# Characteristics of Field Allocation (*fenye*) Astrology in Early China

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This article explores aspects of the Field Allocation system of judicial astrology in Zhou Dynasty China (1046–256 BCE) in an effort to trace its origins, characteristics, and development. In so doing it will shed light on the history of astral-terrestrial correspondences in China and their cosmological basis. Within the late Zhou conventional correlations between celestial spaces and terrestrial polities it is possible to discern traces of earlier cosmological conceptions. Analysis of this layer of original correspondences indicates that the earliest principle underlying this astrological system was a cosmological parallelism between the Yellow River and its celestial analogue, the Milky Way. The evidence points to a 2nd millennium BCE date of inception for these astral-terrestrial correlations, consistent with contemporaneous evidence of observational astronomy. The present study is intended to lay the groundwork for subsequent detailed study of the application of field allocation astrology in connection with political and military events of epoch-making significance in Zhou China.

"The 28 lunar mansions govern the twelve provinces and the Dipper's handle seconds them; the source [of this scheme] is lost in antiquity." Sima Qian (fl. ca. 100 BCE).

<sup>1.</sup> See Shiji (27:1346). The allusion to the Northern Dipper's role here refers either to the astrological correlation of the Dipper's seven stars with specific terrestrial locations or, more likely since the historian Sima Qian refers specifically to the Dipper's handle, to the ancient calendrical function of the Dipper as a sort of seasonal indicator. For Han and later discussion of the astrological system associated with the Dipper see Kalinowski (1991, 197–98 and 338–340). For a detailed discussion of the keying of meridian passages of the Dipper's stars to those beneath the horizon see Needham (1959, 232–233). Detailed discussion of the Dipper's role, be-

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## General Considerations Regarding Ancient Chinese Astrology

In early China, as in the West until the 16th century, the connection between celestial and terrestrial bodies, and consequently between celestial and terrestrial events, was considered self-evident. The two traditions part company, however, when it comes to the belief in the reciprocal nature of the correspondence; that is, the fundamental Chinese notion arising from their organismic view of the cosmos that the celestial and terrestrial realms mutually influence one another. In classical China it was thought that various terrestrial conditions were capable of giving rise to both large and small scale effects in the omnipresent essential medium of qi.<sup>4</sup> Such effects could arise from local climatic, topographic, or hydrologic conditions, which in turn were thought to influence human behavior and even the quality of temporal rulership. Propagating through qi, these influences directly affected what transpired in the sky. In the West, by contrast, astrological influence was generally a one-way street proceeding from the empyrean to here below without parallel reflexivity of cause and effect, though allowance was made for divine retribution in response to mortal hubris.

The notion of celestial causality presumably emerged as an explanation for the observed seasonal cycles of generation and corruption in nature and their obvious

ginning in the Neolithic, as an object of religious veneration together with its role as a celestial timepiece may be found in Yi Shitong (1996, 22–31).

<sup>2.</sup> Judicial astrology refers to prognostication about the future course of events and human affairs as an aid to decision making at crucial junctures based on the appearance, movements, etc. of heavenly bodies and transient celestial events. Horoscopic astrology, or prognostication about an individual's destiny based on the locations of heavenly bodies at a particular time, especially the hour of birth, played no role in classical China.

<sup>3.</sup> For which see Pankenier (in press).

<sup>4.</sup> See, for example, Major (1993, 173). With regard to the connection between qi and stars, the Jin Dynasty (265–316) scholar Yang Quan had the following to say in his Wulilun (Discourse on the Inherent Principles of Things): "The stars are the blossoming of primordial qi and the essence of [elemental] Water. Qi issues forth and rises, its rarefied essence floats up, winding and flowing at will, to be called the Heavenly River. Another name for it is the River of Clouds; the myriad stars emanate from it"; quoted in Taiping yulan (vol. 1, 8:11a). The conventional view which essentially prevailed from Han times on is succinctly summed up by the Ming dynasty scholar Zhang Huang (1527–1608) as follows: "Now, the heavens are qi, but form patterns; earth is form, and has internal structure. Forms cannot but dissipate and become qi; qi cannot but condense into forms. The heavenly bodies are the rarefied qi of earth which rises up and shows itself in the heavens"; Gu jin tushu jicheng (57:1343).

correlation with the sun and moon, which in turn explains why in early China astronomy and the calendar were indistinguishable. In its earliest form the calendar codified knowledge handed down from antiquity about correlations between celestial cycles and phenomena in nature. This is why primitive calendrical indications such as those preserved in the "Lesser Annuary of Xia" Xia xiao zheng take the form of sequential wuhou "harbingers of the seasons," punctuated by references to two or three of the most prominent, archaic, and seasonally significant constellations—Orion, Scorpio and the Big Dipper.6

In addition to conceptions about a generalized celestial influence on terrestrial events, individual celestial bodies like the sun and moon were directly linked to specific meteorological, physical, and political phenomena. Here the evidence ranges from the cardinal orientation of Neolithic burials and sacrifices, to direct observation and representations of the sun and moon in the Neolithic (albeit comparatively rare), to written records of uncommon celestial phenomena such as eclipses, comets, meteor showers, planetary events, and the like, which appear from the Shang period (1554–1047 BCE) on. Not long after the appearance of the heuristic binary complementarity of Yin and Yang and the emergence of correlative cosmology in late Zhou (1046–256 BCE) texts one also finds explicit references to specific solar and lunar effects on the natural world.<sup>7</sup>

If the causal action of celestial bodies could make itself felt on all inanimate and animate beings in this way and be expressed materially through the medium of qi, this explains how such reflexive action could be thought of as an aspect of universal Nature. Moreover, if celestial bodies were considered to exhibit different qualities, exert different influences, and be correlated with (and influenced by) different institutions, terrestrial regions, peoples, etc., all essential elements of late

<sup>5.</sup> A revival of interest in catastrophism, and research into the climatic and cultural consequences of devastating impacts or near-earth approaches by cometary bodies on time scales measured in centuries or millennia now appears to suggest that such unpredictable disasters and apparitions may also have played a significant cultural role in the comparatively recent past. Sec, for example, Kobres (1995, 395–405), as well as Peiser's contributions to this volume.

