

The han CosmiC Board:

a response To ChrisTopher Cullen

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栻 used in the Wang Mang biography in some editions of the Han Shu). Thus any attempt to de-

I have read with some interest Christopher Cullen's further points on the shih "cosmic board" (hereafter Cullen EC6). While the object of Mr. Cullen's study differs greatly from my own, he has given my article published in Early China 4, "The Han Cosmic Board" (hereafter Harper EC4), a care- ful reading and made a number of specific criticisms. With the exception of his remarks concerning my translation of the word shih, the bulk of Cullen's criticisms are grouped seriatim in his footnote 1.

I would like to first discuss the meaning of shih

fine 式 as the name for our astrological instrument must take into consideration the form ~ and account for the kind of material object denoted by it

The description of the shih in the Ta T'ang

Liu Tien 太唐六典, the conspectus of royal insti tutions compiled by Li Lung-chi (posthumously known as Hsuan Tsung; r. 712-756), provides an important clue for the identification of the shih.

This source states that "its chü 局 uses maple wood to make the heaven [plate] and heart of jujube to make the earth [plate]." (Ta T'ang Liu

The translation of shih:

and then work my way through Cullen EC6 footnote 1, following exactly the style of reference to my ar- ticle employed there by Cullen.

Tien [Kyoto, 1914; printed from blocks of 1724

Cullen EC6 p. 31 notes that, "In both Chou and Han texts the most frequent sense of the word shih is that of a rule, model or pattern:

47

it is often glossed as fa 法." This is in fact the very gloss for shih given by Hsü Shen in the Shuo Wen Chieh Tzu (see Tuan Yü-ts'ai, Shuo Wen Chieh Tzu Chu [1872 woodblock ed.], 5A.25a).

However, it is important to realize that there is

no occurrence of the graph 式 in pre-Han lit- erature which refers to the astrological device under discussion. The gloss of fa for shih in the sense of a model is irrelevant to the meaning of the word shih when it denotes this astrological device. When the graph does appear as the name of an astro logical instrument in the Shih Chi, the T'ang commentator Ssu-ma Cheng (second half of

the seventh century) does not gloss it with

fa but rather states that "shih 式 is in fact shih 栻" (Shih Chi [Palace ed.], 127.4a). It

is the graph 栻 and not 式 which appears in the Han Shu account of Wang Mang (Han Shu [Wang Hsien-ch'ien Pu Chu ed.], 99C.27a). The addition

of the signific 木 was a common lexical device for specifying a word which designated a useful ob- ject or implement, although even during Han times and later the inclusion of this signific when writing the graph for such a word was not always consistent (there was also a tendency to use

the signific 才 in place of 木; cf. the form

ed.], 14.60b). According to the Ta t'ang Liu Tien the construction of the shih is like a kind of chü, the word which denotes pprimarily the ancient gaming board used in playing liu po (see Shuo Wen

Chieh Tzu, 2A.28b: "another meaning [of chü] ls the thing on which one moves the playing pieces in po"). In Han times the liu po board was also

called a chü tao 曲道 (see Chou Tsu-mo 周祖

謨, Fang Yen Chiao Chien Chi T'ung Chien [Peking, 1956], p. 38) due to the distinctive "curved" design on the board, a cosmological pattern which modern sinologists have shown to be identical with the design of the TLV mirror. The testimony of the Ta T'ang Liu Tien indicates that the shih, like the liu po board and TLV mirror, belonged to a class of objects which incorporated a dyadic rep- resentation of heaven and earth within their de- sign. This fact is made absolutely explicit in the third century dictionary Kuang Ya. There we find the term ch'ü tao glossed by both shih1 and chü

(曲道栻局也; Wang Niensun, Kuang Ya Shu Cheng [Ts'ung Shu Chi Ch'eng ed.], ch. 8A p. 967. Curi­ously Morohashi, Dai Kanwa jiten, no. 14748 cites an expanded definition for shih1 from the Kuang Ya

which I have been unable to locate in any edition of the text.). While the cosmological design of these objects was fundamentally the same, the shih was distinguished by its two-tiered form — a round heaven plate mounted upon a square earth plate.

of the artifacts involved than on any specific argu­ment concerning the degree measurements for the lunar mansions included on the Dipper dial.

Thus when the word shih is used for an astro­logical device in Han texts it specifically denotes a material object of the same type as the liu po board and TLV mirror. When I translate shih as "cosmic board," I understand the word "board" to refer to the frame upon which a game is played or divina­tory procedures are carried out (as in "chessboard" or "Ouija-board"). Instead of providing a genuine analysis of the meaning of the word, Cullen errone­ously introduces fa as a gloss for the astrological device called shih and then engages in a specious

