Han China. Of course, the solstitial points of intersection with the horizon do explain one aspect of the square appearing on or in ancient Chinese hemerologists' *shi* boards, but there is absolutely no clear evidence from prior to c. the 2nd century AD at the earliest that the Chinese conceived of either an ideal plane of earth, square or otherwise, or a square physical earth, while there is ample evidence to demonstrate that they had, from ancient times, identified the square or rectangle with first the center of the heavens at the ancient NCP and, later, from about the 5th century BC., the heavens overall.

⁶⁵ Van Helden (1985): 4–5.

⁶⁶ Neugebauer (1975): v. 2, p. 576–7.

Chinese Cosmography in the Early 2nd Century BC

One pictorial artifact dating to the Former Han period demonstrates in particular the state of cosmographic projection during the early Han, and this shows clearly that at this time both circles and squares still were quite securely representative of the heavens and had nothing to do with the shape of the earth. This artifact is the Nine Palace Diagram that was found in the early 1970s among the various Mawangdui manuscripts and artifacts. The Nine Palace Diagram dates to the first decades of the 2nd century BC, approximately the same period in which the earliest known *shi* boards were buried in tombs. The diagram shows a circular pivotal center to which is attached by linear radial tethers eight peripheral or radial squares. (**Figure 13**) Overall the circumference defined by the eight radially attached squares is a circle. That is, this circumference represents the horizontal visible dome of the heavens. Each of the eight squares represents astrologically significant events during a segment of time in an eight-segment annual / spatial cosmological year.

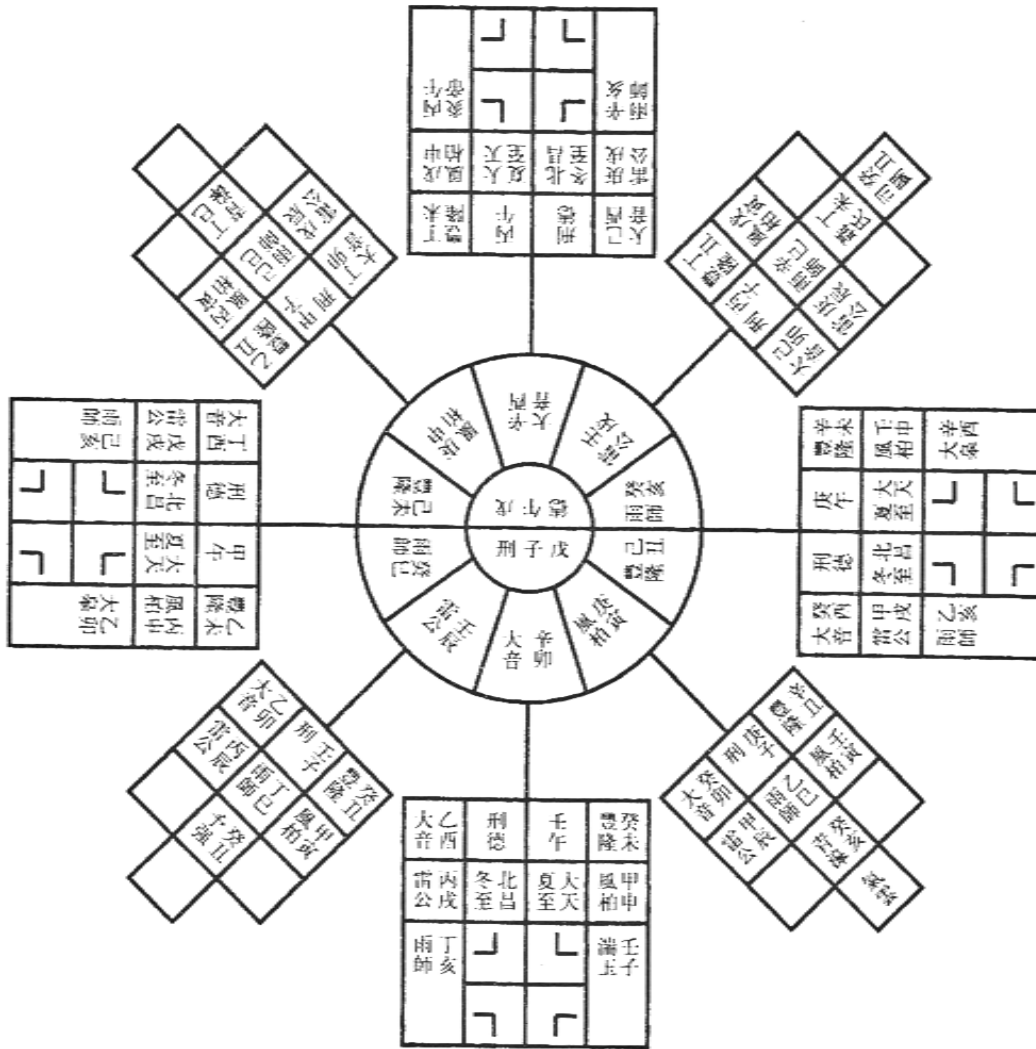


Figure 13. Diagram of the Nine (Heavenly) Palaces. From Li Ling (2001): 330.

The overall scheme is, then, of an annual cycling of astrologically critical moments. It thus resembles the *Chu Silk Manuscript* in presenting a spatial rendering of an astrologically potent calendar year, but one that employs already a far more sophisticated astrological system of projection and understanding than the *CSM* could offer. Given this, then each of the eight radial squares represents the mapping of the heavens during a specific period of a calendar year. This is borne out by the fact that the lower middle composite square of each of the four cardinaly placed square grids is occupied by a miniature version of the *bo* square grid — a cross defined by four Vs whose right angles all converge toward the center of the square. These miniature and

obviously purely symbolic *bo* grids thus identify each of the eight peripheral square grids to be a square-grid mapping of the entire heavens during a temporal segment of a calendar year. Furthermore, that each of these maps of *heaven* is a *square* is particularly relevant. Still, we should not lose sight of the significance of the fact that overall the heavens, as represented by the circular circumference of the greater diagram defined by the eight peripheral squares, is a circle. The meaning is simply that the heavens remained domical but for the measurement of the astrologically potent movements of the heavenly bodies and spirits, and for this an eight-square square grid constituted the shape of choice. The square thus remained at this time, for the creators of the Nine Palace Diagram, a vital magically or astrologically potent shape for the static measurement of heavenly motion.

In brief, then, nothing in the artifactual or textual records leading up to and including the 160s–130s BC offers any support for the argument that in early Chinese cosmographic schemes the earth was projected to be square, flat, or a plane. In fact, the provenance of the earth's shape in two or three dimensions does not seem to have mattered at all.

Chapter 5: Terrestrial Geography and Changes in Early Imperial Cosmography

The Early Tradition of the Chinese Terrestrial Geography, c. 500 BC – AD 100

In a classical textual tradition dating to perhaps the 5th century BC that remained through the Former Han period quite independent of the hemerologically oriented square-and-circle artifacts of the Warring States and Han, several related geographies of earth's land describe it to consist of concentrically emanating physical and political regions outlying the kingly or imperial center. The schemes that these texts describe have been read almost universally to identify a square earth.¹ These texts include, in rough chronological order, the "Yugong" section of the *Shangshu* (probably 5th century BC), two sections of the *Lushi Chunqiu* (*LSCQ*, c. 239 BC), *HNZ* 3 and 4 (139 BC), *Shiji* 2 (c. 100 BC), *Zhouli* 33 (c. 2nd–1st century BC), and Yang Xiong's *Taixuan Jing* of 2 BC. The square-earth geography / cosmography otherwise has been linked to Zou Yan's (late-4th century BC) related geography as expounded by Sima Qian in *Shiji* 74.

The "Yugong" chapter of the *Shangshu* relates the story of mythological court servant and later Xia dynasty emperor Yu's letting of the floods and taming of the lands. Demonstrating

¹ For a reflection of the standard historical squared treatment of classical texts describing "earth's" geography, which has dominated Chinese thinking for over a thousand years and Western thinking on China for as long as the West has actively engaged in the study of China, i.e., since about 1600 AD, see Major (1979): 133–167. See also Needham and Wang (1959): 497–508. As Needham and Wang indicated, there have been Chinese scholars from as early as when the square-earth thesis was first suggested (during no earlier than about the 2nd century AD, I would add) who have disagreed with a square-earth cosmography. However, as I will demonstrate in this chapter, the square-earth thesis did not occur prior to the Latter Han, and not until c. 200–700 AD did this thesis begin to dominate Chinese cosmographical thinking. After c. 700 AD and continuing through the late-19th and early-20th centuries the square-earth thesis prevailed in Chinese court-adopted cosmography as the standard idealized model of earth, along with a circular or spherical heaven. It was further projected mistakenly backward into texts predating and dating to the Han. The square-earth thesis was adopted universally by sinologists in the 20th century and, I presume, also now in the early 21st century.

the successful outcome of Yu's works is the concluding section of the chapter, which describes the Nine Provinces (*jiuzhou* 九州) into which Yu divided the known world on *terra firma*. This section of the "Yugong," perhaps dating to the 5th century BC, is, as far as we know, the earliest of China's terrestrial geographies. In this tale, having traveled through and repaired the flooded Nine Provinces, Yu establishes geo-political / socio-economic regions emanating from the king's central capital region. Without entering into detailed review of the descriptions of the Nine Provinces and Yu's subsequently identified Five Domains (*wufu* 五服) that fall within and across the innermost several of the Nine Provinces, we can note that the text nowhere describes the overall shape of either set of nine or five, and no mention is made of any squareness. At face value, then the shape of the overall extent of the Nine Provinces or, within and across them, the Five Domains, could be circular, oval, rectangular / square, or simply irregular or unknown.² In the case of the greater body of the Nine Provinces that contains the Five Domains, the text does not even begin to mention their linear or geographical measurement from the capital in the center, or the diameters of the provinces. Further confounding a square-earth interpretation of this text, herein the Nine Provinces are not described to be evenly distributed across the directions emanating from the capital region. Rather, the geographical weight of the Nine Provinces lies in the East/Southeast. Thus, the Nine Provinces of the "Yugong" cannot in any way be conceived to constitute a concentric series of shapes (square or otherwise) emanating from the center. They are simply amorphous regions lying out from the center and resting mostly to the east/southeast of the capital region. (This reflects the contemporary view of the geographic extent of Chinese civilization.) Moreover, the text explains that the Four Seas surround the Nine Provinces, obviating that the entity described by the term Nine Provinces does not even advert to what we are in our cosmographic pursuit referring to as the earth. The earth as a unitary aquatic-terrestrial entity surrounded by the greater heavens is not in any way even implied as a subject in this text. The authors did not concern themselves at all with what lay in or outside of the Four Seas beyond the boundaries of the known and pertinent lands, the Nine Provinces.

² Needham and Wang long ago made essentially this point about specifically this text (1959: 501–2).

The text reports that each of the Five Domains that lie within the Nine Provinces radiates 500 *li* (a *li* is estimated to have measured about one-third of a mile) from internal to external border, resulting in an overall radial measurement of the Five Domains of 2500 *li* (about 833 miles) from the capital center to the periphery in any given direction. Assumed here in the text, but which has not previously been noted, is the fact that in *all* directions the measurement is equally 500 *li*. This, we must take special care in noting, could not describe concentric squares, for of course only a circle maintains equidistance from its center at all points on the surface of its exterior defining line. Conversely, the distance of any corner of a square from its center is greater than the distance between any other point on the external line of the square and the square's center. Consequently, we know that here we are dealing with an author's implied or assumed circles, and these circles likely derived quite naturally from the circular horizon visible from any point on which on earth he stood.³

The geographical text in *Shiji* 2 (c. 100 BC) derives from the "Yugong" chapter of *Shangshu* and follows it religiously but for the difference of a few characters in the names of the Nine Provinces and Five Domains. Therefore, like the "Yugong" text, the *Shiji* 2 account of Yu's great works never suggests a squareness to any of the geographical delineations, referring generally to the lands encompassed by the Nine Provinces not as the "four quarters," as some translations would have it,⁴ but as the "four mysterious lands" (*siao* 四奧), therefore not even approaching the term that so often has been misunderstood to define four square territories lying out from the center, *sifang* 四方.⁵

The still derivative but considerably developed text of *Zhouli* 33, probably dating to the 1st century BC, does make mention of specifically the *sifang*, but here the term does not at all

³ For the text of the "Yugong," see *Shangshu* 6 (*Shisanjing zhushu* [Beijing: Zhonghua shuju, 1980], hereafter *SSJZS*): 146–153.

⁴ William H. Nienhauser et al., ed. and tr., *The Grand Scribe's Records, Volume I: The Basic Annals of Pre-Han China by Sima Qian* (Bloomington: Indiana University Press, 1994): 32.

⁵ *Shiji* (Sima, Qian 司馬遷, *Shiji* 史記 [Taipei: Dingwen shuju, 1989]) 2: 75–77.

connote a squareness to the regions outlying the political center. Having already explained how the unnamed and unenumerated "federated states" (*bangguo* 邦國) lay in concentric civilized regions outlying the capital, the text goes on to describe, still in only a general, topical, way, their organization and governance. In that context typifying the use of *sifang* in the text, the term is employed to generalize broadly about the myriad federated states: "Then [the king] warns the *sifang*, saying that each will manage its own pacification and preservation."⁶ *Sifang* denominates the unenumerated and unlocated federated states. It stands in for "all of the federated states throughout the provinces." There is utterly no intimation of any shape that these provinces might have taken; there is no meaning here of literally a "square."

The term *fang* also arises in the text's descriptions of various central court *fang*-officials' duties relative to the outlying regions, or *fang*, and it appears also both in the officials' titles (e.g. the Embracing the Regions Official, *huaifangshi* 懷方氏) to mean "region" and as a stand-alone character meaning either "direction" / "region" / "area" or "on all sides." An example of the latter, singular, usage is the text's description of Yu's delineation of what have become here the Nine Domains. We read of the first domain that encompasses the king's central region of Wangji 王畿 that, "[The area] outside of it (Wangji) 500 *li* in all directions (*fang*) is called the Hou Domain." In the Chinese text, which reads, "*Qi wai fangwubaili yue houfu*" 其外方五百里曰侯服, *fang* does not by any means denote something "square." Here *fang* is an adjunct adjectival modifier attached directly to the distance-measurement phrase *wubaili*, resulting in the understanding of *fangwubaili*, or "500 *li* in all directions." Therefore, in the use of the character in all three instances, i.e., as a single character, in officials' titles, and in the term *sifang*, the character either (1) connotes only generally an amorphous region out from the center, an "out there" beyond the tight confines of the center of Chinese civilization (the Wangji), or (2) means "in any direction" or "in all directions."⁷

Like both the "Yugong" and *Shiji* terrestrial geographies, *Zhouli* 33 divides the physical

⁶ *Zhouli* 33 (SSJZS): 864.

⁷ See *Zhouli* 33 (SSJZS): 864.

land of note outlying the capital and encompassing the Nine (erstwhile Five) Domains as consisting of the Nine Provinces. Further like both earlier texts, the preponderance of the Nine Provinces occurs in the eastern half of an overall more extensive but unidentified land mass: here only one western province is identified (Yongzhou), while all eight others fall to either the north or the south, or to realms to the east of north and south. As in "Yugong" and *Shiji*, no radial measurements involving the Nine Provinces are offered. However, the geo-political / socio-economic world of *Zhouli* 33 differs from that of the "Yugong" and *Shiji* in that it is divided, as we have seen above, into not five but Nine Domains; while many of the domain names remain the same as in "Yugong" and *Shiji*, of course new names have been coined for the four freshly imagined concentrically arranged domains.

As we have seen in the sample phrase quoted above, the central hub of the Nine Domains, the king's capital region identified as the Wangji, is described to be 1000 *li* in diameter (radius of 500 *li*), while the Nine Domains concentrically ringing the Wangji each measures 500 *li* radially, such that the total radial distance from the center of the Wangji to any point lying on the outer edge of the ninth domain can be computed to be 5,000 *li*. As in the cases of the "Yugong" and *Shiji*, we are careful to record that the author did not at all intend to suggest that this distance measured the extent of the encompassing singular aquatic-terrestrial body that we now refer to as our earth, but only the lands that mattered ideally to the center that was the king and his court.

In *Zhouli* 33 the number five has now been assigned dutifully to the idealized types of landed lords of federated *guo* whose sworn loyalty to the Zhou king render them critical to maintaining and spreading the ethical civilization of the capital region. These are the *gong*, *hou*, *bo*, *zi*, and *nan*, which together represent a simplified hierarchy of early-Zhou "feudal" lords. Their enfeoffed domains fall within measured regions lying concentrically out from the center and overlapping the first four of the Nine Domains reviewed above, to a distance from the capital of 2,000 *li*.⁸

Notable in this 1st century BC text is the use of the character *fang* to identify the nature of

⁸ *Zhouli* 33 (SSJZS): 863.

the measurement of each of both groups of the Nine Domains and the five regions of the federated lords of the *guo*. We reviewed this usage above in the case of the domains outlying the king's central capital region of Wangji. Whereas one's first tendency might be to read this *fang* mistakenly to mean "square," here it is meant to accentuate the equal concentricity on all sides, at all points from the center, of the borders of the regions radially defined. The shapes of these regions, then, must be circular. It could not be otherwise, for, as we noted of the "Yugong" and *Shiji* texts above, if an equal radius is to be maintained at all points for each of these regions / domains arranged concentrically surrounding the central capital, then the only possible conceived shape of each of the regions / domains is a circle. Here, then, *fang* means nothing close to "square" but rather indicates "in every / any given direction."⁹ This understanding of *fang* is entirely consistent with our projection of the original meaning of the Shang word represented by the Sinitic character for *fang*, i.e., that the graph representing the word portrayed areas lying outside (and particularly west of) the center, which center was the confluence of the Yi (Yi-Luo) and Huang (Yellow) Rivers at Zhengzhou. That is, originally, and here, *fang* seems most seminally to advert to any area outlying the center.

John Major, following the inherited idea that all of these geographies describe concentric squares of the earth, postulated that Zou Yan's topography of the earth, as recorded exclusively in *Shiji* 74, coincided with them.¹⁰ While it is certain that the geography of the "Yugong" text or a common source for both of them influenced the geography that Sima Qian recorded as originating in Zou Yan of the late 4th century BC, there is in Zou Yan neither any hint whatsoever that he conceived of the earth or any of its parts as being square in any way. Zou Yan's geography stipulated nine supercontinents (*jiuzhou* 九州), each surrounded by a sea. Each supercontinent in turn contained nine subcontinents (also *jiuzhou*), such that altogether, in Zou

⁹ *Zhouli* 33 (*SSJZS*): 862–3.

¹⁰ Major (1979): 133–135. Likely Major was amplifying Fung Yu-lan's vague association of many of these early geographically oriented texts. See Fung's *A History of Chinese Philosophy, Vol. I*, tr. Derk Bodde (Princeton: Princeton UP, 1952): 159–169.

Yan's projection, there existed nine-squared (9^2), or eighty-one, subcontinents (*zhou*). But Zou Yan did not attempt to define anything other than these nine supercontinents each encompassing nine subcontinents, with each supercontinent surrounded by an amorphous sea. Therefore, as in the cases of the "Yugong," *Shiji*, and *Zhouli* texts, definition ends where land meets the sea. There is, consequently, no hint of any shape or geographical extent of the aquatic-terrestrial earth as we are pursuing it here, as a complete and unitary entity surrounded by an even greater heaven. Like the authors of the other texts, Zou Yan was interested only in what was relevant geographically to his cultural and conceivable physical worlds, the shapes of things beyond the imaginable thus having been left... unimagined and thus unreported.¹¹

The relevant sections of the *LSCQ* and *HNZ* are as a set quite different from the purely geographical-"culturographic" texts of the "Yugong" in the *Shangshu*, *Shiji* 2, *Zhouli* 33, and Zou Yan's terrestrial-aquatic geography. Further, while these sections of *LSCQ* and *HNZ* share similarities of language and paradigmatic approach to descriptions of *tian* and *di* ("heaven" and "earth"), among themselves the two texts differ considerably. Most importantly, however, we will see that, virtually universal scholarly agreement to the contrary, neither actually offers anything close to a square-earth thesis.

In the *LSCQ* are two sections of text from which together a square-earth cosmography has been interpreted. These sections occur in *LSCQ* 3.5 and 13.1. We will review first the purport of the text of *LSCQ* 13.1, where are described the Nine Fields (*jiuyue*) of the heavens and the corresponding Nine Provinces (*jiuzhou*) of earth, along with the various numerated sets of phenomena that populate them. A square-earth cosmography has been consistently read into the combined import of several brief descriptions found in *LSCQ* 13.1 of all of (1) regions on earth, (2) distances either on or relative to earth, and (3) equinoctial / solstitial nodes.

First, in the identification in *LSCQ* 13.1 of the names and locations of the Nine Provinces that comprise *di* 地, which has always been understood and translated into English as "the earth"

¹¹ *Shiji* 74: 2344.

and in other Western languages as the equivalent of the English "earth," the cardinally placed provinces are identified using a binome combining one of the characters for each of the cardinal directions and the descriptor *fang*, which of course can mean literally square. However, here the descriptor *fang* certainly does not describe a square. As we saw occurred specifically in the *Zhouli*, here in *LSCQ* 13.1, as well, *fang* is used rather in its more seminal sense of side or direction, or region, just as its progenitor character 方 (𠄎 , 𠄎) was employed during the Shang to delineate relatively unknown regions or sectors far out and away from the Shang cultural / civilizational center. This we know specifically because, while the provinces lying cardinally outside the center are identified employing the *fang* character, the provinces resting in the inter-cardinal directions are not described using the descriptor *fang*. This inconsistency thus leaves us with no description of the composite shape of the Nine Provinces.¹² Based on this segment of text alone, then, contrary to common assumption, these Nine Provinces that define *di* 地 are left amorphous.

The measurement of the land of the Nine Provinces, that is, what is universally misapprehended to constitute a primitively understood geography of what we currently identify as our globular "earth," is described further along in the text of *LSCQ* 13.1 more precisely as the land within the Four Seas, which the text offers as being 28,000 *li* east to west and 26,000 *li* north to south.¹³ We note that there is here no specific definition of this landmass as being square. It could be slightly out of round, or oval, or of any irregular shape — the numbers do not tell us what shape of land connects the four cardinal edges of the land where it meets the seas. And, quite apparently, neither do the measurements constitute those of a square, their being unequal. Then, on the actual shape of this *terra firma* as defined by the Nine Provinces that lie within the Four Seas, this text is both by itself and together with the previous description in *LSCQ* 13.1 of the earth's Nine Provinces still ambiguous. In this it is identical to the parallel

¹² Lü Buwei, *Lushi Chunqiu* 13.1 (*Zhuzi jicheng* ed., Taipei: Shijie shuju, n.d. [1960s?]; hereafter *LSCQ*): 125–6).

¹³ *Ibid.*: 126.

texts found in the "Yugong" of the *Shangshu*, the *Zhouli*, and in *Shiji* 2 and 74 (the latter two being sections of *Shiji* that repeat the text of the "Yugong" and describe Zou Yan's geography of "earth," respectively).

In subsequent text of *LSCQ* 13.1 we read now of the "Four Extremities" (*siji* 四極) that describe nodes beyond the four seas. The text reads, inclusively, "Within the Four Extremities, from east to west it is 597,000 *li*, and from south to north it is 597,000 *li*. The stars of the extremities travel together with the heavens, but the extremity of heaven (the northern celestial pole) does not move."¹⁴ This text has been universally interpreted to offer an overall measurement of the full extent of the square plane of earth as calculated using a gnomon and angular measurements to determine the distance from an observer at the center of the earth (China) of the square sides of the earth on the basis of the sun's solstitial and equinoctial nodes.¹⁵ However, we must take cognizance of the fact that this measurement has nothing to do with the earth, but rather only with the heavens: mention is made of *stars* in the *heavens*, not points on the earth.

Reading only this portion of the text, one might conjecture that the distances between the stars that mark the Four Extremities were measured employing a gnomon to determine the sun's equinoctial (i.e., cardinal east and west) nodes, but that still would have nothing to do with the earth or its shape, or even the shape of whatever might have been called the entire phenomenon surrounded by heaven and that must in this scheme encompass (1) the Four Seas and certainly, within the Four Seas, (2) "earth": recall that *di* 地 is restricted to the Nine Provinces, and we are not even told the name of whatever it might be that is described by the edges of the Four Seas or what might lie beyond them but within the Four Extremities. Furthermore, as in the cases in *LSCQ* 13.1 of the text describing both the Nine Provinces and the land within the Four Seas, there is no indication that whatever it is that lies horizontally between the measurement nodes or extremes (the stars at the extremities) at the four cardinal points is a square. That is, an imaginary

¹⁴ *LSCQ* 13.1: 126.

¹⁵ See, for example, Major (1993), following Nakayama: 149.

line that would be purported to represent the shape of this phenomenon whose limits in four directions the Four Extremities identify and which would connect all four cardinal points could as easily be circular as it could be square. Considering that the *LSCQ* authors were following explicitly the Nine Province tradition of the "Yugong," and that in this tradition the concentric regions outlying the capital region were certainly horizontally circular and not square (or another shape), then we must assume that here, again, we are reading about circles.

Finally regarding *LSCQ* 13.1, that the Four Extremities do not in fact refer to equinoctially measured or imagined *earth* distances is clear from the text's nomenclature. The passage immediately following that quoted above regarding the Four Extremities and the stars of these extremities describes the sun's positions at the solstices. This proximity probably caused some commentators to misinterpret the measurements of the Four Extremities to advert to the size of the earth as measured at the equinoctial points. This is incorrect. The Four Extremities do not in any way describe the size of the earth measured east to west at the points of the equinoctial rising and setting of the sun.

In this latter passage the author(s) employed the standard terminology of *dongzhi* 冬至 (winter solstice) and *xiazhi* 夏至 (summer solstice) to identify the solstices as the topics of his / their remarks, combining in each case the seasonal term *dong* (winter) or *xia* (summer) with the character *zhi*, the latter of which means "to arrive [at an end point of a motion]" but extended here to mean "solstice" (i.e., the end of the northern or southern seasonal / annual movement of the sun). At the same time, in the preceding text describing the Four Extremities, i.e., the cardinal directional measurements, the terminology employed has nothing to do with the standard terms that identify the equinoxes, which are *chunfen* 春分, "springtime [equal] division," and *qiufen* 秋分, "autumnal [equal] division." The *LSCQ* authors of course would have known these terms and employed them had the equinoxes been their topic of discussion. Rather, the *LSCQ* authors applied a character used typically to denote the northern celestial pole or another point of extremity, *ji* 極, in conjunction with specifically the character for *star(s)*, which is *xing* 星.¹⁶ In

¹⁶ *LSCQ* 13.1: 126.

other words, it is clear that the object of measure was not the earth but the canopy of heaven in or on which the stars of course lay. The cardinal directional measurements of east-west had nothing to do with equinoctial measurement, even though in fact the latter of course coincides with cardinal east and west. But we must keep in mind as well that it was not only the measurements of east to west, but also those of north to south, that were offered in the prior section regarding the Four Extremities, obviating further that these were not equinoctial but rather cardinal measurements of the stellar canopy's extent that the *LSCQ* author(s) offered.

As a consequence of the vagueness of the text of *LSCQ* 13.1, we seem to have measurements of only (1) a land that the text says is *di* (地, always misunderstood and mistranslated in modern Western scholarship as "earth"; "*Di* has Nine Provinces," the text states explicitly, but this *di* quite apparently does not equal in reference our modern concept of our globular "earth") that lies within the Four Seas and measures 26,000 by 28,000 *li*, and (2) a heavenly canopy that measures, two-dimensionally at its extreme cardinal boundaries, 597,000 *li* by 597,000 *li*. The text provides no measurement of the phenomenon that we conceive of as earth, i.e., a body that encompasses and integrates both lands and seas. Furthermore, neither set of measurements that the text provides represents in any conceivable way a square.

Still, the text of *LSCQ* 13.1 has been taken, together with the text of *LSCQ* 3.5, to represent that in 239 BC a cosmogony / cosmography that postulates a square earth had already been promulgated. Let us review, then, *LSCQ* 3.5. This text contains only one statement that one might interpret to suggest for the earth some kind of squareness, but this statement attributes to that body not at all a physical squareness but merely a vague and purely culturally impregnated principle of compartmentalizing or delineating. The text tells us, "The way of heaven is cyclical (*yuan* 圓). The way of the earth (*di*) is compartmentalizing (*fang* 方)."¹⁷ Both the title and balance of the text of this chapter that this statement inaugurates, a chapter entitled "The Cyclicity of the Way" (not of "Heaven"), obviate that the authors did not intend to promote a cosmography that defined literally a circular or round heaven and a square earth. Here, as we

¹⁷ *LSCQ* 3.5, "The Circularity of the Way": 31.

should expect, the cyclical way of heaven consists in the natural and regular cyclical revolutions of the cosmos, but no mention is made of a physical circularity of the heavens. Moreover, the text extends the meaning of "the cyclicity of the way of heaven" to describe the cyclical nature of the process of life and death on earth; that is, the way of heaven works through living things on earth to determine their life-and-death process.¹⁸ Very obviously, this has nothing to do with defining a physical cosmography.

