

# A Brief History of Beiji 北極 (Northern Culmen), With an Excursus on the Origin of the Character *di* 帝

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Chinese preoccupation with astronomical orientation has a very long history. Archaeological evidence from the fifth millennium B.C. Neolithic cultures of North China shows that burials and dwellings were already being oriented with particular attention to the diurnal and seasonal variations in the sun's position.<sup>1</sup> With the beginning of the Bronze Age in the early second millennium B.C. and the inception of early state formation, such concepts had progressed to the point where ritually and politically important structures were uniformly quadrilateral in shape and cardinally oriented, with the longitudinal axis aligned with varying precision in a north-south direction.<sup>2</sup> Palatial structures and royal tombs from the earliest dynastic states in the second millennium B.C., that is, Xia, Shang, and Zhou, consistently display such orientation<sup>3</sup> (figs. 1, 2, 3, 4, 5, 6). From the layout of the best preserved of these city walls and palatial foundations, it is clear that the principal access was normally via a main gate in the south facade, with the inner sanctum located far from the entrance towards the rear or north wall. This ritually and cosmologically significant architectural arrangement remained consistent throughout the entire history of China, most especially in edifices connected with the imperial prestige and power, as exemplified by the Forbidden City in Beijing. This much is already well known and has been thoroughly documented by Paul Wheatley.<sup>4</sup>

What has been less well explored is the possible astral-terrestrial correspondence between the archaic kingship in the Bronze Age and the north-pole (*beiji* 北極) or "Northern Culmen," whose unique characteristics and powerful associations as the pivot of the heavens led to its becoming the celestial archetype of the cosmically empowered Chinese monarch. Already by the late Warring States period, well before the founding of the empire, Confucius famously drew on the metaphorical potency of the pole to exemplify the charismatic virtue (*de* 德) of the sagely ruler:

子曰：為政以德，譬如北辰<sup>5</sup>，居其所而眾星共之。

*Lunyu* 2:1, The Master said: To conduct government by virtue may be compared to the Northern Asterism: it occupies its place, while the myriad stars revolve around it.<sup>6</sup>

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1. David W. Pankenier, "The Cosmo-political Background of Heaven's Mandate," *Early China* 20 (1995): 121 n. 2.
2. Paul Wheatley, *The Pivot of the Four Quarters: A Preliminary Enquiry into the Origin and Character of the Ancient Chinese City* (Edinburgh: Edinburgh Univ. Press, 1971), 423.
3. If, indeed, Erlitou Phase I-III may be identified with a culture complex distinctly different from Shang and identifiable with Xia.
4. Wheatley, *Pivot*; esp. chapter 5, "The Ancient Chinese City as Cosmo-magical Symbol."
5. The earliest references to a polar asterism generally use the term *dou* 斗 "ladle/dipper" or *chen* 辰 as here, rather than *beiji* 北極 "northern culmen." In contrast to *ji* 極, which clearly refers to the apex of the heavens, specifically the north celestial pole, *bei chen* usually refers to *bei dou* 北斗, the northern dipper, the asterism of primary

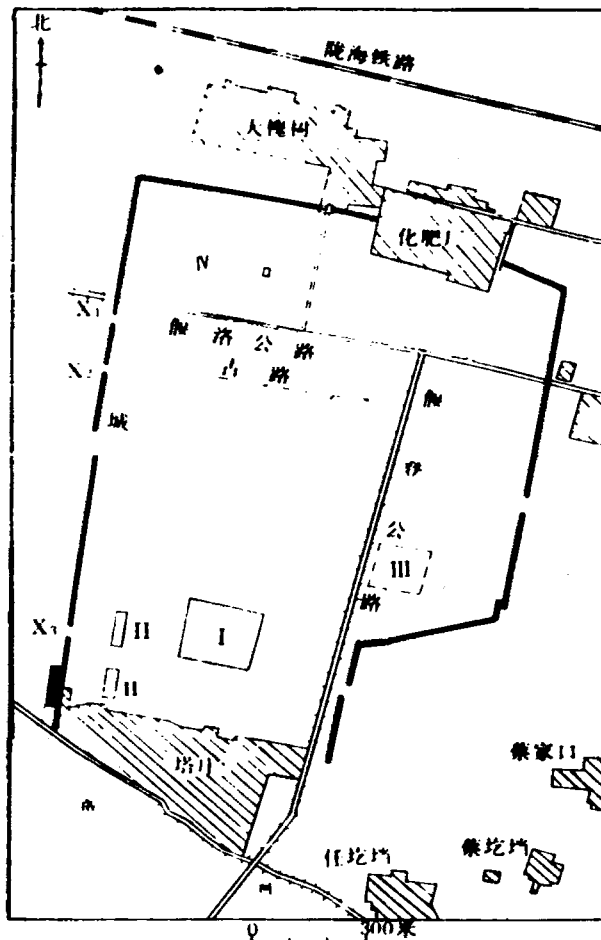


FIG. 1. Yanshi Shang city site plan, Henan province, early Shang dynasty. The arrow at the upper left shows true north. (After Zhang Zhiheng 張之恆 and Zhou Yuxing 周裕興, *Xia Shang Zhou kaogu* 夏商周考古 [Nanjing, 1995], 49)

#### TAIYI AND NORTHERN CULMEN

Recent studies of the cultic practices, ceremonial, and conceptual background of the supreme numinous power *Taiyi*, "Supreme One," during the Warring States through Han

importance closest to the pole (see n. 22 below). But as Brooks and Brooks remark (*The Original Analects*, 109): "Whether we imagine a polar void or (as the text seems to require) a polar star, the thrust of the saying is the magical power of inactivity." If Confucius really did have in mind a true pole star, then he is recalling a very ancient state of affairs indeed (more on which below). I suspect his use of the term *bei chen* here is not intended to be astronomically accurate, but refers in a more conventional way to the centrality of the most prominent circumpolar asterism, the northern dipper, in the same way that the pivot of the round plate representing heaven in the early *shi* 式 or diviner's board is placed very close to the handle of the Dipper. In fact, the celestial pole in Warring States and Han times was far from the Dipper.

6. See E. Bruce Brooks and A. Taeko Brooks, *The Original Analects: Sayings of Confucius and his Successors* (New York: Columbia Univ. Press, 1998), 109.

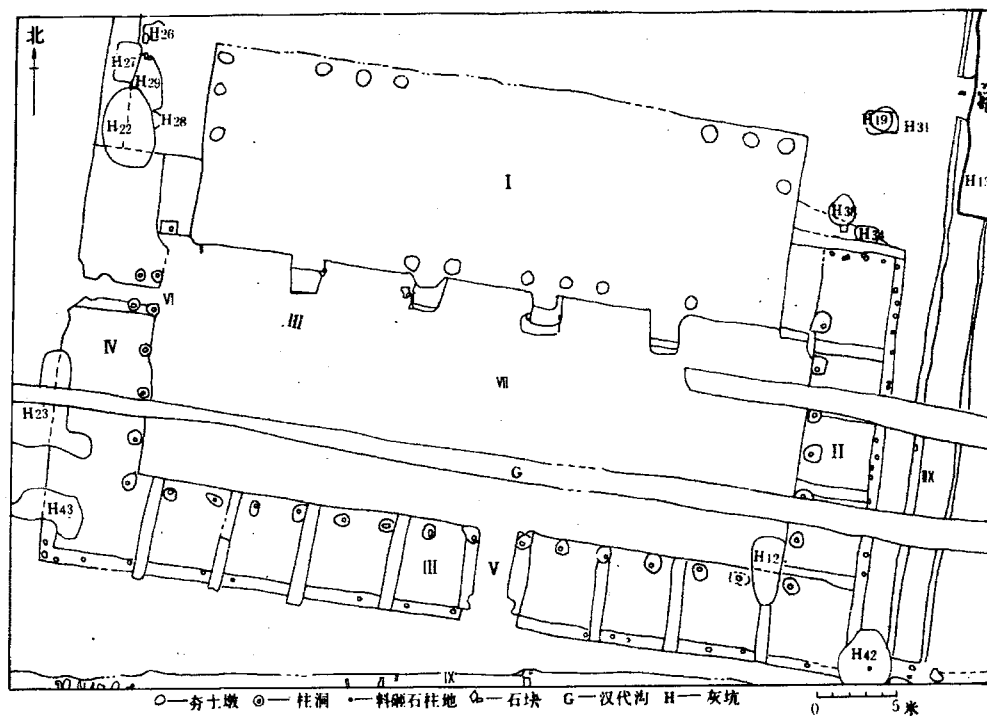


FIG. 2. Yanshi Shang City palace foundation no. 4 (after *Xia Shang Zhou kaogu*, 51).

periods draw on abundant textual and archaeological materials and underscore the identification of *Taiyi* with the celestial pole. Let me cite here just a few examples:

[史記·天官書] 中宮天極星，其一明者，太一常居也。

*Shiji*, "Treatise on the Heavenly Offices": "The brightest star of the Pole Star asterism in the Central Palace is the constant abode of the Supreme One."<sup>7</sup>

[淮南子·天文] 太微者，太一之庭也。紫宮者，太一之居也。

*Huainanzi*, "Heaven's Patterns": "The Taiwei is the court of the Supreme One; the Zigong is the abode of the Supreme One."<sup>8</sup>

[鶴冠子·泰鴻] 中央者，太一之位，百神仰制焉。

*Heguanzi*, "Great Flood": "The center is the place of the Supreme One, the one hundred spirits look up to it and are controlled by it."<sup>9</sup>

[禮記·禮運] 夫禮必本於太一，分而為天地，轉而為陰陽，變而為四時。

*Liji*, "Evolution of the Rites": "Now the rites necessarily have their origin in the Supreme One, which divides to become Heaven and Earth, revolves to become *yin* and *yang*, and changes to become the four seasons."<sup>10</sup>

7. *Shiji* (Beijing: Zhonghua shuju, 1959), 27.1289.

8. *Huainanzi* (Taipei: Shijie shuju, 1974), 3.39. "Taiwei" here is a reference to the Celestial Court, Taiweiyuan, between Leo and Virgo; Zigong refers to Ziweiyuan, the Palace of Purple Tenuity at the pole already referred to above.

9. *Heguanzi* (10.71); photographically reproduced in Carine Defoort, *The Pheasant Cap Master (He guan zi): A Rhetorical Reading* (Albany: State Univ. of New York Press, 1997), 345.

10. *Liji zhengyu* 禮記正義 (*Shisanjing zhushu* 十三經注疏), 22.1426.