Cullen's hypothesis that a graduated de­vice should have developed from an ungraduated one (thereby implying that the Dipper dial, which has marks for dividing the ring of lunar mansions into degrees and also has degree measurements for the individual lunar mansions, should have devel­oped from the cosmic board, which has neither) is inappropriate with respect to the cosmic board. Shigeru Nakayama, A History of Japanese Astronomy (Cambridge Mass., 1969), pp. 54-57 characterizes the tendency of Chinese astrologers to rely on calendrical correlations instead of on astronomi­cal computations or observations. The arrange‑

ment of the directional symbols and lunar mansions on the cosmic board is a perfect example of this predilection for conformity with the calendrical cycle. All symbols on the cosmic board are evenly spaced in exact agreement with the dictates of the calendar. Divination with the cosmic board did not involve actual astronomical computations of celes­tial periods but rather consisted of counting out the sequences of the sexagenary cycle of Celestial Stems and Earthly Branches and interpreting this calendrical data in light of Yin-Yang and Five Phase correlations. The arrangement of the lunar mansions on the cosmic board reflects an abstrac­tion of a model of heaven, a refinement of correla­tions between the celestial periods and the passage of time in which the precise degree measurements derived from astronomical computation were no longer required. Nonetheless astronomical data of some sort would be required in the development of a system of calendrical correlations. Hence I believe that the development of an instrument like the Dip­per dial, which spaces the lunar mansions unevenly in accordance with the positions they actually occupy along the celestial equator, would neces­sarily precede the kind of abstracted arrangement found on the cosmic board.

discussion of the choice of English equivalents. If Cullen believes that the word "board" refers only to a plank of wood, one might excuse him when he opines that the word lacks "resonance." However, given his professed concern for the nuances of the word shih,  
I find it curious that he should then suggest that precise translations of words in classical Chinese

are not necessary among fellow sinologist, and choose to simply transcribe the word for the cosmic board in Wade-Giles romanization.

lb.2: I did indeed misrepresent the hypo­thetical model of an ancient compass proposed by Wang Chen-to. My phrase "was mounted on a pin in the center of a board" should be corrected to read "was placed in the center of a board." As stated in Harper EC4 footnote 4, the reference to the south-pointing ladle in the Lun Heng does not provide sufficient evidence to support Wang Chen-to's model of a ladle compass; by translating the phrase t'ou

chih yü ti 投之於地 as "thrown onto the earth-(?plate)," Cullen still assumes a relation between Wang Ch'ung's south-pointing ladle and the earth plate of the cosmic board which is not at all evi­dent in the text of the Lun Heng.

Cullen EC6 footnote 1:

Cullen's comparison of the box lid of Marksman I of Tseng with the heaven plate of the cosmic board is also inappropriate. The heaven plate is designed to conform to a strict calendrical model. The names of the lunar mansions on the box lid are arranged in an elliptical ring to conform to the configuration of the graph for the Dipper in the center (which is the dominant motif on the lid). Further, there is no systematic regularity to the placement of the lunar mansions on the lid. The Chinese scholars who have described the lid note that whoever inscribed the names began with chiao

2a.1: The cosmic board consists of two pieces: a round heaven plate and a square earth plate. Although the symbolism of a square earth and round heaven is very ancient, it is only in tombs from the Ch'in-Han period that Chinese archeologists have found significant material evidence which demonstrates the transfer of this dyadic concep­tion to a physical object, viz. the TLV mirror, liu po board, and cosmic board. When one considers the relation of the cosmic board to the TLV mir‑

ror and liu po board, the likelihood that the cosmic board deVeloped much earlier than them is not great. On the other hand, the discovery of the lacquer

box lid belonging to Marksman I of Tseng 曾侯乙 (burial dated 433 B.C.) which depicts the graph

tou 斗 for the Dipper surrounded by the names of the lunar mansions (this artifact had not yet been reported in Chinese journals at the time Harper EC4 went to press), indicates that objects bear­ing representations of heaven alone may be traced

back to the late Spring and Autumn or early Warring States period. It is the idea that concrete repre­sentations of heaven, such as we have with the Dip­per dial and the lacquer box lid, may have preceded the dyadic square and circle constructions typi‑

cal of the Han period which leads me to suggest in Harper EC4 p. 2 that the Dipper dial served as the prototype for the heaven plate of the cosmic board. This hypothesis is based more on stylistic analysis

角 Horn and finished with ch'e 車 (i.e. chen 軫 Axletree) because of the large gap left between

these two lunar mansions (see Wang Chien-min 王  
民, Liang Chu 梁柱, and Wang Shengli 王勝利, "Tseng Hou I mu ch'u-t'u de erh-shih-ba hsiu ch'ing

lung pai hu t'u-hsiang," 曾侯乙墓出土的二十八宿青龍白虎圖象 Wen Wu 1979.7: p. 40).

2a.3: I concur with Mr. Cullen that there is no reference to Knot Star in Western Han litera­ture.

By referring to yüan ch'i "primal vapor" as the most basic of life forms I am not leaping to any extremes but simply repeating an idea which is ubiquitous in Han literature. Hsü Shen pro‑

2a.4 and note 18: If by characterizing my

use of "vapor" to translate ch'i as reductionist Cullen means to say that it is a very literal rendering of this important word then I can‑

not object. Specialists in the Shang script have identified the graph for ch'i in the oracle bone inscriptions and later forms of the graph are also found in bronze inscriptions of the Chou period. In these sources and in the received lit­erature of the ancient period ch'i is primarily associated with clouds, rain, and the steam which rises from sacrificial offerings (Maekawa Shōzō

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前 川 presents a convenient summary of the

analysis of the early graph forms for ch'i by a number of scholars in his contribution to Ki no shisō 気の思想, [Tokyo, 1978], pp. 13-29). In

later cosmological and physiological theory ch'i retains this sense of moist matter which pervades the atmosphere, animating living organisms when it becomes concentrated within them. It secondarily refers to the breath or the substance which we breathe, but does not parallel the etymology of words like pneuma and air. According to the four element theory of the Greeks, air denotes the invisible gaseous substance breathed by all land animals and is associated with a quality of dry­ness. Of the possible English equivalents, vapor comes closest to suggesting the qualities of mist and moisture which are at the root of the concept of ch'i.

