

## Harvard-Yenching Institute

---

The Genesis of an Icon: The "Taiji" Diagram's Early History

Author(s): François Louis

Source: *Harvard Journal of Asiatic Studies*, Vol. 63, No. 1 (Jun., 2003), pp. 145-196

Published by: [Harvard-Yenching Institute](#)

Stable URL: <http://www.jstor.org/stable/25066694>

Accessed: 15/01/2015 20:16

---

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



*Harvard-Yenching Institute* is collaborating with JSTOR to digitize, preserve and extend access to *Harvard Journal of Asiatic Studies*.

<http://www.jstor.org>

# The Genesis of an Icon: The *Taiji* Diagram's Early History

---

FRANÇOIS LOUIS

*The Bard Graduate Center*

THE name *taiji tu* 太極圖, or “Diagram of the Supreme Ultimate,” has come to refer to a number of Chinese cosmological images that explain the concept of a primal entity and its generative principle. Most of these *taiji* diagrams are associated closely with the individual thinkers who conceived or perpetuated them. But some entered the learned discourse on cosmology at unknown points in time, and their intellectual provenance is shrouded in myth and legend. The following study aims to clarify the provenance of one of these diagrams. It consists of the eight trigrams (*bagua* 八卦) surrounding a circle that illustrates the *taiji* (fig. 1). This circle is divided into two intertwined dark and light halves to represent *yin* and *yang*. Near its center are two dots, which are usually interpreted as depicting *yang* within *yin* and *yin* within *yang* respectively.

Ming scholars, who were the first to discuss the history of this diagram, generally considered it a divine revelation from the remote past and believed that sages such as the Duke of Zhou and Confucius still knew about its value for divination. The scholars recognized references to the diagram by these sages in certain passages of the *Yijing*. But at some later point in antiquity, they presumed, the

This paper has gone through numerous incarnations and I would like to thank those who have critically commented on the manuscript and helped prepare it for submission to *HJAS*: Anne McGannon, Craig Clunas, Marion Lee, and the anonymous readers of *HJAS*.

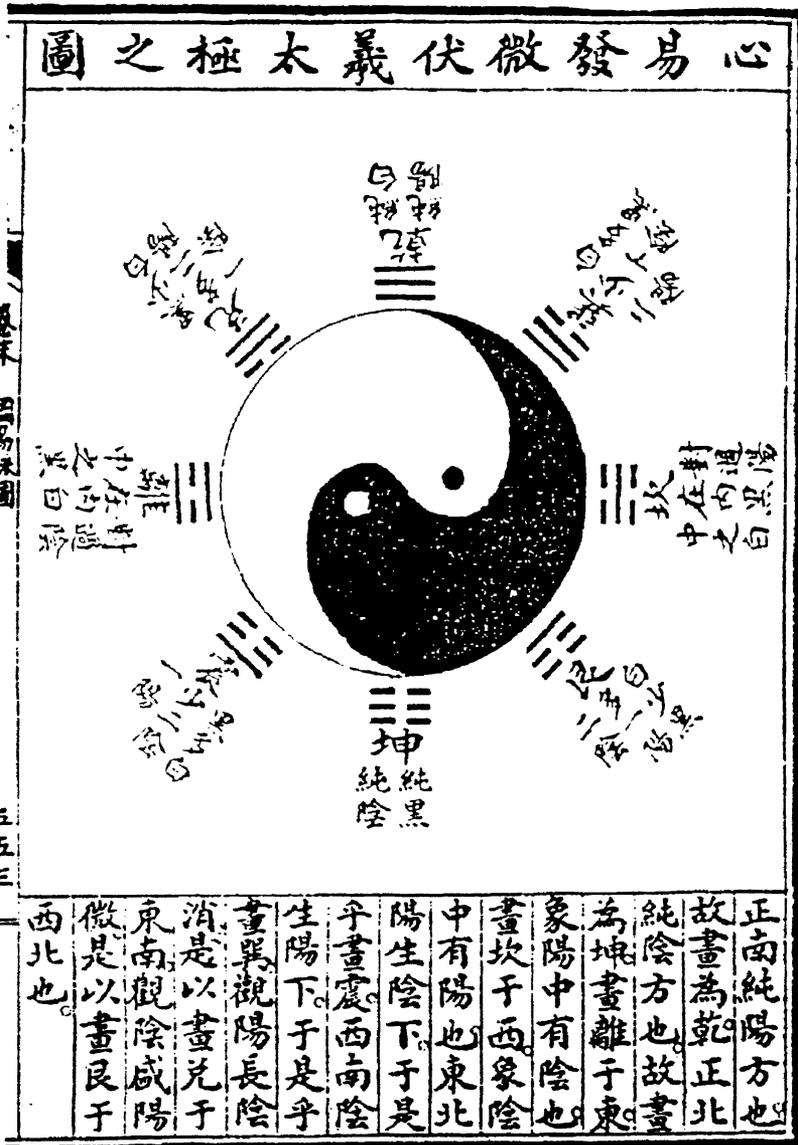


Fig. 1. “The Taiji Diagram of the Heart of the Changes as Mysteriously Revealed by Fuxi,” from Lai Zhide, *Yijing Laizhu tujie* (1688; rpt., Chengdu: Ba Shu shushe, 1989), p. 553.

diagram somehow vanished, for no references to it could be found in texts of the Han, Six Dynasties, or Tang periods. Song sources, on the other hand, seemed to indicate that the *taiji tu* had (re-)emerged in Daoist circles of the tenth century, and that it was transmitted in secret by alchemists as part of their esoteric doctrine. Yet because the diagram could not be verified in texts from this period, some of the more discriminating Ming reviewers concluded that it must have remained secret during the Song as well. Even the eminent and critical Qing scholar Hu Wei 胡渭 (1633–1714), who in the 1690s conducted one of the most comprehensive studies on the history of cosmological diagrams, subscribed to the secret transmission explanation.<sup>1</sup> Hu's research is widely quoted today, and the *taiji tu* is therefore generally considered to have been passed down secretly by certain Daoist adepts and Neo-Confucian thinkers of the Song period before becoming more widely known in the fourteenth century.<sup>2</sup> The critical opinions of later *Yijing* experts such as Zhang Huiyan 張惠言 (1761–1802), however, who felt that secret transmission theories were unconvincing attempts to come to terms with a disconcerting lack of tangible evidence, are rarely acknowledged.<sup>3</sup> According to Zhang, the *taiji tu* grew out of the cosmological speculations of early Ming scholars.<sup>4</sup>

Why is the early history of the *taiji tu* so elusive? And how can we locate the provenance of this image, which was celebrated by men such as Hu Wei as a revelation of the prime mysteries of the

<sup>1</sup> Hu Wei, *Yitu mingbian* 易圖明辨, Congshu jicheng chubian, vols. 438–439 (Beijing: Zhonghua shuju, 1985), p. 81.

<sup>2</sup> For summaries of the most frequent versions of secret transmission theories, see Zhang Qicheng, ed., *Yixue da cidian* 易學大辭典 (Beijing: Huaxia chubanshe, 1992), pp. 486ff.; and Wu Hua, ed., *Zhouyi da cidian* 周易大辭典 (Guangzhou: Zhongshan daxue chubanshe, 1993), pp. 719–20. The most recent Western contribution to the history of the image does not go beyond early Qing scholarship and mainly relies on the important study of Isabelle Robinet on the concept of *taiji*, which, however, is concerned with pre-Ming issues and only hints at the diagram's history in passing, see Stephen Little, *Taoism and the Arts of China* (Chicago: The Art Institute, 2000), p. 131; Isabelle Robinet, "The Place and Meaning of the Notion of *Taiji* in Taoist Sources Prior to the Ming Dynasty," *History of Religion* 29.4 (1990): 374–76, 388.

<sup>3</sup> Zhang Shanwen, *Zhouyi cidian* 周易辭典 (Shanghai: Shanghai guji chubanshe, 1992), pp. 99–100.

<sup>4</sup> Zhang Huiyan, *Yitu tiaobian* 易圖條辨 (1888), in *Wuqiubeizhai Yijing jicheng* 無求備齋易經集成 vol. 146 (Taipei: Chengwen chubanshe, 1976), p. 23b.