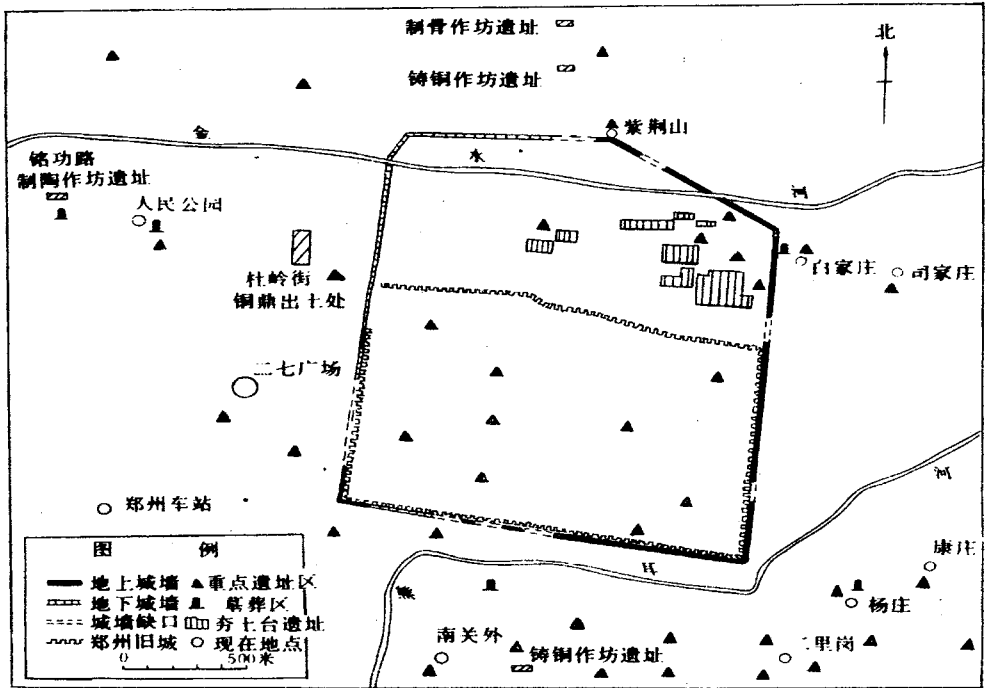


FIG. 3. Early Shang city walls at Zhengzhou, Henan (after *Xia Shang Zhou kaogu*, 54).

[吕氏春秋·大乐] 太一出两仪，两仪出阴阳。阴阳变化，一上一下，合而成章。浑浑沌沌，离则复合，合则复离，是为天常。天地车轮，终则复始，极则复反，莫不咸当。日月星辰，或疾或徐，日月不同，以尽其行。四时代兴，或暑或寒，或短或长，或柔或刚。万物所出，造于太一，化于阴阳。

*Lüshi chunqiu*, "Great Music": "From the Supreme One emanate the Two Exemplars, the Two Exemplars give forth *yin* and *yang*; *yin* and *yang* change and transform, one arising one descending, they combine to form shapes. Confused and obscure in their separateness they recombine, once combined they separate again; this is Heaven's constant rule. Heaven and Earth turn about like the wheel of a cart, ending then beginning anew; reaching their extremes they turn back again, and nothing is ever out of place. The sun, moon, stars and asterisms, some speed along, some move slowly; the sun and the moon differ, and thereby complete their movements. The four seasons arise in succession, now warm, now cold, now short, now long, now mild, now harsh. At the source from which all things emanate, they are initiated by the Supreme One, and transformed by *yin* and *yang*."<sup>11</sup>

According to the team of scholars in charge of restoring the Guodian 郭店 Chu 楚 manuscripts, in the text "Taiyi sheng shui" 太一生水, "The Supreme One Produces Water": "'Supreme One' is here an alternative appellation for the 'Dao' . . . 'Taiyi' in the texts is what is referred to as the 'Dao' in the pre-Qin period."<sup>12</sup>

11. *Lüshi chunqiu*, 5.46. In his commentary, Gao You 高秀 glosses 'Taiyi' as 'Dao': 太一道也. Cf. Angus C. Graham, *Disputers of the Tao: Philosophical Argument in Ancient China* (LaSalle, Ill.: Open Court, 1989), 360.

12. Quoted in Li Jianmin 李建民, "Taiyi xin zheng: Yi Guodian Chu jian wei xiansuo" 太一新证: 以郭店楚简为线索 in *Zhongguo chutu shiliao yanjiuhui* 中国出土史料研究会 (Tokyo: 1999), 51.

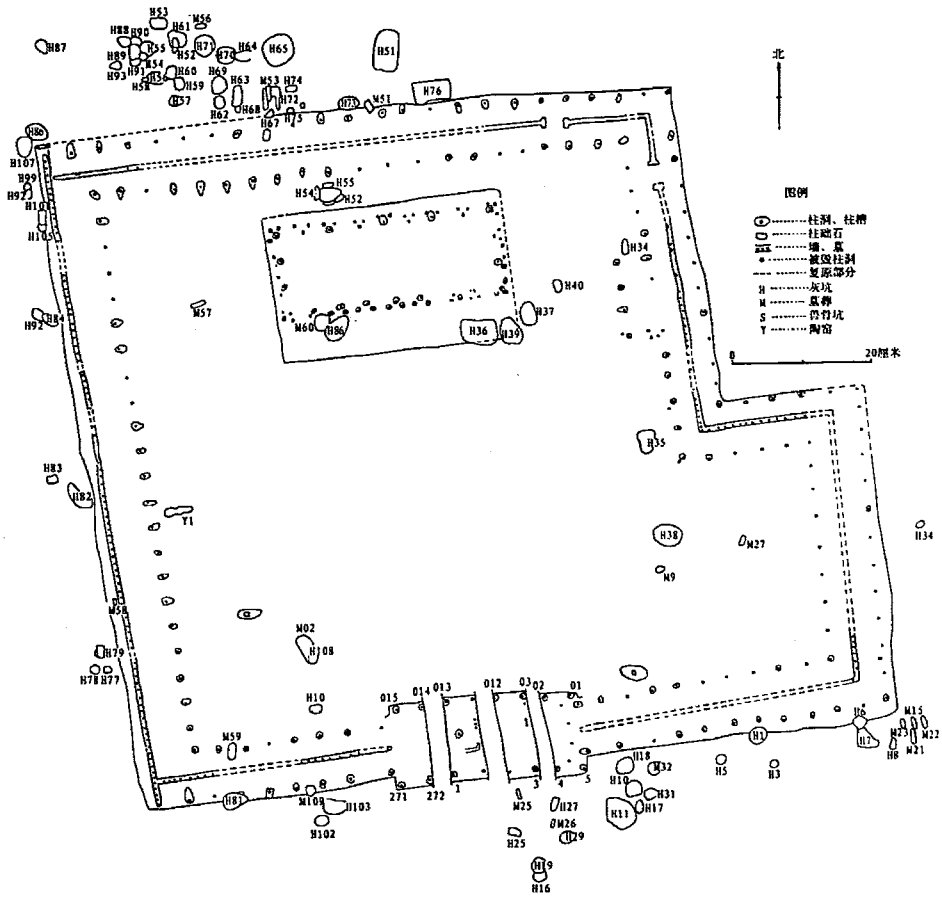


图 84 第一号宫殿基址平面图

Fig. 4. Erlitou palace foundation no. 1 showing orientation 8° west of north (after *Yanshi Erlitou*, figs. 93, 152).

[莊子·天下] 古之道術有在於是者，關尹、老聃聞其風而悅之。建之以常無有，主之以太一，以濡弱謙下為表，以空虛不毀萬物為實。

*Zhuangzi*, "All Under Heaven": "Of the ancient traditions of the Way there is this: Guan Yin and Lao Dan heard about it and found pleasure in it. They established it on the constancy of nothing and based it on the Supreme One. They took weakness and submissiveness as its external manifestation, and emptiness and non-destructiveness to all things as its inner reality."<sup>13</sup>

[神何由降，明何由出]。聖有所生，王有所成，皆原于一。

"How is it that the daimonic descends and clear-seeing emerges? There is that from which sageliness springs and of which kingliness is constituted: both have their source in the One."<sup>14</sup>

13. *Zhuangzi jijie* 莊子集解, 33.472.

14. *Ibid.*, 33.461.

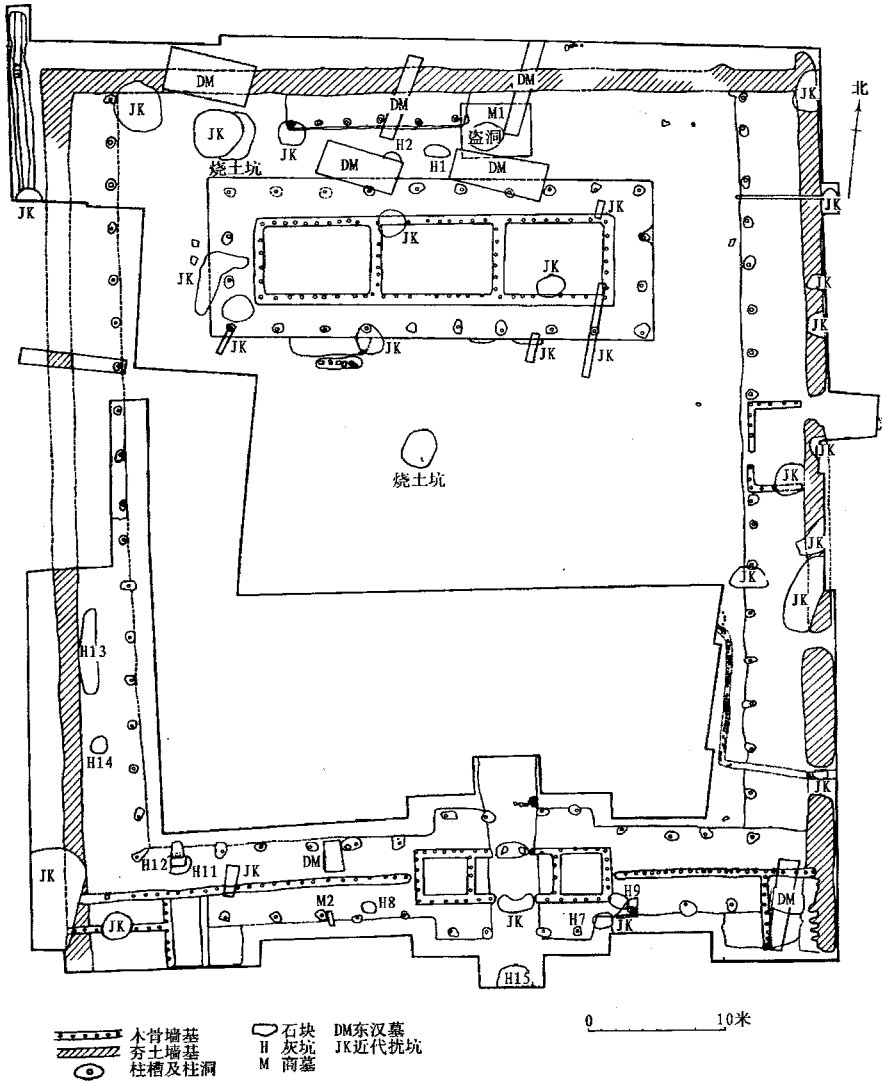


图 93 第二号宫殿基址平面图

FIG. 5. Erlitou palace foundation no. 2 showing orientation 6° west of north (after *Yanshi Erlitou*, fig. 84).