Star" or simply hsing "Star"). It was the position of Great Year in the sequence of Jupiter stations which calendrical specialists used to fix the months in the Jovian calendar. The identification of the Dipper with Great Year is made in Huai Nan Tzu 3,

where the handle of the Dipper is called Minor Year (hsiao sui 小歲; sui alone always refers to

Great Year and not to Jupiter. Huai Nan Tzu [Chu Tzu Chi Ch'eng ed.], ch. 3 p 42). See Liu Pan 劉坦, Chung Kuo Ku Tai Chih Hsing Sui Chi Nien

(Peking, 1957), pp. 190-192 for a discussion of this passage from Huai Nan Tzu 3 and the significance of the Dipper in calendri­cal theories. Because the rotation of the Dipper was thought to follow the movement of Great Year, the Earthly Branch for the month and direction indicated by its handle also corresponded to the

station occupied by Great Year. Thus there

not exist an absolute conceptual

tion between the Jupiter stations in the sky and their respective ter.restrial cor relates.

The discovery of the box lid from the tomb of the Marksman of Tseng which depicts the graph tou

for the Big Dipper surrounded by the names of the lunar mansions provides us with evidence that the use of the Dipper in calendrical calculations is much more ancient than was previously believed. Wang Chien-min, Liang Chu, and Wang Sheng-li, op. cit., pp. 44-45 analyze the day designation "chia

the visible counterpart of Great Year (t'ai sui 太歲), the counter-rotating correlate of Jupi ter (Jupiter was known as sui hsing 歲星 "Year

vides early testimony to the cosmogonic theory that heaven and earth were formed by the divi­sion of primal vapor. in his gloss of ti "earth" at Shuo Wen Chieh Tzu, 13B.16a. Similar statements occur in the Po Hu T'ung and in the prophecy and weft text literature (see the discussion of the development of the concept of yüan ch'i by Togawa

yin 甲 寅 third day" which is inscribed under the

lunar mansion Gullet (k'ang 亢) on the box lid and are able to demonstrate that its appearance there indicates both the day and month of the Marksman's death. Their explanation may be summarized as fol­lows: a bronze bell in the tomb is inscribed with

oyal reign year corresponding to 433 B.C. wArich indicates the year of death; reconstructed calendrical tables for this peri.od show that the third day of the fifth month of t.his year bore the cyclical designation chia yin; the lunar mansions

Yoshio 戶川 芳郎 in Ki no shisō, op. cit., pp. 3-12). Wang Ch'ung also believed in the primacy of primal vapor. He opens the discourse "Wu Hsing" in the Lun He ng with the statement that "Men receive primal vapor from heaven ..." (Liu Pan-sui 劉盼

遂, Lun Heng Chi Chrieh [Peking, 1957], ch. 2 p. 29). In "Ssu Hui" Wang defines primal vapor as "the germinal essernce of heaven and earth"; and since a

Gullet and Horn lie within the Jupiter station which bears the Earthly Braonch designation ch'en

辰; in the fifth month the handle of the Dipper points to ch'en according to the Chou calendar; the lunar mansion Gullet serves to indicate the fifth month on the box lid; and the month and day of death recorded on the box lid in terms of the

Dipper determinant (tou chien 斗建) are indepen‑

contains pure primal vapor when it is born, Wang judges the popular taboo on breast feeding a newborn infant to have no basis in fact (1Lun Heng, ch. 23 p. 469).

2b.1 note 20: Cullen's observation that the stars of the Dipper are fixed relative to the celes­tial position of the Jupiter stations is of course correct and in Harper EC4 footnote 20 I did not in­tend to suggest otherwise. However ancient Chinese calendrical theories were premised upon concrete correlations between the celestial and terrestrial spheres, and the identification of the Jupiter sta­tions (as well as the lunar mansions) with cor­responding regions of the Chinese realm was made

dently corroborated by the coincidence of the day designation chia yin for the third day of the fifth month of 433 B.C. in the reconstructed calendar. It is obvious, then, that the box was made specifi­cally for the burial and that the decoration on it

cehestial configuration, on the day of

Marksma,n's death.

by Warring States times at the latest. Further, the Dipper played a special role in the astrologi­cal and calendrical arts which were based upon the observation of the Jupiter cycle: it functioned as

around

a fixed ring of lunar mansions, the Dipper dial from the tomb of the Marksman of Ju Yin appears to be a specimen of just such a device. The Dipper dial consists of a top disc marked with the seven stars of the Big Dipper and a bottom disc on which the names and degree measurements of the lunar mansions have been arranged. The use of the Dipper dial to perform the kind of calendrical calcula­tions which are in evidence on the box lid of the

Marksman of Tseng would be a natural extension of the role of the Dipper in the calendrical sys‑

tem based on the Jupiter cycle. The idea that the movement of the Dipper was noted in terms of the lunar mansions rather than the Earthly Branches

is also indicated by the following passage in Shuo Yüan "Pi en

Based on the one among the twenty-eight lunar

mansions towards which its bowl and handle point there is auspiciousness and inauspi­ciousness as well as misfortune and good for­tune. (Shuo Yüan [Ts'ung Shu Chi Ch'eng ed.],

18 p. 175)

As Cullen EC6 footnote 75 observes, this passage might equally refer to the rotation of the Dipper on the heaven plate of the cosmic board relative to the sequence of lunar mansions which are arranged around the outer edge of the earth plate. Never­theless, the Dipper di al provides a clear model

for the kinds of calendrical calculations used in designing thne box lid and described in the Shuo

and I strongly disagree with Cullen's nega­tive appraisal of the function of the Dipper on the Dipper dial (Cullen EC6 p. 34).