As for the meaning of the statement that the way of the earth is *fang*, the authors made clear that this has nothing to do with a physically or geographically / cosmographically square entity. They wrote in explanation of this statement most saliently that, first, "The myriad things exist in distinct types and forms. All have their own function and they cannot be one another (i.e., they cannot change types, forms, or functions)."¹⁹ The "squareness," or, really, the compartmentalizing quality, of the way of earth in which such things remain distinct indicates only a simple recognition of categories of things, or the blocking off (here we see squares) of things region by region, type by type, group by group, individual by individual. Such a *fang*, and supposedly "squaring," way is, then, not in any way physical, geographical, topographical, or cosmographical but is, rather, metaphorical, intended to identify a principle of compartmentalizing organization of things on the earth. This meaning of *fang*, then, is not at all "square" but rather is directly related to the earliest seminal meaning of a character *fang* for which we have record, that of the Shang, whereby *fang* meant something such as "region out from the center," i.e., a compartmentalized region that is distinct from the central entity and its processes.

Fang is, further, descriptive still of an aspect of, and dependent for its development on,

¹⁸ The text reads, "One period of day and night is the cyclical way. The moon proceeding through the twenty-eight celestial lodges, passing through the entirety of each, is the cyclical way. Quintessence traversing the four seasons, encountering all, is the cyclical way. Things are stimulated and sprout; they sprout and come to life; they come to life and grow; they grow and become big; they become big and mature; they mature and decline; they decline and then die; dead, then they [return to] the storehouse. This is the cyclical way." (*LSCQ* 3.5: 31).

¹⁹ *LSCQ* 3.5: 31.

the prior cyclical, generative way of heaven. If we conceived of this overall universal construct in terms of an algebraic x - y graph, we might thus think of the *fang*, compartmentalizing, way of the earth, as identified here, to represent the secondary horizontal, or x , dimension on earth of the vertically active, or y , "cyclical way" of heaven. This horizontal dimension complements and completes the heaven-and-earth cycling of the primary vertical dimension of this "cyclical way," which is the "cyclical way of heaven." The latter, we know, defines on earth the life-death cycle itself. That is, what we must understand as not a circular but rather a cyclical way works through two aspects, the cyclical way of heaven and the differentiating (or blocking-out or distinction-making) way of the earth. There is absolutely no sense of cosmography or cosmographic cartography anywhere in this passage.

The only other meanings of circularity / cycling and differentiating / compartmentalizing that the authors offered in their text of *LSCQ* 3.5 extend their naturalistic definitions to the political realm. They wrote, "When the ruler grasps what is cyclical while the ministers manage what compartmentalizes and they do not exchange [their responsibilities respectively to what is cyclical and what compartmentalizes], then the state prospers."²⁰ From the context provided by not only the balance of the text of this chapter of *LSCQ* but also the fact that this chapter is the third in a sequence of twelve that together define an annual almanac or calendar, we know that the authors meant to impart that (1) the ruler concerns himself with matters of communion and communication with the life force that enables and supports all, the way of heaven, and this concern centers on his understanding the cycles of the heavens and interpreting them calendrically and hemerologically so as to benefit all under heaven, and (2) the ministers concern themselves with the secondary matters deriving from the ruler's primary responsibilities, that is, differentiating and distinguishing, sorting and blocking out, and defining and determining all things produced by the primary cyclical way of heaven and mediated by the ruler, so that the state and its populace can live in organization and thus together enjoy an organo-social harmony.

²⁰ *LSCQ* 3.5: 31.

Again, the authors had no intention at all of defining a square physical cosmography or cartography.

Considered either separately or together, then, the two sections of the *LSCQ* that have been consistently misinterpreted to promote a round-heaven / square-earth cosmography, or most specifically a square-earth geography, do not in fact do so in any measure. On cosmography they are utterly silent and ambiguous but for the obvious acknowledgement of heaven's cyclical motion and ways.

Furthermore, neither does the combined effect of *HNZ* 3 and 4 promote in any way a square geography of earth. In addition, *HNZ* 3 and 4 help to clarify that none of the texts in this Warring States-Han Nine Province tradition of describing the known earth's geography defines in any way a square-earth thesis. The authors of *HNZ* 3 and 4 very apparently followed the essential paradigms established by not only the "Yugong" text of the *Shangshu* but also *LSCQ* 3.5 and 13.1.

Most critically, following the "Yugong" tradition, *HNZ* 4 defines the lands within the Four Seas to be comprised of the central Nine Provinces. Borrowing from *LSCQ* 3.5, toward the beginning of *HNZ* 3, "Treatise on Heavenly Patterns," the authors announce that, "The way of heaven is called 'cyclical' (*yuan* 圓); the way of the earth is called 'compartmentalizing' (or 'blocking,' 'grouping,' or 'regionalizing,' i.e., *fang* 方)." ²¹ In the text that follows immediately upon these statements it becomes clear that, precisely as in the *LSCQ*, their import here remains philosophically cosmological and ontological, not cosmographical, geographical, or topographical. To wit, subsequent to these statements, *HNZ* 3 proclaims that, "What compartmentalizes (or distinguishes according to regions or groups: *fang*) oversees what is dark; what cycles oversees what is bright." As one would expect of a discussion that follows from these *yin* / *yang*-suffused descriptors (dark and light), the text then describes the intermingling of *yang* and *yin* pneuma and the consequent transformation into physical being of types of living

²¹ *HNZ* 3: 245.

things, such as feathery and scaly creatures, and these things' distinct natures as determined by their unique mingling of *yang* and *yin* pneuma. Herein one detects clearly the shadow of the discussion in *LSCQ* 13.1 whereby the quality of *fang* of *di* is defined not by any physical attributes but rather a nature by which things born within the bosom of that whose way is *fang* are blocked out and set apart type by type, or region by region. The authors of *HNZ* 3 obviously were developing directly the philosophical application of the notion of compartmentalizing, that is, grouping or sectioning, as promulgated in *LSCQ* 13.1, but here not so much politically (although that is present, as well)²² as purely naturalistically (and, by extension, ethically). As for the cyclicity of the way of heaven as proclaimed in *HNZ* 3, here, too, it is clear that, just as in the *LSCQ* text, *yuan* describes the cyclical motion of the heavens as evident in the motions of its inhabitant astral bodies.²³

The nomenclature of *HNZ* 3 and 4, having derived from but now elaborating on terminology employed in the preceding Nine Provinces tradition, helps to confirm that the descriptions and definitions of the known surface of *di*, "the earth," to be reviewed below, were not at all intended to be identified to be physically or concretely square. Most importantly, the use in *HNZ* 3 of the term *fang* to describe the *directions* in the *heavens* clarifies what I have argued about the meaning of *fang* throughout the Nine Provinces tradition, that it refers to vague and general spatial directions only, i.e., compartmentalized directions, and most certainly not literally squares of sides of a larger square. In *HNZ* 3 we read, for instance, of the Nine Fields of the *heavens* that are located in the eight directions of *dongfang* (the east), *dongbeifang* (the northeast), *nanfang* (the south), and so on.²⁴ In *HNZ* 4 the same descriptor *fang* is employed to identify *directions* on the lands of *di*, "the earth," as in the case of the Nine Provinces themselves

²² See *HNZ* 3: 246 for a statement directly reminiscent of the similar section of the *LSCQ*: "The mood of the ruler of humans above conducts with the heavens..."

²³ See *HNZ* 3, *passim*, but particularly p. 246, 262–5.

²⁴ *HNZ* 3: 262–4.

as well as the other three sets of eight outlying regions, as we shall review below.²⁵ If *fang* were intended to mean literally *square* and *physical squareness* applied in the authors' minds only to the earth, as commentators and interpreters for nearly two thousand years have assumed, then why did the texts' authors employ the term to describe the directions of not just the earth but also, repeatedly, the directions of the heavens? It is clear that in *HNZ* 3 and 4, when used as an indicator of direction *fang* meant simply *direction* or *region* and did not all connote a physical or delineating squareness.

Furthermore, we may safely consider the authors of *HNZ* 3 and 4, in their temporal and thus also cultural proximity to the authors of all of the other texts in the Warring States-Han tradition, to provide us with guidance to understanding these other texts, including those both prior and posterior to the creation of the *HNZ*. The 2nd-century-BC *bo* divinatory board found at Yinwan (*yinwan boju* 尹灣博局) is a case in point: at the top of the board appears the direction-indicating phrase "*nanfang*" 南方, and these characters rest amid a partition of the board that, delineated by the *bo* lines that we described in Chapter 4, create an equilateral triangle (i.e., including south and half each of a strictly delineated southeast and southwest), not a square, that defines the South. (For the sake of furthering the import of the disjunct between an actual depicted square and the use of the character *fang*, we note again that, of course, the object of description in the Yinwan board is not the earth at all but the overall square heavens.)²⁶ It is quite clear, then, that the Nine Provinces topographical / geographical tradition of *di*, "the earth," never did promote a square-earth cosmography.

Turning directly to *HNZ* 4, "Treatise on the Geography of Earth," the text once again makes very clear that the geography of the known lands of earth has nothing to do with a physical squareness. Following the concentric model of the tradition of the Nine Provinces,

²⁵ *HNZ* 4: 418, 433–4.

²⁶ See Chapter 4, Figure 11. For two independent redrawings of the Yinwan board see Kalinowski (1998–99): 144, and Tseng (2004): 180. Kalinowski did not include the originally present binome *nanfang* in his redrawing of the board's design.

whereby the central civilized core regions (the Nine Provinces) lie within various series of outer regions, *HNZ* 4 proposes four concentric sectors of Nine Provinces (*jiuzhou* 九州), Eight Distant Regions (*bayin* 八殫), Eight Cordon Regions (*bahong* 八紘), and the Eight Extremities (*baji* 八極). Most importantly, from the text describing these lands we learn that this entire four-ring construct of sets of eight regions or extremities and nine provinces is, as are all Nine Province models, surrounded by the Four Seas.²⁷ In other words, in describing this "earth" (*di*), once again the author(s) did not attempt to identify the entire sea-land mass that we, as moderns, expect a text to describe according to our knowledge of the unity of form of the entire aquatic-terrestrial mass of the earth. To the authors of *HNZ* 4 (and 3), *di*, "earth," described only what was believed or fathomed to be the known mass of land on which humans and other creatures lived within the Four Seas. When the text explains, "Now, within the Four Seas, east to west it is 28,000 *li*, and north to south it is 26,000 *li*,"²⁸ it does not even attempt to account for whatever lies in, among, or beyond the Four Seas, if anything. What lay in or beyond the Four Seas did not matter, since it was not perceived to affect directly the human world of the center, the Nine Provinces (even though, the text tells us, the weather of the landmass was affected by the winds blowing over and in from the Four Seas). This is thus not a cosmography but only a topography of the *known lands*, or *di*, of this thing that we now call earth, but this thing, our earth, should not be confused with their *di*. The enormous difference between the measurement of the Four Extremities (597,000 *li*) of the *LSCQ* and the measurement of what lies within the Four Seas (28,000 by 26,000 *li*) found in both the *LSCQ* and *HNZ* is easily explained not at all with reference to different approaches to the use of a gnomon²⁹ but rather much more simply and accurately to the texts themselves: the two sets of figures attempt to describe or measure entirely distinct phenomena. The larger figure offered in *LSCQ* measures the entire encompassing heavenly dome, while the smaller figure reported in both *HNZ* and *LSCQ* offers measurements of the

²⁷ *HNZ* 4: 431, 443–4.

²⁸ *HNZ* 4: 431.

²⁹ See Major (1993): 147–149.

much more limited expanse of only the land within the Four Seas. The difference in topic, being thus so enormous, should be obvious.

Now, as for the textual evidence relating to the circularity or squareness of the Nine Provinces or eight scutes of any group of sectors that helps to constitute what lies within the Four Seas, the evidence can be read accurately only to reflect that the provinces / scutes together describe four concentric sets of circles. The key is, again, in the reading of the term *fang*. The text tells us,

As for the size of the Nine Provinces, they are precisely 1,000 *li* on a side (*fang*; or "1,000 *li* in any given direction [*fang*]"). Beyond the Nine Provinces, then there are the Eight Outlying Regions, which also are 1,000 *li* on a side... Beyond the Eight Outlying Regions, then there are the Eight Cordon Regions, which are also 1,000 *li* on a side... Beyond the Eight Cordon Regions, then there are the Eight Extremities.³⁰

How do we know that this *fang* means "side" or "in a given direction" and not, as it otherwise universally has been read, "square"? For one thing, the use of *fang* in both *HNZ* 3 and 4 to indicate only a vague or general direction has been demonstrated. Most seminally, however, as we have reviewed of other texts in this tradition, the only geometric shape that measures in radius equally in all directions is a circle. Conversely, as the Pythagorean Theorem ($a^2 + b^2 = c^2$, where c is the hypotenuse of a right triangle) proves, moving from the central point along any side of a square toward one of the two neighboring corners of the square, the length of a ray drawn from the center of the square to a point on the exterior line defining the square increases with movement of the point on the exterior line from the inter-corner (cardinal) midpoint toward either of the neighboring corners.

³⁰ *HNZ* 4: 443–4.

If we draw a right triangle with the right angle occurring at the cardinal midpoint of an exterior line of a square, with right-angle sides a and b measuring 1,000, then the hypotenuse c equals not 1,000 but 1,414. This constitutes in c a full 41.4% greater length over a or b , hardly a span to have gone unnoticed even in the 5th through 2nd centuries BC. Consequently, we know that each of the four concentric regions or sectors identified in *HNZ* 4 as together having constituted *di* has to have been conceived to be circular.

Di 地, then, or the land entity that we have in English misinterpreted in and mistranslated from these classical texts to be our "earth," has to have been imagined to be circular. But even more important, the *di* of classical China quite apparently was not at all conceived of as something equivalent to our "earth." *Di* was, rather, only the known landmass that lay within the Four Seas that helped to constitute a greater unprojected, undefined expanse. We do not know from any of these texts of the Nine Provinces geographic tradition what might have been the authors' conceptions of the entity that held for them this landmass and the Four Seas, or what we now know to be the globular earth. *HNZ* 4 only hints at what this might have been, and not geographically at all but only in a vaguely spatial sense. The text describes what surrounds earth spatially merely as "*liuhezhijian, sijizhinei*" 六合之間, 四極之內, or "what lies amid the Six Joinings, what is within the Four Extremities." The Six Joinings refer to the six directions in three-dimensional space: east (or, facing typically south, right), west (left), south (front), north (back), and above and below.³¹ None of the *HNZ*, "Yugong," *LSCQ*, *Zhouli*, *Shiji*, or Sima Qian's description of Zou Yan's geography indicates what this overall mass resting in *liuhezhijian* and *sijizhinei* might have constituted. The *LSCQ* comes closest to defining it when the text identifies the *siji*, Four Extremities, that mark the inner circumferential cardinal points of the heavens (where the stars lie, as if on the inside surface of a globular shell), but even this adverts not to the mass lying within the heavens but only to the heavenly field of containment. This distinction in the object of measurement explains the perceived wild disparity in

³¹ *HNZ* 4: 417.

measurements offered by the *LSCQ* and the *HNZ*, as mentioned above. They simply are measurements of utterly distinct phenomena.

In consequence, we can make two verified statements about Chinese conceptions of geography in the period spanning from the 5th through the 1st centuries BC. First, *di* did not identify what we long have misunderstood to refer to our encompassing body "earth." Second, the landmass identified in all of these texts that represents the known and projected terrestrial world was not at all conceived of as a square, but rather a circle, and the concentrically delineated geo-political domains by which the lands within the Four Seas were organized likewise were construed to be not squares but circles.

The Perhaps Accidental Origin of a Square-Earth Cosmography, 2 BC

The utter certitude that no classical or early-imperial Chinese text described the earth to be square ends with the work of Yang Xiong, for at least once in his *Taixuan Jing*, or "Canon of the Supreme Mystery" (hereafter *TXJ*), completed in first draft in 2 BC, Yang stated unequivocally that "the earth is *fang*" (*difang* 地方). In two other instances Yang implied that the earth is *fang*. The fundamental question we must ask, however, is, what does Yang's *fang* as employed in the *TXJ* really mean? Many additional statements that Yang made in the *TXJ* in fact demonstrate quite clearly that he did not at all intend to promote a terrestrial geography of a square earth. Really, his *fang* is, as in the cases of the *LSCQ* and *HNZ*, metaphorical only, meaning, again, "compartmentalizing," "sectioning," or "regionalizing." Regardless, Yang's *TXJ* appears to be the source of a subsequently developing true square-earth terrestrial geography.

In the several chapters of "autocommentaries" that Yang appended to the main text of his *TXJ*, he attempted to provide a synthetic and universal cosmography that would encompass all that was understood in his time of the system by which the heavens, earth, and humanity operated interdependently to produce, organize, and maintain life on earth in the context of a greater cosmos. The essential point that Yang hoped to convey is that the Great Mystery (*taixuan*

太玄), which to Yang was the way of heaven that works through heaven, earth, and humanity to create and order life and living things, unifies all in the universe through its immanent presence and power. This ultimate metaphysical and ontological power differs in conception and workings not at all from the Warring States-Former Han understandings of the vacuous and quiescent *tian*, *de*, *jing*, *yi*, *xingming zhi qing*, Dao (etc.) as represented in the Classical Metaphysics that we reviewed in Chapter 3. As Yang wrote,

The Mystery is that which abstrusely creates the myriad types [of things] but does not appear in physical form. It causes to be embodied [in thingness] vacuity and nothing and engenders the regulations [according to which the universe and all within it operate]. Encapsulated within the radiance of numen (*shenming*), it establishes the models. It conducts across and unifies ancient and present (i.e., all time), unfolding the types [of things]. It stimulates and causes to intermingle *yin* and *yang*, issuing pneuma (*qi*): [*yin* and *yang* pneuma] now separating, now conjoining, heaven and earth are [thereby] completed!³²

³² Yang Xiong, *Taixuan Jing* 太玄經 (hereafter *TXJ*; *Sibu beiyao* ed. [SBBY], rpt. Taipei: Zhonghua shuju, 1983): 7:6a. All translations from the *TXJ* are my own. For a complete translation of *TXJ* see Michael Nylan, tr. and ed., *The Canon of Supreme Mystery*, by Yang Hsiung (Albany: SUNY, 1993). In translating from the *TXJ*, I have been careful to read the autocommentaries to describe relentlessly the processes involved in the unfolding of all, from its origins in the Great Mystery, through the subsequent and sequential development of heaven and then earth, and finally to the emergence of humanity and its socio-political regulations that complete the trinity of heaven, earth, and humanity and thus also the work of the Great Mystery. It is a sacred process that begins in natural forces and ends in completion with the construction of human organizational principles, principles that themselves derive from human observation of the patterns evident in the way of the Great Mystery as embodied in and revealed through the work and ways of heaven and earth. I take the position that every single character and phrase in the *TXJ* very purposefully serves this singular grand theme, and thus also that it is the burden of the translator to demonstrate how every character's explicit and implied meanings serve the expression of this theme.

To Yang, then, all begins in the Mystery (*xuan*), or Great Mystery (*taixuan*). Heaven and earth and all within their construct are born of the Mystery. Yang otherwise wrote cryptically of what surely are heaven and earth,

Looking up to observe the [astral] images and looking down to view [earthly] circumstances, one investigates [the internal] nature to understand fate [as bestowed by the Mystery], to trace origins back to their beginnings, and to spy ends. [He finds that] the three measures (heaven, earth, and humanity) are of the same type and that [it is simply that] what is thick and what is thin rub against each other. What is cyclical (*yuan*) is unsettled (i.e., it moves). What is sectioned (*fang*) retains conservatively. [When the unsettled] expectorates, then flows [*qi* into] embodiment. [When what retains] absorbs, then congeals [*qi* into] form. For this reason, what covers heaven is called *yu*, and what effloresces *yu* is called *zhou*.³³

This section very apparently describes the essential workings of the embracing universe, *yu-zhou* 宇宙, in which heaven and earth bring all things to life and govern them according to a single, shared way or nature. Movement begins in the active, mobile heavenly canopy and completes itself in the efflorescing vessel that is earth. Yang surely referred with "what is *yuan*" and "what is *fang*" to heaven and earth, respectively. Indeed, elsewhere in his "autocommentaries" to the *TXJ* Yang stated explicitly that heaven is *yuan* and earth is *fang*:

Heaven is cyclical (*yuan*) and earth is sectioning (*fang*). The extremity (the heavenly pole) is planted in the center. In its (heaven's) movement it produces the calendar. In its (the earth's) quiescence [the calculation of] time depends on the twelve [months based on zodiacal heliacal risings] to produce the seven

³³ *TXJ*: 7:6a.

governmental regulations. The active application (lit. "arts") of the Mystery illuminates it all.³⁴

Here Yang makes an explicit claim that the earth is *fang*, which readers might wish to read to mean "square." However, once again *fang* appears to denote rather a process whereby things are sectioned or compartmentalized (or, understanding *fang* according to its derived meaning, "squared off,") to differentiate them. In both of the passages quoted above, there is no sense of a physical squareness — for instance, Yang does not offer any hint of measurement, or the measured cosmic relationships, of an actual circle and a square. His language is cryptic and metaphorical, leading us to understand that this entire construct is, though descriptive, elaborative of principles and forces only. In such context, the cyclical *yuan* and compartmentalizing *fang* seem simply to contribute to the metaphor that Yang suggests of a friction, occurring among differing aspects of the processual application of one creative unfolding way, that ultimately leads to (1) the birth within the crucible of heaven and earth of the myriad things in form, and (2) human completion of the model through its development of socio-political regulations that mimic the natural Mystery embodied and evident in the workings of all of and within heaven and earth. In one passage, in fact, Yang describes such a friction occurring among what is cyclical and what compartmentalizes [things] that stimulates the creation of the sundry forms that produce on earth a life process:

The cyclical (*yuan*) and the compartmentalizing (*fang*) grind against one another, and the hard and soft interfere with one another. When [one or the other of the contrasted pairs] has reached fruition, then its decline begins; when one is exhausted, then it is born again. Now full, now vacuous; now flowing, now stopped; all inconstant.³⁵

³⁴ *TXJ*: 7:9a.

³⁵ *TXJ*: 7:8a.

Supportive of the view that Yang intended *yuan* and *fang* only metaphorically is in his identification in another passage of heaven as a precipice and earth a hole, referencing the belief that things emerge from heaven's forces to be completed in and populate the earth.³⁶

Most telling, however, is a passage in which it is clear that Yang was following and indeed combining the two naturalistic and political elements of the tradition of the "cyclical way of heaven, compartmentalizing way of earth" that developed in the *LSCQ* and *HNZ*. Here Yang revealed from what metaphorical models he derived his quite apparently abstract cyclicity of heaven and compartmentalizing quality or function of earth:

Heaven cycles according to its (the Mystery's) way, and earth, as a fence line, carries it (the way of the Mystery) to its end [in its production of things]. [Throughout this process,] *yin* and *yang* intermingle haphazardly such that there is the male and there is the female. The way of heaven develops to form a compass. The way of earth develops to form a carpenter's square (*ju* 矩). The compass moves, revolving through the encampments [of the twenty-eight celestial lodges]. The carpenter's square remains quiescent, settling all things. Revolving through the encampments enables numen to be illuminated. Settling things enables types to be coalesced. The coalescing of types enables fortune. The illumination of numen enables the establishment of the most exalted. The Mystery is all of the way of heaven, the way of earth, and the way of humanity. When [spoken of] together, then we employ the term "heaven" to name it. It is the way of ruler and subject, father and son, and husband and wife.³⁷

Yang's combination and amplification of the earlier political projection of the meaning of the

³⁶ *TXJ*: 10:4b.

³⁷ *TXJ* 10:1b–2a.

metaphor of the compartmentalizing way of earth, as a productive and sectioning agent, as found in the *LSCQ*, with the later largely naturalistic application of the metaphor as delineated in the *HNZ* obviate that he consciously followed the two texts. He also clarifies in this passage that the cyclical way of heaven is not a physical construct but a metaphysical way that describes its presence throughout not just heaven but also earth and humanity. As in the *LSCQ*, then, we should read this cyclicity of the way to connote just that, a cyclical process, rather than a circular construct. Such a metaphorical, metaphysical understanding of the "circularity" of heaven should also, then, by parallel inform our reading of the *fang*-ing quality of the earth: if indeed we allow this *fang* to advert at all to a "squaring quality," it should be understood to be metaphorical only, employed to describe a process by which the earth sections things off, or compartmentalizes them, and thereby delineates them by type and/or region.

There is as well in this passage a clear penumbra of an important text intermediate between *LSCQ* and *HNZ*, on the one hand, and *TXJ*, on the other. This text is the "Commentary on the Attached Verbalizations," or "Great Treatise," of the *Zhouyi* that dates to sometime in the Former Han between the period of the *HNZ* and the *TXJ*, i.e., c. 139–2 BC inclusively. The passage above from *TXJ* clearly echoes the initial passage of the "Commentary," which reads,

When heaven is (has taken its place as the) lofty and earth is (has taken its place as the) lowly, then *qian* and *kun* become fixed. When the lowly and lofty have been [thus] arrayed, then [the principles of] exaltedness and ignobility assume their [respective] positions. When activity and quiescence [thus] have constancy, then [the principles of] hardness and softness become established. When sections (or regions, "*fang*") coalesce by types and things (*wu*) separate by groups, then [the principles of] fortune and misfortune are produced. When in heaven the abstracts [of things] are complete and on earth the forms [of things] are complete, then flux and transformation become visible.³⁸

³⁸ *Zhouyi zhengyi* (SSJZS), 7:1b. Translation modified slightly from Didier (1998): 294–5.

Like all of *LSCQ*, *HNZ*, and *TXJ*, the "Commentary" attributes a compartmentalizing, or regionalizing, sectioning, or territorializing (*fang*), function or quality to a segment of the process of creation and completion, but it does not attempt to define a cosmographically or topographically defined entity, i.e., an "earth." Also interesting is the fact that the "Commentary" resembles far less the *TXJ* than it does particularly the *HNZ* in its placement of the "sectioning by types" in the midst of what is apparently the initial creation process of the universe, prior apparently even to humanity's appearance within the universe. Then Yang, it seems, is particularly responsible for having elevated the role of humanity in the completion of the universe far beyond what either of the other Han-period texts, the *HNZ* or the "Commentary," proposed. Yang's approach thus resembles more the pre-Han *LSCQ* of 239 BC than either of these Former Han texts. At any rate, it is clear that Yang followed a well established tradition of including the "compartmentalizing" of things by type to constitute a critical stage in the process of creation, and it seems readily apparent that in this entire tradition such a compartmentalizing had nothing to do with a square-earth cosmography or topography.

In both the political and naturalistic applications of the metaphor in the *LSCQ* and *HNZ*, what was clear was that *fang* adverted not to a square physical shape but a more germane and, ultimately, ethical issue of arranging things by defining them categorically, i.e., sectioning or segmenting them apart by types (or regions). In Yang Xiong the identical meaning of "securing things" to "enable their coalescing by types" is easily apparent. Moreover, his explicit metaphorical comparison of the way of each of heaven and earth to a perfect compass and carpenter's square, respectively, informs us that his *yuan* and *fang* were mere metaphors for the processes in which heaven and earth engaged to create and complete things. Indeed, Yang indicated in another segment that his "compass" metaphorically described the employment of the Mystery to measure internally in the mind the heaven-earth construct: "Employing it as a compass is 'thought,'" he wrote. Elsewhere Yang further demonstrated that his compass and carpenter's square were simply metaphors for the way in which the Mystery creates and sustains heaven, earth, and all that exists through and in them:

The Mystery has one compass and one carpenter's square, one rope and one level, to traverse vertically and horizontally the ways of heaven and earth, to contain the numerological permutations of *yin* and *yang*.³⁹

Yang's *fang* of the earth remains, then, a culturally charged metaphorical description of the compartmentalizing function or process of "earth," indicating merely the manner in which the earth, completing heaven's initiation of the Mystery's cyclical life-giving force, (1) creates and nurtures things of differentiable types, and (2) causes, through the perceptible and knowable distinct qualities of things that it creates, their differences to be apparent and delineable, as a carpenter's square separates things of a type from others by enabling one to draw an encompassing line around them. The compass draws the circle, or the outlines of the cycle, in which all activity can take place; the carpenter's square measures and sections apart by type all things created within that cyclical process drawn metaphorically as a circle. The only real differences between Yang Xiong's model as exhibited in the *TXJ* and the similar passages in the *LSCQ* and *HNZ* are that Yang has (1) combined and amplified both the naturalistic and human elements of the trinity of heaven, earth, and humanity such that in Yang it becomes especially clear that the way of heaven, as the first conduit through which the powers of the Mystery work, propels itself throughout the ensuing construct of heaven-earth-humanity such that it remains immanent throughout all things that are born and remains active within the trinity, and (2) exaggerated and intensified the role that the human third of the trinity plays in the completion of the overall umbellate construct of the *yu-zhou*, the space-time universe. Yang's *TXJ* thus completes a trend apparent in late-Warring States and early-Han thought that insists upon the morally significant input of humanity in the completion of the universe, exhibited earlier in texts such as the *Xunzi*, *LSCQ*, and *HNZ*, all of which share a certain intellectual lineage. We thus may conclude that Yang did not intend to promote a real, physical earthly squareness but only endeavored to amplify the role that earth plays in the overall Mystery-borne *yu-zhou* construct

³⁹ *TXJ*: 10:3b.

whereby things created on earth can be organized by sectioning them into recognizable — and thus controllable — types or regions. Yang's position then represents merely an extension and amplified conclusion to the developments of metaphorical cosmology apparent throughout Warring States and early-Han cosmo-political thought.