[莊子·列禦寇]「太一形虛」。

Zhaungzi, "Lie Yukou": "The form of the Supreme One is emptiness."<sup>15</sup>

According to Li Ling 李零, "In the 'Nine Songs' 九歌 in the *Chuci* 楚辭 it is the 'August Supreme One of the East' 東黃太一 which is revered. The 'Treatise on the *Feng* and *Shan*

15. *Ibid.*, 32.453.

岐山凤雏西周甲组宫殿(宗庙)基址平面图

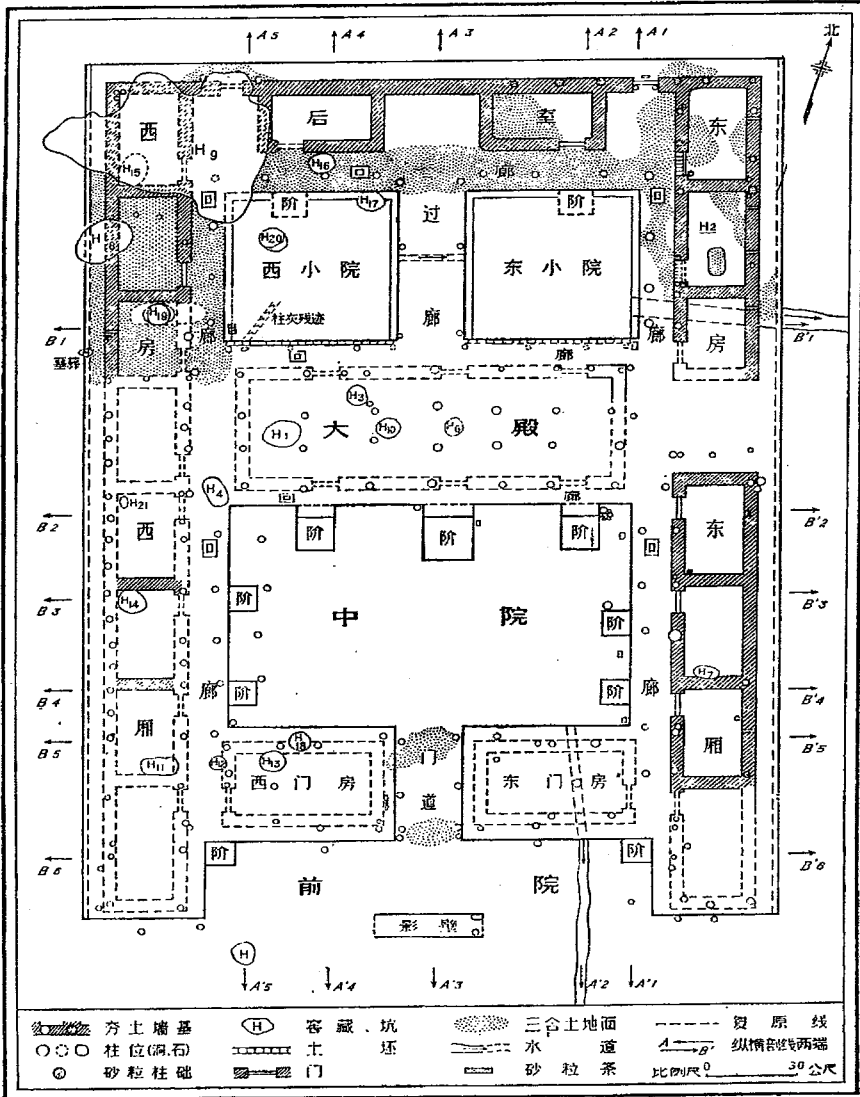


FIG. 6. Qishan, Fengchucun, predynastic Zhou palatial foundation no. 1 (after Chen Quanfang 陳全方, *Zhouyuan yu Zhou wenhua* 周原与周文化 [Shanghai: Shanghai renmin, 1988], fig. 8).

Sacrifices' 封禪書 in *Shiji* and the 'Monograph on the Suburban Sacrifices' 郊祀志 in *Hanshu* 漢書 record that in Han times the Supreme One was worshipped as the most revered. The abode of the Supreme One is the pole of the Dipper about which the myriad stars revolve. The opening passage in the 'Treatise on the Heavenly Offices' in *Shiji* talks about just

this, and the *Taiyi* method associated with the use of the diviner's board also takes the Supreme One as central. All of these can serve to illustrate its importance."<sup>16</sup>

According to Li Jianmin 李建民, "The Supreme One dwells in the center, which is also the position of the Son of Heaven. There is a parallel between the position of the ruler among people and that of the Supreme One among the heavenly bodies. . . . *Heguanzi* speaks of 'using the One' 用一, Laozi talks about 'embracing the One' 抱一 (chapter 22), and Ma-wangdui silk manuscript 'Yao' 要 talks about 'through the One', 繇一, 'obtain the One' 得一, and so on, so it appears as if abstract metaphysical thinking may indeed be the same as the study of formulas and methods in this respect."<sup>17</sup>

According to Jiang Xiangnan 蔣湘南: "What spirit is the daimon of the Supreme One? The Answer: the Lord-on-High 上帝. How is it that the Lord-on-High is the spirit of the Northern Dipper? The answer: it is a fixed star. The very center of the sky is said to be the Purple Tenuity Enclosure 紫微垣. The very center of the Purple Tenuity Enclosure is said to be the North Pole asterism. The fifth star of the North Pole asterism is called 'Celestial Pivot' 天樞 and the place nearby which lacks stars is called the Vermilion Pole 赤極. Directly above the Vermilion Pole is the very center of the Revered Mover of Heaven 宗動天. Beneath the Revered Mover of Heaven is the world of forms, above it is the formless 無形, the formless being the heavenly realm of the Lord-on-High itself. The Lord-on-High is invisible, and so it is known by the center of the Revered Mover of Heaven. The center of the Revered Mover of Heaven cannot be determined, but the second star of the North Pole asterism is big, red, and bright. It controls the sun and rulers, so for this reason astrologers take it to be the seat of the Supreme Lord. When the *Shiji*, 'Treatise on the Heavenly Offices,' says: 'The brightest star of the Pole Star asterism in the Central Palace is the constant abode of the Supreme One,' it is referring to the second star of the North Pole asterism."<sup>18</sup>

From these and other similar sources we may conclude: (i) *Taiyi*, "Supreme One" is the supreme spiritual power residing at the center of the Palace of Purple Tenuity at the pole and is identifiable with the Tao. (ii) All other numinous influences are subordinate to *Taiyi*; it is the ultimate source of all phenomena, imperceptibly animating and regulating the universe [fig. 7]. (iii) An important attribute of *Taiyi* is its protean nature; there is a recognition that its nominal association at this time with the bright star Kochab  $\beta$  UMi (天帝星) is an expedient; similar to the rationale for placing the heavenly pivot of Han diviner's board in the handle of the Dipper.<sup>19</sup> (iv) As an inspirational focus, based on the testimony of *Shiji*, *Zhuangzi*, and others, *Taiyi*/Beiji has a history that reaches into the distant past.<sup>20</sup>

#### THE VIRTUE OF NOTHING

The mysterious efficacy of charismatic virtue to which Confucius referred in the passage above, in the alternative, Taoist vision becomes the efficacy of non-action, or *wu-wei* 無為, the ultimate achievement of one who is in harmony with the invisible force of Tao (*Taiyi*)

16. Li Ling, *Zhongguo fangshu kao* 中國方術考 (Beijing: Zhongguo renmin, 1993), 269; quoted in Li Jianmin, op. cit., 50.

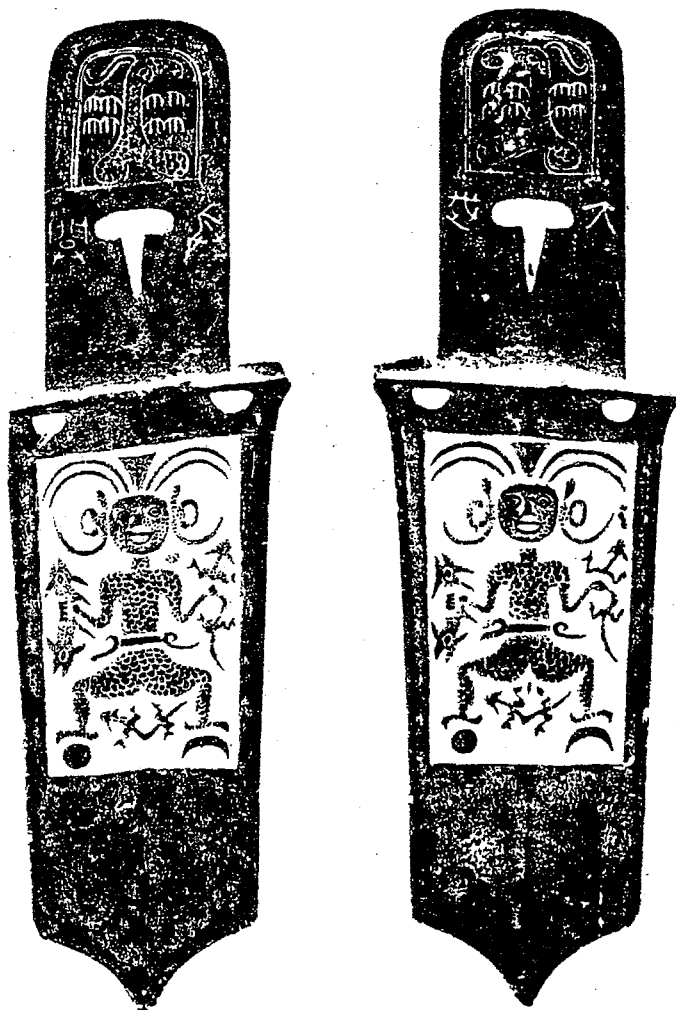
17. Li Jianmin, op. cit., 51.

18. Jiang Xiangnan, *Qijing lou wen chao: Taiyi shi yi* 七經樓文鈔：太一釋義 (Zhengzhou: Zhongzhou guji, 1991), 108; quoted in Li Jianmin, op. cit., 48.