<sup>6.</sup> Conventional accounts of the history of calendrical astronomy in China which focus primarily on the textually better documented practices of the late 1st millennium BCE tend to insist on a causal relationship between the primacy afforded the heavens and the cosmologically-based imperial ideology then in process of expansive elaboration. See, for example, Cullen (1996, 14): "... we should not miss the ideological significance of the decisive shift towards the primacy of the heavens over mere earthly phenomena. There is certainly a link here with the cosmological underpinnings of the unified empire in which the emperor was to his subjects as heaven was to earth." As Cullen himself points out (1996, 4), however, there is compelling textual evidence from a much earlier epoch of the central importance attached to calendrical astronomy by the early Chinese state. Although there is merit to the cosmological analogy heaven: earth:: emperor: subjects, there is also an abundance of evidence indicating that this fundamental conception, however inchoate, was already operative at least a millennium earlier. In fact, it underpinned the early Zhou claim to a Mandate of Heaven; see Pankenier (1995).

<sup>7.</sup> Cf. e.g., Huainanzi: "The furred and feathered are the kinds which fly and run, and therefore belong to the Yang; the shelled and scaly are the kinds which hibernate and hide, and therefore belong to the Yin. The sun is ruler of the Yang, and for this reason in spring and summer the herd animals shed hair, and at the solstice the deer shed their horns; the moon is ancestor of the Yin, which is why when the moon wanes the brains of fishes diminish, and when the moon dies the swollen oyster shrinks"; tr. Graham (1989, 333). See also the first twelve chapters ("Twelve Intervals") of Lashi chunqiu (Spring and Autumn Annals of Master Lü) where the seasonal ordinances are described in detail.

Zhou astrology, it follows that by virtue of the intrinsic periodicities of certain celestial bodies, knowledge of past events and their associated astrological conditions logically renders the astrologer not only capable of predicting future celestial events, but also of forecasting in detail the terrestrial events likely to be produced by them.<sup>8</sup> From conceptions such as these, therefore, there flow a number of concrete conclusions about the implications of phenomena, and ultimately about the possibility of foreknowledge of events, both prerequisites for the formulation of a chronosophy such as, for example, that attributed to Zou Yan (fl. 4th century BCE).<sup>9</sup> Of course, once it was understood in late Zhou that eclipses of the sun and moon were in fact periodic phenomena, the same astrological motives lent increased impetus to efforts to improve the accuracy of prediction of those ominous celestial events, efforts which continued under imperial auspices throughout Chinese history.

Preoccupation with the correlation of celestial and terrestrial phenomena preceded by centuries the elaboration of systematized cosmo-political theories, gradually establishing the conceptual parameters within which such theories would develop. Such archaic predilections certainly contributed to the formation of the influential Huang-Lao thought of the 2nd century BCE, a dominant principle of which was that knowledge of the natural world translates directly into political power. Thus, in his discussion of the cosmological chapters of the Huainanzi, John S. Major shows how this assumption underlies the world-view that "cosmology, cosmography, astronomy, calendrical astrology, and other forms of cosmology form a seamless web,

<sup>8.</sup> A famous remark by Mencius (4B/26) shows how near at hand such thoughts were at the time: "Consider the heavens so high and the stars so distant. If we have investigated their phenomena we may, while yet sitting in the same place, go back to the solstice of a thousand years ago"; tr. Needham (1959, 196). In contrast, D. C. Lau's translation takes Mencius' comment to refer to the predictability of future phenomena: "if one seeks out former instances, one can calculate the solstices of a thousand years hence without stirring from one's seat"; see Lau (1970, 133). That the highly influential Confucian Xunzi (3rd century BCE) found it necessary to argue against the notion that celestial events directly influence terrestrial affairs clearly shows how pervasive such thinking was at the time. See especially his "Discussion of Heaven" in Watson (1967, 81 ff).

<sup>9.</sup> A chronosophy integrates past, present, and future into a coherent scheme by means of some procedure supposed to afford the possibility of predicting the future. According to David Pingree, the earliest form assumed by chronosophy in the ancient world was generally a natural theology of history which provided history "with intelligibility and/or meaning by looking for sufficient reason outside history itself and outside the world human beings are living in." For an orientation in the theory and practice of astrology informed largely by the experience of Mesopotamia and the Hellenistic West; see Encyclopedia Britannica, Vol. 2, s.v. "Astrology," 219 ff. As Pingree points out, as a natural theology of history, astrology is logically incompatible with a theocentric view. Thus, given the presumed immutability of the sequential alternation of the Five Virtues wude, for example, Zou Yan's mutual conquest theory addresses itself only to the intelligibility of the historical process, he makes no claim about historically transcendent meaning. Karl Löwith alluded to this contrast in connection with the fundamental role of correlative thinking in ancient China: "[H]ow can the 'elemental rhythm' of yin and yang and the cycle of growth and decay be adjusted to the belief in a meaningful goal and a 'progressive revelation' of divine truth in history?"; see Löwith (1949, 16). The tension between intelligibility and the expression of divine intentionality in history does, however, emerge in the perennial problem latent in Chinese dynastic ideology; that is, the tension arising from ancient Chinese cosmo-political views about legitimacy attributable to manifest heavenly sanction (i.e., through direct revelation of Heaven's Mandate) as opposed to that conferred by heredity. For the sources bearing on Zou Yan's doctrines and the astral/terrestrial mapping at their core see the conclusions of Brooks (1995, 4–9).