3a.1: I agree with Cullen that the Two Cords of the Huai Nan Tzu cannot be said to denote the solsticial and equinoctial colures brut refuse

to believe that these cosmic ropes are anything as prosaic as "fixed lines defining thre direc­tions north-south and east-west for a terrestrial observer." (Cullen EC6 footnote 1). The Two Cords are primarily a part of the cosmic architecture which binds the universe together. In Huai Nan Tzu 3 the Two Cords (which do run north-south and east-west) are complemented by the Four Hooks

(ssu kou 四鉤, which are positioned in the northeast, southeast, southwest, and northwest corners of the universe). Hayashi Minao has per‑

ceptively analyzed the construction of the TLV mirror in terms of these descriptions in Huai Nan Tzu 3. The four T shapes which emerge from the four sides of the earth square at the center of the mirror represent the Cords and the four V shapes opposite the corners of the earth square

represent the Hooks (Hayashi Minao 林巳奈夫 "Kan kyō no zuhyō ni, [san. ni](http://san.ni/) tsuite," 漢鏡の

について Tōhō Gakuhō 44 [1973J, pp. 11-14; summarized in Michael Loewe, Ways to

[London, 1979J, p. 74). Within this model of the cosmos the Dipper constitutes a rotating axis

which passes across the Cords and Hooks over the

the year (as described in the Huai Nan Tzu 3 passage cited in Harper EC4 p. 3 and foot-note 26; see below for more discussion of the Dip­per as a cosmic axis).

Harper EC4 p. 3 and footnote 28 adduces a

passage from the Wu Hsing Ta I which still suggests that the solsticial colure may have been located along the Big Dipper in Chinese cosmological belief. The line formed by the first and seventh stars of the Dipper are said to constitute a warp‑

thread (ching 經) analogous to the warp-thread

from tzu 子 to wu 午 which binds heaven and earth from north to south. Given the belief in ancient Chinese cosmology that heaven was held

together by the Big Dipper (to be discussed in full immediately below), there is every likelihood that the Chinese perceived the relation of the Dipper

to the solsticial colure (which marks the north-south axis of heaven) in much the same way as other ancient peoples.

3a.3: Perhaps additional citations will help to allay Cullen's suspicion that t\_Jh0e reference

in the calendrical treatise of the Han Shu to the Big Dipper as a kind of celestial support is merely a metaphor "left over from defunct schemes of cosmography" (Cullen EC6 footnote 1). Already

in the writings of the pre-Ch'in period we find ex­plicit references to the concept of a heaven held up by the Dipper. Chuang Tzu "Ta Tsung Shih" in­cludes a passage which parallels section 39 of the Lao Tzu, listing the cosmic phenomena and mythical per sonalities which were transformed by obtaining the Way. In this list we read: "the Support-cord

Dipper (wei tou 維斗) obtained it and for time does not err" (Nan Hua Chen Ching Chu Shu

南華真經註疏, HY 745 [HY refers to the num­ber assigned to the texts in the Tao Tsang in the Harvard-Yenching Tao Tsang Tzu Mu Yin Te, 7.30b). The significance of the term wei tou is explained most fully in the subcommentary of Ch'eng Hsüan­ying of the T'ang: "The Support-cord Dipper is the Northern Dipper. It is the Mainstay and Support-cord for the multitude of stars and thus it is called the Support-cord Dipper" (ibid.). A similar listing in Han Fei Tzu "Chieh Lao" offers a slight variant on the Chuang Tzu passage: "The Support-cord Dipper obtained it, therewith to perfect its majesty" (Han Fei Tzu [Chu Tzu Chi Ch'eng ed.], ch. 6 p. 108).

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Pan Ku's own statement in the calendrical treatise that the Big Dipper is the "Mainstay of heaven" (t'ien chih kang 天之綱) is seconded by Liu Hsin in a quotation from his astrological

writings excerpted in the Five Phase treatise of the Han Shu. Near the end of this treatise Pan Ku

discusses the various interpretations of a portent recorded in the Tso Chuan for the fourteenth year of Seignior Wen, when a stellar explosion (i.e., a comet) passed through the bowl of the Big Dip­per, and notes Liu Hsin's interpretation as fol­lows: "According to Liu Hsin the Northern Dipper has a delimited space within which it rotates and

the Four Stars (ssu hsing 四星, i.e., the four sets of constellations associated with the spirits of the four directions; see Lun Heng "Wu Shih," ch. 3 p. 70) lie within it. The Dipper [starsJ are the Mainstay and Filament stars for the Three Chrono­grams of heaven (i.e. Sun, Moon, Stars)." Liu then

explains the significance of the portenrt in terms of the Dipper's function as the Mainstay and Filaments of heaven (Han Shu, 27C-C.20b).