And if it is true, as Michael Nylan indicates, that otherwise Yang promoted a *huntian* cosmology in which a spherical egg yolk-like earth was conceived to be surrounded by a greater sphere of heaven,⁴⁰ then the metaphorical nature of Yang's "circles" and "squares" becomes a certainty. I have not, however, found any statement made uncontestedly by Yang that would identify explicitly his cosmography with the *huntian* thesis. On the other hand, if the eight objections to the *gaitian* system attributed to Yang that were recorded in the 7th-century *Sui shu* truly represent Yang's statements, then the comment in this *Sui shu* passage introducing the attributed objections that indicates that Yang's point was to promote rather the *huntian* cosmography would confirm our suspicions that Yang's "*di fang* 地方," which one might wish to read literally – and mistakenly – to indicate a "square earth," was intended metaphorically only to advert to a compartmentalizing agency performed by the metaphysical way of an ontologically elemental "earth" principle or entity. However, we really cannot be certain that the attribution of these statements to Yang Xiong is accurate.⁴¹ Still, they would be consistent with what we have reasoned to be Yang's only metaphorical "squareness," i.e., compartmentalizing (*fang*), quality or function, of earth as expressed in the *TXJ*.

Yang Xiong's cyclical / circular and compartmentalizing / sectioning metaphorical references to heaven and earth, or, really, to the imagined and imaged cosmogonically / cosmographically *patterned behavior* of heaven and earth, do not promote a true square-earth geometry or cosmography. Moreover, it seems pertinent that evidence indicates that at the time of Yang's own activity at the courts of the Former Han and Wang Mang's New dynasty, the old cosmography that projected a round earth underlying a square-gridded sky, all falling within a

⁴⁰ Nylan (1993): 87.

⁴¹ *Sui shu* (Beijing: Zhonghua shuju, 1973): 19:506–7.

three-dimensionally domical heaven, yet prevailed. Still, Yang's *TXJ* may yet be the source of the later square-earth cosmography. It may be, and I believe it likely, that over the century or two following the completion and promulgation of the *TXJ* his metaphorical compartmentalizing, or what might be misunderstood to be a "squareness," of earth was misinterpreted to firmly promote just that, an actual – even if thoroughly inappropriately conceived – square-earth cosmography.

The Persistence of the Traditional Cosmography through c. 4–23 AD

Wang Mang was an imperial maternal relative who served as Regent for the child Han Emperor Ping (r. 1 BC – AD 6). In 9 AD Wang usurped the Former Han and ruled until 23 AD over his own Xin (New) dynasty. To contribute to his centralizing of divine and earthly authority in the capital, Chang'an, in 4 AD Wang ordered built there a Mingtang, or Hall of Luminance.⁴² The Mingtang was in Former Han times reported to have served as the central altar and sacred political pivot of all ancient emperors and kings of China, from the Yellow Emperor down to the early Zhou kings. In 110 BC, having heard from his courtiers vague reports of the functions and architecture of the ancient Mingtang, Liu Che, i.e., Han Wudi, the Martial Emperor, had built a Mingtang at Fenggao, near Mt. Tai, in preparation for his performance at and on Mt. Tai of the *feng* and *shan* sacrifices. We know little of the constituent shapes of Liu Che's Mingtang. From the only surviving contemporary account, Sima Qian's description in *Shiji* 12 (28), we cannot discern the shape of either Liu's overall Mingtang structure or its central altar on which sacrifices to Di and Taiyi were performed. From Sima's descriptions neither can we ascertain what shapes Liu Che's two altars to Taiyi took.⁴³

⁴² For a brief description of the structure's architecture, see Lewis (2006): 269; and below, this section.

⁴³ According to *SJ* 12: 480–1 (*SJ* 28: 1398–9, 1401), Liu's Mingtang was used to perform ritual worship to Taiyi/Di and heaven, as well as particularly the *feng* sacrifice to Taiyi/Di and his adjutant directional Five Di. According to a report that Sima records of a description of the Mingtang of the legendary Huangdi, according to which plan Liu Che ordered his own Mingtang built, "The Mingtang had one building, with four sides and no walls,

a rush roof, and a canal running through it. Surrounding the palace altar was a walk with a level above. One entered from the southwest. It (the path from the southwest) was called 'Kunlun.'" In addition, the 1st century BC *Dadai Liji* claims that the roof of Liu's Mingtang was round (Lewis [2006]: 267). Again according to *SJ* 12, the altars to Taiyi and his subordinate Five Emperors were placed in the center of the main altar platform, the Taiyi altar surrounded by those dedicated to the Five Emperors, each according to the direction of his provenance, with the adjutant directional Di of the center, the Yellow Emperor (Huangdi), sharing the southern altar with the Vermilion Emperor (Chidi).

Superficially from these descriptions it would appear that Liu Che's Mingtang was overall circular and encompassed a square central ritual platform. This we might gather from the descriptions of the Mingtang that (1) its structure had "four sides" (*simian* 四面), (2) its altar was surrounded by a path that ostensibly would seem to be circular (*huan gongtan you fudao* 環宮壇有復道), and (3) its rush roof was circular. While this would strongly support my own interpretation of the cosmography prevalent in these times, I do not believe that such a conclusion would be valid. First, it is not only a square that intrinsically possesses four sides; a circle can be described to possess four sides, as well. Second, not only can a circle, but also a square or any other shape, "surround" (*huan* 環) something. That is, though in its sense of "to encircle" *huan* often is considered to connote a circularity, technically it denotes literally only a circumscription, which does not necessarily involve circularity. A square or any other shape can also circumscribe or encompass things. Third, we cannot rely on the report of the later *Dadai Liji*. Otherwise, Sima offered only one measurement of the width or diameter of the ritual platform (*SJ* 12: 475), but from this single measurement of "a width of two *chi*" of course we cannot determine whether the shape was round or square.

Sima is just as unclear on the shapes of the altars that Liu had built on which to conduct sacrifices to the highest heavenly and earthly spirits, and most significantly to Shangdi and/or Taiyi. We recall from Vol. I, Chapter 3 that Liu had constructed two altars dedicated most particularly to Taiyi at (1) an unspecified location southeast of the capital between about 135 and 123 BC, and (2) the Ganquan (Sweet Springs) Palace south of the capital in the autumn of 121–120 BC. In the first instance, Miu Ji's altar to Taiyi, Sima tells us nothing of the geometry of the three vertically stacked altars to Taiyi, Tianyi, and Diyi. (*SJ* 28: 1386) Later in *SJ* 28 (12), Sima Qian offers that the design of the Ganquan Palace's altar to Taiyi followed that of Miuji's earlier altar, but he provides no clear indication of what the geometry of that design was. The only hint of what shape the Ganquan altars took occurs when Sima reports that, as part of the sacrifice to Taiyi and his adjutant Five Emperor spirits, the officiating ritualist performed rituals "below it (the altar) on the ground on all sides" (*qixia sifangdi* 其下四方地). (*SJ* 28: 1394) It is tempting to read this to mean that the altars were thus square, but having four sides does not, without further clarification, limit the shape of the object described to being a square. To those oriented cardinally in their thinking, which Sima and his contemporaries were, a circle also has four sides, i.e., like everything else it encompasses or is encompassed by the four directions (*sifang*). As far as we know, Sima meant to indicate with *sifang* only vaguely "all around, on all sides."

Conversely, Wang Mang's early 1st century AD Mingtang has been partially excavated, and while details are sketchy, it is clear that his Mingtang expressed in its structure an emphatically traditional cosmography whereby heaven, the targeted recipient of ritual performed at the Mingtang altar, was both square and round.

First, we note that, serving as the Mingtang's circumferential border was a round moat that encompassed a square wall that itself enclosed within it a circular ritual platform at whose own center lay a square altar. From periphery to center, the structure thus followed a concentric alternating circle-square-circle-square geometry. Most critical for our present concern is that at this time the square continued to occupy the most central ritual position in a structure whose first purpose was to communicate with the highest powers of the cosmos, those of the heavens above. The concentric alternating circles and squares represent a careful delineation of all of the ancient, classical, and early-imperial understandings of the shapes of the heavens and its parts that we have reviewed in these volumes, thus serving as a cosmographical synthesis of both older and more recent traditions: the circular moat represented the "earth's" boundary oceans, the Four Seas, lying beyond the known horizon, with the internal shore of the moat representing the horizon of the known or projected world of which we read in the Nine Provinces tradition, which we might call the idealized horizon. It is also the point of juncture of the round heavens and, we note, the round earth.

Interestingly, this construct aligns identically with both the 5th-century BC artifact described in Chapter 4 that depicts a moat/ocean surrounding a square/*ya*-shaped center⁴⁴ and, most noteworthy, Zhang Heng's early 2nd century AD *huntian* cosmography, which we will review further below. The point is that Wang Mang's cosmography as expressed in the structure of his Mingtang is consistent with both ancient and contemporary cosmographic speculation. There thus is absolutely no indication that at this time the square-earth theory had become in any way dominant at court. In fact, considering the remaining internal square wall and central circular ritual platform, itself containing a square (or *ya*-shaped) altar in its center, that helped comprise Wang's Mingtang, the contemporary consistency with ancient designs becomes even

⁴⁴ Lewis (2006): 261.

clearer. The outer square wall lying within the circular horizontal circumference, with each cardinally positioned wall segment boasting a central gate along its length, appears to have reproduced the *bo* grid of the heavens, the gates delineating the cardinal ends of the lines forming the central crosshatch of the heavenly polar cross (or the Ts on a TLV mirror) but also serving ritually as actual gates by which the cardinal spiritual conduits could be opened and closed and thus controlled. Finally, the central circle apparently represented the pivotal circular Ziwei of the polar heavens, and the square or *ya* shape within the ritual circle recreated the ancient polar quadrilateral that, as we well know, no longer pivoted at the pole but one of whose short ends was formed from two of the stars (Alioth and Mizar) of the handle of the astrologically central and thaumaturgically critical Dipper.

Understanding that Wang Mang and his court initiated an intensive Western Zhou neo-classicist revival, attempting through many administrative changes to adjust the modern imperial Qin-Han models in favor of what Wang and his courtiers considered the pure models of the ancient Zhou system⁴⁵ (including the structure of the Mingtang itself), and further that Wang relied most emphatically on the spiritual power of the Dipper to attempt to prop up his dynasty and, in fact, save himself and his rule from impending destruction as he awaited in his palace the final incursion of the forces that would indeed end him and his rule,⁴⁶ then that Wang would, in his construction of his Mingtang, follow very carefully what he understood (apparently quite accurately) to be the ancient or Western Zhou model of placing specifically a square at what appears to have been his recreation of the explicitly identified ancient celestial pole at which a quadrilateral was centered, is not surprising.

⁴⁵ For a very brief review of Wang Mang's policies, see Hans Bielenstein, "Wang Mang, the restoration of the Han dynasty, and the Later Han," in Denis Twitchett and Michael Loewe, eds., *The Cambridge History of China, Volume I, The Ch'in and Han Empires, 221 B.C. – A.D. 220* (Cambridge: Cambridge University Press, 1986): 223–235.

⁴⁶ For the oft-quoted story of Wang Mang's last stand in his palace, when, dressed in an azure robe meant to sympathetically gain for Wang command over the powers of the Ziwei and its resident almighty Dipper (whose own resident god surely was our familiar Taiyi), Wang resorted to manipulating a *shi* diviner's board to employ the Dipper's martial power against his enemies, see Ban Gu, *Han Shu* (Taipei: Dingwen, 1987), 99:4190–1.

The fact that Wang Mang, at whose court Yang Xiong was active and with whom Wang was apparently fairly close, did not construct his Mingtang on the basis of a square-earth cosmography lends credence to the position that Yang Xiong's ostensibly cosmographic discussions in the autocommentaries of his *TXJ* were not cosmographic at all, and that Yang's "yuan heaven, fang earth" statements, following the tradition inherited from the *LSCQ* and *HNZ*, constituted only metaphors for describing the processes through which heaven and earth contributed, as two-thirds of the sacred trinity of heaven, earth, and humanity, to the development and maintenance of the *yu-zhou* construct that ultimately arose from the power of the Great Mystery and that developed the universe and operated by means of what was conceived actually to be a "cyclical heaven, compartmentalizing earth" process. Therefore, once more it appears that, in the early 1st century AD, a true square-earth cosmographic thesis had not yet been developed.

Systematized Cosmographies in the Middle to Late Han

Having completed our process of elimination we have arrived finally at the one text dating to prior to 200 AD that actually proposes a type of square-earth cosmography. This text is the *Zhou Bisuan Jing (ZBSJ)*, collected sometime during the 1st and/or 2nd centuries AD. Considering the findings of our foregoing studies of classical Chinese cosmography and terrestrial geography, it has become apparent that the *ZBSJ* is the earliest text to define and develop explicitly either the *gaitian* 蓋天 or *huntian* 渾天 cosmology.⁴⁷ As we know, the

⁴⁷ A third system of Han-period cosmography, the *xuanye* 玄夜 (or 宣夜), was mentioned by Cai Yong c. 180 but is not well understood. *Sui shu*, "Tianwen zhi" ("Treatise on the Patterns of Heaven") contains descriptions of all three of the *gaitian*, *xuanye*, and *huntian* systems. *Sui shu* 19:507 describes the *xuanye* system, as it was understood during the Han and reported by the Han official Xi Meng; the text can be translated loosely as follows: "Heaven has neither substance nor a limit to its heights; thus to imperfect human eyes it appears to be black, just as the further one travels from a yellow mountain the darker it appears. Black is not its inherent color; and what appears to be black has no body. The sun, moon, and myriad stars naturally come to life amid the vacuity and emptiness; their movements and stoppages all rely on pneuma. The reason that the Seven Luminaries (the sun, the

cosmographies espoused in or through all of (1) the *LSCQ*, *HNZ*, "Yugong" section of the *Shangshu*, *Shiji* 2 and 74, and *Zhouli*, as well as (2) the *shi* diviner's board, lodge dials, *bo* boards, TLV mirrors, and gnomon chronometers, other Former Han-period illustrated hemerological systems, and Wang Mang's Mingtang, were not square-earth and round-heaven *gaitian* cosmographies. In fact, where in these sources a cosmography has been described or intimated, it has invariably involved, on a two-dimensional scale, at least, a circular-earth and circular-heaven model. Such a cosmography could fit either a variant of the *gaitian* or the *huntian* systems as these are introduced in the *ZBSJ*.

Various of these *gaitian* systems proposed several distinct cosmographies that projected the shapes of heaven and earth in quite different ways. The *gaitian* series of theories has been argued to have begun to develop first during the late-Warring States and early-Han, and a square-earth projection has always been assumed to be its earliest and most consistently representative feature. Such a square-earth *gaitian* cosmography has been believed to have informed both the square-perimetered design of *shi* boards⁴⁸ and the cosmography as described in the texts of *HNZ* 3 and 4,⁴⁹ including the final section of *HNZ* 3 that relates what Christopher Cullen believes is a later-emended (1st century AD) account of a singular cosmological measurement process that Professor Cullen proposes offers a cosmography distinct from that espoused in *HNZ* 3 proper. Although Professor Cullen has interpreted the latter text to describe the measurement of a square earth, in fact the measurement exercises described in this text clearly have nothing to do with

moon, and Mercury, Venus, Mars, Jupiter, and Saturn) at times stop and at times move, why they sometimes move forward and sometimes move backward, why they're now hidden and now apparent, and why they all progress or regress unlike, is because they are utterly untethered. Therefore, each is unique. Thus, the polar extremity forever resides in its place while the Northern Dipper does not with the myriad stars set in the west."

⁴⁸ For the purported relation of the *gaitian* system to the geometry of the *shi* board see, for example, Christopher Cullen, *Astronomy and mathematics in ancient China: the Zhou bi suan jing* (Cambridge: Cambridge UP, 1996): 43–49, as well as Major (1993): 42–3.

⁴⁹ Major (1993): 42–3.

either the earth's extent or a square.⁵⁰ Likewise, as we know, none of the *shi* and the *HNZ* 3 (proper) and *HNZ* 4 texts promotes anything close to the later *gaitian* cosmographies, and none even remotely suggests that the earth might be square. Certainly in many cases a variant of the *gaitian* theory may have been embodied in the designs of Han *bo* boards and TLV mirrors, though since the TLV mirrors date to this entire Han period of significant flux in the relative cosmographic meanings of the square, circles, and the nine-square square grid that usually appears in abridged form through its component Ts, Ls, and Vs, many interpretations of the TLV mirrors are possible simultaneously.⁵¹

The earliest defined *gaitian* and *huntian* systems, as found in the *ZBSJ*, describe the shapes of the heavens and the earth very inconsistently. In some *gaitian* proposals the earth and the heavens are said to be flat squares one atop the other,⁵² while in other cases the heavens were projected to be circular, and perhaps conical, as a rain hat, over an earth that was thought to be

⁵⁰ Christopher Cullen imposes on this text both the earth as the object of measurement and a square shape to such a measured earth ("A Chinese Eratosthenes of the Flat Earth: A Study of a Fragment of a Cosmology in *Huainanzi*," Appendix A, in Major (1993): 269–290). Both interpolations are incorrectly imposed. While grappling with this extremely difficult cryptic and probably corrupt text, Cullen made the typical mistakes of assuming that (1) the measurement apparatus that appears to describe a square consisting of four gnomons necessarily implies a square earth, when in the text it does not; (2) the obtained sample measurement of 18,000 *li* of the space between the observer and the horizontal sun constitutes a basis for understanding the author to have promoted a square-earth cosmography, when in fact the equal measurements of 18,000 *li* that the author suggested could be obtained in each direction (north, south, east, and west) clearly reflect, as in the terrestrial geographic textual tradition outlined above in this chapter, an understanding of the space measured to be circular — once again, all four points at north, south, east, and west are equal radii of a circle, and therefore the phenomenon measured could not be a square, in which one radius cannot describe all radii of the square; and (3), most fundamentally, that the measurements to be achieved when following the text's instructions were those of the earth; but the text in no way suggests that it is some earthen extent that is to be measured but rather very clearly identifies the fundamental phenomena to be measured to be the distances between the observer and *the sun* at solstice or equinox. The earth or any terrestrial entity had nothing to do with the distances or expanse of space being measured. Thus, not even in this text appended to the *HNZ* in the first centuries AD do we find any hint of a square-earth cosmography. See the text in *HNZ* 3: 408–9.

⁵¹ For some such varied interpretations, compare Tseng (2004): 163–215, and Major (1993): 32–43.

⁵² "The Book of Shang Gao" A6, *ZBSJ*, tr. Cullen (1996): 174.

either square or circular.⁵³ From these inconsistencies it is very apparent that at this late point in the Han a debate had arisen fairly recently regarding the shapes of heaven and earth. The precise meaning of the square, then, was itself yet in flux, which, beyond the fact that a clear square-earth thesis does not appear in any text prior to the Latter Han, should give us serious pause in accepting at face value the purported representation of the square-earth / circular-heaven *gaitian* system in sources predating the *ZBSJ*.

The *huntian*, or what we may understand to mean "spherical heaven," system postulated just that, a spherical heaven surrounding either a flat but horizontally circular or globular (and thus still horizontally circular) earth. Christopher Cullen has traced speculatively the first hints of the incipience of this more advanced spherical astronomy to c. 70 BC, when someone apparently had employed an armillary instrument to measure north polar distances of celestial objects. According to Cullen, by the early 2nd century AD, when Zhang Heng described the *huntian* system in some detail, this system was already displacing at the Han court the *gaitian* cosmography that Cullen believes had been employed to map the heavens since probably no later than the late 1st century BC (though actually it seems not to have been so employed, and, anyway, whatever the *gaitian* cosmography might have been at that point is anyone's guess). It is particularly noteworthy that Zhang's conception of the earth was not as a square but rather a roughly shaped circle held within a circumferential band of water and, beyond that, the great sphere of the heavens.⁵⁴ He went so far as to metaphorically describe earth as an egg yolk within the greater encompassing egg of the heavens.⁵⁵ Therefore, even at this time the meaning of the square had not been assigned firmly to the earth, its symbolic reference still "up in the air."

⁵³ "The Square and the Circle" C1–2, *ZBSJ*, only implies cryptically a circular heaven and square earth (tr. Cullen [1996]: 182), while "The Shapes of Heaven and Earth; Day and Night" E6 (tr. Cullen [1996]: 189) states explicitly that, "Heaven resembles a covering rain-hat, while earth is patterned on an inverted pan." A pan is not square; it is circular.

⁵⁴ See Cullen (1996): 64–66, and particularly p. 66 for Cullen's pictorial recreation of Zhang's description; and Needham and Wang (1959): 216–7, 355–7.

⁵⁵ See the translation of Zhang Heng's description of the *huntian* system in Needham and Wang (1959): 217.

In fact, in our review of the classical and early-imperial texts, illustrations, and artifacts that have touched on cosmographic geometry, we have found that very consistently heaven and earth were both conceived to be overall circular, and as early as in the *LSCQ* in 239 BC the circular enclosure that held the heavenly asterisms and encompassed a circular earth was described as if a sphere: it was not only circular and domical, it appeared as well to possess three-dimensional depth, which depth below the horizon necessarily must have been a hemisphere, forming with the upper hemisphere hovering over and around the earth then a complete sphere. The sense of the sphericity of the encompassing heavens was strengthened considerably when in *HNZ* 3, a text that demonstrably followed the *LSCQ*, the universe was described to consist of the conjoining of the six directions (front/south, rear/north, left/west, right/east, and above and below).

Consequently, if either of the Latter Han cosmographic projections can be applied retroactively to earlier Chinese traditions, it is the *huntian* system that appears to best describe them. At the same time, one of the variants of the *gaitian* system that projected a circular earth and a circular/conical heaven might also apply. This should tell us that likely both Latter Han systems evolved out of an understanding of cosmographic geometry that quite naturally saw the outlines of heaven and earth to be circular, as any casual or unsophisticated observer would assume as s/he noted particularly the nocturnal domical heavenly canopy wrap the earth at the horizon as a circle. I believe, further, that evidence allows us to postulate that as early as the Shang period the heavens that enclose the earth were already conceived to be fully spherical, with the naturally circular earth resting somewhere within the revolving sphere.

Ancient Chinese Cosmography

In her book *The Shape of the Turtle: Myth, Art, and Cosmos in Early China* Sarah Allan posited that Shang religious artifacts, including royal tombs in the form of a square-centered

cross (or *ya* 亞 character) and the common use in oracle-bone divination of turtle plastrons, show that the Shang people viewed the heavens as having been formed from a round turtle shell and the earth from the squarish plastron. Allan also employed myth dating in written form only to the late-Zhou period to bolster her idea that the late-Zhou tradition (but which tradition, as we have seen, can actually be dated only to the Latter Han) whereby the heavens were round and the earth square began in the Shang conceptualization of the cosmos as reflected in artifacts recovered from the earth that attest to their religious/political activities.

Part of Allan's evidence came in the form of depictions of turtles cast into the circular bottoms of Shang bronze vessels.⁵⁶ This was a fairly common motif in Shang bronzes, as Allan noted. While she saw this as proving that the *heavens* were circular, I see it rather as proof that the Shang saw either the heavens as a full sphere, with a hemisphere hidden below the earth's horizon, or earth itself as a great hemispherical bowl (cf. here Yang Xiong's metaphor of earth as a hole), a sea in which the daemonic turtles (and dragonic serpents) swam. After all, the turtles — and serpents, we must add — appear, with shell backs facing *downward*, on the round *bottoms* of the vessels, with the convex (outer) side of the shell bowls thus *not* oriented toward what is above, which is hovering heaven, but rather toward what supports from below, the stable and watery earth. Furthermore, the Shang royal court believed that they communicated with *heaven above* by applying drills and heat to crack not the bowl-shaped shell of the turtle but rather the *square- / rectangular-shaped plastron*. In addition, the cross- or *ya*-shaped royal tombs, in the center of which lay a *square* sepulchre or coffin, were directed at sending the spirits of the deceased ancestors not into the *earth* as Allan suggests (their bodies already were there), but instead, as we can fairly understand, the square center of the *heavens*. The *ya* shape of the tomb describes not the *sifang* out from the center on earth but really the *center* of the *heavens*. The ramps that form the four-directional appendages to the central square tombs are just that — access ramps. They also serve to accentuate the center by directing attention toward

⁵⁶ For illustrations of rubbings of such creatures cast into the bottoms of *pan*, *zun*, and *you* vessels, see Allan (1991): 151, 161, 169. For further examples appearing on *pan* vessels, see Huang Jun 黄濬, *Yezhong pianyu* 殷中片羽 (Beiping: Zun gu zhai 尊古齋, 1937): A28b, A34b, A35b–36a.

it, and they are reflected in the Sinitic form of the *ya* character. Shang attention was on the hovering *center above*, which was *square*, and not the periphery below, for it was the *square* in the heavens that housed their highest ancestors. Propitiating these ancestors resident in the square polar high court of the heavens, Ding, the Shang were able to influence the overall heavenly council of Di to "spin" events on earth to their benefit.

The *Taiyi shengshui* text perhaps reflects how this concept of the structure of the universe survived into the Warring States period, along with the various traditions that we have seen were transmitted from the Neolithic into late-Zhou times. For from *Taiyi shengshui* we learn that Taiyi bears *water*. This water flows where? Downward — diurnally in the created world in the form of precipitation, but also, cosmogonically, in the creation of all things as this pneumatic stuff coagulates into ever more concrete forms on its downward journey from ultimately the heavenly center. Now, what is it that, resting below the source of the flow of water, catches the water to form a pool (oceans) and thus prevents it from dispersing and being lost? A *bowl*. And where do we find Shang representations of tortoises? On the *bottoms* of *bowl-shaped* bronzes, with rounded shells inverted to offer upward the concave internal space of the shell.

Thus, while the *huntian* cosmography has been understood universally to have developed later than the *gaitian* cosmography, and it has been thought to have been formed on the basis of an advanced measuring of the heavens enabled by the development or importation of an armillary sphere in the early 1st century BC, it appears from this evidence that the *huntian* thesis, which describes a spherical heavenly shell encompassing in its center a disc or globe of earth, represents more closely what we now understand must have been the earliest identifiable Chinese cosmography, that of the Shang and Zhou. It is likely, in fact, that the thaumaturgically and ritually central artifact that enjoyed the most critical role in communicating directly with the Shang and Zhou ancestors, the round *ding* tripod, was shaped to represent this *huntian* spherical cosmography (the tortoises and serpents swimming on the bottoms of the exteriors of many *pan*, *you*, and *zun* vessels strengthen this reading), and this would explain its very centrality to the Shang-Zhou ancestral cult.

Therefore, while Allan was correct in her recognition that the overall shape of the tortoise carapace and plastron possessed for the Shang political elite a cosmically pregnant shape, she

read a much later, Latter Han and later, square-earth thesis into what were originally the real referents of the plastron's nine scutes, the quadrilateral at the ancient NCP and the eight *jiuye* sectors of the heavens that lay outside of the polar square and which during the Warring States and Han periods were all reproduced as a nine-square *bo* grid. The tortoise plastron's symbolic and religious value was in its contribution, beyond what the bronze *ding* vessels could practically reproduce, of its squarish shape that mimicked the quadrilateral at the pole and the overall square, nine-sectored grid of the heavens.

But what cosmographical projections might have pre-Shang Chinese Bronze and Neolithic peoples have made? In the remains of their activities in fact we find evidence of the tortoise's long having been exalted as something larger and greater than everyday existence in the physical world. The tortoise from early times quite apparently possessed some thaumaturgical power that people wished to capture or possess for themselves. For instance, the plastron-shaped Puyang M45 grave may have been thus shaped purposefully to accentuate the squareness of the spirits' target destiny, the NCP. Furthermore, people of the Jiahu culture, Henan, c. 6,600–6,200 BC, inscribed signs on turtle plastrons, evidencing that from very early on the Yellow River cultural complexes conceived in the turtle plastron a significant value and symbolism.⁵⁷ In addition, turtle plastrons were used for divination by people of the Erlitou civilization in the early 2nd millennium BC, prior to the Shang. The turtle shape also occurs commonly in the forms that Neolithic jade jewelry took in the coastal regions of China, from Northeast to East.⁵⁸ Most significantly, consider the turtle-shaped three-piece jade ornament found in the tomb at Hanshan reviewed previously, in Volume II, Chapter 1: it lay on the center of the chest of the tomb owner, *with the cosmographically potent plastron and central plate above, bowl below and inverted, and all facing the heavens*. These arrangements of both the

⁵⁷ *Wenwu* 1989, v.1, pp.1–14.