*Yijing*, of the Daoist Huang-Lao School, and of alchemical practice all in one?<sup>5</sup> This study proposes to abandon the traditional search for a specific inventor, which has dominated explanations of the diagram's origin. Instead it will view the traditional explanations as evidence for the construction of an intellectual pedigree necessary for the diagram's acceptance in the cosmological discourse of the Ming and early Qing periods. The murkiness of the *taiji tu*'s early history is seen here as the result of understanding the diagram as a primeval unit instead of recognizing its main constituent elements—the trigram circle and the dynamically divided *yin-yang* circle—as separate entities with an early history independent of each other. Categorically different in their pictorial qualities, these two graphic signs, it is argued here, communicate on different cognitive levels and originally functioned in disparate systems of visual expression and symbolic relevance. While the trigram circle was a prime symbol essential for divination and cosmological analysis, the *yin-yang* circle evolved in the context of decorative imagery and became a standard diagrammatic symbol with a characteristic iconography only after its combination with the trigram circle. Textual data point to the fourteenth century as the time when these two graphic entities were first combined, but the earliest material evidence readily available today dates only to the sixteenth century, reflecting the increasing popularity of the image toward the end of the Ming period.

#### THE ICONOGRAPHY OF THE *TAIJI TU*

Although its name as well as the design of the central circle differed somewhat from case to case in Ming and early Qing illustrations, the basic iconography of the *taiji* diagram remained the same (figs. 1, 11, 12, 19, 20, 21). It is always shown with the white half of the central circle towards the top, the whirl rotating clockwise, the two antithetical dots near the center, and the eight trigrams located in the same positions. A closer look at the symbolism of these specific iconographic elements shows that the design of the central swirls and the positions of the trigrams are carefully coordinated.

<sup>5</sup> Hu Wei, *Yitu mingbian*, p. 81.

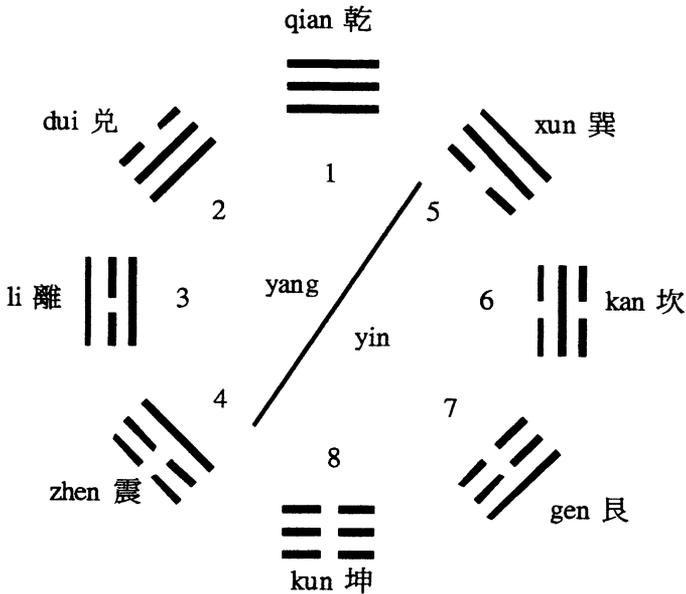


Fig. 2. The circular *xiantian* arrangement of the trigrams (Fuxi sequence).

In the *taiji tu* the trigrams are arranged according to the so-called *xiantian* 先天 or “prior to heaven” system. Unlike other ways of displaying the trigrams in a circle, the *xiantian* circle depicts the waxing and waning of *yin* and *yang* while at the same time pairing each trigram with its respective opposite across the circle (fig. 2). In this arrangement the trigrams are understood to illustrate the interaction between heaven and earth and the creative principles underlying the cycles of nature, such as the phases of the moon, the daily and yearly course of the sun, and the seasons. The trigrams in the *xiantian* circle are read in a specific sequence, which starts with *qian* 乾 at the top. Because broken lines symbolize *yin* and solid lines *yang*, *qian* represents pure *yang*, being made up of three solid lines. It stands for heaven, light, or the south, and is consequently placed at the top of the trigram circle, which can be read like a map.<sup>6</sup> The

<sup>6</sup> Traditional Chinese maps usually depict south on top, north at the bottom, east on the left, and west on the right. In the 1688 illustration (fig. 1) the reading according to the directions of the compass is indicated in the text below the diagram. Lai Zhide 來知德, *Yijing Laizhu tujie* 易經來註圖解 (Chengdu: Ba Shu shushe, 1989), p. 553b.

*xiantian* trigrams are then read counterclockwise following their gradually decreasing *yang* valence, through *dui* 兌 and *li* 離, which both consist of two thirds *yang* and one third *yin*, to *zhen* 震, which consists of one *yang* line at the bottom and two *yin* lines at the top. Because these four trigrams all have a *yang* line at the bottom, they are considered to be essentially *yang*. The *yin* trigrams all have a broken *yin* line at the bottom; they are still read in decreasing *yang* increments, but now the sequence evolves in a clockwise sense starting with *xun* 巽 in the southwest (top right) and going through *kan* 坎 and *gen* 艮 to *kun* 坤. This shift in direction is the result of having the *yin* trigrams arranged in opposition to the *yang* trigrams on the other side of the circle.

The same information of *yin* and *yang* waxing and waning in juxtaposition is also visualized in the design of the swirls of the central *taiji* circle. *Yang* decreases from the top to the bottom, while *yin* decreases from the bottom to the top. What the trigrams express in a conceptual and numerical manner, the central design visualizes in a much more illustrative mode. Essentially, the trigrams lay out in eight points what is traced as a smooth curve by the dividing line between the *yin-yang* swirls. Several Ming and early Qing depictions of the *taiji tu* explain the exact correspondence between the *xiantian* trigrams and the design of the *taiji* circle. The 1688 print illustrated in Figure 1 may serve as our reference here.<sup>7</sup> Right next to the pure *yang* trigram *qian* at the top, the *yang* swirl is white all the way from the circle's edge to its center. The widest part of the black *yin* swirl, on the other hand, corresponds to the trigram *kun*, which represents pure *yin*, the earth, darkness, or north. The explanations of the correspondence between the swirls and the trigrams are written directly behind the trigrams. Underneath *qian* is written "pure white—pure *yang*," underneath *kun*, "pure black—pure *yin*."<sup>8</sup> Next to *dui* in the southeast, the central circle matches the trigram's composition by showing "some black and a lot of white." The black and white dots near the center of the circle are seen as visual paraphrases of the

<sup>7</sup> This illustration appears in the *Yijing Laizhu tujie*, an enlarged edition of Lai Zhide's (1525–1604) *Zhouyi jizhu* 周易集注 of 1599. Cf. Larry James Schulz, "Lai Chih-te (1525–1604) and the Phenomenology of the 'Classic of Change' (I Ching)" (Ph.D. diss., Princeton University, 1982), pp. 43, 251–56. See also figure 20.

<sup>8</sup> Lai, *Yijing Laizhu tujie*, p. 553b.

trigrams *li* and *kan*, which mark the east-west axis. *Li*, in the east, consists of a *yin* line between two *yang* lines. Within the central circle, this configuration is represented by the black dot within the white tip of the *yang* swirl—or as the explanation in the 1688 print states, “*li*: *yin* is within two opposites—the black within white.” The case of *kan* is just the opposite: the white dot is within the black tip on the left.

The connection Ming and early Qing commentators saw between the design of the central *taiji* circle and the *yin-yang* code of the *xiantian* trigrams must be recognized as a primary reason for the difficulties in determining the origin of the *taiji* diagram. For viewing the *taiji* diagram as a coherently designed unit allowed commentators to explain its provenance as the provenance of either of its components. The most influential of these explanations equated the discovery of the *taiji tu* with that of the *xiantian* trigram circle,<sup>9</sup> presumably because Chinese commentators considered the *xiantian* trigrams, not the *taiji* circle, to be the semantically dominant element of the *taiji* diagram. The determinant role of the trigrams is not surprising. The eight trigrams have enjoyed prime status as explanatory symbols of nature's concrete forces ever since the *Yijing* became the standard source for divination and cosmological speculation. The only other symbols of equal importance in Chinese cosmological reasoning were numbers. More telling than words, trigrams were seen as revelatory abstractions of the structure of the universe, as they were primary images (*xiang* 象) designed at the beginning of civilization by Fu Xi 伏羲, primeval sage and China's first creator of culture.<sup>10</sup>

<sup>9</sup> This view is summarized and adopted, for example, in a very thorough and useful new study on the early reception of the *Yijing* by Hermann G. Bohn, *Die Rezeption des Zhouyi in der Chinesischen Philosophie, von den Anfängen bis zur Song-Dynastie* (München: Herbert Utz Verlag, 1998), pp. 138–39.