5a.2-5b.2: The underlying thesis of Harper EC4 was that, "By reconstructing the cosmologi­cal significance of the Big Dipper in Han times as well as the magical function of the Dipper on the cosmic board, we may perceive more clearly how a perception of the cosmos has been translated into a material object, an instrument for divination, and how, in turn, the cosmic board served as the basis for a wide range of beliefs and practices in ancient Chinese astrology and religion." (Harper EC4 p. 2). This led me to speculate that various Dipper meditations practiced in Taoism of the Six Dynasties period show a clear affiliation with the Han cosmic board (Harper EC4 p. 5). Since 1979 I have found confirmation for this thesis over and over again in literature of the Han, Six Dynas­ties, and T'ang periods. Cullen's statement that the cosmic board had no influence on religion is uninformed. The role of the Big Dipper in Chinese religion and the penetration of ideas related to

Tzu, ch. 3 p. 46 uses these four terms consecu­tively to denote the four seasons and directions: "With Compass [Spring and east] there is birth, with Square [Fall and west] there is killing, with Transverse [Summer and south] there is growth, and with Balance-weight [Winter and north] there is concealment."). Thus in the Shih Chi passage we

are being told that Wei P'ing first determined the proper east-west orientation on the cosmic board based on his observations of the position of the Moon, the Dipper and the Sun; and from this first determination he also brought the north-south axis into alignment.

northern quarter is Water ... it grasps the Balance-weight and controls Winter." Huai Nan

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3b.1 note 33: I regret the error made in the name of Tjan Tjoe Som. I happened to be follow­ing the bibliographic citation to his translation of the Po Hu T'ung in Hermann Koster, Symbolik Des Chinesiscihen Universismus (Stuttgart, 1958), who

gives Som as the surname.

3b.3: Cullen appears to be making a facetious objection to my use of the word "axis" to describe the positioning of the Big Dipper on the Dipper dial. He himself notes that the Dipper lies along one of the diameters of the heaven plate of the cos­mic board and comments that the Dipper on the heaven plate "has been displaced so that it occupies the centre of the heaven-disc and usurps the astronomi­cal position of the pole star" (Cullen EC 6 p. 40).

The Lun Heng provides substantial evidence to support this interpretation of the placement of the Big Dipper in Han cosmological schemes. In "Ou

Hui," where Wang Ch'ung argues for a distinction between phenomena that occur due to coincidence and those that result from contact between things which share the same vapor (ch'i), we find the following statement about the Dipper determinant (tou chien, the direction indicated by the handle of the Dipper):

In the first month it is fixed at yin 寅 and 1he bowl of the Dipper crushes (p'o 破) shen 申. This is not because being fixed at

* shen to be crushed, but rather because
* rotating transverse (i.e. the Dipper) coincidentally generates this effect on its own (Lun Heng, ch. 3 p. 48).

Even Wang Ch'ung, although he rejects the notion

* a causal relation exists between each, of the Earthly Brainches in the duodenary sequence for the calendar months (as signified by the term p'o "crushed" and eleven others which are enumerated in Huai Nan Tzu, ch. 3 p.48), acknowledges that when the handle of the Dipper points in one direc­tion the bowl is aligned with the direction ex­actly opposite to it in such a way that the handle would always be first and the bowl seventh in the sequence of Earthly Branches.

the cosmic board into religious belief and practice is a complex subject and I hope to write more extensively on it in the future. For the present I

will only outline some of the more salient facts which demonstrate the direct influence of the cos­mic board on Chinese astrology and religion.

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At the outset I must introduce an important aspect of the cosmic board which I did not men­tion in Harper EC4 because it did not appear on the Former Han cosmic board from the tomb of the Marksman of Ju Yin: it is the system of twelve menstrual spirits which appears on the first cen­tury A.D. cosmic board recovered in Kansu in 1972 (Harper EC4 footnote 9 and Wen Wu 1972.12:9-21) and all other specimens of the cosmic board dis­covered to date. Rather than a numerical designa­tion for each month arranged around the perimeter of the heaven plate as on the Former Han cosmic board, the name of the spirit which presides over that month appears in its place. Thus the spirit of the first month is known as Pellucid Bril‑

liance (cheng ming 徵PP) and corresponds to the Earthly Branch hai 7r, the spirit of the second month is Dipper-bowl (k'uei 魁) and corresponds

to hsü A,and so forth through the remaining ten months (for graphic variants in the names of these

spirits see Ch'en Meng-chia Ft\_ fZ, "Han Chien

Nien Li Piao Hsu," 漢簡年曆表C K'ao Ku Hsüeh Pao 1965.2: pp. 139-140). As can be seen from the  
spirit known as Dipper-bowl, there is a connection between certain of the menstrual spirits and the constellation of the Big Dipper. Thus the spirit of the eighth month, which lies directly under­neath the last star in the handle of the Dipper on the heaven plate, is appropriately titled Mainstay

of Heaven (t'ien kang 3k.KJ).

On examining the astrological literature we find that this duodenary set of spirits is essen‑

tial for the calculations of the Six Jen ;-1- method of divination associated with the cosmic board (see Harper EC4 footnote 54). A listing and esoteric explication of their names is found in the Wu Hsing Ta I in the form of quotations from two cosmic board astrological manuals, the Six

Jen Cosmic Board Canon ;-1-44,k1 and the Cosmic

Board Canon of the Occult Maiden --A7:04a. These passages are translated and annotated in

Nakamura Shōhachi 中村璋八, Gogyō taigi ;5\_41- kik (Tokyo, 1973), pp. 163-170.