⁵⁸ For example, on Hanshan (eastern coastal) see Volume II, Chapter I, above; on Hongshan (northeast) see ACC: 181–188, *Wenwu* 1984.6: 1–5, and Xiaoneng Yang, ed., *The Golden Age of Chinese Archaeology, Celebrated Discoveries from the People's Republic of China* (Washington: The National Gallery of Art; New Haven and London: Yale University Press, 1999): 86–87.

pieces of the turtle ornament and the cosmographic diagram on the central *square* plate of the ornament apparently represent an entire cosmogony and cosmology (1) expressing the shape of the cosmos as I have just described it above, i.e., the *inverted* turtle, and (2) outlining pictorially the metaphysics summarized in *Taiyi shengshui*: from the one central square pivotal point above in the heavens comes all things; in rarefied form the stuff that emanates from the square central pivot constitutes the pristine points of light in the heavens, stars, likely represented cursorily by whorls (*leiwen*) on Neolithic jades (AZ motif) and Shang bronze vessels; in slightly more material form it is water that still on any given day falls from the sky as pure, drinkable, life-nurturing and -sustaining precipitation (compare also that Indra, the RV IA high god identified often as a bull at the NCP, was responsible for both creation and continued fertilization of his creation, the latter through his letting of life-nurturing seminal fluid from the apex of the heavens, which fell as rain to earth). It surely is no simple coincidence that from no later than Han times people were thought to be born of specifically the water element, physically from the *reins* in the lower abdomen; in internal alchemy this water is the beginning of both life and the recreation of the immortal body, or the return to immortal vacuity. We should note also the consistent association of the turtle of the Four Spirits with *water* and *north* — i.e., the northern celestial polar region — according to the same scheme by which in both human physiology and internal alchemy water is life.⁵⁹ Otherwise this stuff, whether we call it *qi* or *shui*, has congealed on and in this bowl of the earth as either (a) water (springs, subterranean water, rivers, lakes, & oceans), or (2) the hardened elements of the soil of the earth (sand, dirt, rock, etc.). This is consistent with the evidence and it in no significant way differs from the essential philosophical outlook according to which the Chinese from Zhou times and on have viewed the creation and construction of the universe. Considering what we know of the ancient origins of the traditions of *Taiyi* and the polar square, and the ubiquity of the tortoise shape and its religious uses from Neolithic — and even Palaeo- / Mesolithic — times forward, that this outlook could very well

⁵⁹ On these matters, in English see Didier (1998): 443–471, 602–614, 674–690, 708–724, 737–742, 805–814. In Chinese see the excellent overview by Ma Jiren 馬濟人 in his “Daojiao neidan xue” 道教內丹學, in Mou Zhongjian 牟鐘鑾 et al., *Daojiao tonglun* 道教通論 (Jinan: Qilu shushe, 1991): 622–686 (esp. 661–662 and 683).

have begun as early as the 7th to 4th millennium BC should not surprise us. What is rather remarkable is that this conceptualization appears to have survived the sundry changes that accompanied the social, political, religious, philosophical, economic, and technological transformations of particularly the Zhou and Qin-Han periods to remain essentially intact while the basic geometry of the Chinese cosmographic projection later was reversed.

Causes of the Change in Chinese Cosmography

Han-period Chinese cosmography's inconsistencies c. 100–200 AD as described in the *ZBSJ*, and the subsequent inversion of the geometry of heaven and earth, reflect the natural sifting that occurred when the civilization needed to synthesize for the new imperial reality sundry strands of long and deeply rooted ancient and classical Zhou, Spring and Autumn and Warring States, and more locally centered traditions. In this case, four factors certainly caused the apparent inconsistencies and uncertainties in Latter Han cosmographic projections.

First and most simply, as we noted in Volume I, Chapter 3, the break from tradition caused by the both draconian and utilitarian measures imposed by the Qin on its conquest of the Zhou court (256 and 249 BC) and remaining Warring States (228–221 BC) surely created the need to reinvent much of what was lost of old court-centered traditions. At the same time, however, with the Qin's and then the Han's centralizing of political and religious power, as well as social and economic attention and privilege, on the new imperial capital, the capital region would have attracted to it many of the purveyors of surviving old elite and popular traditions from the Zhou states. Such individuals would have hoped and attempted to earn gainful employment as experts of every sort, including of astronomy, hemerology, and cosmography, at court, and their varied influences can be discerned in the inconsistent records of the times.

Second, the Han imperial court grappled with the inherited traditions and their inadequacy in supplying the court with an updated and emperor- / empire-centered philosophy of legitimacy. Sundry variations on a theme were attempted, the first of them, the *LSCQ*, representing perhaps an anticipatory program of imperial rule. Crude and vague, the mostly

metaphorical cosmography of the *LSCQ* supplied the basic model on which later the authors of the *HNZ* (ed. Liu An) and the *TXJ* (Yang Xiong) would develop ever more comprehensive legitimations for the exaltation of one human center above all others. As we saw in the progression of the cosmographies promoted in these texts, the tendency was to emphasize more emphatically over time the role of humanity in completing the essentially ethical construct of the universe. Indeed, this trend found its first elaborators in the Warring States Confucian tradition, as it was voiced first in Confucius, then in Mencius, and finally and most explicitly in Xunzi. In cosmographic terms, in the *LSCQ*, *HNZ*, and *TXJ*, the power of the *fang*, or sectioning, regionalizing, or compartmentalizing, way, to organize things on earth necessarily was brought closer to humanity, but through the earth, to justify the greater role that humanity was perceived to have to play in the completion and fulfillment of the principles of natural ethics that the Way, or the Mystery, embodied and furthered in creation. In this sense, already in Confucius this humanizing of the power of the old heavenly polar square was evident.

Third, throughout the course of the Zhou period, several factors interplayed to bring about the transference of the symbolism of the square from the center of heaven to the earth. These include (1) political and intellectual changes, but also the simple transference through mimicry of the quadrilateral shape in the formation of earth-bound altars that were nevertheless dedicated to the worship of heavenly beings resident at the heavenly center, (2) the diffusion c. 950–550 BC of religious authority and magical power associated with the quadrilateral shape from the Zhou royal center and its associated high elites to lesser elites, seen particularly in the expansion of the use of the square / rectangular shape in artistic decoration beyond its original role as a frame in which to locate the images of high royal (and perhaps other elites') ancestral spirits, (3) the shift in focus of ritual and religious attention from both the lineage to the individual and, concomitantly, the temple and its altar to the individual tomb, thereby associating the power of the quadrilateral with an individual's quest for spiritual immortality and specifically the earth (in the tomb), (4) Confucius' intellectual migration of the square from the center of heaven and the ritual center of the Zhou to the new ritual center that was the human heart-mind, (5) the direct correlation of an ancient nine-square square heavenly grid with a nine-sector political division of the earth that had the effect of not only moving the square out from the

center of the heavens to describe the overall astral grid of the heavenly dome but also transferring by association the squarish shape of the heavens to the earth through the correlation of earth's nine sectors with heaven's nine fields, (6) the technical need in the design of the *shi* astrological board to move the square and square-based heavenly *bo* design out from the center to the sides and backs of the boards to accommodate the pivotal role of Taiyi / Di as gods resident in the astrologically central asterism of the Dipper, and (7) prior to and more fundamental than any of these more technically identified causes, the movement of the square from heaven to earth might have occurred as a natural byproduct of people having long before modeled their ritual space on earth, i.e., the altar, on the old polar quadrilateral; once the altar on earth had been created as a square or rectangle, the transference of the symbolism of the square from heaven to the earth had already begun.

Finally, on a technical level, it may be that the invention or importation by, it has been suggested, c. 70 BC of an armillary instrument that permitted far more accurate measurements of the angular separations of celestial objects would have caused a revolutionary advance in the way that the heavens could be perceived to operate, and this in turn may have stimulated the creation of new concepts of space and with them the progression of time. However, this argument has not convinced me, for, ironically, after 200 AD, the court chose to follow not a cosmographic construct and calendar based on these postulated more advanced measurements and understandings of the cosmos but a far more primitive and idealistic (not to mention befuddled) cosmography of which the fairly new, simplistic and idealistic, square-earth / circular-heaven cosmography was a vital component. I think it more likely that, amid a decline during the late Former Han and throughout the Latter Han in the imperial ability to control all of the populace, the economy, and the personnel of the court itself, as the empire spun ever more wildly out of control the imperial court and its supportive courtiers required a greater proof that humanity, i.e., the imperial court, was central to the appropriate functioning of universal processes. Consequently, the magical square had to be brought firmly and institutionally into the court's controllable realm. That realm was the earth, with the emperor standing (or sitting on his throne, facing south in mimicry of the celestial pole) at its center.

At the same time, a skepticism developing in parallel over the belief in the role that some

overawing heaven was purported to have played in human affairs, growing ever since Confucius expressed reservations about the value of concentrating effort on the spiritual world (which he expressed not only explicitly but also implicitly in his transference of the square from the physical heavens to the human breast), may have helped to stimulate some thinkers to stress the centrality of humanity in general in the universally perceived natural-human construct on earth. It may be that the square, as the most potent symbol of heavenly magic, and with its geometry readily accessible and malleable, thus was transferred to earth to bring the power of control over naturalistic magic closer to the human grasp. This may have been at work even in Yang Xiong, for in Yang we observe the culmination of centuries of Confucian ethics projected into the natural world: humanity was now utterly critical to the completion of the cycle of life begun in the Mystery and continued in the progenitive functions of heaven and earth. In all of Confucius, Mencius, Xunzi, the *LSCQ*, the *HNZ*, and Yang Xiong, we witness an increasing tendency to exalt humanity's role in the completion and appropriate functioning of the natively ethical universe. Further, as it was conceived in the culminating works of Former Han Confucianism, in this human-centered construct of *yu-zhou*, heaven, with the Mystery or Way within it and thus powering all that exists in the universe on the basis of heaven's progenitive work, only brings itself to fruition in the development of humanity's faculty of observing, interpreting, and utilizing the earth's function of compartmentalizing (or "squaring") things, i.e., sorting things by type or region, an ability that is fundamental to creating and sustaining an ethically based socio-political construct on earth that can truly complete heaven's, i.e., the Way's or the Mystery's, sacred work. As the critical geometry associated with the center of heaven (i.e., the mystery), the square had to be migrated from heaven to earth, internally, to be accessible to the most important heaven-possessing (but generally heaven-ignorant, due to heaven's being hidden in the heaven-endowed mind-heart occluded in a typical given life by the generation of the human form and the accumulation of human thing-centered experiences) element of the universe, humanity. A cosmographic construct that brought the square to earth to become fully accessible to humanity was central to this human-centered program that was, in its essence, *an attempt to exercise control over the environment*. The point to keep in mind is that the square on earth and as earth, or in the breast of the human being, still represented the magical potency of heaven, and as such

it represented the caging of heaven for humanity's own self-centered use.

And here we are back to the very beginning of this study, humanity's attempts to control its world by imposing on it a human-centered and -inspired architecture that it could employ to rationalize the confusing cosmos in which it found its perplexed self wanting and wondering. Religions and their associated cosmographies always revolve most saliently about the matter of security (whether security is sought and received in the form of beneficence or protection), and achieving internal security is always only an issue of understanding and thus being capable of manipulating the external, at least in one's own mind. In turn, "science" and "the scientific method" represent merely an extension of our impulse to understand and control our environment so that we may augment our sense of security. Religion and science are but two phases of the same impulse, differing only in the degree to which faith is allowed a role in controlling the nature and extent of the inquiry. But even that statement dissects unnaturally what is one continuum of inquiry that endeavors to create and sustain security. What appear in the present to be the religions of the 2nd and 1st millennia BC represented at that time the scientific consensus of the day.

Chapter 6: Great Ancestor Dayi 大乙; Polar God Taiyi 太乙; Yi 一, "One"; and the Development of Early Imperial Chinese Cosmology

Great Ancestors Dayi and Taiyi

It remains to describe how the cosmology of the imperial Qin and, more thoroughly, the Han courts synthesized the developments of the metaphysics, cosmography, and religion inherited from all of philosophers, hemerologists, and cosmographers of the Warring States through early-Han periods into one coherent imperial cosmology. To begin we return to the religio-cosmological NCP-centered system that the Shang (1) first absorbed from its predecessor Neolithic and early-Bronze civilizations of China, (2) redefined for its own dynastic use, (3) and then transmitted to the inheriting Zhou dynastic state. In particular we return to examine more closely the name and role of the highest-ranking dead king of the Shang ancestral pantheon, the founding Shang ancestor Cheng Tang 成湯, whose temple name was Dayi.

It was shown in the concluding section of Volume II, Chapter 5 that the highest-ranking two groups of deceased Shang ancestors inhabiting the polar quadrilateral were the *ding* 丁 and *yi* 乙 stem groups, with the *jia* 甲 group ranking third. Naturally, one would think, with the fall of the Shang the Zi royal family ancestors of these groups lost their high polar positions. Or did they? At least in the case of Dayi (大乙, K1), we may say that he did not. This is not to suggest that subsequent dynasties continued to honor Dayi as an ancestor of the reigning dynasty, although in fact for a time the Zhou did offer cult to Dayi (as well as Dajia [K3], Diyi [K28], and Xiangtu 相土).¹ But Dayi has survived all of these millennia in name if not in substance as an individuated god. Dayi has survived as the polar god Taiyi.

¹ This may have been due to Zhou founder King Wen's marriage to a Shang princess, which princess was both the sister of Shang king Diyi and mother of Wen's successor, King Wu. Likely Diyi received offerings due to this connection. Probably Dayi received cult due to his supreme position, as Shang founder, in the lineage of Shang kings. See Hsu and Linduff (1988): 48–49. Otherwise we do not know the express reasons why the Zhou offered cult particularly to Dajia and Xiangtu, except that in this the Zhou Ji royal clan may have simply endeavored, like their

In the late-Warring States and Han periods and, judging from the placement of the Dipper in the center of the heavens in the painting of the Dipper and twenty-eight celestial lodges found on the side of the clothes box disinterred from the tomb of Marquis Yi of Zeng (c. 433 BC), probably as early as the 5th century BC Dayi / Taiyi was identified with the Dipper, with his residence established specifically at the star Alioth on the Dipper's handle. The Zhou god Taiyi then was identified with the *astrological* celestial pole, even though by the time of the Warring States, Qin, and Han Alioth, having once hovered close to the pole prior to c. 1200 BC, was now far removed from the pole and the star that sat c. 300 BC – 100 AD closest to it, Kochab. But this did not matter, for the critical role of the Dipper in the astrological systems, developed no later than the Warring States period, demanded that the high god of the heavens, by whose will the Dipper was directed to function as a heavenly pointer (as both a calendrical / hemerological tool and a military weapon) and vehicle, sat on the Dipper. As we read in Volume I, Chapter 3 from *Shiji* 27, naturally the brightest star that rested within the close circle at the heavenly pole that centered on the Dipper was the seat of the high god. This brightest star of the polar region was Alioth, on the Dipper's handle. Now, it is no small coincidence that Alioth and the Dipper rest very close to the location of the Neolithic and early-Bronze pole star, Thuban, and in fact Alioth constitutes one of the corners of the Neolithic-Shang polar quadrilateral. It appears, then, that although by the beginning of the Eastern Zhou period the quadrilateral had lost its religious potency in the Zhou state cult of the royal (and likely also elite-lineage) ancestors, its stellar neighbor and partial constituent, the Dipper, had not. The Dipper, easily the most recognizable asterism in the night sky, took on the role of the nocturnal center of Zhou-period religious devotion centered on the heavens.

Dayi/Taiyi, once resident at the old pole star Thuban, sometime during the early to middle Zhou period simply shifted his residence to the newly important brightest star of the astrologically central Dipper. Still, shadowy reminders of Dayi/Taiyi's original residence at Thuban during the Neolithic and early-Bronze periods appear from the Warring States-Han period ("Bing Bi Taisui Ge," "Shenqitu"), through the Tang, and into the 16th and 17th centuries AD (Taiyi appears on star charts, from the Tang to the Ming, resident at Thuban). As we reasoned in Volume I, Chapter 3, this quite late placement of Taiyi at Thuban surely was inherited from one of the three Warring

Shang predecessors, to be inclusive when organizing / defining their high godhead.

States stellar cartographic traditions that was current in the Han, but one that placed Taiyi not at Alioth, as did, seemingly somewhat uncertainly, Sima Qian, but rather at the old seat of the high god at the Neolithic pole star Thuban. This stellar cartographic tradition surely had been transmitted since Neolithic-Shang times.

At the same time, we also know from the foregoing chapters of the present volume, the religious and intellectual potency of the quadrilateral shape in fact carried on throughout the Zhou and into the Han (and, in fact, as we know, although its potency was transferred between c. 100/200 and 700 AD to the earth, the form's heavenly-derived symbolic power remained as virulent as before), but seemingly both within the Zhou court and also outside it in newly developing intellectual and hemerological traditions. In these continuations and transfers of symbolic power we see once again the remarkable ability of the Chinese belief system to remain consistent in its essence while transforming fairly superficially along with new demands placed on it equally by changing stellar precessional conditions in the sky (whether consciously recognized or not) and, on the ground, socio-political, economic, and other circumstances.




The current state of scholarship on the late-Zhou god Taiyi assumes that it is the same phenomenon as the Yi, "One," of Warring States and later intellectual traditions.² Below I will show how and why Yi and Taiyi are in fact entirely distinct and were recognized during the Han to be so. Both, in fact, played critical but thoroughly distinct roles in the greater imperial cosmological system developed during the Qin and Han periods. Much as with the case of the confusion over the providence of the symbolism of the square, I will demonstrate how and why the polar god Dayi/Taiyi and the abstract metaphysical and non-polar construct Yi came to be confused not only in the present but also over the past two millennia's time.

² Pankenier (2004): 212–220.

Dayi and Taiyi

Let us begin this discussion with the two monikers by which the polar god has been known, Dayi and Taiyi. Phonetically these names obviously are intimately linked. In many cases in fact they are identical, for Taiyi 太一 often has been written as Dayi 大一 (see below). Indeed, written in the latter form and pronounced ostensibly as Dayi, since an alternative pronunciation of 大 *da* is *tai*, then 大一 can be read as *taiyi*, as well.







The phonetic similarities and identities of the two gods' names source in their intimate etymological and graphic links that date back to the Shang and Zhou periods (cf. OCM *dâs [大] and *t^hâs [太]).³ First we may note that the name of Taiyi can be and has been written historically in a number of ways: (a) Taiyi 太一, (b) Taiyi 太乙, (c) Dayi 大一, (d) Dayi 大乙, (e) Taiyi 泰一, and (f) and Taiyi 泰壹. We will analyze these forms beginning with the first character of each, *da* or *tai*.

It is widely known that 大 and 太 have been interchangeable since no later than the late-Zhou period. The form 泰 *tai* also is well understood to substitute for the more common form of 太 *tai*. Many assume that, following typical trends in written Chinese usage, the more complex form preceded historically the simpler form, the simpler having derived as a loan for the former out of the inscriber's or writer's typical wish to inscribe / write more efficiently and thus lessen the number of strokes of the character. Indeed, many dictionaries list 太 as the vulgar form of 泰. However, in the case of *tai* / *da*, this is incorrect, and, in fact, just the opposite seems to be true, for in the Han the etymologist Xu Shen traced the form 泰 back to the much simpler form of  in what he knew as the "ancient" (*gu* 古; our "Sinitic") script.⁴ Already one can see the similarity of this ancient  with the modern form of *tai* 太. How the simple  might have *evolved* into the complex 泰 is entirely unclear and, in fact, is unlikely to have occurred. The homophonic character

³ Axel Schuessler, *ABC Etymological Dictionary of Old Chinese* (Honolulu: University of Hawaii Press, 2007): 202.

⁴ Xu Shen, *Shuowen jiezi*, quoted in Zhu Qixiang 朱岐祥, *Yinxu jiaguwenzi tongshigao* 殷墟甲骨文字通释稿 (Taipei: Wenshizhe chubanshe, 1989): 36.

surely was introduced rather late in the Zhou as an alternative character for one form or another of 太, due perhaps to a writer's or scribe's personal taboo on the character 太 (or 大). At any rate, by the late-Zhou through early-Han periods, indeed 泰 had become in sundry contexts a common variant of the cognates *tai* 太 and *da* 大.⁵ Nonetheless, as a loan character appearing in the name of Taiyi (etc.), 泰 does not appear to have infused any particular significance into the binomial name of the god, though of course fanciful theoretical justifications for a semantic — not phonetic — loan for 大/太 based on Han cosmological thinking could be and likely have been made. The characters 大 and 太 are much more germane to our inquiry into the original meaning of Taiyi / Dayi, for they are the most common initial character of the name and the only ones that can be traced back to the Shang.

A form very similar to Xu Shen's archaic *tai*  occurs in Sinitic, on Shang oracle bones. This is the character , which almost certainly represents the earliest known form of 太. But this form, , like its *xiaozhuan*-derived *kaishu*-script counterpart (太), was itself derived by adding a simple hash between the "legs" of the Sinitic character for *da* 大, which is . But really this character  to which we trace the later 太 was little used in the Shang, appearing only in periods IV and V, and it seems to have been a simple variant of *da* 大. Always employed as a person's name, likely it was invented to distinguish one person among two (or more) named *da* 大. Later, through the middle-Zhou period, the characters for *tai* and *da* often were the same, following the OBI form of . Only in the Warring States period does *tai* 太 seem to have developed once again its own individuated script, while in fact it continued to be used mostly as a simple

⁵ As evidenced by the early 2nd century BC *Zhou Yi* (*Book of Changes*) silk manuscript recovered at Mawangdui, by the early 2nd century BC the character 泰 was in use to mean both *tai* 太 and *da* 大 in the names of various hexagrams of the *Zhou Yi*, including Hexagram 10 (*Daxu* 泰蓄), Hexagram 26 (*Dazhuang* 泰壯), Hexagram 34 (*Tai* 泰), and Hexagram 48 (*Daguo* 泰過). See Zhang Liwen 張立文, *Zhou Yi boshu jinzhū jinyi* 周易帛書今注今譯, 2 vols. (Taipei: Xuesheng shuju, 1991). The interchangeable usage of the two *tai* characters can be seen further in references in *Shiji* to the polar divinity Taiyi. See especially *Shiji* 12 (28), where usage shifts throughout the chapter.

alternative form of *da* 大, meaning, just as simply, “big” or “great.”⁶ Whether *tai* 太 developed during the late Zhou due to a personal (i.e., familial or regional political) taboo of the character *da* is unknown,⁷ but at least we know that there was not a universal political proscription of the character during the Zhou, since, first, no Zhou king was named in such a way that *da* 大, in its either written form or pronunciation, would have been tabooed, and, further, such practices did not begin to be executed with any rigor until the Qin and Han. And even the Han prosecuted taboos neither strictly nor consistently.⁸ What is important to understand is that etymologically and in common usage of the graphs in the ancient period the characters were — and continue presently to be — virtually identical and cognate.

Indeed, the very first known textual recording of the name of the god or high power of “Taiyi” 太一, in the 4th–3rd BC century Guodian *Taiyi Shengshui* manuscript, occurs not as “Taiyi” at all but Dayi 大一.⁹ Then we ought to — and here will — retitle this work *Dayi Shengshui*. In addition, the other of the two earliest manuscript recordings of the name of “Taiyi,” dating to the early Han period (no later than 168 BC) and found on the silk “Shenqitu” 神祇圖 uncovered from a grave at Mawangdui (Changsha, Hunan) in 1960, also labels the 大-shaped god appearing thereon (and which thus is reminiscent of the portrait of Taiyi on the “Bingbi Taisui Ge”; Chapter 3, **Figure 9**) clearly as “大一,” that is, “Dayi.”¹⁰ Otherwise, in the late-Zhou ~ early-Han periods,

⁶ See these forms in Gao Ming (1980): 28.

⁷ For a summary of the complex and inconsistent nature of early, pre-imperial, practices of taboo, see Huang Benji 黃本騎, *Bihui lu* 避諱錄, in idem, *Sanzhang wuzhai congshu* 三長物齋叢書 (1846): 5:1a–13b.

⁸ See Chen Yuan 陳垣, *Shihui juli* 史諱舉例 (Shanghai: Shanghai shudian, 1997): 3.

⁹ See the translation of the *Dayi shengshui* text both above in Chapter 3 and, in excerpt, again further below in this chapter. Photocopies of the original recovered bamboo manuscript can be found in Jingmen City Museum 荊門市博物館, ed., *Guodian chumu zhujian* 郭店楚墓竹簡. Beijing: Wenwu chubanshe, 1996: 13–14. In the name of the god Dayi (Taiyi) the character employed is clearly *da* 大, not *tai* 太.

¹⁰ For a photocopied reproduction of this silk-cloth calendrical painting on which twelve gods appear along with their names written in *zhuan* script (in a square arrangement of pictures of gods not unlike that found on the Chu Silk Manuscript), see Zhou Shirong 周世榮, “Mawangdui Hanmu de ‘Shenqi tu’ bohua 马王堆汉墓‘神祇图’帛画,” in *Kaogu* 1990.10: 926.

while in 3rd–2nd centuries BC inherited texts such as the *Zhuangzi* and the *LSCQ* “Taiyi” 太一 becomes a common form,¹¹ the late-Zhou period (3rd-century BC) *Xunzi* and what is likely also a Zhou-period text, the “Liyun” chapter of the *Liji*, like the early manuscripts, record the name as Dayi 大一, not Taiyi 太一.¹² Since these inherited texts have not been received in manuscript form, and thus they do not transmit the original script in which they were recorded, we have no idea what the original form of the Taiyi found in the *Zhuangzi* and *LSCQ* might have taken. But the manuscript recordings of *Dayi Shengshui* and the “Shenqitu” must be taken as authoritative, and they are unanimous in recording the name of the god / power as Dayi. Furthermore, the fact that, in the transmitted Zhou text of *Xunzi* and what is likely also the late-Zhou text of the “Liyun” chapter of the *Liji*, the name Dayi remains, suggests strongly that these occurrences of Dayi constitute shadowy remainders of the earlier dominant provenance of the form Dayi. They thus strengthen even more the position that the tradition of Dayi preceded that of Taiyi.¹³ Therefore, from both etymological / graphic and manuscript evidence, in its earliest form and meaning the god “Taiyi” seems not to have been Taiyi at all, but rather, more accurately, Dayi 大一. Then “Taiyi” apparently was a late-Zhou, Qin, or Han invention.

One character of the name of this god thus already is shown to be identical to that employed in the name of the Shang founder (K1) Dayi 大乙. But what of the second character in the alternate name, that is, *yi* 乙, and its relationship to what appears to be the standard *yi* 一 of the name of the Zhou and later god Dayi or Taiyi? First we note that not only on the 8th–9th-century

¹¹ *LSCQ*, “Dayue” 大樂 (Chen Qiyou 陳奇猷, *Lushi chunqiu jiaoshi* 呂氏春秋校釋 [Shanghai: Xuelin chubanshe, 1984]: 255); *Zhuangzi* 莊子, “Tianxia” 天下, late-3rd~early-2nd century BC (Wang Shumin, ed., *Zhuangzi jiaquan* 莊子校註 [Taipei: Zhongyang yanjiuyuan lishi yuyan yanjiusuo, 1988]: Vol. III, 1337).

¹² *Liji* 禮記, “Liyun” 禮運, in *Shisanjing zhushu* 十三經注疏 (Beijing: Zhonghua shuju, 1984) 22:18ab–19a; *Xunzi* 荀子, “Lilun” 禮論, in Wang Xianqian 王先謙, ed., *Xunzi jijie* 荀子集解 (Beijing: Zhonghua, 1992): 19:234, 236.

¹³ See also a similar phenomenon having occurred in the names of the temporal spirits Dayin/Taiyin and Dasui/Taisui as they appear in 2nd century BC Mawangdui hemerological texts, where *da* 大, not *tai* 太, prevails, in Kalinowski (1998–99): 125–202. Once again, *da* appears to be the original form and *tai* the form that was adopted only later, during the latter century of the Former Han or during the Latter Han.

Dunhuang star charts but also on two of the stellar maps dating to the 16th and 17th centuries AD and collected by Chen Meidong in his *Zhongguo guxingtu*, the names of the stars Taiyi and Tianyi are written with the graph *yi* 乙, not *yi* 一.¹⁴ The terms' having been thus written does not represent a random and fortuitous appearance of a rare usage, but rather a long and widespread tradition of recognizing the significance of specifically the graph *yi* 乙 in the name of the celestial polar high god's name. Already we find, then, an explicit connection between this graph and the ancient pole of c. 3000 BC. Since, as we have reasoned in Volume 1, Chapter 3 (Appendix), the name Tianyi as applied to the star 10 Draconis surely was a late-Zhou manufacture, then we are more interested in and will focus our investigation exclusively on the more significant of the two names employing *yi* 乙, or Taiyi / Dayi.¹⁵

In fact the form 太乙 long predates the 16th century, appearing widely as early as the Han. For instance, Taiyi 太乙 occurs as the name of a palace, the Taiyi Gong 太乙宮 ("The Taiyi Palace"), which stood in the capital of the Western Han (206 BC-AD 9). The name of the palace obviously derived from the names of the high god Taiyi and the polar region or palace (Zigong), the capital palace having been intended through its name to correlatively and sympathetically reproduce or channel the power of the high god or power Taiyi of the northern celestial palace.

¹⁴ Compare the maps found in Chen Meidong (1996): 37, 39, 116, 162, 177 (or see Volume I, Chapter 3 of this study, **Figures 1a, 1d**).

¹⁵ One might object that because the Han dynasty *Shiji* records the name of the Shang king Dayi as Tianyi 天乙, then this could be the earlier name of that king and thus also the earliest form of Taiyi or Dayi (*Shiji* 2, "Yin benji": 92). However, many problems plague this assumption, and it cannot be correct. First, we know that during the Shang the Sinitic characters *tian*, *da*, and *tai* were interchangeable in graphic form, and that therefore the Tianyi of the *Shiji*'s account could (and does) indicate not Tianyi but Dayi. Furthermore, we recall that during the Shang *tian* did not denote "heaven" or "sky," but rather a person's name (etc.). Then there is no connection between the meaning of Tianyi in the Han, which is pregnant with cosmological import based on the *Zhou* use of the character to denote the ancestral sky power Tian, "Heaven," and in the Shang. Third, the Shang wrote their king's name with specifically a *da* graphic form, not a *tian* graph (see Volume II, Chapter 5, **Table 1**). That they intended *da* and not *tian*, nor *tai*, is confirmed by the Shang's having chosen the pair of graphs *da* (Greater) and *xiao* (Lesser) to serve as the honorifics that preceded the stem name in several pairs of kings' temple names, such as Dayi (Greater Yi) and Xiaoyi (Lesser Yi), Dajia (Greater Jia) and Xiaojia (Lesser Jia), and so on. Thus, while during the Shang the term Tianyi could have been cognate with the name of the king Dayi, it was not employed, and, even if it had, at that time it would not have possessed the philosophically involved meaning of "Heavenly One" that it did in the Han.