<sup>10</sup> On Fuxi as the creator of the trigrams, see *Xici* B2. For summaries of recent theories concerning the origin of the trigrams, see Paul Fendos, “Fei Chih's Place in the Development of ‘I Ching’ Studies” (Ph.D. diss., University of Wisconsin), 1988, pp. 26–58; Dominique Hertzner, *Das alte und das neue Yijing: Die Wandlungen des Buches der Wandlungen* (München: Diederichs, 1996), pp. 137–41; and Mark Edward Lewis, *Writing and Authority in Early China* (New York: SUNY Press, 1999), pp. 281, 471 n. 135.

THE *XIANTIAN* TRIGRAM CIRCLE

The *yin-yang* valence of the *xiantian* trigrams, and thus the specific sequence in which these trigrams are read, comes about through a process that is simultaneously arithmetic and graphic and is best explained through a diagram (fig. 3).<sup>11</sup> The diagram is read from the bottom up and shows *taiji* separating into *yang* and *yin* (*yang* is represented by a solid line on the right and *yin* by a broken line on the left). These symbols are divided again into their respective *yang* and *yin* complements, and these are divided once more. The resulting trigram permutations are then read from bottom to top and from

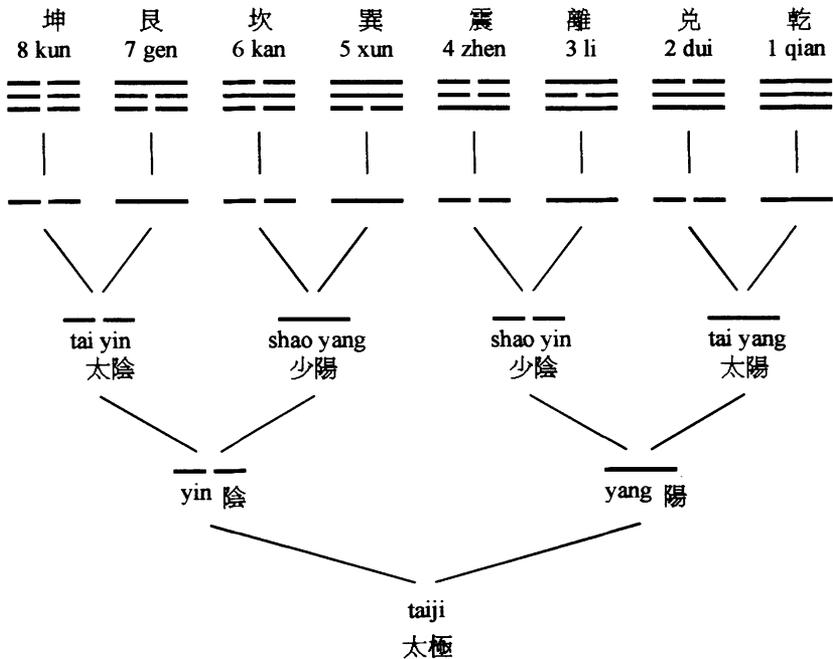


Fig. 3. The creation of the *xiantian* trigram sequence.

<sup>11</sup> This diagram is based on the example in *juan* 10 of Huang Zongxi 黃宗羲 (1610–1695), *Song Yuan xue'an* 宋元學案 (Beijing: Zhonghua shuju, 1986), vol. 1:414, where it is credited to Shao Yong 邵雍 (1012–1077). Zhu Xi (1130–1200) had already described and illustrated this type of diagram, see Huang Zongxi, *ibid.* 1:387–91; Bohn, *Die Rezeption des Zhouyi*, p. 449.

*yang* to *yin*. This system of binary permutations is justified by a famous passage in the *Xici zhuan* 系辭傳, or “Commentary of the Appended Statements,” one of the early *Yijing* commentaries, most likely written during the third or early second century B.C.<sup>12</sup> The passage states that “the *taiji* or Supreme Ultimate<sup>13</sup> generates the two *yi* 儀, or modes [i.e., *yin* and *yang*]. The two modes generate the four *xiang*, or images.<sup>14</sup> The four images then generate the eight trigrams, *gua*,” which portend good fortune and misfortune. And “good fortune and misfortune constitute the great field of action,” or, as we might call it, social life.<sup>15</sup> Interpreting this passage with combinatorial logic results in a linear sequence of the trigrams which are divided into a *yang* and a *yin* group, with *yin* continually waxing and *yang* continually waning.

By the twelfth century the *xiantian* trigram order was hailed as a sublime, naturally perfect arrangement, for it provided the most systematic known way of organizing the trigrams. To leading twelfth-century intellectuals, most notably Zhu Xi 朱熹 (1130–1200), this order, whether in its linear sequence or in the inverted pairing of the circle, represented a natural principle of organization, corresponding to the original conception of Fu Xi.<sup>16</sup> Southern Song

<sup>12</sup> On this commentary, see Willard J. Peterson, “Making Connections: ‘Commentary of the Attached Verbalizations’ of the Book of Change,” *HJAS* 42.1 (1982): 67–116. For a summary of all the *Yijing* appendices, see Fung Yu-lan, *A History of Chinese Philosophy* (Princeton: Princeton University Press, 1952), vol. 1:379–95.

<sup>13</sup> The term *taiji* has been translated as “Supreme Ultimate” (Bodde, transl. of Fung Yu-lan, *A History of Chinese Philosophy*, vol. 2:435 and passim); “Great Primal Beginning” (Baynes, transl. of Richard Wilhelm, *The I Ching or Book of Change* [Princeton: Princeton University Press, 1950], p. 318); “Great Ultimate” (Richard John Lynn, *The Classic of Changes. A New Translation of the I Ching as Interpreted by Wang Bi* [New York: Columbia University Press, 1994], p. 65); “Supreme Pole” (Joseph Needham, *Science and Civilisation in China*, vol. 2, sections 8–18 [Cambridge: Cambridge University Press, 1956], p. 460), and “Grand Terminus” or “Great Extreme” (James Legge, *I Ching. Book of Changes* [1899; rpt., New York: Dover, 1963] pp. 13, 373). Interestingly the term does not appear in the earliest extant version of the *Xici zhuan*, the manuscript unearthed in tomb no. 3 at Mawangdui and datable prior to 168 B.C. Instead the term *daheng* 大恆, “Great Constancy,” is used, which underscores the concept of time in the world principle. See Edward L. Shaughnessy, *I Ching. The Classic of Changes* (New York and Toronto: Ballantine Books, 1996), p. 198.

<sup>14</sup> The word *xiang* has been translated variously as “emblem,” “image,” “representation,” or “figure.” See Peterson, “Making Connections,” 80–81.

<sup>15</sup> *Xici*, A 11.

<sup>16</sup> Zhu Xi, *Zhuzi yulei* 朱子語類 (Beijing: Zhonghua shuju, 1986), 65.1612–19 (“The *xiantian* diagram drawn with Fuxi’s trigrams”); Zhang Shanwen, *Zhouyi cidian*, pp. 277–78.

Neo-Confucian writings thus promoted it as a reflection of the most authentic layer of meaning encoded in the *Yijing*, implying that it also reflected most accurately the principles of nature. Although the *Yijing* actually makes no explicit reference to the *xiantian* sequence at all, late Song scholars nevertheless claimed that the circular *xiantian* arrangement was referred to in a passage of the *Yijing's Shuogua* 說卦傳 commentary: “Heaven [*qian*] and Earth [*kun*] establish positions. Mountain [*gen*] and Lake [*dui*] circulate their material force. Thunder [*zhen*] and Wind [*xun*] give rise to each other. Water [*kan*] and Fire [*li*] refuse to destroy each other. In this manner the eight trigrams alternate with each other, so that to enumerate what has passed, one follows their progress, and to know what will come, one moves backward through them.”<sup>17</sup> This passage is far from clear, however, and interpreting it as a description of the *xiantian* circle—as happens in the still influential *Yijing* translation by Richard Wilhelm—is far from convincing.<sup>18</sup> The order in which the trigrams are mentioned here does by no means correspond to their positions in the *xiantian* circle. Originally the passage may well have been understood as a guide to interpreting those four hexagrams which were composed of the complementary trigrams (i.e., nos. 12, 41, 32, and 63).<sup>19</sup>

Among the several trigram sequences described in the *Shuogua* commentary, only one explicitly arranges the trigrams in a circle according to the points of the compass. Known since the Song period

<sup>17</sup> *Shuogua*, 3. The first publication which links this passage to the *xiantian* trigrams is apparently Zhu Xi, *Zhouyi benyi* 周易本義 (*Siku quanshu* edition), *tu*, 5. However, this book was first printed in 1265 and the authenticity of Zhu Xi's authorship of the introductory illustration, where this statement appears, is uncertain. For Zhu Xi's commentaries on this *Shuogua* passage, see *Zhuzi yulei*, 77.1971–72, where no reference to the *xiantian* trigrams is found. For a fine survey of Zhu Xi's approaches to the *Yijing*, see Joseph Adler, “Chu Hsi and Divination,” in Kidder Smith jr. et al., *Sung Dynasty Uses of the I Ching* (Princeton: Princeton University Press, 1990), pp. 169–205.