On the basis of the cosmic boards excavated from Later Han tombs and the Six Jen divination literature we can ascertain that the beli ef in these menstrual spirits developed within the con­text of the cosmic board and the astrological tech­niques associated with it. That the spirits which figure in cosmic board divination commanded general belief in the Later Han is evident in the Lun Heng. In "Nan Sui" Wang Ch'ung criticizes calendrical taboos and makes the following statement about divination with the cosmic board: "The twelve spirits on the cosmic board--Pellucid Brilliance,

Companion of Dipper-bowl (ts'ung k'uei the

spirit: of the third month), and the like--are

all described as celestial spirits by the special- ists in craftsmanship and techniques. They regu­larly occupy the positions of tzu and ch'ou (i.e.

they occupy positions in the duodenary cycle of Earthly Branches) and all possess vaporous energy

which crashes into and knrocks against

(Lun Heng, ch. 24 pp. 495-496; following the Ch'ing commentator Sun I-jang, I have emended the first

graph of the passage, huo A, to shih .

An unusual Han bronze, previously in the col‑

lection of Tuan-fang (1861-1911), provides

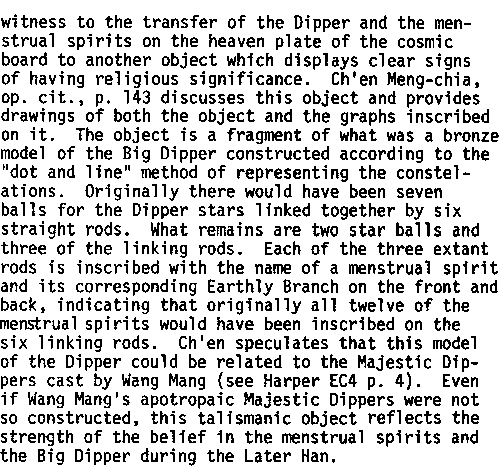
early witness to the transfer of the Dipper and the menstrual spirits on the heaven plate of the cosmic board to another object which displays clear signs of having religious significance. Ch'en Meng-tang

op. cit., p. 143 discusses this object and pro­vides drawings of both the object and the graphs inscribed on it. The object is a fragment of what was a bronze model of the Big Dipper constructed according to the "dot and line" method of repre­senting the constelations. Originally there would have been seven balls for the Dipper stars linked together by six straight rods. What remains are two

star balls and three of the linSking rods. Each of the three extant rods is inscribed with the name of a menstrual spirit and its corresponding Earthly Branch on the front and back, indicating that or

ig‑

inally all twelve of the menstrual spirits would have been inscribed on the six linking rods. Ch'en speculates that this model of the Dipper could be related to the Majestic Dippers cast by Wang Mang (see Harper EC4 p. 4). Even -*-*!T Wang Mang's apo-• tropaic Majestic Dippers were not so constructed, this talismanic object reflects the strength of the belief in the menstrual spirits and the Big Dipper during the Later Han.



In addition to the twelve menstrual spirits, the Cosmic Board Canon of the Occult Maiden lists twelve more spirits who are coordinated with the menstrual spirits in Six Jen divination (see Naka­mura Shōhachi, op. cit., pp. 171-172). This group

is headed by Monad of Heaven (t'ien i The

remaining eleven spirits are laid out according to a system which places some in front of and some behind the Monad of Heaven. Five of these adjunct spirits, beginning with Leaping Serpent (t'eng she

.1t .$;.6), are said to occupy positions in front of Monad of Heaven and the remaining six spirits, beginning with Sovereign of Heaven (t'ien hou

3k. g), are said to be behind the Monad of Heaven. Divination with the cosmic board requires initial numerological calculations based on the Six Jen method (which are briefly explained in Yen Tun‑

chieh a..54M41, "Pa liu jen shih p'an,"

44 Wen Wu Ts' an K' ao Tzu Liao 1958.7: 20-23). After the numerological correlations have been

determined and the positions of the two sets of twelve spirits are fixed on the cosmic board, the

interpretation is derived from Yin-Yang and Five Phase correlations which result from the par­ticular astrological configuration of the time of divination.

4

A number of passages in the Wu Yüeh Ch'un  
Ch'iu of Chao Yeh (Later Han) describe astrological  
calculations utilizing both sets of twelve spirits

nation (see Yao Chen-tsung 姚振宗, Sui Shu Ching

jen pu tou chih shu 94 -/-t -#-r

HY 782, 1.11a). The explicit association of the ancient cosmic board divination system with the Dipper walk is not limited to this single refer­ence. In the collected writings of the Taoist mas‑

ter Po Yü-ch'an FT..L.A,F1 (active in the early part of the thirteenth century) Po declares that, "the great essen tial of the methods of the Eight Gates, Occulted Chia, Grand Monad, Six Jen, and Orphaned Vacancy resides in the Mainstay Pace" (Hai Ch'iung

Chi Chih K'ao Cheng mk-\*gli.t411, in the K'ai Ming Erh Shih Wu Shih Pu Pien, v. 4 p. 5594).  
The other text, attributed to the Occult Maiden, is only a few pages long and obviously a bare fragment of some larger document. Yao Chen-tsung, op. cit., p. 5595 doubts that it can be from the Essential Methods of the Cosmic Board Canon of the

Occult Maiden (Hsüan Nü Shih Ching Yao Fa -A-7-0

ikPgAirr) listed in the Sui Shu bibliographic catalogue (neither, I believe, can it be from

the Cosmic Board Canon of the Occult Maiden which is quoted in the Wu Hsing Ta I. Nonetheless, the presence of three Six Jen divination texts in the Tao Tsang, two of which can be proven to have been in circulation during the Six Dynas­ties, indicates that the astrological techniques associated with the cosmic board from Han times were studied and preserved in Taoist circles.