the principles of which a ruler would ignore only at his peril."10 Similarly, Mark Edward Lewis has described the popular Warring States period (5th to 3rd centuries BCE) mythos in which a non-heroic figure with no combat skills gains victory over a great warrior through the possession of a divinely or magically revealed military treatise, showing that "military theorists thought of their doctrines as an esoteric wisdom that expressed divine patterns inherent in the cosmos."11 At its simplest, the most basic principle of the so-called "calendrical model of warfare" held that cosmically consonant killing was to be carried out according to the seasons of the year. Other accounts that describe the content of revealed texts such as the so-called River Diagram and the Luo Writing also point to their connection with astral portentology and political ascendancy. More to the point, perhaps, the *Huainanzi*, a book compiled in mid-2nd century BCE, ranks astrological factors first among those to be taken into tactical consideration, in this way pointing directly to the agency by means of which patterns of cosmic order having military application were revealed. 12 Such conceptions are reinforced by still earlier textual accounts in Zuozhuan (Zuo Commentary) and Guoyu concerning the correlation of political and military actions with celestial events, most notably Jupiter's motion. 13 By the early imperial period, manifestation of heavenly endorsement in the form of a massing of the five planets constituted a definitive sign of the Heavenly Mandate's bestowal on a new dynasty.

#### Parameters of Field Allocation (fenye) Astrology

The regular field allocation scheme whose application is described in the *Zhouli* (Rites of Zhou) (see Table 1) dates from late Warring States or early Han times (3rd to 2nd centuries BCE). <sup>14</sup> The general principles and motives underpinning this astrological scheme are succinctly stated in the job description of the Astrologer Royal *Bao zhang shi*:

<sup>10.</sup> John S. Major (1993, 14) also argues that "the credibility of the Huang-Lao School in the early Han may have rested in part on the degree to which it was grounded in widely shared assumptions that went back to the foundations of Chinese civilization".

<sup>11. (</sup>Lewis 1990, 98).

<sup>12.</sup> See *Huainanzi* (15:5a): "Clearly understanding the motions of the planets, stars, sun, and moon; the knack of [using] punishment, moral suasion, and the unexpected; the advantageousness of facing to the front or rear, or going left or right; these are helpful in battle."

<sup>13.</sup> When one reads in Guoyu (10:11a), "the space Shi Chen (Orion), this is the dwelling place of the Jin people," this statement should not be taken as metaphorical, but rather as indicative of the functional identity at a certain level between the celestial and terrestrial realms. By the same token, as indicated above, a basic axiom of astrological prognostication was that celestial bodies were susceptible to the particular emanations (qi) of terrestrial regions as they traversed their corresponding celestial spaces, and so it is perfectly natural for Sima Qian to say of Jupiter's location, "[The state] wherein Jupiter is located may not be attacked, but it may attack others"; see Shiji, 27:1312, where this axiom is attributed by Sima Qian to the Warring States astrologer Shi Shen (fl. 4th c. BCE).

<sup>14.</sup> There is, however, strong evidence to suggest that the nucleus of the system, a correlation of the four celestial quadrants with the cardinal directions and perhaps even with the sequence of seasonal powers and their associated colors, may already have been in place by the 2nd millennium BCE; see Pankenier (1995).

"[The Astrologer Royal] concerns himself with the stars in the heavens, keeping a record of the changes and movements of the stars and planets, sun and moon, in order to examine the movements of the terrestrial world, with the object of distinguishing (prognosticating) good and bad fortune. He divides the territories of the nine regions of the empire in accordance with their dependence on particular celestial bodies. All the fiefs and principalities are connected with distinct stars, and from this their prosperity or misfortune can be ascertained. He makes prognostications, according to the twelve years [of the Jupiter cycle], of good and evil in the terrestrial world...."15

|                    | Table 1. The Field Allocation System of Astrological Correlations 16 |               |          |                        |                              |  |
|--------------------|--|---------------|----------|------------------------|------------------------------|--|
| Jupiter<br>station | Chronogram   | Field (State) | Province | Mansion                | Direction<br>(Zodiacal sign) |  |
| Xingji             | chou   | Wu-Yue        | Yang     | Dou, Niu (Sgr-Cap)     | NNE                          |  |
| Xuanxiao           | zi   | Qi            | Qing     | Nü, Xu (Aqr)           | Ν                            |  |
| Zouzi              | hai  | Wèi           | Bing     | Wei, Shi, Bi (Aqr-Peg) | NNW                          |  |
| Jianglou           | xu   | Lu            | Xu       | Gui, Lou (And-Ari)     | WNW                          |  |
| Daliang            | you  | Zhao          | Ţi       | Wei, Mao (Ari-Tau)     | W                            |  |
| Shi chen           | shen   | Wei (Jin)     | Ϋ́i      | Bi, Zui, Shen (Tau-Ori | ) WSW                        |  |
| Chunshoi           |  | Oin           | Yong     | Jing, Gui (Gem-Can)    | SSW                          |  |
| Chunhuo            |  | Zhou          | San Î le | Liu, Xing, Zhang(Hya   | i) S                         |  |
| Chunwei            | si   | Chu           | [ing     | Yi, Zhen (Cra-Cor)     | SSE                          |  |
| Chunwei            | 31   | C,            | 26       |                        | T 2 (*) T 2                  |  |

Yan

Yu

You

Jiao, Kang (Vir)

Wei, Ji (Sco-Sgr)

Di, Fang, Xin (Lib-Sco)