Thus we must question why this *yi* 乙 appears in place of the homophonic character *yi* 一 in the name of the god Dayi/Taiyi as early as, but also continuing after, the Han period. At once one assumes that 乙 appears instead of 一 because, the two characters' being homophones, a Han or earlier copyist(s) must have borrowed the graph 乙 to replace 一 in order to honor a taboo against the use of the character 一. But this is problematic, since there was no known universal taboo against using the character 一 before or during the Han.¹⁶ Furthermore, it is unlikely that during the Han period, when taboos began to be regulated on a universal scale, but only sporadically, what only could have been a local or personal taboo would have become so widespread and centralized such that a Han capital palace built and named to replicate the power of the pole was christened according to this taboo. Additionally, it is unlikely that, even if it had been recognized universally in the Han (and it was not), such a taboo would have continued and been used commonly after the end of the dynasty in 220 AD and throughout the rest of Chinese history. What other circumstances could explain this practice of interchanging the two *yi* characters in Dayi / Taiyi's name?

One might proffer that 乙 replaced 一 because the characters were semantically equivalent. But this is to read into the past what we assume presently on the basis of an inherited tradition whereby the two characters often indeed have been treated as being semantically identical. This would be an especially egregious mistake because the inherited tradition on which this assumption partly could be based is none other than the later loose interchangeability of the two characters in the name of Dayi / Taiyi. We know in fact that, until this practice of interchanging the two characters began, they were never equivalent in either form or meaning, since (1) the ancient, or Sinitic, characters were entirely distinct (乙 vs. 一), and (2) while the character 一 has always, from Shang times and on, meant "one," the character 乙 (early-Shang 乙) has always indicated the second position in the ten Heavenly Stems, or "two."¹⁷ Therefore, apparently no good reason seems to be able to explain the interchanging of these characters. Or does one?

¹⁶ See Chen Yuan (1997): 97–98.

¹⁷ *Yi* 乙, as a stem character, indicated cardinally "two" or ordinally "second" universally during the Shang. That is, it was not employed in ways other than as the second of the Ten Heavenly Stems (and, in relation to that

The form Taiyi 太乙 is found in the name of a now-lost early Han (2nd century BC) system of divinatory numerology called "Numerology of Taiyi" (*Taiyi shu* 太乙數).¹⁸ Already in Volume

meaning, as a stem name in the temple names of royal ancestors). While prior to its having been thus employed, at a time before c. 1300 BC, for which we have no records, the graph might have expressed any number of meanings or represented originally one or more physical object(s) in the external world, except as introduced above Volume II, Chapter 5, where the character was shown to appear as an asterism bisecting the northern celestial pole of c. 3000 BC, these unknown meanings are not germane to the present discussion, for our inquiry seeks to formulate an understanding of the connection between a stem-use of the character 乙 in the name of the Shang king Dayi (and other royal 乙-stem ancestors) and the character 乙 in the name of the polar god Dayi / Taiyi.

Since Han times various theories attempting to explain the original external referent of 乙 (Chinese) and 乙 (Sinitic) have been offered. These include the Han ideas that 乙 depicted a leafy sprout emerging from the soil (Xu Shen, *Shiji*, and *Han shu*) and that 乙 portrays the flowing of the water of a rivulet (Xu Shen). Later commentators have argued that 乙 depicted a blade (Wu Qichang), the gill of a fish (Wu Qichang), or a measure of length (Gao Hongjin). On these postulations see Zhou Fagao (1974): 7955–7977.

Xu Shen's idea that the 乙 form was a picture of water flowing in a rivulet is the most reasonable among these, for the form 乙 indeed appears as part of the Sinitic character and radical denoting water, or 氵. But this does not preclude our understanding 乙 to denote the meridian of heaven that passes through the old pole of c. 3000 BC, because, in the character / radical 氵, our form 乙 depicts not "water" itself, but only a portion of the graph depicting "water," the latter having been a graph that apparently derives from its representing pictorially the source of water, a river. Thus here 乙 describes a movement of water of a river. In so doing, then 乙 depicts a geometry observable in a given larger object, not a specific object itself. It is thus an abstract representing "curvature" as perceived in the physical world, and not only in "water" and "river," but in other objects, as well, including the old polar meridian. Therefore, the flow of water of a river need not have been the source of the Shang observation of the phenomenon of "curvature"; indeed it could have been the curvature of the celestial polar meridian that so stimulated this abstraction, or any number of natural or manufactured objects displaying such a curvature (e.g. a twisted tree trunk, Wu Qichang's blades, etc.). For our purposes the source of the observation of "curvature" is not truly germane to our inquiry. Rather, we are interested primarily in the fact that the same curvature observed in the stem-name of 乙 royal ancestors of the Shang is found as well in the heavenly meridian of the old pole of c. 3000 BC. Whether the pole was the source or an application of the line 乙 meaning "curvature" is immaterial.

¹⁸ This system is reported to have been mentioned in *Shiji* 127 ("Rizhe zhuan" 日者傳), but the only trace of it there is in an appended note by Han-dynasty scholar-official Chu Xiaosun 褚小孫, who refers to the numerology of

1, Chapter 3 (Appendix) we have discussed at some length a text closely related to and surely representative of the Numerology of Taiyi. This is the *Qian Zuo Du* 乾鑿度 section of the early Han text *Yiwei* 易緯 ("The Apocryphal Changes"). The *Yiwei*, as its present name manifests, was deemed by the time of the Latter Han to be an apocryphal version of the classic divinatory text *Zhouyi* (*Changes of Zhou*, i.e., *Yi Jing*). The *Qian Zuo Du* section is a commentary on the first hexagram of the *Zhouyi*, *qian* 乾. *Qian* symbolizes Heaven's incipient and immanent energy of creation. In the *Qian Zuo Du*, there occur two significant heavenly powers, each possessing one of the two characters *yi* that interest us. One is Taiyi 太乙 and the other is simply Yi 一.

In contemporary and later commentary and scholarship, the differing natures of these powers Taiyi 太乙 and Yi 一 as they occur in other period texts often have been mistakenly merged to create a single god Yi / Taiyi because of the component characters' common interchangeability in the name of Taiyi. We learn clearly from the *Qian Zuo Du* that in fact the two powers denoted by the two characters *yi* are not the same at all. In this text, it is clear, Yi 一, "One," denotes "the incipience of pneuma," that is, the creation of the universe through pneuma, and as such it is the incipience of the numerological configurations that explain the creation, structure, and workings of the universe. Taiyi 太乙 is quite distinct from this. It occurs as neither the font of numerological configurations into which the universe unfolds on its incipience nor the power of creation immanent in the universe thereafter. The *Qian Zuo Du* rather identifies Taiyi 太乙 to be the god that commands the created heavens from its seat in the region of the northern celestial pole. This is the martial Taiyi that we have seen occurred in all of the Warring States

"diviners" ("Taiyijia" 太一 (乙)家). See *Shiji* 127: 3222, line 3. Chu may well have been an author, i.e., restorer, of this originally lost chapter of the *Shiji* (on this, see Zhao Yi 趙翼, *Nian ershi zhaji* 二十二史劄記 [Beijing: Zhonghua, 1963]), Ch. 1, item 5; and Fu Sinian 傅斯年, *Shiji yanjiu* 史記研究, #3, in *Fu Sinian Quanjì* 傅斯年全集, 6 vols. [Taipei: Lianjing, 1962], *zhongpian* 中篇, A [*shang* 上]). Regardless, the system is said to have been based closely on the *Qian Zuo Du* section of *Yiwei*, for which see the text and note immediately below. For a well-researched excursus on the history of the development of the divination systems of Chinese numerological astrology whereby Taiyi, the polar center, governs the Nine Palaces of the Heavens, see Ho Peng Yoke (2003). Ho's meticulous scholarship demonstrates how these systems eventually, by the Song period, produced the eclectic Ziwei Doushu system of astrological divination. We can see from the translations from *Yiwei*, above in the text, that these systems began in the Han and are represented in their earliest known developmental stage by the *Yiwei*.

"Bingbi Taisui Ge," the "Shenqitu," and in the 2nd century BC texts of the *HNZ* 3 and *Shiji* 27 and 28 (12). We read in the *Qian Zuo Du* first that,

In the stage of the Great Change (*taiyi* 太易) there is not yet pneuma (*qi* 氣). The Great Incipience (*taichu* 太初) is the beginning of pneuma. The Great Beginning (*taishi* 太始) is the beginning of form (*xing* 形). The Great Simplicity (*taisu* 太素) is the beginning of physical material (*zhi* 質); [this is when] pneuma, form, and material cohabit, not yet having separated from one another. Therefore it is said to be an undifferentiated turbidity (*hunlun* 渾淪)...¹⁹

This passage describes the evolution, from the ultimate principle of Great Change (i.e., the Way of Change), of the changes that generate all creation, in all modes and at all levels. In the above passage, the Great Incipience (*taichu*) represents what later in the text we discover is not *Taiyi* 太乙 at all but rather *Yi* 一, "One." We note in passing how all of "change," 易 *yi*, "one," *yi* 一, and *yi* 乙 are homophonic, very obviously meant to conjure up an intimate association of all of the three high heavenly powers. First there is *yi* 易, then there is *yi* 一, and finally there is *yi* 乙.

The *Qian Zuo Du* continues to describe the incipience of creation and its operation thereafter, but now numerologically:

[The Great] Change fluxes and becomes 1 (*yi* 一); 1 fluxes and becomes 7 (*yang*); 7 fluxes and becomes 9 (changing *yang*); 9 is the exhaustion of the changes of pneuma. Then it fluxes again to become 1. [This later] 1 (一) is the beginning of the fluxing of form. The pure and light rise and become Heaven; the impure and heavy sink and become Earth....²⁰

¹⁹ *Yi wei* 易緯, *Qian zuo du* 乾鑿度, 2:2a, in *Juzhen congshu* 聚珍叢書, collected in *Baibu congshu* 百部叢書 (Taipei: Yiwen, 1965), Series 27, Case 4.

²⁰ *Ibid.*: 2:2b. The *Changes* consists of 64 hexagrams built from 8 trigrams that in turn consist of solid (*yang*) and broken (*yin*) lines. The 64 hexagrams and the lines of which they are constituted have been understood to symbolize all phenomena in the universe (thus to a diviner have their patterns been seen to represent in pure, distilled

...Therefore, in composing the Interpretation (*tuan* 象, i.e., a basic reading of a hexagram of *Zhouyi*, which represents directly the numerology of the hexagrammatic changes), *yang* is 7 while *yin* is 8. In a change, 1 *yang* and 1 *yin* combining to constitute 15 (i.e., 8 + 7) is the Way. The flux of *yang* that produces 9 from 7 and the flux of *yin* that produces 6 from 8 also combine to make 15 (i.e., 9 + 6), so that the numerological configurations of the fluxes of the Interpretations (i.e., hexagrams) are 1. *Yang* activates and advances, fluxing from 7 to 9, representing the exhaustion of its pneuma. *Yin* activates and retreats, fluxing from 8 to 6, representing the waning of its pneuma.

Therefore, Taiyi (太乙) takes up the numerological configurations to traverse the 9 Palaces [of the heavens] (or sectors, as a pie, each symbolized by one of the 8 trigrams, plus 1 palace that constitutes the center), 4 this way and 4 that way (i.e., all directions of the heavens). All combine to become 15.²¹

The 2nd century AD Han commentator Zheng Xuan remarked of this text concerning Taiyi that,

Taiyi (太乙) is the name of the god at the northern celestial pole. Residing in its station, it is called Taiyi. Since it constantly traverses the 8 trigrams between the sun and the pole (i.e., from the ecliptic to the pole, or throughout the heavens), it is called either Tianyi (天乙, "Heavenly Yi") or Taiyi. Exiting and entering its residence to travel both inside and outside the Azure Palace [of the pole] (*zigong* 紫宮; i.e., throughout the sky but centering at the pole), its star takes its name from the

numerological form any given current circumstance about which the diviner seeks guidance). Certain interpretive texts are attached to each hexagram. These texts are known as the Interpretation, Image, Line Readings, and so on. In divining a hexagram, a diviner can obtain a numerical value of 9 or 7 to produce a *yang* line or a 6 or 8 to generate an *yin* line. A value of 9 or a 6 produces a "fluxing" line. That is, an additional hexagram is created when such a line fluxes into its opposite, i.e., a *yang* to an *yin* or vice versa. The diviner then consults also the individual line reading of such a line that accompanies the second hexagram.

²¹ *Ibid.*, 2:3b.

god.... Taiyi is the god that is the master of pneuma. Its movements [through the heavens] are indeed thorough.²²

Zheng Xuan was correct in his reading of Taiyi in this text. Here Taiyi is far removed from the initial impulse of creation that is identified to be the beginning of pneuma, *taichu*, "The Great Beginning," or Yi, One. Here *taichu*, One, is the secondary instance in creation, emerging when the Great Change has begun. It is the One pneuma from which all else then is born. At this incipient stage of creation the god Taiyi still has not even been created. Being a numenic entity, Taiyi only appears in what here is an unnamed stage when all numenic powers (*shen* 神) are generated, which stage occurs after the emergence of One but before the development of form or even the physically-tethered sub-pneuma from which form is created (from One to form, all is pneuma, differing only in degrees of proximity to and thus purity relative to the absolutely pure pneuma of One). We first learn of Taiyi only when the nine palaces of the heavens have already been established by the numerological permutations created by the fluxing of 1 into 7, then 9, then 6, and finally 8. That is, Taiyi appears only when the magic number of 15 has been accomplished on the basis of the completed fluxes of *yang* and *yin* and the nine palaces thus are in place. The structure of the universe has been created, and now Taiyi, a numen or spirit, can take up his role as its overseer. Thereafter Taiyi supervises the continued revolutions of the numerology of creation, recreating the magic 15 with each flux, within the construct of heaven-and-earth. That this is a numerological justification for Taiyi's residence in the center of the heavens, the Zigong, and his active role of touring and thus governing the entire heavens, is clear.

Therefore, this Taiyi is the god that we recognize from our discussions in Volume 1, Chapter 3 (and Appendix). Liu Che took him to be the chief god of the heavens residing in the Zigong, repeatedly offering cult to him at all of (1) Yong and the altar to Taiyi in the Ganquan Palace outside the capital Changan, and (2) the Mingtang structure that he had constructed at Fenggao near the foot of Mt. Tai. This Taiyi is also the god described in *HNZ* 3: here Taiyi is identified as the god who resides in the Zigong and tours the heavens, holding court in the southern

²² *Ibid.*, 2:3b.

Taiwei region of the sky: "Taiyi holds court in the Taiwei; Taiyi resides in the Zigong."²³ It is, furthermore, the god displayed on the Warring States "Bingbi Taisui Ge" and the 2nd century BC "Shenqitu." This god Taiyi is not at all the same as the philosophically inaugurated Yi, "One," that creates the universe of numen and pneuma (as well as the formal construct of heaven and earth), but the god Taiyi relies on Yi, as does everything else in the created universe, for its existence, energy, and numenic power, as well as for the presence of the construct of heaven-and-earth that it traverses and whose revolutions and regenerative fluxes it oversees. Like all other *shen*, "numenic" or "spiritual," entities, Taiyi is a secondary or (as here) a tertiary creation of Yi 一, or, before Yi 一, ultimately of Yi 易, "Change." Taiyi is Yi's active agent in overseeing the created universe, and in serving in this role Taiyi allows Yi to remain forever vacuous and quiescent, pure, and untransformed as the source energy and pneuma (*qi* 氣) for the continuously created-and-destroyed and revolving universe.²⁴

Finally, we need only note that Yi and Taiyi are identified in this one text, the *Qian Zuo Du*, consistently using the two distinct characters for the phonetic *yi*, *yi* 一 and *yi* 乙, that otherwise often were confused in contemporary and later texts and scholarship. It is of course the polar god Taiyi whose name employs the *yi* 乙 of the Shang ancestor Dayi, while the abstract metaphysical creator One that was developed philosophically in the Warring States period naturally employs the character denoting "one," *yi* 一. The *Qian Zuo Du* thus clarifies what otherwise in contemporary or later texts often is muddled and which thus has confused readers and commentators ever since.

As we saw in our foregoing analysis of the characters *da* and *tai*, the binomes Dayi 大一 and Taiyi 太一 occur often in late-Warring States and Han texts, and, similar to the two *yi* characters 一 and 乙 employed to write the second syllable of the name Dayi / Taiyi, *da* and *tai* were seemingly interchangeable. Contemporary and later writers and copyists seem to have been confused over which character was appropriate to which name or term, because, as we now know, by the late-Warring States period there was not only a god named Dayi / Taiyi, there had also

²³ HNZ 3: 264–5.

²⁴ For the nature and workings of this system whose active agents enable the vacuous and quiescent One to remain untransformed or uncreated, see Didier (1998): 104–336.

developed, in parallel with but separate from the continuance of the old cult of Dayi / Taiyi, the new and abstract concept of Yi, One, that in elite texts constituted the primary cosmogonic impulse of and immanent creative energy throughout the universe. Being immanent in all things, this untransformed One, as we saw above in Chapter 3, therefore also was accessible within one's own breast and so became the teleological goal in one's endeavor to unify (*yi*, one) oneself internally (both within oneself and with the natures of all created living things on earth) and, for the politically concerned, the politically organized world. To identify its cosmogonic and ontological primacy, often writers prefixed its appellation, *yi* 一, with the modifier "great," this being *da* or *tai*. Surely the continued parallel existence of the distinct polar god Dayi / Taiyi influenced them in their selection of the adjectival prefix *da* or *tai* to describe the metaphysical construct of Yi, One. It brought power. Thus developed a new philosophically abstract Dayi / Taiyi alongside the cult of the old polar god Dayi / Taiyi. That the two terms could be and have been confused is unsurprising, but in each case the context of its use demonstrates clearly that the two Dayis / Taiyis were, throughout the Han, utterly distinct.

Let us look at how Dayi / Taiyi was employed in the late-Warring States and Han philosophical texts, citing in translation the examples referenced previously in the discussion about the characters *da* and *tai*:

Dayi shengshui

Dayi 六一 bore water. Water in return commingled with Dayi; thus was formed heaven. Heaven in return commingled with Dayi; thus was formed Earth. Heaven and Earth commingled; thus was formed Spirit and Light Energy.... Therefore, Dayi is contained within water, and it courses through time. It cycles through once and begins all over again, taking itself to be the mother of all things.... Dao is its agnomen.²⁵

²⁵ *Guodian chumu zhujian* (1996): 13–14, 125.

Lushi chunqiu, "Dayue"

- (1) The origins of music are distant indeed, having been born of people's taking measure of the world but having truly originated in Taiyi 太一. Taiyi produced two measures, and the two measures produced *yin* and *yang*.²⁶
- (2) The origins of the myriad things are in their creation by Taiyi 太一 and their transformation by *yin* and *yang*.²⁷

Xunzi, "Lilun" (19:351, 355)

- (1) To value the root is called embellishment. To hold dear application is called appropriate pattern (*li* 理). Employing it to return to Dayi 大一, now, this is called the Great Flourishing.²⁸
- (2) The rites begin in stripping away, become mature in embellishment, and end in presentation. Therefore, to return to Dayi 大一, one employs the most comprehensive [rites] when feeling and embellishment are together exhausted, the next [most comprehensive rites] when either feeling or embellishment exceeds the other, and the next [most comprehensive rites] when feeling is redoubled [without embellishment]. Heaven and earth employ [Dayi] to come together, the sun and the moon employ [Dayi] to illuminate, the

²⁶ Chen Qiyou (1984): 255.

²⁷ *Ibid.*: 255.

²⁸ *Xunzi jijie* 19 (*Xunzi* 13): 234.

four seasons employ [Dayi] to follow their sequence, the stars employ [Dayi] to ambulate, the rivers employ [Dayi] to flow, the myriad things employ [Dayi] to flourish....²⁹

Zhuangzi, "Tianxia"

Taking the root to be the quintessence and things to be the husk, taking to be insufficient the possession of accumulations, calmly residing singularly with the radiance of numen (*shenming*, i.e., quintessence, One, Tian, etc.): of old there were those whose arts of the Way were as this. Guan Yin and Lao Tan heard of their style and delighted in it, establishing it by forever not-having and overseeing it using Taiyi 太一. They took its outward manifestation to be humility, pliancy, and deference; they took its implementation to be emptiness, vacuity, and not doing harm to the myriad things.³⁰

HNZ 14

What mysteriously unites heaven and earth, is turbidly and undifferentiatedly uncarved, and is uncreated and yet complete is called Taiyi 太一. Although identically issuing from One, in what they become each thing is different.... Their natures and destinies are distinct, and all take form in something (*you* 有, i.e., "being" or, literally, "having"), and [therefore therein they are

²⁹ *Ibid.*: 236.

³⁰ Wang Shumin (1988): III, 1337.

mutually] partitioned and disconnected. Differentiated and becoming the myriad creatures, none can attain (i.e., return to) the ancestor (Taiyi).³¹

Liji, "Liyun"

The rites necessarily originate in Dayi 大一. [Dayi] divides to become heaven and earth, it rotates to become *yin* and *yang*, and it fluxes to become the four seasons.³²

In each case this Dayi or Taiyi has nothing to do with either the polar god Dayi / Taiyi or the Zigong in the astrological celestial center. Nor has it anything to do with the contemporary astronomical pole very near which sat the star Kochab. This Yi, Dayi, or Taiyi is an abstract construct having developed ultimately from Confucius and later thinkers throughout the centuries of the Warring States to denote the ontological and cosmogonic source and the immanent internal power energizing all of creation. It is prior even to the creation of the pole or the heavens in which the pole sits, cognate with *jing* 精, *tian* 天, *xingmingzhiqing* 性命之情, *xuan* 玄, and, often, *dao* 道.

In no case does any Warring States or Han text reference the pole when introducing or describing this metaphysical Yi / Dayi / Taiyi. Furthermore, despite the easy allure of identifying the stimulus to create this metaphysical Yi with the fact that the pole was starless throughout most of the 1st millennium BC, from our analysis in Chapter 3 regarding the origins of the principles of *wuwei* and *wu* in Confucius we understand that in fact the stimulus to create the vacuity and nothingness that describes this Yi originated in the composure of mind with which one entered ritual communion with ancestral spirits and, by extension, on the basis of which one conducted

³¹ *HNZ* 14:1469; translation modified from Didier (1998): 42.

³² *Liji* 22:18ab–19a.

himself in his ritual relations with the world and its inhabitants. While ultimately this ritually originating centeredness of the abstract Yi derived, through Confucius, ironically from the Shang-Zhou state cult of the ancestors that had centered ritual attention on the quadrilateral at whose central star sat the god Dayi, the pole was at this time in the Warring States no longer directly relevant, primarily because the central power that once had occupied that pivotal position now had vacated it, and, secondarily, without that concrete presence of the polar square in its erstwhile pivot the polity that continued to depend on the old conjunction of the square with the polar pivot, the Zhou dynastic court, consequently now was itself essentially irrelevant except to serve as a figurehead powerless to obstruct or reverse the mutually destructive policies and tendencies of the already long-warring *guo*, or estates-cum-states. Something other than the pole that held nothing had to be developed that could reädhre these states — and humanity among the states — culturally and politically. Confucius sought it in the vacuous and quiescent mental composure of rites and ritual endemic to the proper functioning of the old Zhou royal ancestral cult. Those who followed on his heels, stimulated by his nomenclature and topical / philosophical proclivities, either elaborated his arguments around the redevelopment of a ritually oriented culture or followed the inherent implications of Confucius' having stressed the internal calm by turning inward to seek the source of calm in the hidden nature that was then theorized to be one with the ultimate "Ancestor," the creator, One. The metaphorical identification of this metaphysical One in the *Zhuangzi* to be the "Ancestor" (*zu* 祖) assures us of the origin of this abstract creator in the ancient dynastic ancestral cult centered on Thuban and the Neolithic-Bronze-period polar quadrilateral.³³

³³ *Zhuangzi* 5 says of the True/Great Man that, "Life-and-death is also a great affair, but he does not come the point of changing [inwardly] (*bian* 變) with it (i.e., he is unmoved by such concerns). Even if heaven and earth were to collapse and fall, he would not be lost along with them. He is illumined as to what is not borrowed (his own fate or *hua* 化, his inborn perfection within) and thus is unaffected by things (literally, 'he does not shift along with things' 不與物遷). He takes as fate (i.e., gives himself up to, or follows along with) the transformations of thingness (i.e., he moves effortlessly and frictionlessly through the external *hua* 化 of his physical form amid the physical world, 命物之於化), all the while sticking to his Ancestor (*zu* 祖, i.e., the quintessence or essential One of the Way)." Translation from Didier (1998): Volume 1, p. 159. The Chinese text can be found in Wang Shumin (1988), Volume 1, p. 171.

Zhuangzi 20 avers similarly that the person who is able to tally with his "true essence of heaven and earth...

The tradition of a high god residing at the NCP appears to date back to at least as early as c. 3000 BC, and perhaps earlier. The evidence presented throughout this study demonstrates that this tradition remained consistent and powerful from the Neolithic and throughout subsequent times down at least to the 17th century AD. It appears that the Shang, having inherited the tradition of treating the NCP as the seat of the high power, established its highest dynastic kingly ancestor, the Shang dynastic founder Dayi, in that most exalted position. This was in addition to the apparent Shang placement of the highest ancestor, Shangjia, in the same polar position, as identified through the graph of his temple name, 田. We recall from Volume II, Chapter 5 that both constituent forms 十 and 口 describe stellar polar patterns and mark the NCP itself, and thus Shangjia seems to have been resident at the NCP. As for Dayi, as we have seen, the graph of the stem name of the ruling Zi house that he established in the dynastic succession, 乙 (乙), also passes through the Neolithic NCP star of Thuban. Furthermore, the old pole star Thuban constitutes (1) the center point of all of that line 乙, (2) a central point on a horizontal of the quadrilaterally shaped polar name and residence of the single most powerful Shang kingly lineage, *ding* 口, (3) the highest central location of the character denoting the high ancestral consular power Di, and (4) the mouth of the cult-consuming Taotie. (See Volume II, Chapter 5, **Figures 1ab**.) Furthermore, the character *da* in the god Dayi's name describes the shape that patterns of stars at the Neolithic-Bronze NCP formed. Thus the name of Dayi, in its entirety, like that of Shangjia, can be found in the shapes of the stars at the ancient pole centered on the star Thuban.

The identification of *yi* 乙 with the old NCP surely derives from the earlier Shang polar god Dayi, beginning with the death of the founding king Dayi in the late 16th century BC. However, high ancestor Dayi 大乙 inherited this position of absolute peak and center at the NCP from the earlier inhabitant high polar god(s) of the Neolithic and early-Bronze periods whose human-originated associations, if any, and name(s) we cannot know. But when in the late 16th century BC Dayi died and was apotheosized and delivered to the pole, the highest godly power of

rides along on the Way and Potency.... Now below, now above, he takes harmony as his measure. Floating and wandering with the Ancestor (*zu*) of the myriad things, [and, like it,] treating things as things but not being treated as a thing by things, how could he come to be trammled?" Translation truncated and modified slightly from Didier (1998): Volume I, p. 176 (text at Wang Shumin [1988]: Volume II, p. 719–720).

the pole came to be known as Dayi, for this simply reflected the name of the pole star's inhabitant (a tradition of naming that we have seen continued in the *Qian Zuo Du*'s claim that the star of the Zigong named Taiyi 太乙 derived its name from its resident spirit's or god's name, which was Taiyi 太乙, as well) and the shapes of the characters that formed the founder's temple name, Dayi 大乙. Such a belief in the high polar god by this name, thereafter dictated for 500 years by the ruling Shang throughout the territories it ruled, controlled, or influenced, i.e., those territories whose inhabitants participated in the belief in Di, would have spread both widely and deeply in the population such that it continued down through the Zhou at, apparently, both elite and popular levels.

However, the Zhou ruling house of Ji would not have retained Dayi at his preeminent position, either at all or for very long, as we have reasoned previously. Thus Dayi ceased to appear in traditions traceable to the Zhou court not long after the Zhou founding. On the other hand, the lesser elites and commoners living outside of the immediate influence of the Zhou central court would not have forfeited a long and deeply ingrained religious tradition of recognizing the polar god, known as Dayi, for they had no compelling political reason to do so and every personal religious reason not to. It is possible that the Zhou-period Dayi, which since the Han period (as mostly "Taiyi") has usually been considered to have been originally the high god of the southern state and culture of Chu,³⁴ survived especially well in Chu in the South due to that territory's relative political and cultural distance from the Zhou court in the North.³⁵ Such a southern popular transmission might be suggested by the appearance of this god in the Warring States "Shenqitu," recovered from the former Chu region of the South.

How, then, did an earlier tradition of Dayi 大乙 transform into the later tradition of first Dayi 大一 and then Taiyi 太一? We have discussed already the nature of the change from *da* 大 to

³⁴ See Zhou Shirong (1990): 925.