The absorption of cosmic board divination techniques into Six Dynasties Taoism is not an isolated phenomenon, but part of a general pat­tern. The fact that during the Six Dynasties the ancient Han divination techniques were studied most assiduously by Taoists and exploited by them in their religious practices is well known. graphical accounts of eminent Taoists frequently refer to their mastery of Han divination texts, as well as of the prophecy and. weft text litera‑

ture (ch'an wei). The biography of T'ao Hung-ching

(456-536), wr.itten. by his nephew T'ao

0T, states that he was especially fond of the divination arts associated with the "Five Phases, Yin-Yang, Wind Directions, Signs of Vapors, Grand

Monad, and Occulted Chia" (Yün Chi Ch'i Ch'ien

IL-1;fk [HY 1026], 107.7b). Tao Hung-ching also authored a number of works on divination (ibid., 107.9b).

have seen that many of the texts on cos­mic board divination are attributed to the Occult Maiden and the Yellow God. This attribution has its origin in the Han prophecy and weft text

li te rature. According to the River Crta of the

Dragon fish (Lung Yü Ho T'u itA041 Rd), Heaven dispatched the Occult Maiden to give battle talis­mans to the Yellow God so that he could vanquish Ch'ih Yu (see the fragments of this text gathered

together in Yasui Kōzan 4:-*,*g-f.,11 and Nakamura Shōhachi +44-4:in ed., Jūshū Isho shūsei

10\*--\*\*A, [Tokyo, 1971], v. 6 pp. 89-90). The tradition of the battle talismans transmit‑

ted to the Yellow God by the Occult Maiden spawned a whole genre of martial literature, such as the Battle Canon of the Occult Maiden (Hsüan Nü Chan

Ching -A--7-00g; Yao Chen-tsung, op. cit., p. 5550) and the Methods of Warfare Asked of the Occult Maiden by the Yellow God (Huang Ti Wen

Hsüan Nü Ping Fa Itt iv, -A- ; ibid.); and

the attr-ibution of cosmric board divination texts to these two figures is related to the influence

of this genre.

These traditions also had a great impact on Taoism. Most all of the hagiographic literature on the Yellow God in Taoist sources refers to the visit from the Occult Maiden. (See, for ample, the hagiography of the Yellow God in HY 1026, 100.16b-17b.) The account of the Occult Maiden (who in Taoism became the Occult Maiden of the Nine Heavens and was the special emis­sary of the Queen Mother of the West) written by

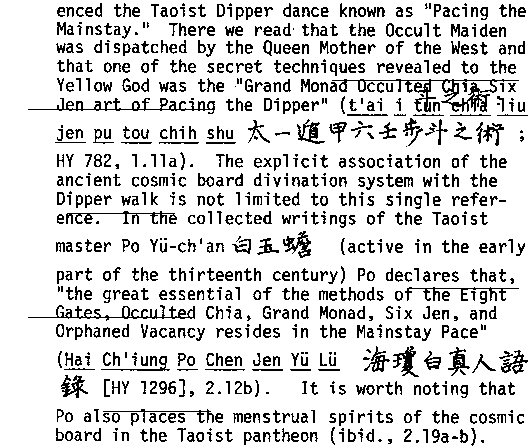
Tu Kuang-t'ing -i:jk,)7A-L (active ninth-tenth cen­turies) records that among the talismans which the Occult Mai den conveyed to the Yellow God were

the battle tokens of the Six Chia and Six Jen and the Five-Yin Five-Yang Occulted Chia Cosmic Board

(Yung Ch' eng Chi Hsien Lü -C34\*il1L-a 6.3b).

The account of the visit of the Occult Maiden to the Yellow God in the hagiography of the Queen Mother of the West, also in Tu Kuang-t'ing's col­lection, is the most crucial for understanding

how ideas associated with the cosmic board influ­enced the Taoist Dipper dance known as "Pacing the Mainstay." There we read that the Occult Maiden was dispatched by the Queen Mother of the West and that one of the secret techniques revealed to the Yellow God was the "Grand Monad Occulted Chia Six Jen art of Pacing the Dipper" (t'ai i tun chia



Po Chen Jen Yü Lü "if:;AFT [HY 1296],

2.12b). It is worth noting that Po al so places the menstrual spirits of the cosmic board in the Taoist pantheon (ibid., 2.19a-b),

In Early China 4 I suggested that the spatial symbolism of the cosmic board could have served as a kind of mandala, a blueprint for the cosmic orientations of a Dipper walk (Harper EC 4 p. 5). The similarity of the T'ang Taoist mirror studied by E.H. Schafer to the heaven plate of the cosmic

board showed that the model of the cosmic board was being used in a Taoist context (Harper EC4 foot­note 59; and E.H. Schafer, "A T'ang Taoist Mirror," Early China 4, 56-59). The scriptures on Dipper walking written during the Six Dynasties within the Shang Ch'ing sect of Taoism do refer to the prac­tice of painting the stars of the Dipper on a cloth which the adept then places on the ground and steps on while performing the Dipper walk (HY 1305, 8b), but we have no clear proof that this ritual mat

was conceptually related to the heaven plate of the cosmic board.