Zheng

Song

Yan

chen

mao

yin

Shouxing

Dahuo

Ximu

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<sup>15.</sup> Zhouli zhushu (The Zhou Li with Notes and Commentaries) in Shisanjing zhushu, 26:181. Tr. Needham (1959, 190). Cf. also Biot (1975, 113ff). The ambiguity of the passage with regard to how the astral and terrestrial correspondences were established has led to varying interpretations, all based on fragmentary and inconclusive evidence from other Zhou and Han texts. The most frequently cited operative principles include: (i) relating the Nine Provinces to the seven stars of the Big Dipper (see n. 16); (ii) tying the five planets and their associated terrestrial regions to stellar locations; (iii) the regular system of allocating the 28 Lunar Mansions among the terrestrial politics; (iv) defining the astral correlate of an ancient feudatory as the celestial location of Jupiter at the time of enfoeffment; (v) identifying the celestial correlate of a locality as the asterism to which ancient inhabitants of that place principally offered sacrifice. Of these, Zheng Qiao (1104–1162) accepts only the last as having a sound historical basis; for his measured criticism of the various theories, see Gu jin tushu jicheng, ch. 57, "Stars and Asterisms: General Discussion," 1341.

<sup>16.</sup> The scheme presented in Table 1 is found in Zheng Xuan's (CE 127–200) commentary to Zhouli and is essentially identical to that attributed to Shi Shen's (fl. 4th c. BCE) Xing jing (Canon of Stars) which is reproduced in the astrological monograph in Jinshu (11:307ff) and also adduced in a commentary to Shiji (27:1346). According to Zheng Xuan, an earlier lost work had elaborated the astral correlates of the Nine Provinces but all that could be reconstructed in his time were the terrestrial correlates of the 12 Jupiter stations (ci, lit. "stage of an army's march") in the more familiar field allocation system. In his commentary, Zhouli shu (Shisanjing zhushu, 26:181), Jia Gongyan (fl. ca. 650) takes fenxing (allocated asterisms) to refer to the stars of the Dipper and reproduces the scheme of correlations shown below in Table 2 from the influential Han dynasty apocryphal work Chunqiuwei wen yao gou. Little clse is known about the principles of this system except that its prognostications presumably relied on perceived changes in the brilliance, color, or visibility of the stars of Ursa Major. Prognostication using this astrological system involving the Dipper cannot be documented prior to the Han dynasty. Cf. also Major (1993, 135).

Table 1 reproduces the standard scheme of correspondences among the twelve Jupiter stations, solar chronograms, 28 lunar mansions (with corresponding Western zodiacal signs), and terrestrial regions. A similar tabulation found in chapter three of the Huainanzi differs in minor detail, on the one hand by omitting the state of Jin and reversing (possibly erroneously) the lunar mansion correlates of Wei and Zhao, and on the other by separating Wu and Yue so that they correspond to Serving Maid (Nü = Aqr) and Southern Dipper/Ox Leader (Dou, Niu = Sgr/Cap) respectively.<sup>17</sup> The scheme of apportionments shown here is obviously the product of a process of systematization that necessarily dates from some time after the de jure partitioning of the state of lin by Zhao, Wei, and Han in 403 BCE. In it an older scheme of Nine Provinces jiuzhou has now been expanded to take account of the political and military realities of the early Warring States period. Three additional "provinces" have been carved out of the older scheme of nine—Bing, San He, You—and the territories to which each has been made to correspond (Wèi, Zhou, Yan) have been reassigned accordingly. Table 2, based on the mid-3rd century BCE text Lüshi chunqiu (Spring & Autumn Annals of Master Lü), shows the Nine Fields of Heaven jiuye which correspond to the Nine Provinces and can serve to illustrate the contrast. 18

| Direction | Heavenly Field | Province | Lunar Mansions       | States           |
|-----------|----------------|----------|----------------------|------------------|
| Center    | Revolving      | [Yan]    | Jiao, Kang, Di;      | [Han, Zheng]     |
| E         | Azure          | [Yu]     | Fang, Xin; Wei,      | [Song; Yan ?]    |
| NE        | Changing       | [Yang    | Ji; Dou, Niu,        | [Yan; Wu, Yue?]  |
| N         | Dark           | [Qing]   | Nü; Xu, Wei; Shi,    | [Yue; Qi; Wèi ?] |
| NW        | Somber         | [Xu]     | Bi; Gui, Lou,        | [Wèi; Lu?]       |
| W         | Bright         | [Ji]     | Wei; Mao, Bi;        | [Lu; Zhao;]      |
| SW        | Vermilion      | [Liang]  | Zui, Shen; Dongjing, | [Jin; Qin ?]     |
| S         | Fiery          | [Yong]   | Yugui; Liu, Xing,    | [Qin; Zhou ?]    |
| SE        | Uplifting      | [Jing]   | Zhang; Yi, Zhen      | [Zhou; Chu]      |

Here each of the nine fields corresponds to three lunar mansions, except Dark Heaven which has four. As may be seen from the punctuation and arrows in the

<sup>17.</sup> This curious variation produces an idiosyncratic list of 13 distinct units, rather than the standard 12. John Major speculates that this greater discrimination may be a reflection of the *Huainanzi*'s "southern orientation"; see Major (1993, 128). The preeminence of Jupiter's role in astrological prognostication based on this system is evident in the lines immediately following in the *Huainanzi* passage (3:15a-b) on which Major comments: "As shown by the prognostication rules given in lines 20-24, all of the attention given here to the description and apportionment of the lunar lodges is for the purposes of the 'Yin-yang Militarist' School, to indicate good or bad military fortune for the several states." Despite this, and unlike the standard listing show here which begins with the first Jupiter station Xingji, the *Huainanzi* begins the list with the first lunar mansion Horn (Virgo), presumably because that is the sequence the author follows in the passage immediately preceding giving the dimensions of the mansions in degrees. As one might expect, the military value of calendrical astrology is made even more explicit in the *Huainanzi* treatise on military affairs; see note 12 above.