³⁵ However, some scholars attempt to trace Taiyi to the northeastern Zhou state of Qi 齊. See Zhou Xunchu 周勛初, *Jiuge xin kao; Donghuang Taiyi kao* 九歌新考. 东皇太一考 (Shanghai: Shanghai guji chubanshe, 1988). Still, this Donghuang Taiyi (August of the East, Taiyi) of Qi likely was a localized Warring States tradition derivative of the earlier and broader tradition of the high Dayi. It / he probably originated in the middle-Zhou and later Eastern Di, one of the five adjutant directional Di of the heavens that were thought to serve the Di of the Zigong.

tai 太 and need not repeat ourselves here except to reiterate that *da* was the original and always a cognate form of 太. Regarding the partial shift from *yi* 乙 to *yi* 一, we can understand it to have occurred through, once again, the minds and mouths of the elite philosophers of the Warring States period. We can reason that *yi* 一 replaced *yi* 乙 in the usage *Dayi* when the god no longer was important to these philosophers who were developing in the late Zhou a metaphysics of unity. To them *yi* 一, denoting a unity in "one," was important to their construction of a metaphysical-physical-political One from which all springs and to which all returns, i.e., a new "Ancestor" to replace the old quadrangular ancestral godhead of the pole that no longer held any significance for them. The mid-Zhou evolved personification or individualization of that godhead, *Yi* 乙, by then a vague and distant god of a long-vanquished dynastic lineage who anyway had moved away from the actual physical pole in the heavens and whose name moreover meant not "one" but "two," was useless to them. However, as a homophone of the original god *Dayi*'s (大乙) name, the term describing the new non-polar metaphysical abstract, i.e., *Dayi* 大一, "The Great One," naturally then borrowed the significant cultural and political capital of the ancient and high source of power in deceased ancestors. That is, the homophonic quality of the terms allowed the name of the new abstract *Yi* or *Taiyi* to draw into the center of a new philosophy of metaphysical, biological, and political oneness a sense and the power of the traditional godhead, but now, rather than a personal human ancestry, the new *Taiyi* conveyed for all a broader ancestry in universal creative energy that explained the origins of all. Perhaps it did not hurt, either, that the forms of both 一 and 乙 (both of which were the current forms of the characters during the Zhou) could be found at the *old*, Neolithic-Bronze, celestial pole, and that the centers of their intersecting vertical (乙) and horizontal (一) lines were one and the same: the old polar star Thuban. Aside from its having derived, through Confucius, ultimately from the ritual cult practices of the early Zhou court, it could only be in this sense that, perhaps, the new *Yi*, One, had anything to do with the pole. And this polar connection had no relation whatsoever with the current, vacant, pole, but only with the old, occupied, pole where sat the old polar god *Dayi* at his stellar throne of Thuban and surrounded by the old polar quadrilateral. The *xuwu*, "vacuity and nothingness," with which Warring States philosophers described this source and return, i.e., the Ancestor, derived not at all

from a physical vacancy at the pole but only from the emptied internal mental state through which in ritual one approached an ancestor.

The fact that in the Han this concept of an abstract one, unity, and center came to be reunited in the political cosmology of the Han court with the physical (but really now outdated, inaccurate, and only astrologically important but astronomically irrelevant) heavenly pole centering on the Dipper and its brightest star Alioth, underlines the implicit unity, found in the Warring States philosophers' appropriation of 大乙 / 大一, of the two concepts, one an ancestral god and the other an impersonal primordial origin, center, and metaphysical "ancestor."

The penultimate question for this study is, how indeed were the philosophers' metaphysical Yi, "One," and the popular god Dayi / Taiyi united in the Qin-Han periods to create a universal metaphysics and imperial cosmology that embraced fully not simply an account of the significance of now-popular traditions, Dayi / Taiyi, in whose name and upon whose actions ultimately most or all hemerological interpretations of the heavens were determined and relied, but also this newly conceived abstract source, center, and "ancestor," i.e., Yi —, "One"?

Above we have seen already how Yi and Taiyi fit into one unified Han understanding of cosmogony and cosmology, in the *Qian Zuo Du*. We need not repeat that work here, except to reiterate simply that Yi was the absolute singular source from which all creation sprang — and which to Warring States and Han philosophers represented the "ancestor" that had for them replaced the ancestors of the old Shang-Zhou pole-centered ritual cult. In both cases the "ancestor" was the goal of return to the source of one's creation. For those practicing the Shang-Zhou cult, the return occurred at death, when one, through the magic of the sympathetically shaped altar, tomb, and ritual bronze vessel (or its décor), joined the ancestors at the old polar quadrilateral. For the philosophers, the return occurred ideally in one's own lifetime as one discovered the Yi, One (heaven, quintessence, nature, potency, etc.), within himself that was identical to the procreative ancestor of not just one's human lineage but further one's universal lineage, greater creation itself. However, for the philosophers the final return to the great ancestor still occurred at death, though such a return was not personalized according to a human biological / familial lineage but was, again, a return without trace to, as the *Zhuangzi* avers, the great smithy, in whose metaphorical

hands the recycled pneumas (at all levels, from One to numen to coarse pneuma to form) were repackaged for a renewed cycling through life... and death.³⁶

In the meantime, in both constructs this "ancestor" was also considered a guide to aligning or finding good fortune in the here and now. In the case of the old polar god Taiyi, for both the state cultists and the later hemerologists and their believers, the god provided foreknowledge of events on earth, enabling, it was believed, the faithful participants to avoid bad and welcome good fortune. In the case of the philosophers, their Yi provided them, they believed, with the creator's vortextual innate knowing and understanding of all things and events in the universe, enabling them to see beyond matters of mere good and bad fortune to understand intuitively the source of all fortune. Such an understanding, they believed, rendered matters of fortune irrelevant to the prior and greater, central and pivotal, issue of creation and return of all in the universe. Whether, then, the application of such understanding occurred on a personal or political level, the result was success and long life. To some, ultimately the perfect understanding of Yi rendered one immortal, from which perspective all matters of even success and long life were irrelevant.³⁷

These discussions are not mere theoretical reconstructions but derive from the Warring States and Han texts and artifacts that we have reviewed in this study. Moreover, the methods and goals described here, of a belief in the efficacy of both Yi and Dayi / Taiyi, had real applications in the imperial cosmological construct according to which, under particularly Ying Zheng (Qin Shihuangdi) and Liu Che (Han Wudi), the imperial state's activities were organized. From the *Qian Zuo Du* we recall the essential cosmological construct whereby Yi originates all creation but remains passive while its agents carry out the development and governance of the universe on its behalf — in this it differs not at all from the Classical Metaphysics developed by various philosophers during the Warring States and reviewed above. But we also recall that the primary agent of governance of the created universe was the polar god Dayi / Taiyi.

This construct, Yi serving as motionless creator and source, and Dayi / Taiyi carrying out

³⁶ See Didier (1998): Volume I, p. 67–86, 153–177.

³⁷ For the eventual development of these implications into a full-fledged and explicitly described immortalism, see Didier (1998): Volume I, p. 347–481.

the active supervision and stimulation of ongoing creation from his perch at the astrologically central polar position of Alioth on the Dipper, is in fact directly reflected in the ritual constructs and activities of both Ying Zheng and Liu Che. The universal interpretation of Ying Zheng's and Liu Che's imperial cosmology avers that both emperors sought through the symbolism of *wuwei* and *xu* to correlate and thus identify themselves with the central and motionless northern celestial pole: the universe revolves around them while they remain vacuous and still vessels of the polar vacuity and motionlessness. Since Dayi / Taiyi has been believed mistakenly to have been the god resident at the contemporary Qin-Han *astronomical* pole, and situated specifically at the star Kochab, Ying and Liu have also been thought to represent and even personify on earth this polar aspect of this god.

However, this conventional wisdom is not supported by contemporary evidence. From Volume 1, Chapter 3 we remember that late in his reign Ying Zheng built a new palace complex at Shanglin, south of the capital Xianyang and connected to the city across the Wei River by a covered walkway. In so moving his administrative center of the empire to south of the capital he wished for his residence to mimic neither the astronomical pole, near which at that time circled the star Kochab, nor the astrological pole centered on Alioth and the Dipper, but rather the active administrative center of the heavens that lay out and away from the polar center, specifically in the sector of the zodiacal belt known as Yingshi,³⁸ which when visible of course lay in the southern part of the sky but which in pre-Han classical Chinese interpretation was associated with the north and the beginning of spring, and thus also, derivatively in Ying Zheng's new *Zhuan Xu li* (calendar), the first moon of the new year (in conjunction with the rising sun) and the beginning of the calendrical epoch in 366 BC.³⁹

³⁸ *SJ* 6: 256.

³⁹ For this association based on both the *LSCQ* and Zheng Xuan's commentary to the *Zhouli*, see Pankenier (1999): 265, as well as both Volume I, Ch. 3 (and Appendix), and Volume II, Ch. 5. See also *HNZ* 3: 262. On the calendrical significance of the Yingshi asterism in the calendar established in the late 3rd century BC by the First Emperor (Qin Shi Huang), i.e., Ying Zheng, see above, Volume I, Chapter 3, but also specifically Christopher Cullen, "Motivations for Scientific Change in Ancient China: Emperor Wu and the Grand Inception Astronomical Reforms of 104 B.C.," in *Journal of the History of Astronomy* xxiv (1993): 189–90. See, as well, Nathan Sivin, *Cosmos and*

From Ying Zheng's movement of his administration to south of the capital we thus know that he did not intend to arrogate to himself an identity with the astrological polar god Taiyi in his passive, *wuwei*, aspect while he resided at Alioth, but, rather, the god's agential role when he traveled throughout the heavens outside of the polar region, working on behalf of the creative origin or impulse, Yi. Just as obviously, Ying Zheng thus did not attempt to identify himself with the even more hidden, distant, and powerful vacuous and quiescent Yi, One, the creator, but rather wished to portray himself as an agent on earth of the heavenly power matrix represented by Yi and Taiyi. We can thus postulate that Ying Zheng saw himself as occupying a position not one but three full steps away from the power of creation: first, there was the creator Yi; second, there was the creator Yi's numinous agent, Taiyi; third, there was the *yang* Taiyi's identity as the *yin* Tianyi when he toured and held court in the greater heavens; and, finally, there was Tianyi's reflection and sub-agent on earth, the First Emperor Ying Zheng.

This posture of serving on earth as the agent of the old polar god's active, touring, and administrative aspect, and not attempting to identify with the astrological polar god himself in his quiescent state on the throne of heaven, we recognize even more clearly in Liu Che's ritual approach to the polar god Dayi / Taiyi approximately 80–100 years after the demise of Ying Zheng and his Qin empire. First, like Ying Zheng, Liu Che built his Ganquan palace south of the capital. We can assume that in this he followed Ying Zheng's development of his new administrative center south of the capital in order to mimic the polar god's active court administration of the heavens out and away from the polar center (in fact, this might explain why it was said in the Han that in the early Zhou the main altar to Heaven, the suburban altar, was built south of the capital). We know from the *Shiji* that Liu propitiated most carefully Taiyi / Di at no fewer than four great altars over some thirty years, including at least two at Fenggao (the Mingtang and a special earthen altar built near it) and the two three-tiered altars near the capital, one built at an unknown location south of the capital in the 130s on the advice of Miuji and one later constructed south of the capital at Ganquan. From the facts that (1) Liu's two capital altars dedicated specifically to Taiyi were in fact three-tiered altars at which he and his officials offered ritual propitiation of "The Three Ones" (Sanyi), that is, Taiyi, Tianyi, and Diyi, (2) Tianyi was the name of the *yin* aspect of the *yang* Taiyi

in his active mode when he toured the heavens (see above this chapter, section on *Qian Zuo Du*, as well as Volume 1, Chapter 3, Appendix), and (3) from the *Shiji* and *HNZ* we have learned that the Dipper was in Liu's time considered to be the seasonal timekeeper of the heavens as well as Di's / Taiyi's pointer, weapon, and chariot, and thus the chariot on which Tianyi / Di rode as he toured the heavens, we know that Liu understood and worshiped the dual nature of Taiyi in the latter's quiescent (polar) and active touring (heavenly) modes. From the *HNZ* we have learned further that in the 2nd century BC it was believed that, "Taiyi holds court in the Taiwei; Taiyi resides in the Zigong," and that Taiwei rests in the asterism Vermilion Bird.⁴⁰ As we recall from Volume 1, Chapter 3, Taiwei and the *fenye* field of the Vermilion Bird were together associated with the south-southwest. It thus appears that, in a way perfectly parallel to Ying Zheng approximately 100 years before him, Liu Che intended to correlate himself and his Ganquan court on earth with the active administration of the heavens by Tianyi in Taiwei / Vermilion Bird, while his capital correlated with the polar region, or Zigong, and its resident god Taiyi in his restful state of command at the astrological northern pole, the star Alioth on the handle of the Dipper. Therefore, Liu, like Ying Zheng, considered himself to be not the personification of either the creator, Yi, or the creator's numenic polar agent in its vacuous and quiescent state, Taiyi, but rather the direct reflection on earth of Taiyi in his active and administrative state, which was Tianyi.

We can press our understanding of the cosmology of Liu Che even further, by reconsidering in our present context the design and use of the Mingtang he had built at Fenggao. We know of the ritual platform built for the purpose of worshipping heaven that its central and highest altar was dedicated specifically to the worship of Taiyi / Di, i.e., the polar god Dayi, with four additional altars placed at the four cardinal points along the perimeter and dedicated to the worship of the adjutant governing spirits of the five sectors of the heavens, the Five Di (with the central Yellow Di sharing an altar with the southern Vermilion Di in order to vacate the center for the altar dedicated exclusively to Dayi / Taiyi).⁴¹ The fact that the emperor entered the platform's central ritual space dedicated to the worship of Dayi / Taiyi by striding along the covered Kunlun

⁴⁰ *HNZ* 3: 264–5.

⁴¹ *SJ* 28: 1401.

Walk that led inward from the southwest corner of the platform should give us pause. Kunlun is the name of the sacred mountain, the world *axis mundi*, that physically denoted Mt. Meru in the Himalayan mountains in a tradition well known to have derived from South Asian sources. From the perspective of the Chinese, Mt. Meru, in the Himalayas, lay to the southwest, correlating therefore with the court of Tianyi in Vermilion Bird also in the southwest.⁴² In the Indian RV-Hindu tradition, Mt. Meru/Kunlun is the font of all earthly creation. Following this tradition, Liu Che attributed not to the Dipper or its resident god Dayi / Taiyi but rather to Mt. Kunlun in the southwest the origins of all.

And in this Liu's approach almost precisely mirrors that outlined in the text of the *Qian Zuo Du*, which text, we recall, posited (1) an Yi, One, that, originating in the northeastern sector of the heavens, was the font of all creation,⁴³ and (2) an overseeing *astrologically* polar god of the physical heavens, Dayi / Taiyi, who regularly toured the far extremes of the heavens to ensure that the numerological configurations according to which Yi, "One," had created the universe were followed faithfully throughout each cycle or revolution in the ongoing creative and sustaining work that continuously derived ultimately from the energy of Yi. It is probable that the reason that, in the *Qian Zuo Du*, Yi originated in the northeast is due to this text's having followed more closely a specifically Chinese tradition of the *Zhouyi*, according to which the One that originated all of creation lay in the north / northeast, as represented in the north by the heavenly stem *zi* 子 and in the northeast by the trigram *zhen* 震, "thunder" (one *yang* / creative / solid line rising below two *yin* / receptive / broken lines). *Zi* correlated with winter / north, and *zhen* with the end of winter and beginning of spring (i.e., the time for rebirth) / northeast.

In Liu's apparently more universal or synthetic multicultural scheme that postulated a source and universal center outside of China, the *old* Neolithic-Bronze pole that now centered on Alioth and the Dipper, which served as the *astrological* pole, constituted the seat of the governing *god* or *spirit* of the heavens, while the *new*, or *astronomically recognized*, pole, which was

⁴² However, Han Chinese seem to have been confused about the directional location of Kunlun. See *HNZ* 3 and 4; for translations and a brief discussion of Kunlun's various directions, see Major (1993): 150–159.

⁴³ See *QZD* B:2b.

theorized on the basis of imported lore from India to correlate on earth with Mt. Meru / Kunlun in the Southwest, was the seat of Yi, "One," the originator of all energy and thus also all numen, pneuma, and form in the universe. In this we see the final amalgamation of the two traditions that we have traced, that of Dayi / Taiyi, the *old* polar god of the square, and the philosophically created Yi, "One," that, ultimately, also had derived from the traditions that had developed centered on the ancient polar quadrilateral, through the expostulations of Confucius and the subsequent, Warring States, philosophers. The move to localize Yi diminished it from its original metaphysical and mystically attained state, but at the same time this new amalgamation that entailed the rooting of Yi in a place, the astronomical pole around which in the Han period the star Kochab hovered, enabled a far more universalistic cosmology than had been attempted or achieved previously, one that was truly inclusive of and expansive into all realms on earth and in the sky. Such an expansive cosmology was fitting for regimes under particularly Ying and Liu that pretended to universal domination and influence, and in fact it not only served their imperial needs, it also unified for the first time two disparate cosmologies of the Zhou period that similarly had derived ultimately from the Neolithic-Shang traditions of the rectangular / square polar asterism but which by the late Warring States and Han periods had come to represent distinct, mystical and astrological, traditions. Their logical and intimate inosculation into a single, fully syncretic scheme allowed for the legitimacy of both traditions even as it bolstered the legitimacy of a political regime. As such, this synthetic system demonstrates an extraordinary imagination and intellectual liberalism, and, ultimately, it represents a typical consistency and persistence of the ancient Chinese patterns of culture as they encountered and worked constructively to adapt to the many advances that necessarily occurred in the Chinese understanding of the human being and its environment.

Chapter 7, Conclusion: Expression in Religious Structure, Myth, and Iconography of Neolithic-Bronze Trans-Eurasian Contact

Assessing the Role of the Polar Quadrilateral in Ancient and Later Religions

Among the many helpful comments that I have received from readers of rougher drafts of this manuscript, perhaps none was as thought-provoking as one reader's suggestion that my entire thesis that purports a central importance of the quadrilateral in ancient religions across Eurasia and the world is weakened by the observation that, while we remain today aware of constellations such as Ursa Major that are regarded to date long into prehistory, the tradition of the stellar quadrilateral did not make any lasting impact on history. In response we can indicate that in the present perhaps the polar quadrilateral remains only hidden in its ubiquity the world over.

First, I have shown throughout these three volumes that in Neolithic and Bronze times the quadrilateral was significant as a central icon representing a high superhuman celestial power. Without reviewing again all of the examples found in all three volumes, we can restate that in Neolithic or Bronze times the square turned up repeatedly in particularly Mesopotamia, Anatolia, England, India, the Americas, and China, playing in each case what was a central iconographic role in the religion of each region or society.

In addition, we must remain cognizant of the ways in which socio-political change can influence religious observance and its reflection in varying socio-economic-technological periods among the populations of the earth. At least two socio-political and environmental changes caused enormous transformations in human expression c. 3000 and 500 BC, whether in Mesopotamia or China, and such changes very likely affected the ways in which religious iconography was or was not passed down to future generations. The first is the occurrence of urbanization. In Mesopotamia, urbanization resulted in the continuous employment in the political center of increasingly expert observers of celestial phenomena from no later than c. 2500 BC. We saw in Chapter 2 of Volume I that between c. 2000 and 400 BC Mesopotamian astronomical observers developed an increasing sophistication in observing celestial phenomena,

based mostly on the consistency of observation and the observers' persistently having maintained records of their observations, and that such advances resulted in the sorting and resorting of recognized constellational patterns throughout particularly the period stretching roughly from 2000 to 400 BC. As far as we know, the majority, if not the totality, of constellationary configurations changed thoroughly between 2500 and 400 BC. We have little concrete idea over what the Mesopotamian constellations might have looked like during or before the 3rd millennium BC, but by triangulating pictures with text, in Volume I, Chapter 2 we came to recognize that during the 3rd millennium BC the quadrilateral was employed as an icon symbolic of the gods of the celestial polar center (in the so-called "winged-gate" motif). We also saw in the same chapter how our inherited zodiacal and other constellations were sewn together only between c. 1500 (and, really, c. 1200) and 400 BC, and that we really have no concrete idea of what the recognized or established constellations in Mesopotamia prior to c. 2000–1500 BC might have looked like. Even less can we know what constellations people prior to the period of rapid urbanization c. 4000–2000 BC might have construed as they observed the stellar canopy above them. Thus, any number of iconographic images critical to the social-political-religious world of 4000–2000 BC might have played a prominent role without our having any notion of it — or of these images' appearance.

In both Mesopotamia and China, in addition the precession of the equinoxes likely influenced what polar constellations would and would not be passed down to subsequent generations. While the precession of the equinoxes likely was not consciously observed in either Mesopotamia or China until very late in the 1st millennium BC, its real effect in shifting the stars of the polar center would have resulted in people having changed their conceptions of what constituted the center: in an organized state structure in Mesopotamia centered after c. 2300 BC in Babylon, the continuous state-centered observation of the heavens would have resulted in nothing less than an unconscious recognition of differences in the inherited statements, descriptions, or images describing the appearance and behavior of the contemporarily observed stellar phenomena versus those passed down from reciters or recorders of the past. That is, those whose job it was to record stellar phenomena could not have helped but notice that the stars did not always behave or appear in the ways in which the lore or records from the past said they did

or should. The consequence would have been that old records and traditions were discarded or updated as new religious justifications for the appearances of the stellar patterns were forwarded and ensconced in text and illustration. When such consistent observations had been recorded for long enough a period of time, by c. 1200–500 BC, the constellations that we know in the present congealed, which, due perhaps largely to the essential conservatism that runs inherent in urbanized state and/or religious intellectual institutions, mostly have not been changed since. In essence, then, it is only reasonable that the early, Neolithic and early-Bronze, observations of stellar phenomena, observed at a time when virtually the only texts written down in cuneiform, on clay tablets, were records of trade or monetary transactions, should not have been transmitted to the present.

In China, as we have seen, although the specific circumstances of the religious-political shift away from the stellar polar quadrilateral resulting similarly from the accumulated effect of the precession of the equinoxes differed, the effect was much the same. The old polar quadrilateral representative of the high superhuman power was abandoned as a symbol of particularly that high power. And if we take Greece to represent an intellectualized advancement over the traditional Near Eastern religious culture, then in Greece and China we can see parallel developments from the basis of an originally stellar-based religion centered at the pole: in both cases intellectuals tended toward an abstract, depersonalized understanding of the godhead that originally had sat at the pole. While Greece retained its old sky-god Zeus and China its old sky-god Taiyi, advanced intellectuals paid scarce serious attention to these old cronies inherited from the past, while in both cases the essence of the heavens and their central, polar, god was transmuted to exist in only an abstract, ethereal sense.

In the cases of both the West and the East, the undeniable similarities related to the evolution of the significance of the quadrilateral continue beyond intellectualized traditions that moved away from symbolic toward rather abstract representation. Indeed, the significance of the old polar quadrilateral continued in the representation of the quadrilateral on earth as the generally preferred shape of monumental and sacred architecture and modeling. In both the West and East, consider the shapes of temples, tombs, coffins, and "sacred" government structures: with only a rare exception, they are quadrilaterally shaped. Why?

We may extend this even further: why ever were tombs, beginning in the Neolithic, shaped rectangularly or squarely? The ellipse would have been the natural and most efficient shape that one could excavate for interment of a human corpse, so why were tombs and later coffins almost invariably squared-cornered and thus quadrilaterally shaped? One could argue that the shape of the grave derived from the square-cornered shape of the coffin, and the coffin was so squared because wooden boards from which the coffins were constructed were straight (from the straight nature of the reformed timber, i.e., lumber) and that they thus naturally formed squared corners when fastened together, but Neolithic and early-Bronze burials did not include a wooden coffin or tomb lining. Most rectangular graves and tombs were simply earthen pits, sometimes lined with rock. Why would they have been made square-cornered to be rectangular in a time, we must note, prior to the development of milled and thus straight-board lumber?

Further, why have temples, churches, schools, houses, and even coaches and cars been made forever, until very recently, almost invariably in the rectangular shape? Why has the frame of coaches remained, despite recently ellipsized body shapes, rectangular, based on a four-square model? Even with four wheels, a vehicle's frame need not be four-square — a rather more safe, resilient, flexible, and efficient frame would be elliptical. Tracing this back a step further, why were the earliest four- and two-wheeled carts invariably rectangular in shape or based on an essentially four-square design? After all, the precursors to the rectangular or square wheeled cart, the dragged sledges of the 5th and early-4th millennia BC, were triangular in shape. Why, then, have wheeled conveyances, including carts, chariots, and cars, since the mid-4th millennium BC, almost always been square- or rectangular-based?

Nearly forty years ago Kent Flannery first proposed that across the world the Mesolithic / Neolithic shift was accompanied by a change from circular to rectangular architecture in complex settlements.¹ In a recent article Flannery has revisited this phenomenon. From Flannery's own research and that of others who responded to the arguments presented in his original 1972 article, it appears that the shift to rectangular architecture on the complex village

¹ Kent Flannery, "The Origins of the Village as a Settlement Type in Mesoamerica and the Near East. A Comparative Study," in P. J. Ucko, R. Tringham, and G. W. Dimbleby, eds., *Man, Settlement, and Urbanism* (London: Duckworth, 1972): 23–53.

scale accompanied the move from a hunter-gatherer / light-agricultural mode of economic subsistence, whereby storage was maintained communally, to the more intensive agricultural mode whereby surpluses were produced and stored individually, that is, by individual nuclear families.²

In the Near East / Mesopotamia the shift to quadrilateral architecture occurred in the early Neolithic, or c. 5000–4000 BC; in the Americas it occurred between 1000 BC and 1000 AD, at a similar point of shift from the Mesolithic to the Neolithic. Flannery and others have not been able to locate a precise cause, or series of causes, for the dramatic and widespread change in approach to architecture among independent, non-interacting communities. On the basis of his decades of consideration of the issue and others' contributions, Flannery points vaguely to socio-economic developments such as shifts in risk assessment among groups, marriage patterns (polygamous versus monogamous), privatization of storage, and degree of dependence on agriculture, but these observed changes that accompany the shift in architectural structure / form simply cannot explain the common but independent advent of rectangular architecture in socially complex, agriculturally founded villages.

I believe that we may offer a more specific solution. In my own reading of the evidence, it appears that most significant is the fact of the development of individuated wealth and status, which the Neolithic stage of development brought, that accompanied the advent of quadrilateral architecture. The significance of this meaningful coincidence appears to be borne out especially clearly by the fact that archaeologists have recorded of the later phase of the Jorwe culture in the Indian Deccan c. 1000–700 BC a return from quadrilateral to circular-hut architecture when climatic change caused, through induced poverty, complex village communities to disintegrate and return to a simpler organizational pattern.³ It seems, then, that when the society reverted to a more communal-sharing model of subsistence, the quadrangular architecture disappeared, replaced by the formerly utilized circular-hut architecture. Therefore, the use of quadrangular

² Kent Flannery, "The Origins of the Village Revisited: From Nuclear to Extended Households," in *American Antiquity* 67:3 (July 2002): 417–433.

³ *Ibid.*: 423.

architecture appears to be related to the differentiation of statuses within a complex community. In other words, quadrangular architecture accompanies the development of a complex socio-political structure that differentiates access to power and authority on the basis of stored individual (or nuclear-family) wealth.

The seminal question remains, then, of why Neolithic people the world over, who experienced in this phase of development similarly the accretion by certain nuclear families of individuated surplus wealth, appear to have modeled their architecture on the quadrilateral shape. There appears to be no universally applicable but specific socio-economic cause that would have engendered such a shift to particularly quadrangular architecture in wholly independent and mostly non-interactive communities.

The answer to this question might lie in a combined consideration of the political-religious power that accretes to the wealthy — and most leisurely — in a given culture or civilization and the ever-increasing proximity during the Mesolithic-Neolithic periods to the astronomical pole of the celestial quadrilateral centering on the eventual pole star Thuban. In 5000 BC Thuban was 12°22' distant from the astronomical pole; by 4000 BC it had moved to a close distance of 6°45' from the pole. In 3000 BC, as we know, Thuban was virtually spot on the pole. I therefore suggest this as a possibility: as ancient societies evolved to rely ever more substantially on the consistently produced and increased wealth that agricultural practices allowed, they moved from small, simple, and communally sharing settlements to larger, more stratified and more complex, hierarchized societies based on individually (or nuclear-family-) hoarded wealth that required a stratification in socio-political status in order to organize both labor and proximity to the power structure, for the purpose of maximizing and sustaining the accumulation of society-supportive wealth.

As we have argued throughout these volumes, the development and retention of socio-political power relied in the ancient world on the legitimation by the politically central, the high elite, of their enjoyment of relative power over others of the community. This legitimation would have to have depended in large part on the emerging control of resources that the status quo provided, but at an even more fundamental level it also would have to have relied significantly on a continued ideological base of justification for status differentiation that could only have

been superhuman, or religious. As we have argued previously, such a superhuman agency or entity would have provided a sense of security to these people who lived in a largely unknown and often feared world, and particularly in the half of each day when, due to the disappearance of the day star, the sun, the world encapsulated these people ever more stringently as nighttime left them without the use of their most fundamental sense and tool of orientation, their sight. It may be that by mimicking the quadrilateral that approached the northern celestial pole, formed by the stars of Mizar, Alioth, Pherkad, Kochab, and Thuban, and thus tapping into the perceived power of the unmoving center of the understood universe, then emergent socio-political leaders were able to justify — on the basis of their communion, through, in part, their quadrilaterally shaped architecture mimicking the most salient design found at that time in the circumpolar region, with that perceived high power — their accretion or seizure of socio-political power over the community. When, as in the Jorwe culture of the Indian Deccan, the hierarchized community needed to disintegrate to enhance the chances of its members' survival and well being, the failure of this high polar power, and the elites' communion with it, to protect the community may have induced a forfeiture of the high power and a consequent return to a more flattened power-sharing arrangement among community members, represented in architecture by the reversion to a circular architecture of communal-familial structures. It is possible that such circular architecture mimicked another, more "primitive," high power on which people relied for their security. What this might have been is anyone's guess, although the most obvious candidate would be the non-specific, horizontally circular heavens and earth themselves.