Surprisingly it is not in Taoist scriptures but rather in the sutras of the esoteric Mantra sect of Buddhism that we find the cosmic board itself pre‑

sented as one of the mandalas used in meditation. The sutra, an example of indigenous Chinese scrip­tural writing, is the Esoteric Cosmic Board Sutra [which provides] Instantaneous Divine Verification of the Five Great Ākāśagarbha Bodhisattvas Wu

This secret instruction was transcribed by Hsü Mi. While there is no reference to the use of a cosmic board in the Shang Ch'ing literature, the cosmic board would have been an accessible device for cal­culating the position of the Dipper as required in this meditation (see Harper EC 4 footnotes 43 and 44 for a description of how to make such a determi­nation with the cosmic board).

A century or so after the time of Hsü Mi, T'ao Hung-ching had a highly sophisticated demonstra­tional armillary sphere built precisely for use in his religious pursuits (such devices were known in the fourth century but were not common, and it is unlikely that the Hsüs would have possessed one). According to T'ao's own testimony, quoted in the biography by T'ao I, "this [demonstrational armil­lary sphere] is something which is required for cultivating the Way and is not merely for the use of astrological officials." (HY 1026, 107.10b).

Astrological calculations, and especially the position of the Dipper, play an important role in the liturgical practices of Taoists in Taiwan today. Michael Saso, The Teachings of Taoist Master Chuang (New Haven, 1978), pp. 244-250 discusses the use

of the Dipper in performing the rites of what Saso calls "Thunder Magic." Saso notes that Taoists in Taiwan make a special chart which shows the posi­tion of the handle of the Dipper for any time of the night or day (p. 248). Thus devices like the cosmic board or the armillary sphere have been re­placed by some kind of Dipper almanac.

Make a circular form for the heaven plate,

from two ts'un five fen to three ts'un in

Although it may not have been his intent, I should thank Mr. Cullen for providing me with so many opportunities to elaborate on important as­pects of the cosmic board which I had only briefly described in my earlier article. As I stated at the beginning, Cullen's object in studying the cosmic board differs greatly from my own. I prefer to simply recognize that we each have a different approach to the subject matter and I do not intend to discuss further the specific points in Cullen EC6 with which I disagree. However in his writing Cullen displays an attitude towards the language and thought of the ancient Chinese about which I feel compelled to comment. This attitude is re­vealed when Cullen attempts to characterize tradi­tional cosmological beliefs as literary metaphors "left over from defunct schemes of cosmography" (Cullen EC6 footnote 1) or when he refers to the esoteric terminology of the prophecy and weft text literature as a "literary conceit" invented by men from the backwaters of cosmological thought (EC6 footnote 71). By removing the language that the Chinese used to express their cosmological beliefs

to the limbo of metaphor and literary conceit Cullen has freed himself from the difficult task of pene­trating the subtleties of thought that characterize the ancient mind and can proceed to judge ancient cosmology according to any standard that suits him. I consider this a disingenuous form of scholarship.

of the rotation of the stars then one should position oneself in line with the direction pointed to by the Dipper and actualize the Steps [of the Dipper Walk]. (HY 1010, 9.1a)

Ta Hsü K'ung Tsang P'u-sa Su Chi Ta Shen Yen Pi

Mi Shih Ching 五大虛空藏菩薩速疾大神驗秘密式經), said to have been translated by the T'ang monk Vajrabodhi (Chin-kang Chih 金剛

智; Taishō 1149). In the Mantra sect the man­dala asso ciated with Ākāśagarbha consists of the

bodhisattva placed at the center and four forms of him portrayed under different names in the four directions. The instructions for constructing this mandala in Taishō 1149 are in fact based upon the model of the cosmic board to which have been added a host of Buddhist spirits. Let me translate some of the sentences in the description of how to construct the mandala which most clearly describe features of the cosmic board:

diameter. The earth plate is six or seven ts'un on all four sides... At the verytop of the heaven plate paint the image of the King of the Seven Stars (i.e. the

Dipper). Next on the earth plate ... paint ... pictures of the twenty-eight lunar mansions. (Taishō 1149, v. 20 p. 607, register b-c)

There can be no doubt that the mandala described in this sutra is patterned after the Chinese cos­mic board. Buddhism was influenced by Taoist star cults during the T'ang and Sung periods (cf. E.H. Schafer, Pacing the Void [Berkeley, 1977], pp. 138-139) and we should not discount the possibil­ity that the cosmic board model in this sutra was adopted from Taoist sources.

There is yet another way in which the cos­mic board might have been employed in Six Dynas­ties Taoism. Among the secret oral instructions

(pi chüeh 祕訣) contained in the Chen Kao 真誥 (HY 1010) -- the text compiled by T'ao Hung-ching from original manuscripts of the divinely revealed Shang Ch'ing scriptures written down by Yang Hsi

楊羲 and his patrons Hsü Mi 許謐 and Hsü Hui 許

翽 (see Michel Strickmann, "The Mao Shan Revela­tions; Taoism and the Aristocracy," T'oung Pao 63 [1977], 1-64) -- is one which is intended to ex­plicate the procedures described in a Shang Ch'ing Dipper meditation text:

When the scripture says, "At the time of performing the operation do it by facing the north and holding the secret document," it is speaking of those who have just begun to study the mysteries of the Perfected and who have not yet penetrated the subtle depths. They do not know the orientations of the stars nor

are they aware of the determinant indicated by the Occult Dipper (i.e. the Big Dipper).

Thus they can only pursue the operation by facing the north and holding the document. If one already understands the intent of the

writing and is familiar with the time sequence

56