<sup>18.</sup> Lüshi chunqiu (13:1b). Although the passage does not supply the names of the nine provinces, its tabulation of the nine fields of Heaven giving the cardinal and intercardinal directions of each, together with their associated lunar mansions, makes the correspondences unambiguous. The terrestrial correlations are those assigned by Gao You (168–212) in his commentary. These conform with those specified in the parallel passage in the *Huainanzi*, chapter 3, "Treatise on the Patterns of Heaven," 3:2b; see Major (1993, 69).

fourth and fifth columns, this apportionment results in a straddling of boundaries by some lunar mansions which conventionally refer to a single terrestrial location, as for example in the case of the state of Yan in column 5, which ordinarily corresponds to province You and to mansions Wei (Sco) and Ji (Sgr) (see Table 1), but here those two lunar mansions are allotted separately to provinces Yu and Yang (column 3), respectively, and province You does not appear. This is a clear indication that the augmentation of the divisions proceeded sequentially, beginning with the cardinal four, then increasing to nine, and finally to twelve, the second enhancement occurring before, and the third after, the distribution of the 28 lunar mansions among the 12 chronograms (Jupiter stations) was conventionalized. In transforming the scheme of nine divisions into twelve (Table 1), one new province, Bing, was interposed between Qing and Xu and assigned to the state of W-i; another, San He, was placed between Yong and Jing and assigned to Zhou; and a third, You, was placed between Yu and Yang and given to Yan. In addition, the name of the WSW province was changed from Liang to Yi and made to correspond to the territory of the state of Wei, one of the three which succeeded Jin. 19

On the whole, the two systems' apportionments are in basic agreement, so that it is clear that the expansion by three terms did not alter *preexisting astrological relationships* between celestial and terrestrial locations, but strove rather to accommodate ancient tradition to new political realities by making terminological adjustments "on the ground," as it were. Chief among the historical changes demanding accommodation, besides the break-up of Jin, was the eastward removal and subsequent decline of Zhou after 771 BCE coupled with the rise of Qin in present-day Shaanxi. Taken together these adaptations point to a late Western Zhou or Spring and Autumn period date (8th to 7th centuries BCE) for the Nine Heavenly Fields precursor to the Field Allocation scheme of twelve shown in Table 1.<sup>20</sup>

<sup>19.</sup> The implicit correlation between province Liang and the state of Jin in the Nine Fields system strongly suggests a different identity for Liang than given in later texts. In the "Yu gong" (The Tribute of Yu) chapter of Shangshu (Book of Documents), a Zhou text, Liang is identified with southern Shaanxi province, specifically the region between Mt. Hua and a tributary of the Han River known as the Black River; see Nienhauser (1994, 27). But there is no doubt that the state of Jin and its immediate predecessor, Tang, were located near the Fen River in western Shanxi, northeast of the Yellow River's abrupt northward bend near its confluence with the Wei River. Just west of the confluence of the Fen River with the Yellow River is Mt. Liang, one of the peaks which demarcate the watersheds regulated by the legendary Xia Dynasty founder Yu the Great in the border region between provinces Ji and Yong; see Nienhauser (1994, 22). It is probable, therefore, that province Liang was originally located in this area in pre-Zhou times and only later relocated and redefined to include southwestern Shaanxi and Sichuan after the extermination of the principality of Liang by the state of Qin in mid-Zhou Dynasty.

<sup>20.</sup> Elsewhere I have argued for a 2nd millennium BCF date for the conceptual basis of the correlation between celestial and terrestrial events, locations, etc., based in part on the actual locations and early textual accounts of portents connected with three impressive massings of the five planets. There is considerable evidence to suggest that the correlation between Xia, Shang, and Zhou and the Northern, Eastern, and Southern quadrants of the sky and their cardinal constellations arose very early in Chinese cosmo-political thinking; see Pankenier (1995).

# Derivation of Astrological Correspondences

The antecedents of Field Allocation astrology are to be found in certain conceptions already influential in the 2nd millennium BCE. Apart from the rare planetary massings already verified, several passages in pre-Qin works preserve the remnants of etiological myths and traditions which establish the existence of definite connections between certain celestial locations and terrestrial polities or peoples. One of the most famous is the legend of E Bo and Shi Chen which is preserved in the Zuo Commentary (Duke Zhao, 1st year):<sup>21</sup>

Formerly, Gao Xin had two sons, the eldest was named E Bo and the younger one Shi Chen. They lived in Kuanglin but could not get along, daily taking up shield and lance against one another. In the end, Gao Xin could no longer condone it and removed E Bo to Shangqiu to have charge of [the asterism] Chen (Great Fire in Scorpio); the ancestors of the Shang people followed him, therefore Great Fire is the Shang asterism. [Gao Xin] moved Shi Chen to Da Xia to have charge of Shen (Orion), so the people of Tang followed him, and there served the houses of Xia and Shang. The last of their line was Tang Shuyu. When [Zhou Dynasty] King Wu's wife Yi Jiang was pregnant with Tai Shu (i.e., Tang Shuyu), she dreamed that the Lord on High told her: 'I have named your son Yu and will give Tang to him, make Tang belong to Shen (Orion), and cause his descendants to flourish.' When the child was born he had the character Yu on his hand, and so his name was called Yu. When [Zhou] King Cheng extinguished the old house of Tang he enfoeffed Tai Shu there; hence, Orion is the star of Jin. From this we can see that Shi Chen is the spirit of Shen (Orion).

and again (Duke Xiang, 9th year):22

The ancient Regulator of Fire was offered sacrificial nourishment either in the asterism Heart (Sco) or in the asterism Beak (Hya) in order [for the people] to take out and bring in their fires. For this reason Beak is [called] Quail Fire and Heart is [called] Great Fire. Tao Tang's (i.e., Emperor Yao's) Regulator of Fire, E Bo, dwelt at Shangqiu and sacrificed to Great Fire (Sco), using Fire to mark the seasons there. Xiang Tu (grandson of Xie and father of the Shang people) continued in like manner, and so the Shang principally focus on Great Fire. They observed that the incipient signs of their calamities and defeats invariably began with Fire.