I believe that the key in the development of the use of the pole-stimulated quadrilateral architecture likely can be found in incipient urbanization and, within that complex development, the initiation of stratified societies the elite or central power structure of which required a superhuman agency on which it could rely to establish and maintain its authority over others of the community. It would not have been only the shape of preferred architecture that displayed symbolically through the shape of the polar quadrilateral the elites' tether to superhuman, celestially central power, but also any symbolic representation of the elites' authority.

Thus, as we know, in the Near East and Egypt of the 4th–3rd millennia BC the quadrilateral shape surfaced consistently across civilizations in the shapes of religiously

legitimizing and thus ideologically fundamental ziggurats, temples, tombs, and pyramids. We must not forget either that the shaft leading from the pharaoh's tomb in the pyramid of Cheops was directed at the contemporary pole star and center of the polar quadrilateral, Thuban. In Harappan India the quadrilateral shape was employed in the mobile altars that people either wore on their bodies or strapped to shipped goods, seemingly as protective amulets. In Anatolia, Britain, the Americas, and China the quadrilateral appears repeatedly in religiously pregnant architecture, often surrounded by the contextual circle of the heavens as they appear to be restricted at the circular horizon. In China, as we have seen, the polar quadrilateral seems to have served as the model from which was developed the graphic symbol of the composite high god of the Shang and Zhou civilizations.

In Mesopotamia, the pole-mimicking sacred quadrilateral design seems to appear not only in the architecture of temples, tombs, city walls, and altars, but also in the shape of the wheeled cart that was reserved for use by royalty. Naturally, the political center, i.e., the king, along with the class of his supportive ministers and priests, would have identified themselves as the earthly representatives of the celestial center and source of universal power, the pole. It is thus natural that the exclusive conveyance of the king, the cart, would have mimicked the shape of the polar center that the king himself wished to emulate, the polar quadrilateral.

The cross and swastika, having served as both religious and political symbols, also appear to transmit to the present the shape of the Neolithic polar quadrilateral, either modeled from the quadrilateral or as direct representations of the intersection of two clearly discernible stellar lines that meet in a cross at the old pole star Thuban. Both symbols originate in a time commensurate with the advent of quadrilateral architecture, or c. 5000–3000 BC, when the stellar quadrilateral rotated very near or at the pole. Both symbols, the cross and swastika, have also long survived as centrally religious symbols the time when the stellar quadrilateral, or a linear stellar intersection constituting a cross, centering on Thuban ceased, due to precessional drift, to be associable with the NCP.

In sum, the old stellar polar quadrilateral appears to have survived ubiquitously, through symbolism present even today that in most cases is not thought to be related directly to ancient religious beliefs and habits. Such quadrilaterally shaped symbolism, found in architecture,

design, and iconography, may have originated in social reorganizations that caused people to look to the stellar patterns observed at or near the northern celestial pole c. 5000–1000 BC to locate a critical source of legitimating power. Thus the question about why the quadrilateral asterism has not left a mark on later civilizations may not be pertinent at all, for, if we look beyond the obvious remnant iconographic symbolism inherited from later-urban civilizations in the Near East and China (or elsewhere), then we can observe that the symbolism of the old pole appears to remain with us ubiquitously even today, if only in an indirect and therefore normally unobserved context, mode, or expression.

Bronze-Period Mesopotamian and Chinese Religions: Simple Pan-Babylonism?

Another comment received from a generous reader of the single-volume 2003 draft of this manuscript suggested that by attempting to tie in Neolithic-Bronze Chinese religion with specifically Mesopotamian developments over the same period, c. 4000–500 BC, I may have committed the error of succumbing unwisely to the arguments of 19th–20th century so-called Pan-Babylonists. Here, I think, the reviewer meant "Pan-Eurasianists."⁴ Once again, this honest and well-intended criticism has caused me to think and rethink my positions, and all evidence for and

⁴ Pan-Babylonism was a specific sub-field of religious study that, beginning in the late-19th century among European and American scholars, purported to be able to trace a large body of Eurasian, and in fact also world, myth and iconographic expression back to the early Mesopotamian body of myth. While I believe that in specific cases their arguments hold some value, in fact my 2003 manuscript promoted rather a thesis, which now, from the present, expanded, manuscript's evidence becomes quite undeniable, that from no later than the Neolithic-Early Bronze periods there occurred a significant intermingling of cultures and technologies across West and East Eurasia, and the content of the transmission across the continent of course included some elements of religion. Thus I believe that the reviewer really meant that s/he objected to my "Pan-Eurasianism." It is only in the present three-volume manuscript that I have taken up selectively some elements of what might be construed as "Pan-Babylonism," in addition to what remains in these volumes a firm "Pan-Eurasianism." At this point, however, having in fact traced some Mesopotamian, Indian, Chinese, American, and European IE myth back to what was likely Palaeolithic Siberia, perhaps in addition to Pan-Eurasianism I am also promoting a simple recognition of widespread prehistoric and historic interaction, whether it was pan-Eurasian or, much earlier and more broadly, simply intracontinental and intercontinental.

against them, over a period of years. This reader's reasonable caveat or criticism (if we substitute "Pan-Eurasianist" for "Pan-Babylonist") is also partly responsible for my having developed much of Chapters 1 and 2 (as well as significant elements of Chapters 3 and 4) of Volume I from what was originally a single short introductory and lightly skimming chapter. Not only have the original evidence and argumentation borne up under renewed and more intensive scrutiny, but also additional research has turned up quite a bit of further evidence that even more formidably supports my theses arguing for both (1) significant Neolithic-Bronze Eurasian cultural, linguistic, and technological transfers, and (2) the centrality of the polar quadrilateral symbolism and meaning in and across sundry ancient religions of c. 5000–1000 BC.

In response to the suggestion that through this manuscript I might be reviving an old Pan-Eurasianism, first we may note that, thanks to the efforts of generations of brilliant scholars of archaeology, anthropology, genetics, literature, and history, our scholarship has come a long way since c. 1870–1950, and, consequently, we know, Pan-Eurasianists (and, in many cases, Pan-Babylonists) have been essentially, but not necessarily specifically, correct in their identifications of transfers having occurred. Religious concepts and constructs from Mesopotamia dating to the 4th–1st millennia BC (or earlier) certainly made their way to China to exhibit themselves in the record of Chinese iconography and text from the 4th millennium BC forward.⁵ Considering both the migratory history of Eurasia from the 4th millennium BC and on and the similarities in religious expression of the quadrilateral in both regions of Eurasia during the same period (not to mention the related quadrilateral-based religions of Egypt, Britain, and Anatolia in the 3rd millennium BC and Greece in the 1st millennium BC), then to posit a relationship of influence, west to east, is not at all unreasonable. And we recall that the influence may have traveled east to west, as well, for the quadrilaterally concentrated iconography of Neolithic China seems, according to presently available archaeological evidence (the dual-

⁵ For a general treatment of the Pan-Eurasian transfer that not only focuses particularly on the development of bronze-making technology as it traversed Eurasia from west to east but also identifies distinctive facets of urbanizing development east and west, see Andrew Sherratt, "The Trans-Eurasian Exchange: The Prehistory of Chinese Relations with the West," in Victor H. Mair, ed., *Contact and Exchange in the Ancient World* (Honolulu: University of Hawaii Press, 2006): 30–61.

trapezoid hexagram, or eight-point star, design), to have appeared first along the eastern Chinese seaboard earlier than in any other civilization, during the 4th millennium BC.

Leaving aside for now the possible east-west influence of quadrilaterally shaped iconography in the 4th–3rd millennia BC, the more daring scholarship of the past fifteen or so years supports my inclination to look to Mesopotamia-Babylon as a possible source for Chinese religious ideas of particularly the period when the Chinese began organizing themselves into an extensive political entity, the Shang, i.e., during the latter half of the 2nd millennium BC. The most obvious link between the two civilizations of course would have been Indo-Iranian- and Iranian-speaking peoples, identified culturally / archaeologically with the eastward-spreading Anafasievo and Yamna-derived Andronovo cultures, and thus we may expect linguistic links to be discernible between proto-Chinese and Indo-Iranian / Iranian. Unfortunately, this enormously important topic appears not yet to have attracted many scholars' serious attention.

At the same time, since the 1960s some European and Chinese linguists have written experimentally on linguistic connections that they detect between Proto-Indo-European or Indo-European and Old Chinese (Sinitic, and Zhou and Qin-Han periods Chinese). Among them, in 1988 Chang Tsung-tung published a substantial but seemingly little noticed study in which he identified, through his quite extensive reconstructed phonetic correspondences between Indo-European stems and Old Chinese words, a fairly intimate connection between Old Chinese and particularly the Germanic Indo-European linguistic group.⁶ More recently Zhou Jixu and Julie Lee Wei have followed up with studies of correspondences between PIE or IE and Old Chinese roots of particular cultural provenances.⁷ Likewise Justine T. Snow has focused on an apparent particular cultural correspondence to draw believable links between (1) the Chinese weaving goddess Zhinü (Chih-nü) and Indo-European spinner goddesses of the sun / dawn, and (2) the

⁶ Chang Tsung-tung, "Indo-European Vocabulary in Old Chinese. A New Thesis on the Emergence of Chinese Language and Civilization in the Late Neolithic Age," *Sino-Platonic Papers* 7 (January 1988): 1–56.

⁷ Zhou Jixu, "Correspondences of Cultural Words between Old Chinese and Proto-Indo-European," *Sino-Platonic Papers* 125 (July 2003): 1–19; and Julie Lee Wei, "Counting and Knotting: Correspondences between Old Chinese and Indo-European," *Sino-Platonic Papers* 162 (September 2005): 1–71. The latter paper interestingly takes Welsh (a Celtic language) as its targeted Indo-European language for comparison against Old Chinese.

Chinese Xihe (Hsi-ho) and Indo-European solar charioteer goddesses.⁸ In the meantime, Penglin Wang took the logical intermediate linguistic step of identifying Indo-European loans in Altaic. Wang's work, if pursued further, should prove to be a fruitful area of research to help to establish the long-standing links between linguistic communities across Eurasia, and particularly various branches of Indo-European and Old Chinese languages, over millennial time.⁹ Equally seminal is the linguistic and cultural research demonstrating evidence of cultural interaction having occurred between early Indian and Chinese civilizations c. 1500–500 BC,¹⁰ precisely when we would expect that the seventeen Babylonian ecliptic asterisms made their way to India, and then, as the expanded twenty-eight *naksatras*, from India to China. We can expect that both Indo-European- and Altaic-speaking folk played a role in the cultural and technological transfers west-east and east-west, of course.¹¹

One particularly interesting postulation draws a link between the Chinese Di (*tees, *teegs, Old Minimal Sinitic *têkh*) and Proto-Indo-European **deus* (usually reconstructed as **dyeus*), as well as **dyeus* / **deus*-derived Indo-European god names, including the Greek Zeus (see Volume I, Chapter 2).¹² Victor Mair has reached back even more deeply and distantly, to

⁸ Justine T. Snow, "The Spider's Web. Goddesses of Light and Loom: Examining the Evidence for the Indo-European Origin of Two Ancient Chinese Deities," *Sino-Platonic Papers* 118 (June 2002): 1–74.

⁹ Penglin Wang, "Indo-European Loanwords in Altaic," *Sino-Platonic Papers* 65 (February 1995): 28. It is worth noting here that while Wang has found word loans traveling from IE to Altaic, Chang Tsung-tung (1988: 33) pointed to a hypothesized long interaction in Central Asia between Altaic and the particular IE group of Greek, Latin, and Southern Germanic as having influenced in the latter group the development of a complicated conjugation system. Both Wang's and Chang's postulations are well worthy of further pursuit.

¹⁰ Qingzhi Zhu, "Some Linguistic Evidence for Early Cultural Exchange between China and India," *Sino-Platonic Papers* 66 (March 1995): 1–7.

¹¹ Central and Inner Asian peoples would have played critical transferring roles in such exchanges. In addition to the discussion and many sources cited in Volume I, Chapter 1 that demonstrate the 2nd–1st millennia BC mixing of Central / Inner Asian and Indian languages and cultures, see also Michael Witzel, "Linguistic Evidence for Cultural Exchange in Prehistoric Western Central Asia," *Sino-Platonic Papers* 129 (December 2003): 1–70.

¹² Zhou Jixu, "Old Chinese '*tees' and Proto-Indo-European '*deus': Similarity in Religious Ideas and a Common Source in Linguistics," *Sino-Platonic Papers* 167 (December 2005): 1–17.

postulate a graphic and phonetic connection between Old Chinese Di and Mesopotamian *dingir*.¹³ Indeed, the phonetic similarities among all three godheads, Di (and Tian), *dingir* ✳, and Dyaus, as well as particularly what I have shown to have been the Shang high power *ding* (Ding), not to mention the graphic similarities between *dingir* and, together, Di and Tian (note the asterismic legs of Di / Tian and how they resemble the rays emanating from the center of *dingir*) in Chinese heritage and the fish / loop-in-square figure appearing on Harappan seals (Dravidian *mîn*?), make not considering this possibility rather foolish. Drawing from earlier but later-retracted work by Edwin Pulleyblank, Professor Mair has also projected an intimate link between the Phoenician consonantary of c. 1400–1200 BC and the Chinese *tiangan* and *dizhi* symbols, as reviewed previously in Volume II, Chapter 5.¹⁴

It is difficult to ignore the phonetic and graphic similarities of the names of all of these gods, East and West, although at present proving such a connection outright is not possible. There seems to be no intermediate link well understood at present that would account explicitly for the transmission of *dingir* to become in the Shang polity the high god Ding or Di, though we know that such a transmission would have to have occurred through the agency of specifically Indo-Iranian- / Iranian-speaking — and surely also Altaic-speaking — peoples. As intimated above, as well, a connection through Harappan / RV-IA or Harappan / RV IA-influenced peoples (BMAC, Andronovo?) is quite possible, considering particularly both the transmission of the (seventeen Babylonian and later) twenty-eight Indian *naksatras* from Mesopotamia through India to China and the possible graphic and/or phonetic links between *dingir*, the Harappan loop / fish-in-square icon, and Chinese Di / Ding / Tian. Establishing such an intermediate link is work yet to be performed by linguists expert in the areas of all of Sumerian, Akkadian, the cuneiform script, Indo-European, Altaic, Harappan, Sanskrit, the Prakrits, and Sinitic / Chinese linguistics.

¹³ Victor Mair, "Religious Formations and Intercultural Contacts in Early China." Forthcoming (to be published in a conference volume from Bochum University): 21, n. 11.

¹⁴ Victor Mair, "West Eurasian and North African Influences on the Origins of Chinese Writing." In Luk et al. (1992): 335–8.

Beyond graphs and phonetics, we may consider many apparent similarities between the Babylonian, or, more broadly, Southwest Asian, and the Indian and Chinese religious systems, likenesses of both a particular and general nature. First, in Volume I, Chapter 2 we reviewed the common origins in Babylonian star lore of the Pleiades of both the Japanese and Chinese names and traditions associated with that star cluster, *subaru* and *maotou*, respectively. Furthermore, Mesopotamian / Babylonian understandings of the influences of planets begets a similar unity of vision and origin in Babylon: as in Babylonia, so in China, Venus was viewed to be the astral spirit of love, while Mars was similarly observed to govern matters of hostility and war (see Volume I, Chapter 2).¹⁵ In Volume I, Chapters 2 and 3, we also noted how both civilizations employed deci-sexagesimal (or sexagenary) combined luni-solar calendars that are too similar to have developed independently of each other. Considering the much earlier development in Sumer / Babylon of this calendar and the great weight of west-to-east Eurasian migration during this period, the origin of the calendar, of course, would have been in Sumer / Babylon. In addition, as we have mentioned again above, particularly the transmission of the twenty-eight *naksatras*, or celestial lodges / mansions, from Babylon to India to China c. 1000–400 BC inclusively, further force an intellectual reconciliation of the similarities between the cultures of the two regions at distant nodes across the Eurasian continent. Further, the tradition of interpreting the Dipper to be a wagon or cart, or, later, chariot, which began in Mesopotamia, surely spread east into India and likely from there further to China, as well as north and west to alight also in Greece. Similarly, the identification of the Dipper as a bull in India certainly also derived from the identical earlier Mesopotamian and Egyptian traditions. Much earlier, we know,

¹⁵ Here it is interesting to note that Zhou Jixu (2003: 14) has proposed a phonetic and semantic correspondence between what he has identified as an Old Chinese war god, *maas (馮, Chinese *ma*), and the Roman god of war Mars (Nergal). This is a complex proposition that before being accepted would need to be traced carefully in Sumerian and Akkadian linguistics as well as traditions of astral myth in both Sumer/Babylon and the Roman Republic and Empire, for (1) the god of the planet Mars in Babylon was Nergal, not Mars, and (2) it is commonly believed that the Roman Mars derived from the Etruscan god Maris. Maris was an agricultural god of fertility whose role and characteristics Mars inherited; Mars became increasingly militaristic only under the Roman Empire. This would discount any suggestion that the warrior god Mars had any bearing on the development of the Old Chinese war god *maas, for the movement of any influence would have to have occurred east to west, from the earlier Old Chinese to Latin.

as well, the cosmic hunt myth, originating in Siberia during the Palaeolithic, spread all of east-southeast, south-southwest, and west to appear in the traditions of China (and the Americas) and, through likely first Finno-Ugric- and then in turn generally Indo-European- and / or more specifically Iranian-speaking communities, Greece (and Italy) and India.

We also perceive similarities in the conceptions of immortality and heavenly governance in all of Egypt, Mesopotamia, and China. In the cases of both Egypt and China, it appears that at death kings or pharaohs ascended to reside immortally at the NCP, at Thuban or within the celestial polar quadrangle. And the fact that in both civilizations such immortality consisted of two apparent aspects, one restful (northern) and the other active (southern), may indicate that the two systems are linked. Recall that two shafts emerged at acute angles from the tomb chamber in the low center of the Egyptian pyramid of Cheops. One was aimed north at the pole star Thuban, while the other pointed south to Orion. The quiescent element of the pharaoh's immortality resided forever at the NCP, while the active or motive soul of the pharaoh, identified with Orion, represented the immortal continuance of diurnal death and rebirth through the nightly setting and / or rising of the Orion star cluster. Similarly, in China the high god Dayi / Taiyi, who originated at least historically in the apotheosis of the great Shang ancestral king Dayi c. 1500 BC, resided at the pole but toured the heavens south of the pole in his motive persona of Tianyi / Yinde. And that Tianyi / Yinde was associated particularly with the movements of Jupiter that formed in both China and Mesopotamia the basis of the calendar, while in Mesopotamia the high god Marduk was identified, like Taiyi and his active persona Tianyi, with both the NCP *and* Jupiter in particular, likely is no mere chance coincidence. It is very possible that this bifurcation of the night sky into northern and southern sectors, as they are represented by celestial polar and ecliptic bodies, derives ultimately from the widespread distribution, throughout both the west and east, of the Palaeolithic Siberian mythic motif of the cosmic hunt. In this myth the essential northern / southern, or polar / ecliptic, division of the night sky seems to have been recognized, even if only very vaguely.

In a related way, the anthropomorphic nature of the Mesopotamian pantheon is similar in its humanistic focus to the ancestral composition of Ding, Di, and Tian. Indeed, it is even likely that the mostly Sumerian gods dating to at least as early as the 4th millennium BC, whom

Babylon inherited, were originally apotheosized ancestors, just as in Shang and Zhou (and almost certainly Neolithic-early Bronze) China. In Egyptian religion, as well, we witness the similar apotheosis of the pharaoh with his immortal soul being escorted sympathetically through the architecture of his great tomb (the pyramid) and the angular thrust of his tomb's north-pointing shaft to the contemporary northern pole star Thuban and the quadrilateral pole that it helped to constitute. This shares certain similarities with the Chinese penchant to send off their ancestors such as Shangjia, Dayi, and various other deceased *jia*, *yi*, and especially *ding* ancestors to the quadrilateral Ding that was centered in Di at the old northern celestial pole. This pattern also holds true of An / Anu, Enlil, and Marduk of the Sumerian / Babylonian religion and Varuna and Indra of the RV IA religion, in which these high gods, who likely originally had been royal ancestors, were stationed at the pole.

Further, polar traditions in all of Mesopotamia, India, and China related to the Dipper that likely predate those of the wagon or bull but which became systemically ingrained in a particular fashion in the structure of each civilization's developed religion or myth likely all originate in the same ultimate source, the Siberian myth of the cosmic hunt. In each civilization the cosmic hunt motif, whether involving bears or not, is reflected in the role that the Dipper plays in both creation and, in tandem with cosmogony, the cosmological structure of governance that plays out in gods' familial relationships as depicted among the stars of the Dipper and the NCP. In each case the NCP serves, as we mentioned above, as the creative source of all energy and thus also the patriarch of the entire cosmos. In every case, as well, the Dipper represents offspring of the patriarch at the pole, and it helps as an agent to produce and/or govern further evolutionary developments of the cosmos. In Mesopotamia, Enlil, having taken over from his father An as the god of the pole, enjoys the assistance of his son Nergal and Nergal's wife Ninlil in overseeing the cosmos. Nergal and Ninlil both were identified with the Dipper. In India, both Dippers, as bears, are the progeny of the high night-sky god Varuna (the Rikṣas, the Dippers, are "the holy and uninterrupted acts of Varuna"), and the Dipper bears in turn perform other acts of creation. In addition, in a parallel myth, Aditi, daughter of the early high polar god Dyaus, gives birth to the Rsis, or seven stars of the Dipper and the sun god Mārtanda (Sūrya), the latter of whom Aditi casts away to govern the day sky as the sun star. The Rsis evolve in the RV IA literature into the

Saptarsis, or Seven Sages, great icons of heavenly wisdom. We may note here as well the Amesha spenta of the Iranian tradition that likewise explains the birth of the stars of the Dipper in a divine familial way, though here Ahura-Mazda (Varuna-Mitra) constitutes one among the stars, not their northern celestial polar progenitor.

In China, the myth of Huangdi, whose father, according to a later-emended tradition, was the Dipper, and his seven most noteworthy descendents, the remaining members of the Three Augusts and Five Emperors, is remarkably similar in varying ways to both the Iranian version of the Dipper myth of the Amesha spenta and the RV IA lore of Aditi and the Rsis / Saptarsis. First, like Ahura-Mazda, Huangdi is the son of the Dipper father. But similar to Varuna, Huangdi is also described early on as the cosmogonic god of creation. Further like the Rsis / Saptarsis myth, Huangdi and his seven patriarchal and kingly descendents continue to be associated with the Dipper (e.g. Huangdi is from the Bear clan, Yu and his father are described as bears, and Yu's astral magical dance is one that mimics tapping "in and around the Dipper"), and ultimately they evolve into human civilizational / cultural heroes and progenitors.

There are further close similarities in the structures of the religions of both Mesopotamia during the 3rd-2nd millennia BC and Shang China c. 1500-1000 BC. Both betray their organization on the basis of the center-plus-agency pattern that we witness of Chinese religious thinking and intellectual developments in particular: just as in Shang China Ding / Shangdi and, more broadly, Di (or, in the Zhou, all of Shangdi, Di, and Tian) supervised a coterie of lesser helping spirits, so in Mesopotamia a familial pattern apparent in the relationships shared between the great father god An, his sons Enlil and Ea / Enki, his grandson (son of Ea / Enki) Marduk, and the family of supportive skyborne spirits identified with specific stars, planets, and asterisms, prevails. The same can be said of RV India, where either Varuna-Mitra or Indra oversees a host of helper spirits that essentially serve as skyborne avatars of the One spirit / origin of the center. In all of these civilizations, as well, ancestral spirits, i.e., gods, are identified with and as stars, as well.

Forming the basis of all such myth in all three civilizations, of course, is the recognition of the NCP as the source of cosmogonic and cosmological power. All of An / Enlil / Marduk (originally *dingir*) in Mesopotamia, Varuna / Indra in India, and Di / Ding / Tian / Dayi (or

Taiyi) in China were polar high gods, and in each case the heavens over which they governed were divided into specifically three heavens, which tradition probably began with the Mesopotamian focus on the NCP as the heavenly center and source and the division of the sky into concentric thirds at about $15^{\circ} / 17^{\circ}$ S and $15^{\circ} / 17^{\circ}$ N of the celestial equator, that is, the three paths of Thirty-six Stars known in the Babylonian Astrolabes as the paths of Enlil, An / Anu, and Ea / Enki.

Moreover, there is a definite fluidic quality to the leadership of the pantheon in each of the religious systems of Babylon (and, derivatively, Greece) and ancient China: as the most exalted leadership position in the heavens of Babylon passed hands, so did the composition of the powers included in Ding (i.e., Shangdi) and the broader godhead of Di / Tian itself seem to rotate. Further, the survival of the god Taiyi / Dayi from the Neolithic through the early imperial period, a god who usually was identified with Di throughout the early-dynastic and imperial periods but whose name(s) in the prehistoric / pre-Shang period we do not know, resembles the persistence of the pole-centered pantheon of Babylon: no matter the changing personalities installed into the roles of leadership that occurred with a change of dynasties or other earthly circumstances, the structural and effective qualities of the godhead and its pantheon remained. The same is of course true of RV IA and later India, involving the old high god Dyaus as well as Indra, Varuna, and others.

A difference occurs, however, between India, on the one hand, and Mesopotamia and China, on the other, after c. 1000 BC in the degree of direct continuity of the old religious structure inherited from the past. In India the RV IA system survived essentially intact, due probably to both (1) the early compilation of a central sacred literature — until quite late thoroughly oral — that memorialized in detail the great achievements and works performed by the civilization's early high powers, and (2) the apparently less object-oriented nature of the RV IA religious system (i.e., the polar quadrilateral or any particular polar stellar pattern does not appear prominently in the RV IA literature to play a concretely defined role). Mesopotamia and China conversely witnessed significant changes in their religious systems, or at least in their expression and the ability of the old system to maintain for anyone employing it a unified polity in the inherited geography of each area.

It may be that the erstwhile persistent religious structure of the Mesopotamian and Chinese civilizations began to dissolve after the turn of the 1st millennium BC because the millennia-old structure itself, the patterns of stars, including the rectangle, that had sat at or near the pole circa 5000–1000 BC, had vacated its central position in the visible universe. Without the old visible, concrete anchor for the godhead resting in the central position in the heavens that had accompanied the development of urbanizing civilizations from the beginning of the most critical period of intense urbanization and reorganization, it seems, eventually the impetus for gathering under that godhead waned. Thus during the 1st millennium BC these civilizations experienced both a lengthy period of incessant and intense warfare and a burgeoning (or perhaps merely a historically visible surfacing) of local religious and cultural impulses. In both cases, once again, the foundations of the most momentous replacement impulses, after having undergone considerable sifting in the middle to late 1st millennium BC and early 1st millennium AD, have continued to be expressed in one modified form or another all the way to the present, and this is probably because the new impulses had little to do with the actual astronomical celestial pole and thus did not depend for their anchoring on eventually shifting patterns of stars that would leave the new religious orientations without an anchor. The gods no longer depended on their visible appearance in a specific location in the nocturnal sky, for they had been either (1) localized either in non-central stars or asterisms whose shifting patterns of appearance in the sky did not affect their believability because the new organization of the godhead and pantheon accommodated for structural stasis amid a shifting center (e.g., the imperial-period seat-shifting administrative *shen* [spirits] Taiyi and Tianyi, who, by the time of the Han period now being astral gods associated with not an astronomically but rather astrologically derived polar center, relied for their motive force on a metaphysical, non-anthropomorphic, central One placed only very vaguely at an unspecified *omphalos* coordinated with the immaterial, abstracted astronomical celestial pole), or, (2) in the cases of (a) the Chinese philosophical One / heaven / quintessence / nature (etc.) and (b) increasingly over time the Judaeo-Christian Yahweh / Jehovah as that god evolved through the Torah / Pentateuch and the Christian Old and New Testaments, both high powers dissipated throughout the universe at the same time that they were interiorized to rest within the human breast. The strength of these religions that enables them to

survive so long is in their conscious failure or refusal to establish a concretely identifiable center in the northern celestial pole, a center that ultimately would have to have been dismembered from the religions and whose eventual absence from the pole likely would have caused them to implode. In these religions the center itself forever remains absolutely central to the human world but simultaneously infinitely transforming in the particular, to be reborn in each generation, in each human birth.

While one might argue that the essential center-plus-agency structure was a natural and universal by-product of an earth-bound Neolithic-Bronze view of the sky from which Thuban and its quadrilateral at the celestial pole sat motionless amid a scurrying host of mobile stars / spirits, the various specific linguistic, philosophical, structural, and technical similarities between the Babylonian and Old Chinese calendrical-astral-religious systems, as outlined above, suggest that a transfer of religious iconography, ideas, and systems did occur. The various linguistic, cultural, and technological transfers outlined in Volume I, Chapter 1 support this consideration significantly, as do, further, (1) the occurrence of the Cross Potent / Swastika / **m^yag* symbol in Shang OBIs in a religiously / politically significant usage, (2) the Caucasoid bust found at Anyang with the same symbol etched onto its crown, suggesting the presence at the Shang court of Iranian magi, and (3) the appearance at the Shang and early-Zhou courts of non-Mongoloid persons, whose presence has been verified not only by the Caucasoid bust but also physically in the cranial remains of such people uncovered at Anyang.¹⁶ Recent research into the Caucasoid genetic makeup of southern Siberian "Kurgan" populaces of the Bronze-Iron periods strengthens this claim rather significantly.¹⁷

The fact that quadrilaterally shaped artifacts and symbols consistently appear beginning as early as the 4th millennium BC in what becomes China (see Volume II, Chapters 1 and 2), before similar symbols and patterns appear in Southwest Asian strata and thus prior to their

¹⁶ On the cranial remains of such non-Mongoloid peoples, see Kim Hayes, "On the Presence of Non-Chinese at Anyang," *Sino-Platonic Papers* 132 (April 2004): 1–9.