<sup>18</sup> Wilhelm, *The I Ching*, pp. 265–66. More recently this view has been propounded again by Schuyler V. R. Cammann, “The Eight Trigrams: Variants and their Names,” *History of Religions* 29 (1990): 301–2.

<sup>19</sup> Legge had already expressed his unease with the *xiantian* interpretation of this passage, see Legge, *I Ching*, p. 424. For alternative translations, see Shaughnessy, *I Ching*, p. 219; Lynn, *The Classic of Changes*, pp. 120–21; and Kidder Smith Jr. and Don J. Wyatt, “Shao Yung and Number,” in Kidder Smith Jr. et al., *Sung Dynasty Uses of the I Ching*, p. 118.

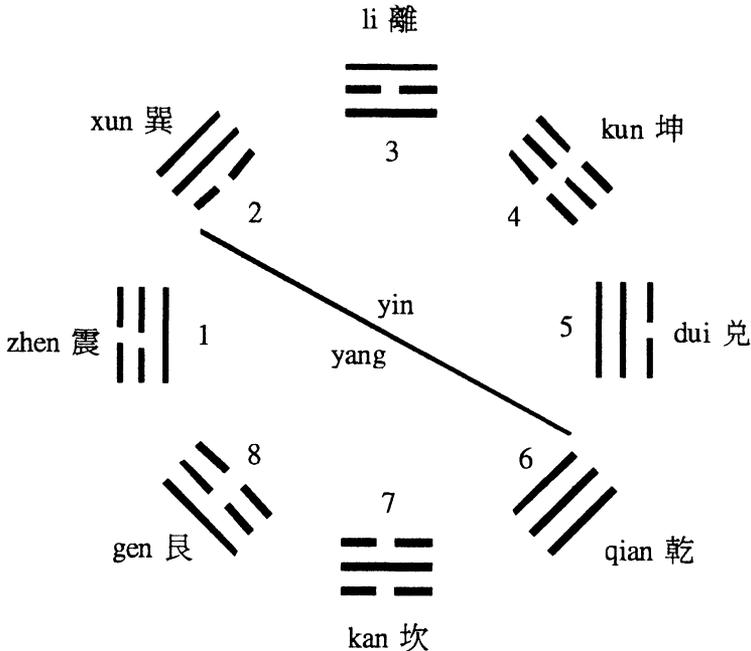


Fig. 4. The circular *houtian* arrangement of the trigrams (King Wen sequence).

as the *houtian* 後天 or “After Heaven” order (fig. 4), this arrangement was understood to describe the cyclical changes of the seasons and days and, by extension, explain the workings of the world.<sup>20</sup> The trigram *zhen* represents spring and the beginning; its position on the circle is east, and from there the sequence is read clockwise. The most recognizable elements in this constellation are *li* in the south and *kan* in the north, symbolizing fire and water respectively;

<sup>20</sup> *Shuogua*, 5. This passage reads in the translation of Lynn, *Classic of Changes*, p. 121 (quoted here without the annotations): “The Divine Ruler comes forth in *Zhen* and sets all things in order in *Sun*, makes them visible to one another in *Li*, gives them maximum support in *Kun*, makes them happy in *Dui*, has them do battle in *Qian*, finds them thoroughly worn out in *Kan*, and has them reach final maturity in *Gen*. . . . *Zhen* corresponds to the east. . . . *Sun* corresponds to the southeast. *Li*. . . is the trigram of the south.” Cf. Legge, *I Ching*, pp. 425–26; Wilhelm, *The I Ching*, pp. 268–71. For an insightful exposition of possible meanings of this sequence based on explanations of the *Yijing* in the Han apocrypha, see Fung, *A History of Chinese Philosophy*, 2:102–6.

they are the only trigrams positioned opposite each other as a complementary pair, one representing *yang*, the other *yin*. The other trigrams, though not paired as opposites, are still ordered around *li* and *kan* so as to form a *yang* and a *yin* group respectively (fig. 4). Their *yin-yang* valence, however, is assessed according to a different, much simpler principle than that found in the *xiantian* system, simply working with even (i.e. *yin*) and odd (i.e. *yang*) numbers. To determine whether a trigram is *yin* or *yang* according to the *Yijing*, one counts the number of lines (a *yang* line is one, a *yin* line two), then tallies whether the total is an even or odd number.<sup>21</sup>

It was this trigram cycle that served as the standard directional and cosmological circular arrangement in early China. Referred to in Han texts as the “proper order,”<sup>22</sup> it is, with minor variations the only directional trigram sequence found on archaeological material up to the early Southern Song period. It appears most frequently on objects whose function related closely to cosmological speculation, to the transcending of life and death, and the invocation of good fortune, such as late Han and Six Dynasties “diviner’s boards,”<sup>23</sup> stone lids of tomb epitaphs from the late Six Dynasties through the Five Dynasties period (fig. 5),<sup>24</sup> late Six Dynasties Buddhist stupas,<sup>25</sup> and, most prominently, bronze mirrors dating

<sup>21</sup> This manner of determining the *yin-yang* valence can be observed throughout the *Yijing*, see e.g. *Shuogua* 10.

<sup>22</sup> Fung, *A History of Chinese Philosophy* 2:103–4.

<sup>23</sup> Two diviner’s boards, one from an Eastern Han tomb and the other in the Shanghai Museum datable to the Six Dynasties, have part of the *houtian* circle trigrams inscribed on them, see Lian Shaoming 連劭名, “Shipan zhong de simen yu bagua” 式盤中的四門與八卦, *Wenwu* (1987.9): 34. For wider-ranging discussions of such boards, see the articles by Donald Harper, “The Han Cosmic Board (*Shih*),” *Early China*, 4 (1978/79): 1–10, Christopher Cullen, “Some Further Points on the *Shih*,” *Early China*, 6 (1980/81): 31–46, and Donald Harper, “The Han Cosmic Board: A Response to Christopher Cullen,” *Early China*, 6 (1980/81): 47–56. This circular trigram arrangement also appears on turtle-shaped inkstones made of earthenware. Such objects have so far been dated to the Eastern Han period, yet on stylistic grounds a dating to the tenth century seems more convincing. For an example of such an inkstone in the Minneapolis Institute of Art, see Ezekiel Schloss, *Art of the Han* (New York: China Institute in America, 1979), no. 52. For a comparable excavated Tang example, see Song Yanyan 宋燕燕, *Tangdai yishu* 唐代藝術 (Xi’an: Shaanxi renmin yishu chubanshe, 1991), no. 73.

<sup>24</sup> For a tenth-century example from the tomb of a scholar named Du Jiyuan 杜繼元, who died in 940 in Nanjing, see *Wenwu ziliao congkan* 文物資料叢刊 (1987.10): 160.

<sup>25</sup> Eugene Y. Wang, “What do trigrams have to do with Buddhas? The Northern Liang stupas as a hybrid spatial model,” *Res* 35 (Spring 1999): 70–91.