The same legend is alluded to in an equaly famous passage in Guoyu, "Jinyu" (Discourses of the State of Jin):<sup>23</sup>

<sup>21.</sup> Combined Concordances to Ch'un-ch'iu, Kung-yang, Ku-liang and Tso-chuan, Vol. 1, 344.

<sup>22.</sup> Combined Concordances to Ch'un-ch'iu, Kung-yang, Ku-liang and Tso-chuan, Vol. 1, 266.

<sup>23.</sup> Gиоуи (10:3а),

I have heard that when Jin was first enfoeffed, Jupiter was in Great Fire, which is the star of E Bo; in truth, it marked the periods of the Shang.

This famous nexus of astral lore involving E Bo and Shi Chen, which has abundant echoes in later literary composition, weaves together various elements of cultural significance in characteristic fashion. At bottom, it is a classic example of the kind of etiological myth dating from the pre-literate period which served both to explain and to memorialize vital astronomical and calendrical knowledge. In so doing it also laid the foundation for the subsequent elaboration of an astrological theory based on celestial and terrestrial correspondences. In this pithy story we can discern an euhemerized tale about the human origins of the deities associated with the principal constellations of spring and autumn, Scorpio and Orion, which are diametrically opposed or "at odds" in the heavens and hence never appear in the sky simultaneously. Just as if unable to abide each other's presence, É Bo invariably ducks beneath the western horizon just before Shi Chen rises in the east. These personified asterisms are then linked to the cardinal directions (East and West), to seasonal activity for which they anciently served as harbingers (carrying out and in of the hearth fires24 marking the beginning and end of the agricultural season), as well as to the dominant political entities of the archaic period (Shang and Xia), their descendants, and the hereditary lines of astrologers and calendrical specialists who served them. In this and other examples of such astral lore (notably texts linking the above-mentioned bird asterism "Beak" to the fortunes of the Zhou people) it is possible to discern the historical nucleus of the system of astrological correlations which over time was to become amplified and ultimately standardized in the configuration shown above in Table 1.

The prominence and appropriateness of Orion and Scorpio as seasonal harbingers has frequently been remarked upon. More tellingly, however, Scorpio's celestial location and ancient calendrical function may link this constellation with the flood mythos and the cosmogonic exploits of Yu the Great and his father Gun.<sup>25</sup> What principally concerns us here, however, is the fact that both Scorpio and Orion are similarly located adjacent to the Heavenly River, though as we have already noted, at opposite ends of the sky. If we consider the relationship between the asterisms and their terrestrial correlates in the Heavenly Fields scheme in Table 2 it will be noted that Great Fire corresponds to east and province Yu, identified with Song, the successor state of Shang in east-central Henan, while Shen or Orion corresponds to the southwest, province Liang, and the state of Jin, consistent with the traditions relating the feud between Shi Chen and E Bo. Although the connection between

24. Interestingly, as red supergiants, both Alphard (Delta Hydrae) and Antares (Alpha Scorpii) are noticeably orange to reddish in hue.

<sup>25.</sup> Scorpio's location on the western edge of the Milky Way or "Heavenly River" figures prominently in a recent analysis of the flood mythos and the evidence for the early empirical recognition that what had been thought to be changeless features of heaven were in fact impermanent, as seasonal harbingers in the sky were rendered obsolete by their precessional dislocation relative to the tropical year; see Porter (1996, 27 ff). The recent discovery of a Neolithic tomb at Puyang, Xishuipo, in Henan Province containing a dragon and a tiger mosaic assembled from clam shells and positioned with cosmological accuracy to the east and west of the high status occupant of the tomb indicates that the seasonal role of those cardinal constellations may already have been recognized by the 3rd millennium BCE. For a speculative interpretation of the tomb as a simulacrum of the heavens, see Feng (1990, 52–60).

Shang and the east is well established, how are we to account for the placement of Jin in the southwest? Or, for that matter, for such glaring geographical anomalies as the association of ancient states like Zhou in the west and Qi in the Shandong peninsula on the east coast with cardinal south and north, respectively?

If, however, we plot the provinces and their celestial counterparts on a schematic map of the North China plain the incongruities begin to assume the character of deliberate constructions arising from a preeminent concern with celestial rather than terrestrial topography. Viewed in this way, the scheme may be seen to preserve at its core distinct traces of the original cosmographic organizing principle that was later obscured.

# The Heavenly River as Cosmographic Divide

The Milky Way arches across the dome of the heavens (Figure 1) from Sagittarius in the northeast (juncture of the northern and eastern quadrants of the sky) to Gemini in the southwest (juncture of the southern and western quadrants), with Scorpio and Orion strategically located at those opposite extremes. If we imagine that ancient Chinese astrologers practicing their art in the great river's flood plain envisioned the Milky Way as the celestial analogue of the Yellow River, an explanation for the apparently incongruous astrological correlations immediately suggests itself. When the generally southwest to northeast course of the Yellow River (Figure 2) is compared to the SW to NE orientation of the Heavenly River (Figure 1), most of the celestial correlations of the Nine Provinces in the Spring and Autumn period make sense. The "fields" of Qi (Province Qing) in the "north" and Qin/Zhou (Province Yong ) in the "south" determine the generally "north to south" orientation of the major cardinal axis, while the area above the Yellow River becomes "west" and below becomes "east." Jin's location (Province Liang) in the astrological "southwest" can now be seen as a logical outgrowth of this paradigmatic celestial frame of reference, as does Chu's (Province Jing) location in the "southeast." Further examination of the figures confirms that the scheme's essential fidelity to celestial topography rather than to terrestrial directions probably arises from an archaic conception in which the Yellow River and the Milky Way were functional analogues in astrological terms.25