¹⁷ Christine Keyser et al., "Ancient DNA provides new insights into the history of south Siberian Kurgan people," *Human Genetics*, published online May 16, 2009: <http://www.springerlink.com/content/4462755368m322k8/>.

having been able to reach the proto-Chinese from the west, causes one to pause before making a categorical statement to the effect that transmission or diffusion can be held solely responsible for the appearance in China of the patterns and expressions of the polar quadrilateral. However, even long before the transfers of the 4th millennium BC and later, cultural transmission and interfusion across northern Eurasia and into China (and into the Americas via the Bering Strait), in the east, and northern Europe and ultimately southeastern Europe and South Asia in the west and south, had occurred as early as the Palaeolithic period. This, we recall from Volume I, Chapters 2 and 3, is demonstrated in the west by the appearance in the star lore of Finno-Ugric and Greek speakers of the Dipper as a bear, in the south by the occurrence of both the (1) seven Saptarsis and Rsis and (2) the Riksas (bears) in RV IA Dipper myth, and, in the east, in the Chinese mythology of the Three Sovereigns and Five Emperors in which we observed at least two temporal layers of the mythology of the cosmic hunt that identify the Dipper and Dipper-derived Chinese cultural heroes as either or both of a bear and the seven hunters / brothers (heroes). Thus, we know that cultural transfers across Eurasia were occurring rather consistently from as early as the Palaeolithic and thereafter throughout subsequent periods. Then it still well could be that a development of quadrilateral polar symbolism occurred even earlier in Southwest Asia than we presently suspect, and that this tradition had made its way into and across China by the 4th-3rd millennia BC.

From beginning to end, in these volumes I have endeavored to press the currently known artifactual, inscriptional, and textual evidence pertaining to particularly ancient Eurasian and, most specifically, proto-Chinese and Chinese, civilizations toward the limits of their reasonable interpretation. My intention has been to synthesize as well as one can the many strands of possible meaning that we may draw from this evidence. In doing so, I have sustained a hope throughout that my comments and synthesis might prove stimulating to others so that many might take up these topics of investigation in order to shed further and more fruitful light on these still only partially understood fields.

Works Cited, Volume III

Allan, Sarah. *The Shape of the Turtle: Myth, Art, and Cosmos in Early China*. Albany: SUNY, 1991

_____, and Crispin Williams, eds. *The Guodian Laozi: Proceedings of the International Conference, Dartmouth College, May 1998*. Berkeley: Society for the Study of Early China and the Institute of East Asian Studies, University of California, Berkeley, 2000

Aristotle. *On the Heavens*. Jonathan Barnes, ed. *The Complete Works of Aristotle, The Revised Oxford Translation*. Princeton: Princeton UP, 1984

Baibu congshu 百部叢書. Taipei: Yiwen, 1965

Ban, Gu 班固. *Han Shu* 漢書. Taipei: Dingwen, 1987

Barnard, Noel. *The Ch'u Silk Manuscript. Translation and Commentary. Studies on the Ch'u Silk Manuscript, Part 2*. Canberra: The Australian National University, Monographs on Far Eastern History, 1973

Barnes, Jonathan, ed. *The Complete Works of Aristotle, The Revised Oxford Translation*. Princeton: Princeton UP, 1984

Birrell, Anne. *The Classic of Mountains and Seas. (Shanhaijing 山海經)*. London and NY: Penguin, 2000

Brooks, E. Bruce, and A. Taeko Brooks. *The Original Analects: Sayings of Confucius and His Successors*. New York: Columbia University Press, 1998

Cammann, Shuyler. "The 'TLV' Pattern on Cosmic Mirrors of the Han Dynasty." *Journal of the American Oriental Society* 68:4 (1948): 159–167

_____. "Types of Symbols in Chinese Art." Arthur F. Wright, ed. *Studies in Chinese Thought*. Chicago and London: The University of Chicago Press, 1953: 195–231

Chang, K. C. *The Archaeology of Ancient China, Fourth Ed.* New Haven and London: Yale University Press, 1986

_____. "Shang wang miao hao xin kao" 商王廟號新考. Idem, ed. *Zhongguo qingtong shidai* 中國青銅時代. Hong Kong: Zhongwen daxue chubanshe, 1982: 85–106

_____. *Zhongguo kaoguxue lunwen ji* 中國考古學論文集. Taipei: Lianjing, 1995

_____, ed. *Zhongguo qingtong shidai* 中國青銅時代. Hong Kong: Zhongwen daxue chubanshe, 1982

Chang, Tsung-tung. "Indo-European Vocabulary in Old Chinese. A New Thesis on the Emergence of Chinese Language and Civilization in the Late Neolithic Age." *Sino-Platonic Papers* 7 (January 1988): 1–56

Chen, Meidong 陈美东, ed. *Zhongguo guxingtu* 中国古星图. Shenyang: Liaoning jiaoyu chubanshe, 1996

Chen, Pan. *Chunqiu dashibiao lieguo juexing ji cunmiebiao* 春秋大事表列國爵姓及存滅表. Taipei: Zhongyang yanjiuyuan, 1969

Chen, Qiyou 陳奇猷. *Lushi chunqiu jiaoshi* 呂氏春秋校釋. Shanghai: Xuelin chubanshe, 1984

Chen, Yuan 陳垣. *Shihui juli* 史諱舉例. Shanghai: Shanghai shudian, 1997

Childs-Johnson, Elizabeth. "Dragons, Masks, Axes, and Blades from Four Newly Documented Jade-producing Cultures of Ancient China." *Orientalia* (April 1988): 5–171

Cook, Constance. "Scribes, Cooks, and Artisans: Breaking Zhou Tradition." *Early China* 20 (1995): 241–78

_____. "Three High Gods of Chu." *Journal of Chinese Religions* 22 (1994): 1–22

Creel, Herrlee. *The Origins of Statecraft in China*, Vol. 1. Chicago: University of Chicago Press, 1970

Cullen, Christopher. *Astronomy and Mathematics in Ancient China: The Zhou bi suan jing*. Cambridge: Cambridge UP, 1996

_____. "A Chinese Erastosthenes of the Flat Earth: A Study of a Fragment of a Cosmology in *Huainanzi*." "Appendix A" in Major (1993): 269–29

_____. "Motivations for Scientific Change in Ancient China: Emperor Wu and the Grand Inception Astronomical Reforms of 104 B.C." *Journal of the History of Astronomy* xxiv (1993): 185–203

_____. "Some Further Points on the *Shih*." *Early China* 6 (1981): 31–46

De Santillana, Giorgio, and Hertha von Dechend. *Hamlet's Mill. An Essay on Myth and the Frame of Time*. Boston: Gambit, 1969

Dicks, D. R. *Early Greek Astronomy to Aristotle*. Ithaca: Cornell University Press, 1970

Didier, John C. "Systems of Thought and Belief." Xiao-bin Ji, ed., *Facts about China*. New York and Dublin: H. H. Wilson Company, 2003: 83–130

John C. Didier, "In and Outside the Square," *Sino-Platonic Papers*, 192, vol. 3 (September, 2009)

_____. "Way Transformation: Universal Unity in Warring States through Sung China--
The *Book of Transformation* (*Hua Shu* 化書) and the Renewal of Metaphysics in
the Tenth Century." Princeton: Princeton University Ph.D. dissertation, 1998

Dreyer, J. L. E. *History of the Planetary System, from Thales to Kepler*. Cambridge:
Cambridge University Press, 1906

Du, Jinpeng 杜金鹏. "Liangzhu shenqi yu jitan" 良渚神祇与祭坛. *Kaogu* 1997.2: 52-62

Eno, Robert. "Was There a High God *Ti* in Shang Religion?" *Early China* 15 (1990): 1-
26

Feng, Shi 冯时. "Henan Puyang Xishuipo 45 hao mu de tianwenxue yanjiu" 河南西水坡
45 号墓的天文学研究. *Wenwu* 文物 1990.3: 52-60

Flannery, Kent. "The Origins of the Village as a Settlement Type in Mesoamerica and the
Near East. A Comparative Study." P. J. Ucko, R. Tringham, and G. W. Dimbleby,
eds. *Man, Settlement, and Urbanism*. London: Duckworth, 1972: 23-53

_____. "The Origins of the Village as a Settlement Revisited: From Nuclear to Extended
Households." *American Antiquity* 67:3 (July 2002): 417-433

Fu, Sinian 傅斯年. *Shiji yanjiu* 史記研究. *Fu Sinian QuANJI* 傅斯年全集, 6 vols. Taipei:
Lianjing, 1962

Fung, Yu-lan. *A History of Chinese Philosophy*. 2 vols. Tr. Derk Bodde. Princeton:
Princeton UP, 1952

Gao, Ming 高明. *Gu wenzi leibian* 古文字類編. Beijing: Zhonghua shuju, 1980

John C. Didier, "In and Outside the Square," *Sino-Platonic Papers*, 192, vol. 3 (September, 2009)

Graham, A. C. *Disputers of the Tao: Philosophical Argument in Ancient China*. La Salle: Open Court, 1989): 107–111

Harappa.com. <http://www.harappa.com>. Accessed December 2002

Harper, Donald. "The Han Cosmic Board (*Shih* 式)." *Early China* 5 (1979): 1–10

_____. "Warring States Natural Philosophy and Occult Thought." Loewe and Shaughnessy (1999): 833–52

Hayashi, Minao 林巳奈夫. "Kandai no zuhyo ni san ni tsuite" 漢代の圖柄に三について. *Tôhō gakuhō* 東方學報 44 (1973): 1–63

Hayes, Kim. "On the Presence of Non-Chinese at Anyang," *Sino-Platonic Papers* 132 (April 2004): 1–9

Ho, Peng Yoke. *Chinese Mathematical Astrology -- Reaching out to the Stars*. London: RoutledgeCurzon, 2003

Hsu, Cho-yun. "The Spring and Autumn Period." Loewe and Schaughnessy (1999): 56

_____, and Katheryn M. Linduff. *Western Chou Civilization*. New York and London: Yale University Press, 1988

Huang, Benji 黃本騎. *Bihui lu* 避諱錄. Huang, Benji, ed. *Sanzhang wuzhai congshu* 三長物齋叢書, 1846

_____. *Sanzhang wuzhai congshu* 三長物齋叢書, 1846

Huang, Jun 黃濬. *Yezhong pianyu* 鄴中片羽. Beijing: Zun gu zhai 尊古齋, 1937

Hubei sheng bowuguan 湖北省博物館, eds. *Zeng Hou Yi Mu* 曾侯乙墓, 2 vols. Beijing: Wenwu, 1989

Ji, Xiao-bin, ed. *Facts about China*. New York and Dublin: H. H. Wilson Company, 2003

Jingmen City Museum 荊門市博物館, ed. *Guodian chumu zhujian* 郭店楚墓竹簡. Beijing: Wenwu chubanshe, 1996

Kalinowski, Marc. "The *Xingde* Texts from Mawangdui." Tr. Phyllis Brooks. *Early China* 23–24 (1998–99): 125–202

Kaplan, Sidney M. "On the Origin of the TLV Mirror." *Revue des Arts Asiatiques XI* (1937): 21–4

Karlgren, Bernhard. "New Studies on Chinese Bronzes." *Bulletin of the Museum of Far Eastern Antiquities* 9 (1937): 1–117

_____. "Yin and Chou in Chinese Bronzes." *Bulletin of the Museum of Far Eastern Antiquities* 8 (1936): 9–156

Keightley, David. "Shang Divination and Metaphysics." *Philosophy East and West* 38.4 (October 1988): 367–97

Keyser, Christine, et al. "Ancient DNA provides new insights into the history of south Siberian Kurgan people." *Human Genetics*. Published online May 16, 2009: <http://www.springerlink.com/content/4462755368m322k8/>.

Kryukov, Vassili. "Symbols of Power and Communication in Pre-Confucian China (On the Anthropology of *De*), Preliminary Assumptions." *Bulletin of the School of Oriental and African Studies* LVIII: 2 (1995): 314–332

Lewis, Mark Edward. *The Construction of Space in Early China*. Albany: State University of New York Press, 2006

_____. *Sanctioned Violence in Early China*. Albany: SUNY, 1990

Li, Feng. *Landscape and Political Power in Early China. The Crisis and Fall of the Western Zhou, 1045–771 BC*. Cambridge: Cambridge University Press, 2006

Li, Ling. "An Archaeological Study of Taiyi (Grand one) Worship." *Early Medieval China* 2 (1995–6): 1–26

Li, Ling 李零. *Changsha zidanku zhongguo boshu yanjiu* 長沙子單庫中國帛書研究. Beijing: Zhonghua, 1985

_____. *Zhongguo fangshu kao* 中國方術考. Beijing: Dongfang chubanshe, 2000

_____. *Zhongguo fangshu xukao* 中國方術續考. Beijing: Dongfang chubanshe, 2001

Li, Xueqin. *Chinese Bronzes. A General Introduction*. Beijing: Foreign Languages Press, 1995

Lianyungang shi bowuguan 連雲港市博物館, Zhongguo shehui kexue yuan jianbo yanjiu zhongxin 中國社會科學院簡帛研究中心, Donghai xian bowuguan 東海縣博物館, and Zhongguo wenwu yanjiusuo 中國文物研究所, eds. *Yinwan Hanmu jiandu* 尹灣漢墓簡牘. Beijing: Zhonghua, 1997

Liangzhu wenhua bowuguan 良渚文化博物館 (Hong Kong). *Dongfang wenming zhi guang: Liangzhu wenhua yuqi* 東方文明之光: 良渚文化玉器. Hong Kong: Liangzhu wenhua bowuguan & Xianggang zhongwen daxue wenwuguan, 1998

Liji 禮記. *Shisanjing zhushu* 十三經注疏. Beijing: Zhonghua shuju, 1980

John C. Didier, "In and Outside the Square," *Sino-Platonic Papers*, 192, vol. 3 (September, 2009)

_____. *Huainanzi* 淮南子. Edn. of Liu, Wendian 劉文典, ed. *Huainan honglie jijie* 淮南鴻烈集解. Taipei: Shangwu, 1969

Liu, An 劉安. *Huainanzi* 淮南子. Edn. of Zhang Shuangdi 張雙棣, ed. *Huainanzi Jiaoshi* 淮南子校釋. Beijing: Beijing daxue chubanshe, 1997

Loewe, Michael A. N. *Chinese Ideas of Life and Death. Faith Myth and Reason in the Han period (202 BC – AD 220)*. London: George Allen & Unwin Ltd., 1982

_____. *Ways to Paradise. The Chinese Quest for Immortality*. London: Greg Allen & Unwin, 1979

_____, and Edward L. Shaughnessy, eds. *The Cambridge History of Ancient China*. Cambridge: Cambridge UP, 1999

Lu, Buwei 呂不韋. *Lushi Chunqiu* 呂氏春秋. *Zhuzi jicheng* 諸子集成 ed. Taipei: Shijie shuju, n.d. (1960s?)

Lucretius (Titus Lucretius Carus). *De Rerum Natura, with an English Translation by W. H. D. Rouse, Revised Edition by Martin Ferguson Smith*. Cambridge, Mass.: Harvard University Press; London: William Heinemann Ltd., 1982

Luk, B. H. K., et al., eds. *Contacts between Cultures. Eastern Asia: Literature and Humanities*. Vol. 3 of *Selected Papers from the 33rd International Congress of Asian and North African Studies, Toronto 1990*. Lewiston, Queenston & Lampeter: Edwin Mellin Press, 1992

Lunyu 論語 (*Analects*). *Shisanjing zhushu* 十三經注疏. Beijing: Zhonghua shuju, 1980

Ma, Jiren 馬濟人. "Daojiao neidan xue" 道教內丹學. Mou Zhongjian 牟鐘鑒 et al., eds. *Daojiao tonglun* 道教通論. Jinan: Qilu shushe, 1991

Mair, Victor H. *Contact and Exchange in the Ancient World*. Honolulu: University of Hawaii Press, 2006

_____. "[The] File [on the Cosmic] Track [and Individual Dough[tiness]: Introduction and Notes for a Translation of the Ma-wang-tui Manuscripts of the *Lao Tzu [Old Master]*." *Sino-Platonic Papers* 20 (October 1990): 1–68

_____. "Religious Formations and Intercultural Contacts in Early China." Forthcoming (to be published in a conference volume from Bochum University): 1–31

_____. "West Eurasian and North African Influences on the Origins of Chinese Writing." In Luk et al. (1992): 335–8

Major, John S. "The Five Phases, Magic Squares, and Schematic Cosmography." Henry Rosemont, Jr., ed. *Explorations in Early Chinese Cosmology. Journal of the American Academy of Religious Studies* L:2. Chico: Scholars Press, 1979: 133–167

_____. *Heaven and Earth in Early Han Thought: Chapters Three, Four, and Five of the Huainanzi*. Albany: SUNY, 1993

Mou, Zhongjian 牟鐘鑒, et al., eds. *Daojiao tonglun 道教通論*. Jinan: Qilu shushe, 1991

Needham, Joseph, and Wang Ling, eds. *Science and Civilisation in China, Volume 3, Mathematics and the Sciences of the Heavens and the Earth*. Cambridge, England: Cambridge University Press, 1959

Neugebauer, Otto. *A History of Ancient Mathematical Astronomy, 3 vols*. New York, Heidelberg, Berlin: Springer-Verlag, 1975

Nienhauser, William H., et al., eds. and trs. *The Grand Scribe's Records, Volume I: The Basic Annals of Pre-Han China by Sima Qian*. Bloomington: Indiana University Press, 1994

Nishida, Morio 西田守夫. "Hôkaku kiku kyô no zumon no keifu: kokurô hakugyoku kyo fuyô no meibun motsu kyô ni tsuite" 方格規矩鏡の圖紋の系譜 : 刻婁博局去不羊の銘文もつ鏡について. *Museum* 427 (1986): 28–34

Nylan, Michael, Tr. and ed. *The Canon of Supreme Mystery, by Yang Hsiung*. Albany: SUNY, 1993

Pankenier, David. "Applied Field-Allocation Astrology in Zhou China: Duke Wen of Jin and the Battle of Chengpu (632 BC)." *Journal of the American Oriental Society* 119.2 (1999): 261–279

_____. "A Brief History of Beiji 北極 (Northern Culmen), With an Excursus on the Origin of the Character *di* 帝." *Journal of the American Oriental Society* 124.2 (2004): 211–236

_____. "The Cosmo-Political Background of Heaven's Mandate." *Early China* 20 (1995): 121–176

Peterson, Willard. "Squares and Circles: Mapping the History of Chinese Thought." *Journal of the History of Ideas* 49.1 (January-March 1988): 47–60

Pines, Yuri. *Foundations of Confucian Thought: Intellectual Life in the Chunqiu Period, 722–453 BC*. Honolulu: University of Hawaii Press, 2002

_____. "Intellectual Change in the Chunqiu Period: The Reliability of the Speeches in the *Zuo Zhuan* as Sources of Chunqiu Intellectual History." *Early China* 22 (1997): 100–116

Rawson, Jessica, ed. *Mysteries of Ancient China, New Discoveries from the Early Dynasties*. New York: George Brazillier, Inc., 1996

_____. "Western Zhou Archaeology." Loewe & Shaughnessy (1999): 352–449

_____. *Western Zhou Ritual Bronzes from the Arthur M. Sackler Collections. Ancient Chinese Bronzes from the Arthur M. Sackler collections*. 2 Vols. Washington, D.C.: Arthur M. Sackler Gallery of Art; Cambridge, MA: Arthur M. Sackler Museum; Cambridge, MA: Harvard University Press, 1990

Rosemont, Henry, Jr., ed. *Explorations in Early Chinese Cosmology. Journal of the American Academy of Religious Studies* L:2. Chico: Scholars Press, 1979

Schuessler, Axel. *ABC Eytmological Dictionary of Old Chinese*. Honolulu: Hawaii University Press, 2007

Shangshu 尚書. *Shisanjing zhushu* 十三經注疏. Beijing: Zhonghua shuju, 1980

Shaughnessy, Edward L. *Sources of Western Zhou History: Inscribed Bronze Vessels*. Berkeley: University of California Press, 1991

_____. "Western Zhou History." Loewe and Shaughnessy (1999): 292–351.

Sherratt, Andrew. "The Trans-Eurasian Exchange: The Prehistory of Chinese Relations with the West." Victor H. Mair, ed. (2006): 30–61

John C. Didier, "In and Outside the Square," *Sino-Platonic Papers*, 192, vol. 3 (September, 2009)

Shirakawa, Shizuka 白川靜. *Kinbun tsûshaku 金文通釋*. Kobe, Hakutsuru bijutsukanshi, 1962

Shisanjing zhushu 十三經注疏. Beijing: Zhonghua shuju, 1980

Sima, Qian 司馬遷. *Shiji 史記*. Taipei: Dingwen shuju, 1989

Sivin, Nathan. *Cosmos and Computation in Early Chinese Mathematical Astronomy* (Leiden: E. J. Brill, 1969)

Snow, Justine T. "The Spider's Web. Goddesses of Light and Loom: Examining the Evidence for the Indo-European Origin of Two Ancient Chinese Deities." *Sino-Platonic Papers* 118 (June 2002): 1–74.

Steinhardt, Nancy Shatzman. *Chinese Imperial City Planning*. Honolulu: University of Hawaii Press, 1990): 29–36

Tseng, Lillian Lan-ying. "Representation and Appropriation: Rethinking the TLV Mirror in Han China." *Early China* 29 (2004): 163–215

Twitchett, Denis, and Michael N. Loewe, eds. *The Cambridge History of China, Vol. 1, The Ch'in and Han Empires, 221 BC-AD 220*. Cambridge: Cambridge UP, 1986

Ucko, P. J., and R. Tringham and G. W. Dimbleby, eds. *Man, Settlement, and Urbanism*. London: Duckworth, 1972

Van Helden, Albert. *Measuring the Universe. Cosmic Dimensions from Aristarchus to Halley*. Chicago & London: University of Chicago Press, 1985

von Falkenhausen, Lothar. *Chinese Society in the Age of Confucius (1000–250 BC): The Archaeological Evidence*. Los Angeles: Cotsen Institute of Archaeology, University of California, Los Angeles, 2006

_____. "Issues in Western Zhou Studies: A Review Article." *Early China* 18 (1993): 139–226

_____. "The Waning of the Bronze Age: Material Culture and Social Developments, 770–481 BC." Loewe and Shaughnessy (1999): 486–7

Waley, Arthur. *Book of Odes*. Revised edition. Joseph R. Allen, ed. New York: Grove Press, 1996

Wang, Aihe. *Cosmology and Political Culture in Early China*. Cambridge: Cambridge UP, 2000

Wang, Penglin. "Indo-European Loanwords in Altaic." *Sino-Platonic Papers* 65 (February 1995): 1–28

Wang, Shumin 王叔岷, ed. *Zhuangzi jiaoquan* 莊子校註. 3 vols. Taipei: Zhongyang yanjiuyuan lishi yuyan yanjiusuo, 1988

Wang, Xianqian 王先謙, ed. *Xunzi jijie* 荀子集解. Beijing: Zhonghua, 1992

Weber, Charles D. *Chinese Pictorial Bronze Vessels of the Late Chou Period*. Ascona: Aribus Asiae, 1968

Wei, Julie Lee. "Counting and Knotting: Correspondences between Old Chinese and Indo-European." *Sino-Platonic Papers* 162 (September 2005): 1–71

John C. Didier, "In and Outside the Square," *Sino-Platonic Papers*, 192, vol. 3 (September, 2009)

Wen, Fong. *The Great Bronze Age of China*. New York: Metropolitan Museum of Art, 1980

Wenwu 文物 1984.6: 1–5

Witzel, Michael. "Linguistic Evidence for Cultural Exchange in Prehistoric Western Central Asia." *Sino-Platonic Papers* 129 (December 2003): 1–70

Wu, Hung. "Art and Architecture of the Warring States Period." Loewe and Shaughnessy (1999): 651–744

_____. "From Temple to Tomb: Ancient Chinese Art and Religion in Transition." *Early China* 13 (1988): 78–115

Xun, Kuang 荀况. *Xunzi* 荀子. Wang Xianqian 王先谦, ed. *Xunzi jijie* 荀子集解. Beijing: Zhonghua, 1992

Yan, Dunjie 嚴敦杰. "Guanyu Xi Han chuqi de shipan he zhanpan" 關於西漢初期的式盤和占盤. *Kaogu* 考古 1978.5: 334–40

Yang, Jidong. "Siba: Bronze Age Culture of the Gansu Corridor." *Sino-Platonic Papers* 86 (October 1998): 1–18

Yang, Xiaoneng, ed. *The Golden Age of Chinese Archaeology. Celebrated Discoveries from the People's Republic of China*. Washington: The National Gallery of Art; New Haven and London: Yale University Press, 1999

Yang, Xiong 揚雄. *Taixuan Jing* 太玄經 (TXJ). *Sibu beiyao* 四部備要 ed. Rpt. Taipei: Zhonghua shuju, 1983

Yao, Xiaosui 姚孝遂, and Xiao Ding 肖丁, eds. *Yinxu jiagu keci leizuan 殷墟甲骨刻辭類纂 (LZ)*. Beijing: Zhonghua shuju, 1988

Yetts, W. Percival. *The Cull Chinese Bronzes*. London: University of London, Courtauld Institute of Art, 1939

Yijing 易經. See *Zhouyi* 周易.

Yi wei 易緯. *Qian zuo du 乾鑿度*. *Juzhen congshu 聚珍叢書*. *Baibu congshu 百部叢書*, Series 27, Case 4. Taipei: Yiwen, 1965

Yu, Ying-shih. "Life and Immortality in the Mind of Han China." *Harvard Journal of Asiatic Studies* 25 (1964–1965): 80–122

Zhang, Liwen 張立文. *Zhou Yi boshu jinzhu jinyi 周易帛書今注今譯*. 2 vols. Taipei: Xuesheng shuju, 1991

Zhang, Minghua 張明華. "Guanyu Yipi Liangzhu xing guyu de wenhua guilu wenti" 关于一批良渚型古玉的文化归属问题. *Kaogu* 1994.11: 1012

Zhang, Shuangdi 張雙棣, ed. *Huainanzi Jiaoshi 淮南子校釋*. Beijing: Beijing daxue chubanshe, 1997

Zhao, Yi 趙翼. *Nian ershi zhaji 二十二史劄記*. Beijing: Zhonghua, 1963

Zhejiang sheng wenwu kaogu yanjiusuo 浙江省文物考古研究所 and Shanghai shi wenwu guanli weiyuanhui 上海市文物管理委員會, eds. *Liangzhu wenhua yuqi 良渚文化玉器*. Wenwu, 1989

Zhou, Fagao 周法高. *Jinwen gulin 金文詁林*. Hong Kong: Chinese University of Hong Kong, 1974

_____. *Jinwen gulin bu* 金文詁林補. Nangang: Zhongyang yanjiu yuan, Lishi-yuyan yanjiusuo, 1982

Zhou, Jixu. "Correspondences of Cultural Words between Old Chinese and Proto-Indo-European." *Sino-Platonic Papers* 125 (July 2003): 1–19

_____. "Old Chinese "*tees" and Proto-Indo-European "*deus": Similarity in Religious Ideas and a Common Source in Linguistics." *Sino-Platonic Papers* 167 (December 2005): 1–17

Zhou, Shirong 周世荣. "Mawangdui Hanmu de 'Shenqi tu' bohua 马王堆汉墓的'神祇图'帛画." *Kaogu* 1990.10: 926

Zhou, Xunchu 周勋初. *Jiuge xin kao; Donghuang Taiyi kao* 九歌新考。东皇太一考. Shanghai: Shanghai guji chubanshe, 1988

Zhou, Zheng 周錚. "Gui jing yinggai cheng boju jing" 規矩鏡應改稱博局鏡. *Kaogu* 1987.12: 1116–8

Zhouli 周禮. *Shisanjing zhushu* 十三經注疏. Beijing: Zhonghua shuju, 1980

Zhouyi 周易. *Shisanjing zhushu* 十三經注疏. Beijing: Zhonghua shuju, 1980

Zhu, Qingzhi. "Some Linguistic Evidence for Early Cultural Exchange between China and India." *Sino-Platonic Papers* 66 (March 1995): 1–7

Zhu, Qixiang 朱岐祥. *Yinxu jiaguwenzi tongshigao* 殷墟甲骨文字通釋稿. Taipei: Wenshizhe chubanshe, 1989

Zhuang, Zhou 莊周, et al. *Zhuangzi* 莊子. Wang, Shumin 王叔岷, ed. *Zhuangzi jiaquan* 莊子校詮. 3 vols. Taipei: Zhongyang yanjiuyuan lishi yuyan yanjiusuo, 1988

John C. Didier, "In and Outside the Square," *Sino-Platonic Papers*, 192, vol. 3 (September, 2009)

Zuo, Qiuming 左丘明 (attributed). *Zuo Zhuan* 左傳. *Shisanjing zhushu* 十三經注疏.
Beijing: Zhonghua shuju, 1980

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