19. On the significance of the diviner's board in ancient Chinese cosmology and mantic arts, see Li Ling, "Shi yu Zhongguo gudai de yuzhou moshi" 式與中國古代的宇宙模式, in his *Zhongguo fangshu kao*, 89–176.

20. See esp. Li Ling, "An Archaeological Study of *Taiyi* (Grand One) Worship," *Early Medieval China* 2 (1995–96): 1–39.





图三四 “兵避太岁”戈上的“太一锋”

FIG. 7. Taiyi depicted with cosmogonic attributes on the Bingbi Taisui dagger-axe from the Warring States period (after Li Ling, “An Archaeological Study of Taiyi Worship,” 32).

animating the universe. As Victor H. Mair explains, “*Wu-wei* does not imply absence of action. Rather, it indicates spontaneity and non-interference; that is, letting things follow their own natural course. For the ruler, this implies reliance on capable officials and the avoidance of an authoritarian posture. For the individual, it means accomplishing what is necessary without ulterior motive. Some commentators have explained *wu-wei* as ‘non-purposive’ or ‘nonassertive’ action.”<sup>21</sup> The aphoristic maxims of the *Laozi* repeatedly invoke the themes

21. Mair, tr., *Tao Te Ching: The Classic Book of Integrity and the Way*, Lao Tzu (New York, 1990), 138.

of non-action, artlessness, and embracing “the one” through which non-intentional purposefulness achieves its objective. So, for example, we find metaphorical allusion to the protean nature of *de* as impassive, infantile, feminine, watery, non-possessive, non-controlling, and so on.<sup>22</sup> More to the point, however, may be this musing on the paradoxical virtue of “nothing”:

Thirty spokes converge on a single hub,  
 But it is in the space where there is nothing  
 That the usefulness of the wheel 車 lies.  
 Clay is molded to make a pot,  
 But it is in the space where there is nothing,  
 That the usefulness of the clay pot lies.  
 Cut out doors and windows to make a room,  
 But it is in the spaces where there is nothing  
 That the usefulness of the room lies.  
 Therefore,  
 Benefit may be derived from something,  
 But it is in nothing that we find usefulness.<sup>23</sup> (55/11)

We have twice seen the metaphor of a wheel appear, with reference to rotational movement, first in the quotation from *Lüshi chungü* above, and now with reference to the utility of the void at its hub. In contrast to the *Lunyu*, which was quite explicit about the astronomical source of its evocative metaphor of the mysterious efficacy of charismatic virtue, the *Laozi*, true to form, is indirect, allusive, yet down-to-earth in its choice of images. Nevertheless, it does not require a great imaginative leap to recognize the likelihood of a common inspirational source for their respective visions of ultimate attainment in the mysterious operations of the formless pivot of the heavens. 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.

#### THE NORTHERN DIPPER AND THE IMPERIAL POWER

Needless to say, as the most distinctive stellar formation near the pole, some of the mysterious aura of that location quite naturally attached to the Dipper. The rotation of the Northern Dipper around the mysterious pivot at the center of the heavens [fig. 8] for centuries enabled it to serve as a celestial clock whose changing orientation marked the passing of the hours of the night as well as the seasons of the year. As the *Pheasant Cap Master* (*Heguanzi*), famously put it:

When the handle of the Dipper points to the east [at dawn], it is spring to all the world. When the handle of the Dipper points to the south (i.e., up) it is summer to all the world. When the handle of the Dipper points to the west, it is autumn to all the world. When the handle of the Dipper points to the north (i.e., down), it is winter to all the world. As the handle of the Dipper rotates above, so affairs are set below. . . . (5:21/1–4)<sup>24</sup>

22. See, e.g., (54/10) Mair, *Tao Te Ching*, 69.

23. *Ibid.*, 70 (modified).

24. Defoort, *The Pheasant Cap Master*, 189, 320. On the centrality of this polar imagery in *Heguanzi*, Defoort remarks (p. 120): “Most attention in the *Pheasant Cap Master* is directed at the sagely ruler, the One Man, who is the unique fountainhead of order. This sage-ruler is the political polestar, surrounded by his ministers, impartially distributing responsibilities and penetrating to the smallest corners of his realm. The strength of this imagery, fully exploited in the *Pheasant Cap Master* . . . lies in its affirmation of the very different and independent position of the

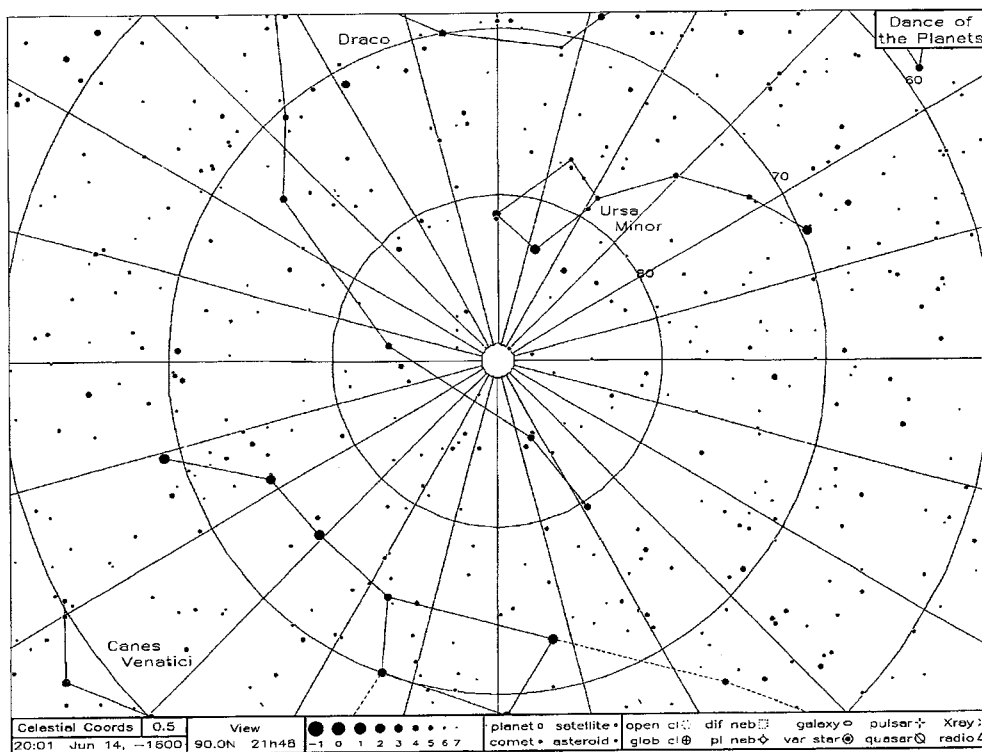


FIG. 8. Position of the Big Dipper in relation to the North Pole in early Shang, ca. 1600 B.C. (*Dance of the Planets* ©ARC Software).

Explicit literary and graphic elaboration of the association of the north-pole and its attributes with the person of the Emperor, the “Son of Heaven,” came with the establishment of the universal empire, as in this famous Han-dynasty stone carving from a Wu Liang tomb shrine dating from the Later Han [fig. 9]. Here we see the Celestial Thearch *di* 帝 dressed in the imperial garb and riding in the Dipper as if driving an imperial carriage. Like the mysterious Northern Culmen (*beiji*) at the center of the celestial dome, the formal, ritual pose of the terrestrial emperor was to sit facing south, so that all his ministers, minions, generals, and subjects approached his exalted presence and prostrated themselves while facing north. Indeed, tradition had it in the early empire that the Han dynasty capital Chang’an had been laid out in such a way as to mimic the stars of Ursa Major and Ursa Minor, although this has not been confirmed archaeologically.<sup>25</sup> Historical accounts from the early Han dynasty

central pole in relation to the other political constellations.” The earliest such metaphorical use of stars or asterisms occurs in ode no. 203 in the *Shijing* 詩經. There, however, the brilliance of several asterisms, including the Northern Dipper, is likened to the aristocratic elite who occupy positions of importance but do not exploit their brilliance in ways that benefit the populace. See Bernhard Karlgren, tr., *The Book of Odes* (rpt. Stockholm: Museum of Far Eastern Antiquities, 1950), 153–54. For an account of the Dipper in Han times, see John S. Major, *Heaven and Earth in Early Han Thought: Chapters Three, Four, and Five of the Huainanzi* (Albany: State Univ. of New York Press, 1993), 106ff.

25. Wheatley, *Pivot*, 443.



FIG. 9. Stone carving from the Wuliang shrine, Eastern Han, showing the Celestial Thearch driving his heavenly chariot, the Dipper (after Major, *Early Han Thought*, 108).

are quite explicit that the preceding Qin dynasty capital of Xianyang 咸陽 contained elements of astral symbolism implying that the emperor's palace was in the position of the pole star relative to the constellations and the Milky Way.<sup>26</sup>

The *locus classicus* for the identification of the person of the emperor, who with the inception of the imperial system is now also called *di* 帝, with the cosmic functions of the Northern Dipper, is in the "Treatise on Astrology" in the *Shiji* 史記, compiled in the late second century B.C. There, in the description of the astral correlates of the imperial court in the circumpolar region of the sky, we read:

The Dipper is the Celestial Thearch *di's* carriage. It revolves about the center, visiting and regulating each of the four regions. It divides *yin* from *yang*, establishes the four seasons, equalizes

26. Ibid., 442. The passage from the "Basic Annals of Qin Shihuang" to which Wheatley here refers reads: "Thus he laid out and started to build the audience halls to the south of the Wei [River] in the Shanglin Menagerie. He started first with the A-fang 阿房, which was five hundred *bu* 步 from east to west and fifty *zhang* 丈 from north to south. . . . From all sides ran stepped passageways reaching directly from the hall to the Nan 南 (Southern) Mountains. He built an elevated passageway from A-fang across the Wei [River] to connect the hall to Xianyang, thereby to symbolize the Stepped Passageway [閣道], [which runs] from near the Celestial Pole across the Milky Way to connect with the lunar mansion Lay-out-the-Hall [營室]"; William H. Nienhauser, ed., *The Grand Scribe's Records*, vol. 1: *The Basic Annals of Pre-Han China* (Bloomington: Indiana Univ. Press, 1994), 148 (tr. modified). Earlier in the same chapter, Sima Qian provides the following, related, information: "In his 27th year (220 B.C.E.). . . . He built the Xin 信 Palace to the south of the Wei. Shortly after, he renamed the Xin Palace the Polar Temple 極廟 to symbolize the celestial pole. From the Polar Temple a road led to Mount Li 鄜, where he built the front hall of the Ganquan 甘泉 Palace. He constructed a walled corridor to connect it to Xianyang"; *ibid.*, 138 (tr. modified).

the Five Elemental Forces, deploys the seasonal junctures and angular measures, and determines the various periodicities: all these are tied to the Dipper.<sup>27</sup>