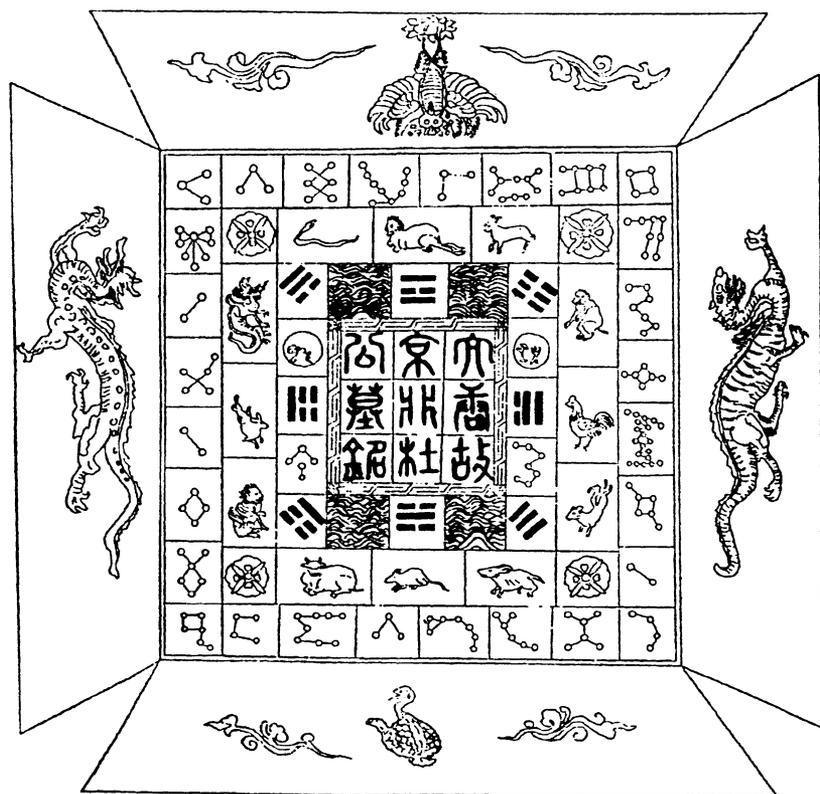


Fig. 5. A drawing of the lid of the epitaph of Du Jiyuan, who died in 940 (excavated in Nanjing). From *Wenwu ziliao congkan* (1987.10): 160.

from the eighth to the twelfth centuries (fig. 6).<sup>26</sup> It was also still the norm at the Song court in 1118, when emperor Huizong 徽宗 (r. 1100–1125) began building his famous garden in the northeast of Kaifeng, which he named Genyue 艮嶽, “Northeast Marchmount” or “Marchmount of Gen,” in accordance with the directional symbolism of the *houtian* trigrams.<sup>27</sup> Only from the Southern Song period onwards is the *xiantian* trigram circle also found as an occasional decorative symbol.<sup>28</sup> Among the earliest archaeological evidence for the *xiantian* circle is a mid-thirteenth-century silver cup discovered in the tomb of a Southern Song scholar named Shi Shengzu 史繩祖 (1191–1274) in Quzhou, Zhejiang (fig. 7A). As attested in Shi’s epitaph, he was an official of rank five with a vivid interest in the *Yijing*.<sup>29</sup>

Aside from the archaeological evidence, there is ample textual evidence for the beginning popularity of the *xiantian* trigram circle during the Southern Song period. Don Wyatt has recently discussed some of the Song textual history of the *xiantian* diagrams and concluded that one of the earliest precise descriptions of the circular diagram was written around 1200 by Lou Yue 樓鑰 (1137–1213), while less explicit but nevertheless unambiguous references to the image can also be found in Zhu Xi’s writings.<sup>30</sup> Lou not only mentions the directional positions of all the *xiantian* trigrams, he also states that only “since the advent of our [Song] dynasty have there

<sup>26</sup> For examples, see Ma Chengyuan 馬承源, ed., *Zhongguo wenwu jinghua daquan. Qingtong juan* 中國文物精華大全：青銅卷 (Beijing: Wenwu chubanshe, 1993), nos. 1293, 1313; Wu Shuicun 吳水存, *Jiujiang chutu tongjing* 九江出土銅鏡 (Beijing: Wenwu chubanshe, 1993), nos. 72, 81, 82, 92; Cheng Changxin 程長新 and Cheng Ruixiu 程端秀, *Tongjing jianshang* 銅鏡鑒賞 (Beijing: Beijing yanshan chubanshe, 1989), nos. 53, 56; Kong Xiangxing 孔祥星 and Liu Yiman 劉一曼, *Zhongguo gudai tongjing* 中國古代銅鏡 (Beijing: Wenwu chubanshe, 1984), pp. 165–66.

<sup>27</sup> Huizong took the geomantic advice of a Daoist practitioner named Liu Hunkang 劉混康 (1035–1108). See James M. Hargett, “Huizong’s Magic Marchmount: The Genyue Pleasure Park of Kaifeng,” *Monumenta Serica* 38 (1988–89): 1–48 (on the naming see pp. 7–8).

<sup>28</sup> The *houtian* trigrams remained popular designs throughout Chinese history, especially on ritual objects.

<sup>29</sup> Quzhou shi wenguanhui, “Zhejiang Quzhou shi Nan-Song mu chutu qiwu” 浙江衢州市南宋墓出土器物, *Kaogu* (1983.11): 1004–11.

<sup>30</sup> Don J. Wyatt, *The Recluse of Loyang: Shao Yung and the Moral Evolution of Early Sung Thought* (Honolulu: University of Hawai’i Press, 1996), pp. 195–201. See also note 48 for Zhu Xi.



Fig. 6. A drawing of a bronze mirror with the *houtian* trigrams, carrying a date corresponding to 758. Diameter: 21.0 cm. Private collection, New Zealand. Courtesy of the owner. Drawing by Zoi Kotitsa.

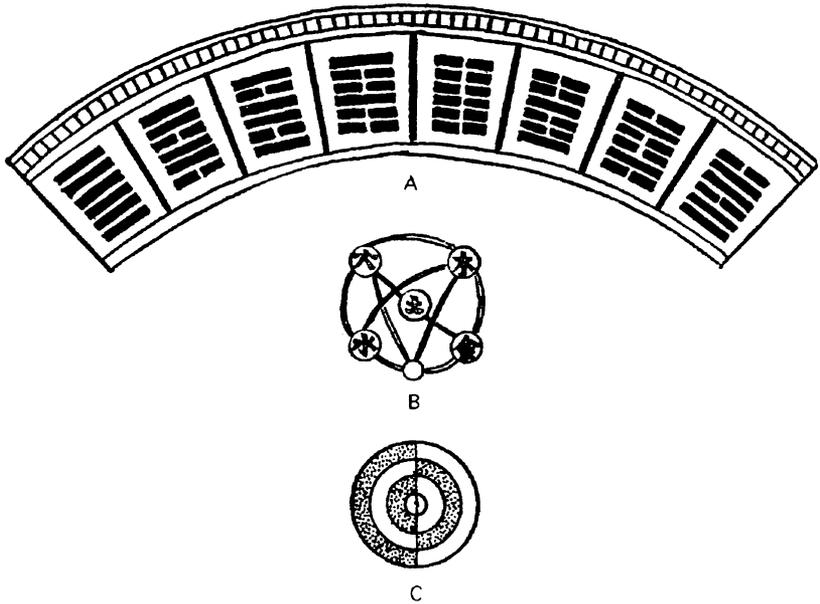


Fig. 7. The decoration on a silver cup excavated in 1974 in the tomb of Shi Shengzu (1191-1274) in Quzhou, Zhejiang. From *Kaogu* (1983.11): 1005.

A: Outside wall: The *xiantian* hexagram circle with top band indicating the 64 hexagram combinations.

B: Inside bottom: Diagram with the Five Elements.