The heavenly topography, thus, is primary. The complete Heavenly Fields scheme presents a few minor inconsistencies with this portrayal of the system's origins, but it is not difficult to imagine how these could have arisen over time as the growing complexity of the geo-political situation and its astrological ramifications tended to obscure the original cosmographic concept. Interestingly, the identification of latecomers on the political horizon, Wu and Yue (province of Yang), with astrological "northeast," though presumably quite late, is still consistent with the original concept. The one major incongruity, the identification of the states of Wèi and Lu with north-northwest, makes no sense either geographically or astrologically, though the association of the state of Yan with east-northeast, while not astrologically correct, is at least geographically accurate. By the time the expanded Warring States system portrayed in Table 1 was fully elaborated, the original cosmographic

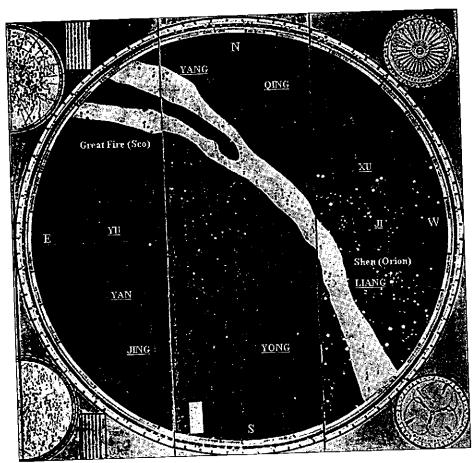


Figure 1. Locations of the Nine Provinces around the Milky Way. After Zhongguo gudai tianwen wenwu tuji (Collected Illustrations of Cultural Artifacts of Ancient Chinese Astronomy) (Beijing: Wenwu chubanshe, 1980, p. 101).

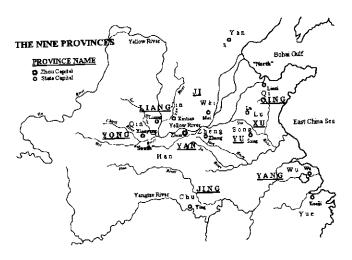


Figure 2. Locations of the Nine Provinces in relation to the Yellow River.

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1 1 frame of reference appears to have been largely obscured by the accretions. Although the analogy between the Yellow River and the Milky Way was conventionally repeated in Yin Yang and Five Elements (Powers) speculations from this time on, actual references in the late Zhou and Han astrological literature to the Milky Way as the Yellow River's celestial analogue are surprisingly rare.<sup>26</sup>

One noteworthy, but quite late, exception is the brilliant Tang dynasty (618–907) monk-astronomer Yi Xing (fl. 725), who is recorded as having seen this archetypal astral-terrestrial parallelism as fundamental in Field Allocation astrology. By Yi Xing's time the expansion of Hua-Xia civilization had long since brought south China within the mainstream of Chinese culture, so that both of China's major river systems now had to be taken into account, somewhat obscuring the archaic one-to-one correspondence between the Yellow River and the Milky Way. Nevertheless, the fundamental conception is still discernible in his explanation. According to the Song dynasty encyclopaedist Zheng Qiao (1104–1162):

How excellent was Yi Xing's discussion of the twelve stations in the Tang dynasty! From beginning to end he relied on the River of Clouds (i.e., Milky Way) to talk about them. The River of Clouds is the qi of the Yellow and Yangtze Rivers. He discerned the Two Divisions (of China) by the mountain ranges and river systems and recognized the rising and setting of the River of Clouds at the Four Nodes (NF, SE, SW, NW). On comparing below to the ancient Han dynasty commanderies and kingdoms, differentiating and locating the field allocations (fenye) was (as easy as) pointing to one's palm. Evidently, the stars are like qi, nothing more; the River of Clouds, the Northern Dipper, the Five Planets, there is nothing which is not qi. How profound was Yi Xing's learning!<sup>27</sup>

#### **Conclusion**

As Sima Qian strongly intimated, by his time astrological prognostication based on celestial and terrestrial correspondences (and by implication, an antecedent paradigmatic cosmography), was already very ancient. Archaic astrological traditions preserved in Zhou texts, the history of astronomical observation, and the historical development of field allocation astrology all support Sima Qian's assertion. Even though adaptations to the field allocation scheme in the late Zhou period could apparently be made with little regard to the archaic geo-political precedents, at an ear-

<sup>26.</sup> Like most of his contemporaries, the famous Han Dynasty astronomer and polymath Zhang Heng (78–139) subscribed to the conventional view that the "essence of [elemental] Water becomes the Heavenly Han (River)"; see the quote from his Ling Xian in Taiping yulan, vol. 1, 8:10a. In a similar vein, the Han apocryphal text Hetu kuodi xiang (River Diagram Images Encompassing the Earth) makes the astral-terrestrial correspondence plain: "The essence of the Yellow River rises to become the Heavenly Han"; Taiping yulan, vol. 1, 8:11a. How, precisely, this generally stated correspondence plays out in terms of specific astrological prognostications is not made explicit, however.

<sup>27.</sup> Zheng Qiao's approving comments conclude his discussion "Distinguishing Field Allocations" in *Gujin tushu jicheng*, chapter 57, "Stars and Asterisms: General Discussion," 1341. For the geographical details of Yi Xing's analytical scheme, see the "Monograph on Astrology" in *Xin Tang Shu* (New History of the Tang Dynasty), 21:817.