Beginning with the Han dynasty, the historical record clearly reflects the crucial symbolic significance of the Dipper in the cosmo-magical imagery associated with the imperial office. Let me just cite two examples. In the Grand Scribe's account of ritual procedures during the Former Han dynasty there is the following passage:

That autumn (112 B.C.E.), in preparation for a punitive expedition against Nanyue 南越, the attack was announced in prayers to the Supreme One. A banner decorated with images of the sun, moon, Northern Dipper, and rampant dragons was mounted on a shaft made from the wood of the thorn tree, to symbolize *Tianyi* the Heavenly Unity and its three stars, vanguard of *Taiyi* the Supreme One. [The banner] was called "Numinous Flag." When one prayed for military success, the Grand Scribe would hold it aloft and point in the direction of the country to be attacked.<sup>28</sup>

And then there is the slightly later account from the reign of the usurper Wang Mang 王莽, first and only emperor of the Xin 新 dynasty, which intervened between the Former and Later Han dynasties. This occurred in A.D. 17:

(In the 4th year of the Tainfeng 天鳳 reign period) in the 8th month, (Wang) Mang went in person to the place for the suburban sacrifice south of the capital to superintend the casting and making of the Ladle of Majesty (威斗). It was prepared from minerals of five colors and from copper. In shape it was like the Northern Dipper, measuring two feet five inches in length. (Wang) Mang intended (to use it) to conquer all rebel forces by means of conjurations and incantations. After the Ladle of Majesty was finished, he ordered the Directors of Mandates (from the Five Elemental Forces) to carry it solemnly on their shoulders in front of him whenever he went out, and when he entered the palace, they waited upon him at his sides.<sup>29</sup>

Six years later, during the rebellion of A.D. 23, when the burning palace was invaded and Wang Mang and his retinue were about to be killed by Han dynasty loyalists, the following scene ensued:

Meanwhile, (Wang) Mang, dressed all in deep purple and wearing a silk belt with the imperial seals attached to it, held in his hand the spoon-headed dagger of the Emperor Shun. An astrological official placed a diviner's board (*shi* 式) in front of him, adjusting it to correspond with the day and hour. The Emperor turned his seat, following the handle of the ladle (of the diviner's board), and so sat. Then he said, "Heaven has given the (imperial) virtue to me; how can the Han armies take it away?"<sup>30</sup>

Imperturbable in his faith in the protection of Heaven and the Dipper, in this pose Wang Mang and his Xin dynasty met their end.

27. *Shiji* (Beijing: Zhonghua shuju, 1972), 27.1291. As John Major points out, the Celestial Thearch or God of the Pivot was in Han times understood to refer to the star Kochab, which although many degrees from the celestial pole at the time, conventionally served as the pole star in astrological contexts. This star thus became the pivot of the heaven plate of Han cosmographs (diviner's boards), around which the image of the Dipper inscribed on the plate rotated while serving as a pointer; see Major, *Heaven and Earth in Early Han Thought*, 107.

28. William H. Nienhauser, ed., *The Grand Scribe's Records*, vol. 2: *Basic Annals of Han China* (Bloomington: Indiana Univ. Press, 2002), 239.

29. Joseph Needham et al., *Science and Civilisation in China*, vol. IV, part 1: *Physics and Physical Technology* (Cambridge: Cambridge Univ. Press, 1962), 272.

30. *Ibid.*

## SEASONAL TIME-KEEPING AND THE NORTHERN DIPPER

As in Homeric Greece, where the orientation of the Dipper's handle was used to time the sentries' watches at the siege of Troy, we saw above how the Dipper served as a celestial clock-hand, indicating the passage of the seasons and the hours of the night. This enormously useful function of the Dipper is certainly very ancient. There is evidence that at a much earlier epoch the bright star Arcturus (*α Boo*) or Dajiao 大角 participated in this function of the Dipper's handle until precession caused the ecliptic to move away from the vicinity, so that Arcturus's Left and Right Assistant Conductors "could not longer serve as indicators," as Sima Qian put it.<sup>31</sup> Arcturus's obsolescence (by the early first millennium B.C.) is also noted in Hesiod (ca. 700 B.C.), so we are here talking about a very ancient observational practice indeed.

In a more particularly Chinese application of the usefulness of the circumpolar stars, it was evidently also common practice to key their meridian transits to the positions of other stars by means of sight lines, and in this way by indirect means determine the location of the sun, moon, and other heavenly bodies among the lunar mansions not currently visible in the night sky. Given the resolutely polar-equatorial orientation of Chinese astronomy from the outset, this technique too is likely to have arisen quite early. It is clearly reflected in the astronomical decor painted on the lid of the famous lacquer hamper from the tomb of Marquis Yi of Zeng 曾侯乙, dating from 433 B.C., which also for the first time deploys in one image the entire sequence of twenty-eight lunar mansions. In the diagram of the heavens painted on the lid, the central character *dou* 斗 representing the Dipper is exaggerated in certain specific ways to point to the cardinal lunar mansions.<sup>32</sup>

## BRONZE AGE ANTECEDENTS

We have seen how the microcosmic-macrocosmic analogy between the emperor and *di*, the Celestial Thearch at the apex of the heavens, is abundantly documented for the early imperial period. In addition, as Paul Wheatley and others have shown for the Shang and Zhou dynasties, each of the basic modes of symbolism displayed by the ideal type-city throughout much of the ancient world is evident in the planning of ancient Chinese capitals. These aspects of traditional symbolism have been succinctly formulated by Mircea Eliade as follows: (1) Reality is a function of the Imitation of a Celestial Archetype. (2) The Parallelism between the Macrocosmos and the Microcosmos necessitates the practice of ritual ceremonies to maintain harmony between the world of the gods and the world of men. (3) Reality is achieved through participation in the Symbolism of the Center, as expressed by some form of *axis mundi*. (4) The techniques of orientation necessary to define sacred territory within the continuum of profane space involve an emphasis on cardinal compass directions.<sup>33</sup>

In addition to the cosmo-magical physical layout of the Shang and Zhou capitals and ritual centers mentioned above, abundant inscriptional evidence attests to the ancient Chinese preoccupation with each of these basic modes of symbolism. For example, the late-Shang

31. Joseph Needham et al., *Science and Civilisation in China*, vol. III: *Mathematics and the Sciences of the Heavens and the Earth* (Cambridge Univ. Press, 1959), 252; *Shiji*, 26.1257.

32. See Chen Cheng-yih 程真一 and Xi Zezong 席澤宗, "The *Yao Dian* and the Origins of Astronomy in China," in *Astronomies and Cultures* (Niwot, Colo.: Univ. Press of Colorado, 1993), ed. C. Ruggles and N. Saunders, 47ff. See also Sun Xiaochun and Jakob Kistemaker, *The Chinese Sky during the Han: Constellating Stars and Society* (Leiden: Brill, 1990), 20.

33. Quoted in Wheatley, *Pivot*, 418.

oracle bone inscriptions integral to the Shang kings' cultic and ritual practices contain numerous examples of divinations motivated by propitiatory impulses. In addition to those concerning *di*'s manipulation of powerful natural forces such as wind, rain, and the like, numerous other divinations relate to the bestowal of good harvests, relief from natural disasters, belligerent neighbors, etc., by the spirits of the Four Quarters, the Dipper,<sup>34</sup> and so on. These and other divinations also embody the conceptualization of Shang as the symbolic center from which the royal charisma radiates in all directions. From the inscriptions it is also clear that the supernatural realm, with *di* at its apex, mirrored the hierarchy of the temporal Shang state.<sup>35</sup> Though we have no explicit contemporary statement to that effect, it seems clear that in the Shang conception the Lord-on-High *di*'s abode, as in Warring States and Han times, was at the center of the heavens from which cosmic control appeared to emanate, a location made all the more mysterious even then by the lack of a pole star.<sup>36</sup> This absence of a distinctive pole star at this epoch as well is an issue that deserves further exploration, both because of the orientation of monumental architecture in the landscape, and to understand better the role of the Lord-on-High and the significance of the graph used to denote him (*di*). First, however, a brief account is perhaps in order of the career of the north-pole from the Neolithic through the Bronze Age.

#### MIGRATION OF THE POLE

Precession of the equinoxes may seem a rather sophisticated concept to be of concern to the Chinese in the mid-second millennium B.C., but for a civilization with an emphatically polar-equatorial astronomy and cosmo-political culture, the inconstancy of the pole's location ought to have been problematical. Although precession as a phenomenon was not adequately understood until the third century, well after the founding of the empire, its effects were certainly noticed and accommodated considerably earlier, most notably in the well-documented Taichu 太初 calendar reform of 104 B.C.<sup>37</sup> Given the early focus on the celestial pole in early Chinese astronomy, it would be surprising if the inconstancy of such a highly symbolic location did not register with observers in the Chinese Bronze Age. This is all the more true since in the late Neolithic period there was a comparatively bright star,  $\alpha$  Draconis (magnitude +3.65), ideally located close to celestial north. Indeed, in about 2775 B.C., Thuban ( $\alpha$  Dra), with a declination of  $89^{\circ}53'$ , was closer to the pole than our own Polaris [fig. 10]. Subsequently, however, and for the entire pre-imperial period, the track of the north pole did not bring it anywhere near as close to a comparably bright object which might serve as a pole star [fig. 11]. By the Han dynasty the celestial pole had migrated many degrees from its location in the late Neolithic, so that there can be little doubt that the circumpolar

34. A reflection of the protean role of the Dipper asterism whose most archaic attested identity (ca. 1300 B.C.) was already as a ladle *dou* 斗, or peck-measure.

35. Cf. Cho-yun Hsu and Kathryn M. Linduff, *Western Chou Civilization* (New Haven: Yale Univ. Press, 1988), 98.

36. The 1987 discovery of the Neolithic clamshell mosaics depicting eastern dragon, western tiger and Northern Dipper in tomb no. 45 at Xishuipo, dating from ca. 2500 B.C., is another possible indication of the long history of ancient Chinese cosmological focus on the North Pole; see Chen and Xi, "The Yao Dian and the Origins of Astronomy in China," 53; but see also David W. Pankenier, "The Mandate of Heaven," *Archaeology* 51 (1998): 30, for concerns about interpretations of this particular tomb.

37. See Christopher Cullen, "Motivations for Scientific Change in Ancient China," *Journal for the History of Astronomy* 24 (1993): 185-203.