C: Outside bottom: *Taiji* circle.

existed explanations of the *xiantian* and *houtian*.<sup>31</sup> Wyatt perceptively recognized that intellectuals like Lou and Zhu were well aware of the relative novelty of the *xiantian* symbols, yet insisted on their primordial perfection and timelessness, which resulted in the paradoxical tension in their texts “between the simultaneous modernity and antiquity of the diagrams.”<sup>32</sup>

Undoubtedly, the manufactured antiquity of the *xiantian* trigrams was a means of promoting the new arrangement.<sup>33</sup> The proponents of the new *xiantian* system must have been acutely aware that this sequence caused a profound conflict in the interpretation of the individual trigrams. After all, both the *xiantian* and the *houtian* arrangements represent the cycles of nature in the same manner—as circles in which the trigrams are directionally positioned and grouped into a *yin* and a *yang* section. Yet in each arrangement the same trigrams possess contradictory meanings. Half of them have opposing *yin-yang* valences (*li* and *dui* are *yin* in the *houtian* cycle, but *yang* in the *xiantian* cycle; *kan* and *gen* are *yang* in the *houtian* cycle but *yin* in the *xiantian* cycle), and all of them represent different directions. Emphasizing the primordially of the *xiantian* system was crucial for its adherents to have it accepted as an alternative mode of interpreting the signs of heaven. In fact, the adoption of the suggestive terms “Before Heaven” and “After Heaven” to distinguish the two trigram cycles was so effective that it eventually led to the anachronistic perception that the younger sequence was the older one, and vice versa.<sup>34</sup>

<sup>31</sup> Lou Yue, *Shao Kangjie guanwu bian* 邵康節觀物篇, translated after Wyatt, *Recluse of Loyang*, p. 199. Certainly by early Southern Song times the contrast between *xiantian* and *houtian* trigrams was well established, as seen for example in *juan* 4 of Zhang Xingcheng's 張行成 (*jinsi* 1132) *Huangji jingshi guanwu waibian yanyi* 皇極經世觀物外篇衍義 (Shanghai: Shangwu yinshuguan, 1935).

<sup>32</sup> Wyatt, *Recluse of Loyang*, p. 199.

<sup>33</sup> Presumably unaware of the archaeological evidence, Wyatt concluded that not only the *xiantian* but also the *houtian* diagram was novel to the Song philosophers, Wyatt, *Recluse of Loyang*, p. 199.

<sup>34</sup> A temporal reading of the terms was emphasized through the association of the *xiantian* order with Fu Xi, and of the *houtian* order with the less ancient King Wen 文王, the founder of the Zhou Dynasty. The *Yijing* originally used the terms *xiantian* and *houtian* to refer to two noble ways of behavior in relation to the knowledge gained from the oracle, not as two different ways of divining. *Wenyan*, hexagram 1: *qian*; Wyatt, *Recluse of Loyang*, pp. 194–5; Lynn, *Classic of Changes*, p. 138.

As is well known, Chinese historiography traditionally credits the philosopher and diviner Shao Yong 邵雍 (1012–1077) with the conception of the philosophical framework for the *xiantian* system.<sup>35</sup> Twelfth-century scholars, however, including his son Shao Bowen 邵伯溫 (1057–1134), did not cite him as the inventor of the *xiantian* circle. Instead they reported that Shao derived his insights from already existing diagrams. These pre-existing, so-called *xiantian* diagrams 先天圖 were thought to have been transmitted to Shao Yong through his teacher Li Zhicai 李之才 (d. 1045), from whom they were traced back via Mu Xiu 穆修 (979–1032) and Zhong Fang 種放 (d. 1014) to the Daoist monk Chen Tuan 陳搏 (872/895–989).<sup>36</sup> Chen, a heavily mythicized figure, takes the crucial position of a spiritual inceptor of the Neo-Confucian Daoxue tradition, which credits him with first making public certain elements of esoteric Daoist knowledge previously developed and transmitted within alchemist traditions. He is said to have employed cosmological charts and images, *tu* 圖, for meditative purposes—an activity which, by the tenth century, had of course become a well-established Daoist and Buddhist practice. Chen's few known writings confirm that he was well acquainted with the processes of alchemy, and also that he concerned himself with diagrams.<sup>37</sup>

We do not know what Chen Tuan's *xiantian tu* looked like, as none of his discussions of such a diagram survives with illustrations.<sup>38</sup> Song

<sup>35</sup> The term *xiantian* may only have been assigned to Shao's cosmology by his immediate followers, see Wyatt, *Recluse of Loyang*, pp. 179ff. There is abundant literature on Shao Yong and his *xiantian* theory. Aside from Wyatt's recent book, see e.g. Fung, *A History of Chinese Philosophy* 2:451–74; Wing-tsit Chan, *A Sourcebook in Chinese Philosophy* (Princeton: Princeton University Press, 1963), pp. 481–99; Anne D. Birdwhistell, *Transition to Neo-Confucianism: Shao Yung on Knowledge and Symbols of Reality* (Stanford: Stanford University Press, 1989); Smith and Wyatt, "Shao Yung and Number."

<sup>36</sup> For quotes and literature on this lineage, see Fung, *History of Chinese Philosophy*, 2:440; Livia Knaul, *Leben und Legende des Ch'en T'uan* (Frankfurt a.M./Bern: Peter Lang, 1981), p. 34; Birdwhistell, *Transition to Neo-Confucianism*, pp. 207–8; Smith and Wyatt, "Shao Yung and Number," 110; Wyatt, *Recluse of Loyang*, p. 199. Regarding Chen's dates, Knaul, *Leben und Legende*, p. 145, mentions various Daoist records according to which Chen was 118 *sui* at his death, which would indicate a birth year of 872. Traditionally his birth year is given as 895.

<sup>37</sup> Knaul, *Leben und Legende*, pp. 35–6. Also see the special issue of *Taoist Resources* 2:1 (1990), subtitled *A Memorial to Chen Tuan*, especially the contributions by Livia Kohn, "The Life of Chen Tuan After the History of the Song," and "Chen Tuan in History and Legend," 1–7, 8–33.

<sup>38</sup> Recent discussions of Chen Tuan's diagrams, such as the one by Li Yuanguo, are based

scholars were already quite vague in their descriptions, and most presumably had never seen Chen's pictures. All we are told is that his graphs used numbers, lines, and trigrams, and that they functioned without text.<sup>39</sup> The transmission of the *tu* from the tenth to the eleventh century evidently was a secretive affair, forming part of an intimate master-student relationship that stood at the core of finding individual enlightenment and personal divinatory insight.<sup>40</sup> How long the *xiantian tu* had existed in secret as tools for the alchemist-diviner-philosophers we do not know. Four generations reaching back to Chen Tuan would well seem possible. But whether Chen was really the source of the diagrams will remain a mystery.

What we can say with certainty is that the circular *houtian* trigram arrangement had become ever more popular since the mid-Tang period, as demonstrated by a marked increase, even the commercialization, of artifacts decorated with it.<sup>41</sup> In certain areas of intellectual life in the Tang and Five Dynasties periods, moreover, trigrams arranged in a circle started to become accepted symbols for rendering the waxing and waning of the moon—a use of the *Yijing* line statements which had previously been reserved to hexagrams. Circular arrangements of twelve hexagrams showing a continuous waxing and waning of *yin* and *yang* are already recorded in some of the early *Yijing* apocrypha, notably in the *Yiwei zhilan tu* 易緯稽覽圖, which is associated with the first century B.C. authors Meng Xi 孟喜 and Jing Fang 京房, and was commented by Zheng Xuan 鄭玄 (127–200).<sup>42</sup> The first book to use trigrams in a circle to express a cycle of waxing and waning *yin* and *yang* was an alchemist treatise entitled *Zhouyi cantongqi* 周易參同契, which employs six of the eight trigrams. The diagram in this treatise must be considered a

---

on traditional attributions only. Li, for example, does not discuss the historical authenticity of the diagrams he ascribes to Chen Tuan, see Li Yuanguo: "Chen Tuan's Concepts of the Great Ultimate," *Taoist Resources* 2:1 (1990): 32–53, esp. 46ff.

<sup>39</sup> Zhu Bokun 朱伯崑, *Yixue zhexue shi* 易學哲學史 (Beijing: Huaxia chubanshe, 1995), 2:11–12.

<sup>40</sup> On Shao Yong's secretive treatment of his *xiantian* fortune-telling skills, see Wyatt, *Recluse of Loyang*, pp. 202–4.

<sup>41</sup> See notes 23, 24, 25 and 26.