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lier stage when the new province of "Three Rivers" was incorporated into the system and the state of Zhou was summarily detached from its erstwhile homeland in Shaanxi Province's Wei River Valley in favor of Qin, care was obviously still taken to preserve the pre-existing correspondence between Zhou, cosmographic "south," province Yong, and the Vermilion Bird constellation (Hydra, Corvus, Crater). Evidently, even gross manipulation in geographical terms was unproblematical so long as Zhou's primordial astral correlates and cosmographic cardinality remained intact. If this portrayal of the historical nucleus at the heart of field allocation astrology is correct, further research in this area holds the promise of adding an important new dimension to the study of the political and military history in the early period. Already the evidence points to a long process of evolutionary development in astrological cosmography reaching well back into the formative Three Dynasties period of Chinese civilization. By mid-11th century BCE judicial astrology figured importantly in the epoch-making Zhou conquest campaign that overthrew the Shang Dynasty, and the evidence that continues to emerge indicates that astral/terrestrial correspondences routinely played a similar role throughout the Zhou dynasty.

### References

Biot, E. tr. 1975, Le Tcheou-li ou Rites des Tcheou. 3 vols. (Paris: Imprimerie nationale, 1851). Reprint. (Taipei: Ch'eng-wen Publishing Co.).

Brooks, E. B. 1995, "Warring States Working Group: Query 47" 4 July 1995. Pho-

Clube, S. V. M. 1995, "The Nature of Punctuational Crises and the Spenglerian Model of Civilization" Vistas in Astronomy 39.4.

Combined Concordances to Ch'un-ch'iu, Kung-yang, Ku-liang and Tso-chuan. Harvard-Yenching Institute Sinological Index Series, Supplement No. 11. Vol. 1. Reprint. (Taipei: Cheng Wen Publishing Co., 1966).

Cullen, C. 1996, Astronomy and mathematics in ancient China: the Zhou bi suan jing (Cambridge: Cambridge University Press).

Encyclopedia Britannica, 15th ed. (Chicago: Encyclopedia Britannica, 1984).

Feng Shi. 1990, "Henan Puyang Xishuipo 45 hao mu de tianwenxue yanjiu (Research on the astronomy of tomb no 45 at Xishuipo, Puyang in Henan Province)" Wenwu 3, p. 52.

Graham, A. C. 1989, Disputers of the Tao (LaSalle, Illinois: Open Court).

Gu jin tushu jicheng (Comprehensive Collection of Illustrations and Documents Ancient and Modern) Reprint. (Taipei: Wen-hsing shu-tien, 1964).

Guoyu (Discourses of the States) Sibu beiyao edition. (Shanghai: Zhonghua shuju, 1927-35). Reprint. (Taipei: T'ai-wan Chung-hua shu-chü, 1966).

Huainanzi (Master Huainan) Sibu beiyao edition. (Shanghai: Zhonghua shuju, 1927-35). Reprint. (Taipei: T'ai-wan Chung-hua shu-chü, 1966).

Jinshu (History of the Jin Dynasty). Reprint. (Beijing: Zhonghua shuju, 1974). Lewis, M. E. 1990, Sanctioned Violence in Early China (Albany: State University of

New York Press). Löwith, K. 1949, Meaning in History (Chicago: University of Chicago Press). Lüshi chunqiu (Spring & Autumn Annals of Master L"). Sibu beiyao edition. (Shanghai: Zhonghua shuju, 1927-35) Reprint. (Taipei: Chung-hua shu-chü, 1966).

Major, J. S. 1993, Heaven and Earth in Early Han Thought: Chapters Three, Four, and Five of the Huainanzi (Albany: State University of New York Press).

Lau, D. C. tr. 1970, Mencius (Harmondsworth, Middlesex: Penguin Books).

Needham, J., et al, 1959, Science and Civilisation in China. Vol. 3. Mathematics and the Sciences of Heaven and the Earth (Cambridge: Cambridge University

Nienhauser, W. H., ed. 1994, The Grand Scribe's Records. Vol. 1. The Basic Annals of Pre-Han China. (Bloomington: Indiana University Press).

Pankenier, D. W. 1995, "The Cosmo-Political Background of Heaven's Mandate," Early China 20, p. 121.

Pankenier, D. W. in press, "Applied Field Allocation Astrology in Zhou China: Duke Wen of Jin and the Battle of Chengpu (632 BCE)" Journal of the American Oriental Society.

Peiser, B. J. 1998, "Cultural Aspects of Neo-Catastrophism: What are the Implications for Archaeoastronomy?" This Book (Durham: Carolina Academic Press).

Porter, D. L. 1996, From Deluge to Discourse: Myth, History, and the Generation of Chinese Fiction (Albany: State University of New York Press).

Karlgren, B. tr. 1950, Shangshu (Book of Documents) (Stockholm: Museum of Far Eastern Antiquities).

Shisanjing zhushu (The Thirteen Classics with Notes and Commentaries) 2 vols. Reprint. (Taipei: Wen-hua t'u-shu kung-ssu, 1970).

Sima, Qian. Shiji (The Grand Scribe's Records) Reprint. (Beijing: Zhonghua shuju, 1959).

Sun Xiaochun & Kistemaker, J. 1997, The Chinese Sky During the Han: Constellating Stars & Society (Leiden: E. J. Brill).

Taiping yulan, 7 Vols. Reprint. (Taipei: P'ing p'ing ch'u-pan-she, 1975).

Watson, B. 1967, Basic Writings of Mo Tzu, Hsün Tzu, and Han Fei Tzu (New York: Columbia University Press).

Xin Tang shu (New History of the Tang Dynasty) Reprint. (Beijing: Zhonghua shuju, 1976).

Yi Shitong. 1996, "Beidou ji — dui Puyang Xishuipo 45 hao mu beisu tianwen tu de zai sikao (Sacrifices to the Northern Dipper-further thoughts on the astronomical chart made of shells in tomb #45 at Puyang, Xishuipo)" Zhongyuan wenwu 2.