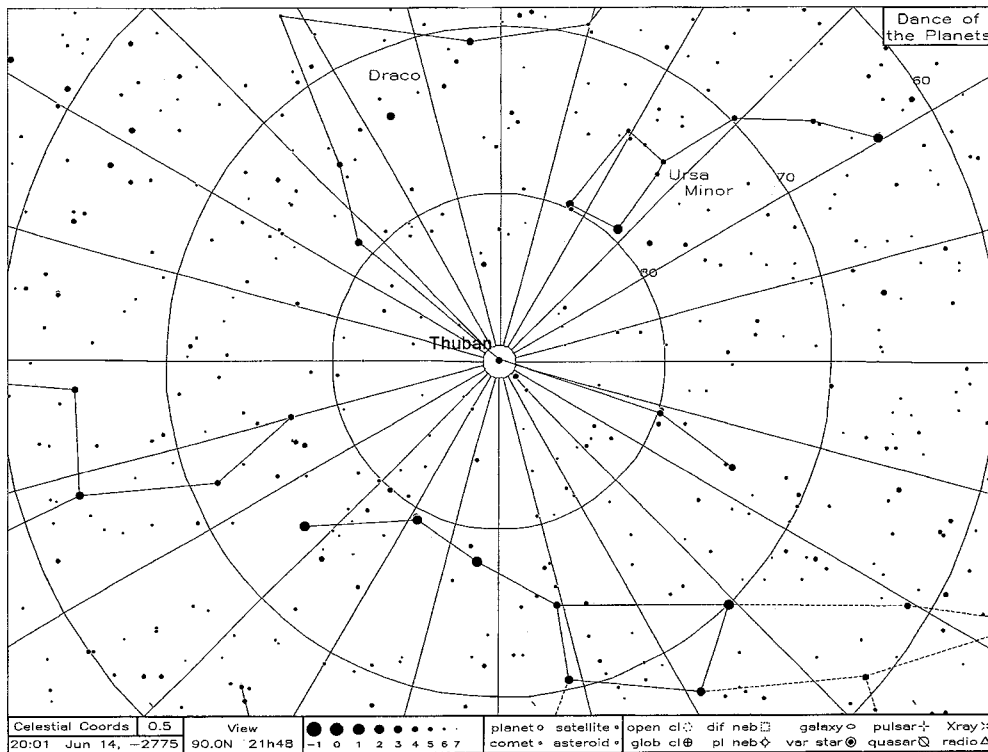


FIG. 10. Thuban, the late-Neolithic pole-star, at  $90^{\circ}$  N in 2775 B.C. (*Dance of the Planets* ©ARC Software).

constellations and imperial nomenclature now familiar to us are creations of late Warring States and Han times.<sup>38</sup>

#### A HANDOFF OF POLE STARS

As we saw above, however, the lack of a precisely located pole star did not deter the Shang royal architects, throughout the latter half of the second millennium B.C., from attempting to align their built environment with celestial north. This is especially true in the Shang ritual center of Yinxu near Anyang, where palatial foundations, city walls, royal tombs, and other structures were laid out with their longitudinal axis aligned on the pole. To cite just one well-known example, the consistent displacement from the present true north by some  $5^{\circ}$ – $12^{\circ}$  E displayed by late Shang tombs [fig. 12] is, as Joseph Needham observed, “not far from what we should expect if the Shang people had taken care to site their tombs in accordance with the astronomical north of their time.”<sup>39</sup> Needham was apparently of the

38. This is, of course, the reason why Sun and Kistemaker (see n. 30) subtitled their reconstruction of the sky in the early imperial period “Constellating Stars and Society.”

39. Needham, *Science and Civilisation*, 4: 313. On Kochab as the pole star of about 1000 B.C., see *Science and Civilisation*, 3: 261.



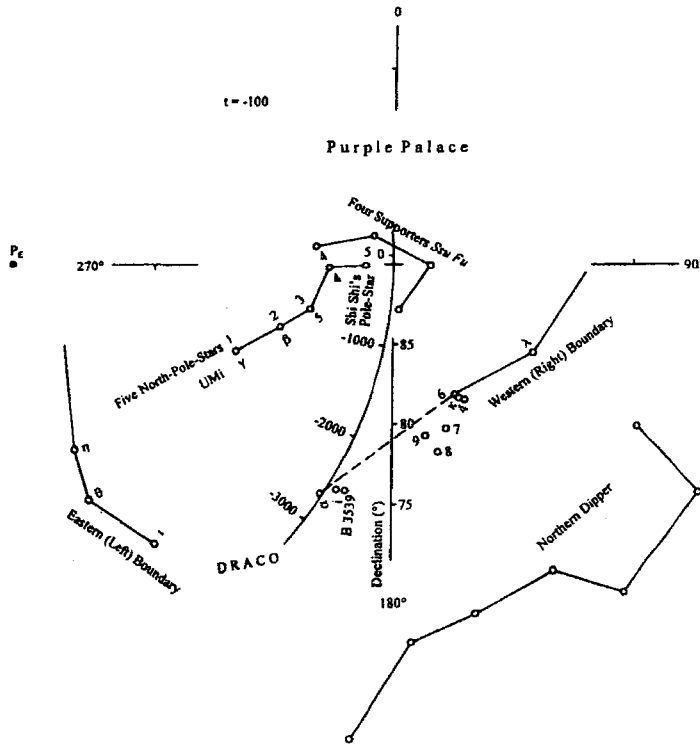


FIG. 11. The trajectory of the north celestial pole among the Chinese circumpolar asterisms from -3000 through -100 (after Maeyama, "Two Supreme Stars," 7).

opinion that Kochab, with a declination of  $83^{\circ} 26' 54''$  in 1200 B.C., roughly  $6.5^{\circ}$  from the pole, may have served as the pole star for alignment purposes. This is a reasonable enough conjecture, but there are other possibilities that might account equally well for the archaeological facts observed on the ground.

Below is a table showing the changing declinations of Thuban, the ancient pole star, and Kochab at intervals from -2000 to -600:

Epoch	Star	Declination	Polar Distance
-2000	Kochab	$82^{\circ} 01' 54''$	ca $8^{\circ}$
	Thuban	$85^{\circ} 32' 36''$	ca $4.5^{\circ}$
-1600	Kochab	$82^{\circ} 58' 11''$	ca $7^{\circ}$
	Thuban	$83^{\circ} 18' 00''$	ca $6.6^{\circ}$
-1200	Kochab	$83^{\circ} 26' 54''$	ca $6.5^{\circ}$
	Thuban	$81^{\circ} 04' 20''$	ca $9^{\circ}$
-1000	Kochab	$83^{\circ} 28' 46''$	ca $6.5^{\circ}$
	Thuban	$79^{\circ} 57' 56''$	ca $10^{\circ}$
-600	Kochab	$83^{\circ} 07' 05''$	ca $7^{\circ}$
	Thuban	$77^{\circ} 46' 13''$	ca $12.25^{\circ}$

Notice the changing polar distances of the two stars. Thuban, located precisely at the pole in 2775 B.C., grew ever more distant from  $90^{\circ}N$  over the course of the next two millennia,

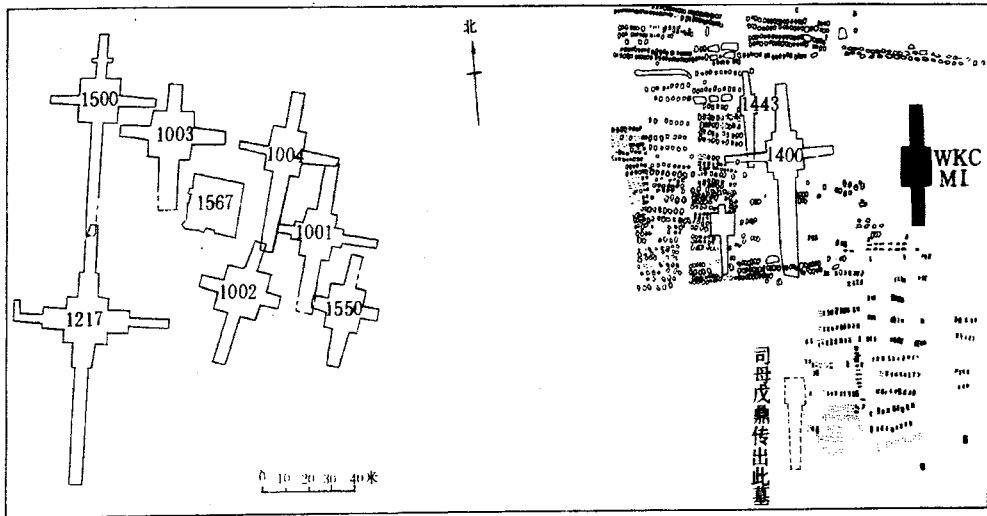


FIG. 12. Site plan of the late-Shang royal tombs at Xibeigang, Anyang, Henan (after *Xia Shang Zhou kaogu*, 106).

all the while Kochab, the brightest star (mag. +2.0, same as Polaris) within  $10^\circ$  of the pole at that epoch, grew progressively closer. Unlike Thuban, however, Kochab never approached closer than  $6.5^\circ$  to the pole, and by mid-1st millennium, during Confucius' time, the pole was withdrawing from the vicinity of Kochab. What is particularly striking, however, is that the crossover point during the sixteenth century B.C., when both stars would have been equidistant from the pole, coincides with the date of Shang ascendancy. I have long wondered about the curious fact that the somewhat earlier palatial foundations at Erlitou, which are attributed to a distinctly different cultural complex, identified as Xia by a number of archaeologists, depart radically from subsequent Shang period structures in being oriented roughly the same average number of degrees west of north, rather than east of north<sup>40</sup> [figs. 4, 5]. Perhaps a transition from the obsolete pole star Thuban to the upstart Kochab, located on the opposite side of the celestial pole, might provide an explanation for this phenomenon. What I am suggesting, therefore, is that along with the political hegemony and the new cult of the royal ancestors, the Shang would have introduced certain other ritual and cultural innovations, including using a different pole star for alignment purposes.<sup>41</sup> But there is still another possibility, slightly more conjectural, to which I now turn.

40. Erlitou Phase III, palace no. 1, for example, is oriented  $8^\circ$  west of north, while palace no. 2 is oriented  $6^\circ$  west of north. All Erlitou graves from Phases I to IV, in which the head is oriented to the north, are aligned within the range of  $0^\circ$  to  $10^\circ$  west of north. See Zhongguo shehui kexue yanjiusuo ed., *Zhongguo tianye kaogu baogao ji: Yanshi Erlitou* (Beijing: Zhongguo da baike quanshu chubanshe, 1999), 141, 397–98.

41. Or, perhaps, the same star was used by both Xia and Shang, but in the case of Xia the timing of observation had been consistently at a date and hour when the star's circular "orbit" around  $90^\circ$  N took it to its greatest elongation west of the pole. Whatever its source, this same alignment west of true north is also found in predynastic Zhou palatial foundations in Fufeng, suggesting again that the Zhou claim to be the successors to the Xia may be more than merely rhetorical (fig. 6).