<sup>42</sup> Bohn, *Die Rezeption des Zhouyi*, pp. 59–101; Fung, *History of Chinese Philosophy*, 2:106–118; Michael Nyland, *The Canon of Supreme Mystery*, by Yang Xiong (Albany: SUNY Press, 1993), pp. 14–17.

particularly important predecessor of the *xiantian* circle, for Zhu Xi explicitly refers to it when discussing the provenance of the *xiantian tu*.<sup>43</sup> The book, attributed to a second-century Daoist, Wei Boyang 魏伯陽, has a very obscure textual history. The oldest extant version was produced in 947 and commented by Peng Xiao 彭曉 (?–955), a high official active in Sichuan under the Later Shu dynasty (934–965).<sup>44</sup> Parts of the text certainly existed since the late Six Dynasties, but much was emended during the Tang and Song, and no standard edition was ever established. In the *Cantongqi* we find a combination of *Yijing* principles and alchemist methods. In one section the trigrams are correlated to the phases of the moon, most likely in order to indicate different stages and intensities of firing during the alchemist production of elixirs.<sup>45</sup> The cycle begins in the east with *zhen*, and continues through *dui*, *qian*, *xun*, and *gen* to *kun* (fig. 8).<sup>46</sup> These six trigrams are read from the bottom line up; in this way *yang* lines increase until, after the moon is full on the fifteenth day of the month, *yin* lines begin to increase from the bot-

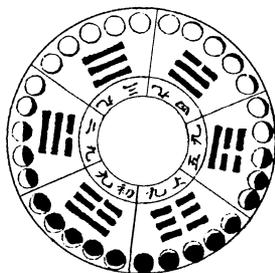


Fig. 8. The Phases of the Moon, from Yu Yan (1258–1314), *Zhouyi cantongqi fahui* (Wenyang edition).

<sup>43</sup> Zhu Xi, *Zhuzi yulei*, 65.1617.

<sup>44</sup> On the complex history of the *Cantongqi*, see Fabrizio Pregadio, *Zhouyi cantong qi: Dal Libro dei Mutamenti all'Elisir d'Oro* (Venezia: Cafoscarina, 1996); for an English summary, see <http://helios.unive.it/~dsao/pregadio/book.html> (July 1996); Fukui Kojun, "A Study of *Chou-I Ts'an-t'ung-ch'i*," *Acta Asiatica* 27 (1974): 19–32; Joseph Needham, *Science and Civilisation in China*, vol. 5:3. *Chemistry and Chemical Technology* (Cambridge: Cambridge University Press, 1976), pp. 50–57.

<sup>45</sup> Needham, *Science and Civilisation in China*, vol. 5.3:60–66.

<sup>46</sup> Fung, *History of Chinese Philosophy*, vol. 2:426–30.

tom up. *Li* and *kan*, the trigrams traditionally representing the sun and the moon and hot and cold, are excluded because the cycle explains their waxing and waning. According to Fung Yu-lan, they are to be imagined within the circle.<sup>47</sup>

The *Cantongqi* also contains other concepts which foreshadow the later directional *xiantian* trigrams, such as the emphatic use and linking of the trigram pairs *qian-kun* and *li-kan*. *Li* and *kan* here are understood as a secondary display, *eryong* 二用, of *qian* and *kun*, representing the same creative principles.<sup>48</sup> But while these pairs in the *Cantongqi* are intended to explain the human body and various alchemist and meditative practices,<sup>49</sup> the Neo-Confucian reader was able to discern in them the directional *xiantian* patterns. In his annotated edition of the *Cantongqi*, Zhu Xi explicitly bases his interpretation of these two trigram pairs on the directional *xiantian* arrangement, even though the original text never mentions north and south, nor left and right.<sup>50</sup>

To be sure, medieval alchemist books such as the *Cantongqi* do

<sup>47</sup> Ibid, 2:430. One might also argue that *li* and *kan* were excluded because their linear composition did not neatly fit into the sequence of waxing and waning *yin* and *yang* lines.

<sup>48</sup> In Zhu Xi's edition of the *Cantongqi*, the first chapter states for example: "Heaven and earth establish the positions, and the changes take place between them. Heaven and earth means *qian* and *kun*. Establishing the position means arranging the position of a *yin* and *yang* pair. The *Yijing* speaks of *kan* and *li*. *Kan* and *li* are the second display of *qian* and *kun*. The lines of the second display do not have a definite position. They float to all six vacancies." Wu Shuping 吳樹平, comp., *Zhouyi cantongqi kaoyi*; *Zhouyi cantongqi fahui*; *Zhouyi cantongqi fenzhang zhu* 周易參同契考異, 周易參同契發揮, 周易參同契分章註 (Tianjin: Tianjin guji chubanshe, 1988), p. 11. The explanatory parts in this passage may well have been emendations by Peng Xiao or some other tenth or eleventh-century commentator.

<sup>49</sup> For a Daoist reading of the *Cantongqi*, see Yu Yan's 俞琰 (1258–1314) edition *Zhouyi cantongqi fahui* 周易參同契發揮 (preface 1284) in *Zhengtong Daozang* (hereafter *Daozang*; rpt. Taipei: Yiwen yinshuguan, 1962), pp. 625–27, or the commentary by Chen Xianwei of 1234, *Daozang*, vol. 628.

<sup>50</sup> Zhu Xi, *Zhouyi Cantongqi kaoyi*, shangbian (first published 1197), 4a, in Wu, comp., *Zhouyi cantongqi kaoyi*, pp. 7–8. The *Cantongqi* begins like this: "*Qian* and *kun* are the gate and the door to the changes, they are the father and mother of all trigrams. *Kan* and *li* assist [them like a] wall revolving around a nave on an upright axle tree. These four trigram pairs are like a bag and a tube." Zhu Xi reinterprets this clearly three-dimensional illustration (surely written with the human body in mind) in the following two-dimensional manner: "The position of *qian* and *kun* is at the top and at the bottom, while *kan* and *li* ascend and descend between them. Therefore it is called 'changes.' In the *xiantian* position *qian* is south, *kun* north, *li* east, and *kan* west. That is why this image has the form of a city wall and its rising and descending sides are like the revolving wheels on the naves of a chariot axle—one at the bottom and one at the top."

not contain the *xiantian* sequence itself, but they clearly indicate that certainly by the tenth century the groundwork had been laid for the *xiantian* system. Considering the new functions assigned to the trigrams in alchemist literature and the popularity of the *houtian* circle during that period, Shao Yong, or his teacher Li Zhicai, must have been able to conceive of the *xiantian* sequence without much difficulty. There are no indications in Five Dynasties or Song sources that the formation of the *xiantian* trigram circle came about in conjunction with a dynamically divided *yin-yang* circle, comparable to the one we find in the *taiji* diagram. The texts explain the genesis of the *xiantian* circle entirely in terms of trigrams and numbers—symbols whose code was recognized as basically arithmetic.

There is no evidence from the Song period that the *xiantian* trigrams at the time had any connection to a *yin-yang* circle with swirling halves. The mid-thirteenth-century silver cup from Shi Shengzu's tomb, for instance, still combines the *xiantian* circle (fig. 7A) with the kind of *yin-yang* circle (fig. 7C) that had become popular through Zhou Dunyi's 周敦頤 (1017–1073) classical *taiji* diagram (fig. 9).<sup>51</sup> That circle is static and does not reflect the waxing and waning of *yin* and *yang*. Even Yuan scholars apparently did not feel compelled to combine a dynamic *yin-yang* circle with the *xiantian* trigrams, as is suggested by a short treatise entitled *Bao yihan sanmi jue* 抱一函三秘訣, written by the Quanzhen 全真 master Jin Yueyan 金月岩 (also known as Jin Pengtou 金蓬頭, 1276–1336) and his assistant, the famous scholar-painter and Daoist practitioner Huang Gongwang 黃公望 (1269–1354).<sup>52</sup> Here the trigram circle is discussed as a sequence from *yang* to *yin* (fig. 10). The trigrams are numbered,

<sup>51</sup> The *taiji* circle is chased on the outside bottom of the cup. The inside bottom of the cup shows the diagram of the relation of the Five Elements, also taken from Zhou Dunyi's *taiji tu*. See note 29. For thirteenth-century textual sources where the *xiantian* circle is discussed as containing *taiji*, visualized by Zhou's *taiji* circle, see Robinet, "Place and Meaning of the Notion of Taiji," p. 399.

<sup>52</sup> *Bao yihan sanmi jue* in *Daozang*, 321:1a. The *Bao yihan sanmi jue* is a Daoist text that combines explanations of *neidan* practices with traditional cosmological theories based on the *Yijing*. Like the *Cantongqi*, it appealed to classically educated scholars, and was in fact conceived by two scholars of the Quanzhen sect who rigorously promoted a syncretistic philosophy. Cf. A. John Hay, "Huang Kung-wang's 'Dwelling in the Fu-ch'un Mountains': The Dimensions of a Landscape" (Ph.D. diss., Princeton University, 1978), pp. 11–12; Caroline Gyss-Vermande, *La vie et l'œuvre de Huang Gongwang (1269–1354)* (Paris: Collège de France, 1984), pp. 35–51.