ON THE ORIGIN OF THE CHARACTER *DI*

In what follows I would like to discuss how this northerly alignment might otherwise have been accomplished in practical terms, given the absence of a true pole star, which will also lead me to propose a new interpretation of the notoriously obscure shape of the oracle-bone character used to write the name of the Shang high god, *di* [fig. 13]. In view of the inconspicuousness of the stars near 90° N when the late-Shang-dynasty royal tombs were being constructed, some technique must certainly have been devised to locate true north in order to orient such structures in the landscape. In speaking of a technique, what I have in mind is something akin to the device commonly employed today to locate conveniently a naked-eye object among the vast array of stars. First one identifies an unmistakable constellation nearby, for example, to find Polaris one can use Ursa Major. By sighting along the line formed by the two bright stars Mirak and Dubhe ( $\beta$  and  $\alpha$  Ursa Major; fig. 10) forming the outer edge of the bowl of the Dipper, the eye is easily guided toward Polaris, the last star in the handle of Ursa Minor. This is about the simplest and most effective device one could imagine, both serviceable and, in my experience, still necessary, even in an age when we have a second magnitude star less than 1° from the pole. How much more indispensable would such a device have been in an age when there was no obvious star located precisely at the pole? Indeed, we know for certain that such techniques were later used by the ancient Chinese, as Joseph Needham has illustrated with regard to the sight-lines established for the circumpolar stars.<sup>42</sup>

Of course, one could argue that the objective of locating astronomical north could have been accomplished more conveniently had structures been oriented in conformity with a north-south axis determined by the bisection of the angle between the directions of the rising and setting sun. Indeed, such a procedure may be alluded to in an ancient ode from the early Zhou dynasty,<sup>43</sup> and it is explicitly recommended much later in the *Rites of Zhou*, as Paul Wheatley has pointed out.<sup>44</sup> However, alignments established by bisecting the angle between the directions of the rising and setting sun should still be accurate today, and should not have produced the significant easterly offset exhibited by Shang-dynasty architectural remains.<sup>45</sup> I am inclined to the opinion that at a time when the Lord-on-High's intentions vis-à-vis the Shang state were very much a national security concern, "taking direction" *literally* from the ultimate source of supernatural power, may well have called for a more direct, "polar" method.

*The Role of the Celestial Thearch, Lord-on-High*

Assume for the sake of argument that at some point, after the ancient pole star Thuban had departed noticeably from the north celestial pivot point, say 5° or so, the need arose for a convenient device to locate celestial north. Now, consider again the curiously obscure shape of the OBI character *di* itself [fig. 11]. Over the centuries lexicographers have advanced

42. See Needham, *Science and Civilisation in China*, 3: 232–33.

43. Pankenier, "Background," 121 n. 2; Wheatley, *Pivot*, 426; see also Kwang-chih Chang, *Shang Civilization* (New Haven: Yale Univ. Press, 1980), 160.

44. Wheatley, *Pivot*, 426.

45. Interestingly, the foundation of a small shrine that originally stood atop the underground tomb of Fuhao 婦好, consort of the thirteenth century B.C. Shang king Wu Ding 武丁, is precisely aligned to the cardinal directions, though the tomb beneath is not, suggesting that builders may well have used different techniques to orient the two structures, a solar method in the case of the shrine and a polar method in the case of the tomb beneath. See Zhang and Zhou, *Xia Shang Zhou kaogu*, 117, 120.

帝 禘 𠄎 𠄎 𠄎 𠄎 𠄎

孙诒让 《帝字皆作禘，说文二部：帝，禘也。王天下之号。从二，从声。古文作禘，与此便略同。》（《契五著例》上十八页下）

王襄 《古帝字，兵荒斋先生云：许书帝古文作禘，从部不，从同，象革帝之形。周与禘通。》（《汉石经与籀文第一集》）

孙诒让 《帝，禘四，一七，五。卜辞用帝为禘，壹见帝下。》（《甲骨文字编》九页）

孙诒让 《禘，禘九，一。疑帝字。癸巳卜，其早于五。》（《甲骨文字编》八五八页）

尹一萍 《按帝禘与禘必祭为禘，禘为束薪焚于示前，禘为交互植薪而焚，帝者以束薪而祭文也。三者不同处，仅在植薪之方式与范围，故辞高。帝一丈，犹地祇之吉。禘一斗也。》（《美国哈佛大学艺术博物馆甲骨卜辞考释》）

王德 《在上卜辞中，帝字的字形极其复杂，下面列其重要者：》

- a. 禘 (俗) (一五)
- b. 禘 (禘八一一)
- c. 禘 (禘一六)
- d. 禘 (禘二一)
- e. 禘 (禘二二)
- f. 禘 (禘二二)
- g. 禘 (禘二二)
- h. 禘 (禘二二)
- i. 禘 (禘二二)
- j. 禘 (禘二二)
- k. 禘 (禘二二)
- l. 禘 (禘二二)
- m. 禘 (禘二二)
- n. 禘 (禘二二)
- o. 禘 (禘二二)
- p. 禘 (禘二二)
- q. 禘 (禘二二)
- r. 禘 (禘二二)
- s. 禘 (禘二二)
- t. 禘 (禘二二)
- u. 禘 (禘二二)
- v. 禘 (禘二二)
- w. 禘 (禘二二)
- x. 禘 (禘二二)
- y. 禘 (禘二二)
- z. 禘 (禘二二)

FIG. 13. Common oracle-bone script variants of the character *di* “Lord-on-High” with commentary (after Yu Xingwu 于省吾, ed., *Jiagu wenzi gulin* 甲骨文字诂林 (Beijing: Zhonghua shuju, 1996), #1132, vol. 2, 1082). The first two variants illustrated predominate in the earliest inscriptions.

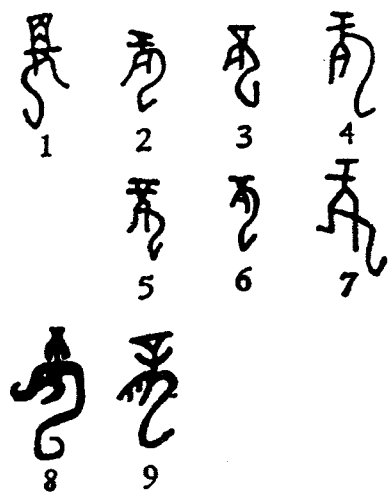


图2 甲骨文及金文“龙”字  
1—7. 甲骨文 8—9. 金文

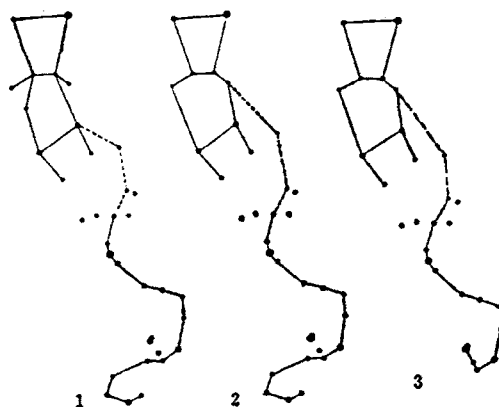


图3 苍龙之象构想图

FIG. 14. left: Shang oracle-bone script (#1–7) and Shang bronze variants (#8–9) of the character for *long* “dragon”; right: the Eastern Dragon constellation formed by linking together stars from Virgo through Scorpius (after Feng Shi 馮時, “Zhongguo zaoqi xingxiangtu jianjiu” 中國早期星象圖研究, *Ziran kexueshi yanjiu* 自然科學研究 9.2 [1990]: 112).

numerous etymologies purporting to explain the origin of this word and the graph used to write it, none of which has won general acceptance.<sup>46</sup> Indeed, that the etymology of this most important word anciently used to denote the high god at the apex of the supernatural pantheon remains obscure seems a bit of an embarrassment to sinology.<sup>47</sup> Let me suggest that the character *di* is representational in much the same way as depictions of certain constellations are, albeit in this case with a twist. There is precedent for this kind of representation in the oracle-bone inscriptions. One obvious example is the OBI character for *dou* 斗

46. Xu Shen 許慎 (ca. 55–ca. 149), in his *Shuowen jiezi* 說文解字, claimed that 帝 is equivalent to 諦, meaning “to look into, examine.” In a similar vein, later interpreters, influenced by the existence of the character 蒂 identified 帝 as a pictograph of the peduncle or footstalk of a plant. For discussion of the various modern interpretations and graphic analysis, see Yu Xingwu, ed., *Jiagu wenzi gulin*, #1132, vol. 2, 1082. Yu’s dissection of the graphic components of the character led him to propose (with Yan Yiping 嚴一萍) “burnt sacrifice” as the basic meaning, implying that “*di*-sacrifice” is used metonymically to stand for an otherwise nameless Lord-on-High. Of the oracle-bone variants illustrated in *Jiagu wenzi gulin* (fig. 13), the first two predominate in the Period I inscriptions from the reign of King Wu Ding. The shape of the character remains comparatively stable throughout the Anyang period inscriptions.

47. As early as the thirteenth century B.C. the same character was used in the inscriptions to denote both the Lord-on-High and the ritual sacrifice dedicated to him; later the two would be disambiguated by the addition of an ‘altar’ signfic 示 to the sacrificial term. From later accounts, especially in the early imperial period, we know that this sacrifice was conducted on a platform reminiscent of the Altar of Heaven which survives in the southern suburbs of Beijing. Performed in person by the emperor, like the sacrifice to Taiyi, this rite involved a role reversal, in that after the prayer of supplication the Emperor, now enacting the role of devoted subject, would face north and perform ritual prostrations like those prescribed for subjects entering his own presence.



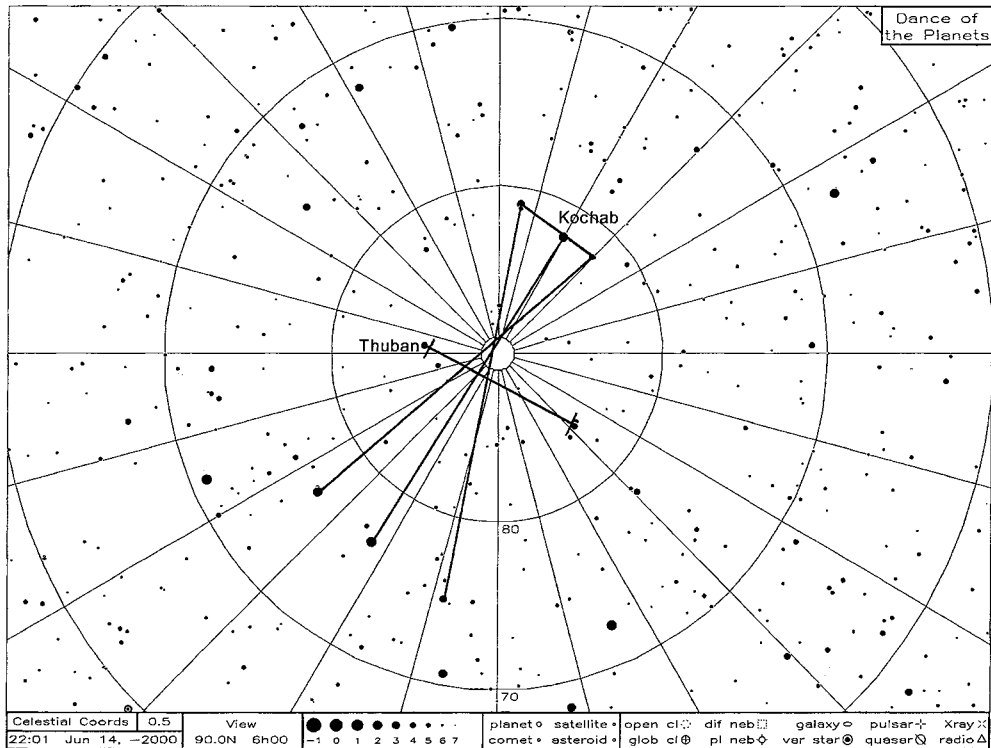


FIG. 16. Star chart with superimposed character *di* 帝; the intersection of the three lines connecting the principal stars in the handles of UMa and UMi marks the location of the north celestial pole in about 2000 B.C.

UMa). By comparing this chart with fig. 15, it is evident that the intersection of the three longitudinal lines of the character *di* coincides with the actual location of  $90^\circ$  N in about 2000 B.C. We do not know the epoch of creation of the character *di*, except that it had to have occurred considerably before the thirteenth century B.C., the date of the earliest Shang inscriptions, which already give evidence of a script and written language in fully developed form. What is especially noteworthy in this connection is that crossbars, crosshatching, or circling is a very common feature of the oracle-bone script designed to draw attention to the ideational focus of particular interest (cf. fig. 13), in this case, the intersection of lines marking the location of true north. Notice, too, that in the case of the crossbar of the character *di*, one possible location of which is depicted here, the endpoints are also marked by crosshatching, which could have been intended to mark the location of Thuban, the ancient Neolithic pole star on the left, and  $\kappa$  Dra on the right, possibly the original Supreme One star and object of the ancient astral cult already referred to above.<sup>48</sup> In other variants of the graph *di*, the small circle at the top could conceivably be intended to identify

48. For a recent study of the identity of stars associated with this cult, see Y. Maeyama, "The Two Supreme Stars, Thien-I and Thai-I, and the Foundation of the Purple Palace," in *History of Oriental Astronomy*, ed. S. M. R. Ansari (Dordrecht, 2002), 3–18. Above it was pointed out that Sima Qian was inclined to identify Taiyi with Kochab, a more logical choice in his day.

the location of Kochab, the brightest star in the configuration. And, it seems, the OBI character for *di* can even be written upside down, which is only surprising until one realizes that this stellar formation is constantly rotating about the pole.<sup>49</sup>

Needless to say, for the practical purpose of laying a foundation, some sort of sightline on the ground would have to have been established, perhaps using a front and backsight of some kind, but as a means of gauging the location of the pole the kind of device I am positing could conceivably have been employed. A template such as I have drawn on the star chart could have been fabricated to serve the purpose, and mounted on a rod like a shaman's staff. And perhaps it is not too farfetched to imagine this shape subsequently being adopted to symbolize the supreme numinous power resident at that strangely empty spot in the sky. The gradual obsolescence of the polar location so identified, by the time of Shang ascendancy in the mid-to late second millennium B.C., could also have produced the easterly offset of structures at this epoch, given the margin of error such a method likely entailed.

What about linguistic evidence for this hypothesis? Figure 17 reproduces the *xiesheng* series to which *di* 帝 belongs, from Karlgren's *Grammata Serica Recensa*. As many already are aware, and as Karlgren points out (at GSR877: k-1), *di* is actually phonetic in the second half of the series. If we try to isolate the root meaning of those words which appear to be intrinsically related in meaning, leaving aside for the moment examples like "hoof," "weep," "scrutinize," and so on which appear to be homophones, the result is:

- di* 敵 be a match for → opponent → enemy [~ be a match for in strength, power, wits, etc.]
- di* 蒂 peduncle; footstalk; i.e., part joining the flower, melon, etc., to the main stem [~ mate with; join]
- di* 締 join together as one [~ connect; join to] 締結：賈誼 [過秦論]：「合從締交，相與為一」
- di* 嫡 primary mate; principal wife → legitimate heir [~ mate; match]
- shi* 適 be fitting; suit; match [~ match; conform with] 適合，適宜，恰好 [商君書·畫策：「然其名尊者，以適于時也」]
- di* 禘 principal sacrifice to *shangdi* and/or the ancestors collectively
- di* 帝 Lord-on-High; celestial Thearch resident at the pole

This series implies a constellation of root meanings similar to "match, mate, fit, conform with," and so on, which would seem apt if the original meaning of the character derived somehow from the process of locating the north pole, *di*'s abode, by means of a template-like device designed to be congruent with the stellar configuration in the northern sky.<sup>50</sup>

This ancient sacral preoccupation with taking supernatural direction from the spirit of the celestial pole, literally bringing an aspect of numinous heaven down to earth, like the practical use of the Dipper's handle as a clock-hand and the keying of lunar mansions to the

49. See Liu Xinglong 劉興隆, *Jiagu wenzi jiju jianshi* 甲骨文字集句簡釋 (Zhengzhou: Zhongzhou guji, 1986), 178. The inscription is Hou 後 1.26.5 (though it must be admitted this occurrence is rare, possibly even unique in the inscriptional record).

50. It is also worth noting here the resemblance between the form of the early OBI character for *di* and the "spread-eagle" posture of Taiyi on the Warring States dagger-axe shown in fig. 7 above. Still another example of this archetypal "demiurgic" posture may be seen in an early depiction of the monstrous mythological miscreant Chiyou, "The Wounder." See Derk Bodde, *Festivals in Classical China: New Year and Other Annual Observance during the Han Dynasty (206 B.C.–A.D. 220)* (Princeton: Princeton Univ. Press, 1975), 123.



## BERNHARD KARLGREN: GRAMMATA SERICA RECENSA

877 帝 采 采 采 掃 諦 啼 蹄 禘 締 啻 啻 嫡 鐫 躡  
 a b c d e f g h i j k l m n o  
 捕 敵 謫 適 擗 謫

- 877 a—d. \**tiæg / tiei- / ti* sovereign, emperor, God (Shī). b. is Yin bone (E 35: 3), c. is Chou I (inscr. 63), d. is Chou I (inscr. 101).  
 e. \**tiæg / tiei- / ti* and \**l'ieg / l'iei- / t'i* and ? / *l'iai-* / *ch'i* comb-pin (Shī).  
 f. \**tiæg / tiei- / ti* examine (Kuanyin); loan for g. (Sün).  
 g. \**d'ieg / d'iei / t'i* weep, howl (Tso). — h. *id.* animal's foot, hoof (Yi).  
 i. \**d'ieg / d'iei- / ti* a kind of great sacrifice (Tso).  
 j. \**d'ieg / d'iei- / ti* and \**d'ieg / d'iei / t'i* knit together, condense (Ch'uts'i).  
 k—l. \**siæg / siæg- / shī* only (Shu). l. is Chou I (inscr. 89, sense of q. below).  
 This k. is really phonetic in the following series, but in the modern form it is slightly deformed.  
 m. \**tiék / tiék / ti* son of principal wife (Tso). — n. *id.* barb of arrow (Lie).  
 o. \**tiék / tiék / ti* animal's foot, hoof (Shī); \**d'ïék / d'ïäk / ch'i* check the foot, stop walking (Yi); loan for *id.* throw out, send away (Chuang).  
 p. \**t'iek / t'iek / t'i* and \**t'iek / t'iek / ch'ê* to pluck (Lie).  
 q. \**d'iek / d'iek / ti* enemy, opponent (Shu); resist (Tso); an equal, a match (Tso).  
 r. \**t'iek / t'iek / ch'ê* and \**d'ïék / d'ïék / ch'ê* blame, punish (Tso); loan for \**d'ïék / d'ïék / ch'ê* change of appearance of the sun (Tso).  
 s. \**siïék / siïäk / shī* proceed to, go to, come to (Shī) (in this sense also read *t'ïék / t'ïäk / ch'i* in Ts'ieyün); tend towards (Shu); happen (Shī); just then (Tso); be suitable to (Shī); (find suitable =) to like (Shī); (make suitable =) to moderate (Shu); agree, on good terms (Kuan); loan for *id.* only (Meng), scared (Chuang); loan for m. above (Shī), for q. (Lunyü), for r. (Shī); Gls. 194, 418, 1204, 1802.  
 t. \**d'ïék / d'ïäk / ch'i* scratch (Lie); throw (Chuang). — u. variant of r. to blame (Shī).

FIG. 17. Bernhard Karlgren, *Grammata Serica Recensa* (rpt. Stockholm: Museum of Far Eastern Antiquities, 1964), 233.

culmination of circumpolar stars, survived on a liminal level to inspire seminal metaphors about charismatic potency, until by early imperial times both Taiyi and the Celestial Thearch *di* experienced a major resurgence of devotional interest.

## CONCLUSION

By the end of the Shang dynasty in the early eleventh century B.C., the evolution of the Shang ancestral cult had culminated, not merely in the identification of the royal Shang ancestors with the Lord-on-High *di*, but even in the posthumous adoption of the title *di* for the ruler. With this, the precedent was assuredly set for the assertion of a genetic relationship between the temporal authority and the Lord-on-High, which was to be made still more explicit in the term "Son of Heaven" subsequently applied to Zhou-dynasty kings, and ultimately to all Chinese emperors.

Quite apart from metaphorical associations between the temporal power and the potency of the numinous void, whether in Confucian ideology or Taoist mysticism, one is struck by

a remarkably strong and persistent preoccupation with quite specific astral-terrestrial correspondences, especially concerning the north pole. Although well documented in the classical and imperial period for which abundant literary sources are available, the history of this preoccupation with the pivot of the heavens and its potent symbolism have not previously been traced back to the formative period in the second millennium B.C. As we have seen, however, by bringing together a variety of evidence from archaeology, the paleographic record, and the history of astronomy, it is possible to piece together a coherent picture that identifies the Celestial Thearch or Lord-on-High with the potency of the pivot of the heavens, at least by the founding of dynastic Shang in the early Bronze Age, and perhaps before.