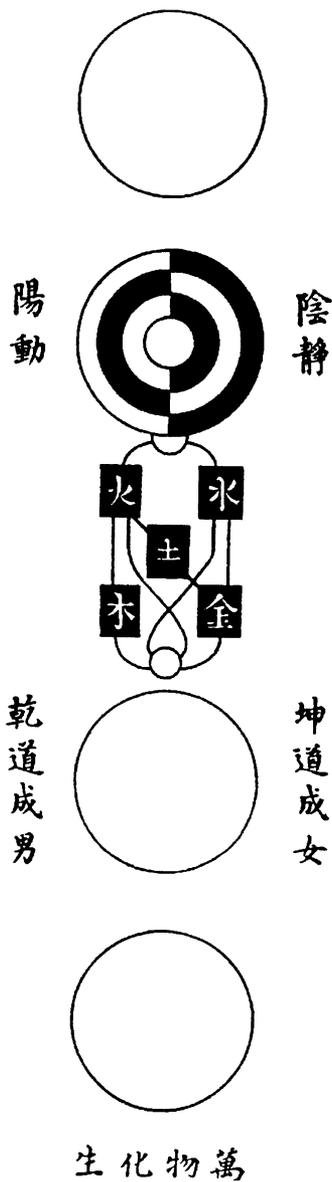


Fig. 9. *Taiji* Diagram, redrawn after Zhou Dunyi (1017–1073), from Joseph Needham, *Science and Civilisation in China*, vol. 2, sections 8–18 (Cambridge: Cambridge University Press, 1956), p. 461.

抱一函三秘訣

抱一函三秘訣

洞全真正宗金月若編

洞全真大癡黃公望傳

大六

伏羲先天始畫之圖

右法乾至震左旋坤至巽右轉象先天盤屈

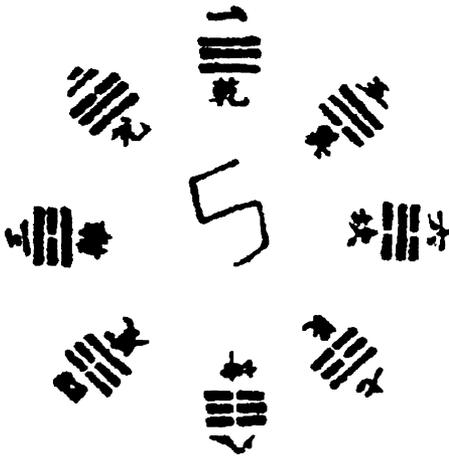


Fig. 10. "Fuxi's First-Drawn Prior to Heaven Diagram," from Jin Yueyan and Huang Gong-wang, *Bao yihan sanmi jue*, in *Zhengtong Daozang* (Taipei: Yiwen yinshuguan, 1962), 321, 1a.

and the dynamic of change they express is indicated in their center with an angular s-line. The text explicitly states that this line describes the changes.<sup>53</sup> Nevertheless, the line marks only six instead of eight corners, and thus does not exactly replicate the dynamic stages described by the trigrams. Assuming that the fifteenth-century *Daozang* edition, which makes this book available, did not gravely distort the fourteenth-century Yuan original, one cannot but suspect that the authors simply were unaware of the dynamically divided *yin-yang* circle; otherwise they would certainly have employed it instead of the unconventional and unsystematic line.

#### THE TAIJI CIRCLE

Ming and early Qing authors were quite mystified when it came to determining why early depictions of the *xiantian* trigram circle never included the *taiji* circle with the characteristic, interlocking *yin-yang* swirls. None of the major compendia, in which the *taiji tu* could be expected, included it. It appears neither in the *Xingli daquan* 性理大全 of 1415, the standard Ming compilation of orthodox texts of, and commentaries on, Song Daoxue philosophy,<sup>54</sup> nor in the Daoist Canon published in 1444 and 1445. Its earliest appearance was discovered by Hu Wei at the end of the seventeenth century in an etymological study called *Liushu benyi* 六書本義 (figs. 11, 12) written by the Zhejiang scholar Zhao Huiqian 趙搗謙 (1351-1395).<sup>55</sup> That book was first printed in the Hongwu era (1368-1399) and has four prefaces by early Ming literati. Two of the prefaces are dated; one was written by Bao Xun 鮑恂 in 1380, one by Zhao himself in 1378.<sup>56</sup> No Hongwu edition, however, appears to have survived. The earliest extant versions date to 1517 and 1520 respectively, and thus are over a century younger than the original.<sup>57</sup>

<sup>53</sup> *Bao yihan sanmi jue*, 1b.

<sup>54</sup> My thanks to Peter Ditmanson for pointing out this compilation as a potential source.

<sup>55</sup> Hu Wei, *Yitu mingbian*, 79-80. Hu's book appeared in 1706. For Zhao Huiqian's biography, see Edward L. Dreyer, "Chao Ch'ien," in L. Carrington Goodrich and Fang Zhao-ying, eds., *Dictionary of Ming Biography, 1368-1644* (New York: Columbia University Press, 1976), 1:124-125.

<sup>56</sup> The other prefaces are by Lin You 林右 (1356-1402) and by Xu Yikui 徐一夔 (1318-c. 1400).

<sup>57</sup> The 1517 edition was issued by Shao Fen 邵賁, the 1520 edition by Hu Donggao 胡東



Fig. 11. "River Diagram of the Spontaneous Process of Heaven-and-Earth," from Zhao Huiqian (1351-1395), *Liushu benyi* (1520 Hu Donggan edition).



Fig. 12. "River Diagram of the Spontaneous Process of Heaven-and-Earth," from Zhao Huiqian (1351-1395), *Liushu benyi* (1751 Wenyange edition).

The *taiji tu* appears near the beginning of the *Liushu benyi* in an illustrated introductory section (*tukao* 圖考) on the origin of written Chinese characters.<sup>58</sup> In the tradition of classical *Yijing* interpretation, Zhao explains that in the earliest forms of writing the trigrams and the characters for the natural elements such as fire, water, and wind were written the same way and therefore must have the same origin.<sup>59</sup> Linking his paleographic observations to the *xiantian* trigram charts of the Song, Zhao correlated the origin of the Chinese script with the origin of cosmological symbols and diagrams, and fittingly began his section of tables and charts with our *taiji* diagram. His illustration is entitled *tiandi ziran hetu* 天地自然河圖, “River Diagram of the Spontaneous Process of Heaven-and-Earth.” To Zhao Huiqian this was a primal image of natural creation comparable to one of the divinely revealed charts of mythical times, the famed *hetu* 河圖, or River Diagram.<sup>60</sup> After associating his diagram to such divine images he provides the earliest known explanation of its provenance: “As for this diagram, it has long been said that Cai Yuanding received it from a recluse in Shu [Sichuan]. He kept it

舉. Of both these editions several copies are preserved. In addition there are copies of a Wanli era edition by Yang Junkuang 楊君况 of 1610, see Shen Jin (Chun Shum) 沈津, *Meiguo Hafo Daxue Hafo-Yanjing tushuguan zhongwen shanben shuzhi* 美國哈佛大學哈佛燕京圖書館中文善本書志 (Shanghai: Shanghai cishu chubanshe, 1999), pp. 77–78. Wang Zhongmin 王重民 mentions an extant Hongwu edition in his *Zhongguo shanbenshu tiyao* 中國善本書提要 (Shanghai: Shanghai guji chubanshe, 1983), p. 57. Wang describes a copy he saw at the library of Beijing University; but since the published catalogues of Beijing University do not list such an edition, Wang appears to have been mistaken, see Beijing daxue tushuguan, ed., *Beijing daxue tushuguan cang guji shanben shumu* 北京大學圖書館藏古籍善本書目 (Beijing: Beijing daxue chubanshe, 1999), p. 43. I am indebted to Philip Hu for his advice during my search for early editions of the *Liushu benyi*.

<sup>58</sup> Zhao Huiqian, *Liushu benyi*, “Tukao,” 1a.

<sup>59</sup> For a fine summary of the origins of this etymological tradition, see Lewis, *Writing and Authority in Early China*, pp. 272–8.

<sup>60</sup> The highly complex issue of the *hetu* being considered the prototype of all cosmological diagrams (and therefore also the ancestor of the *taiji tu*) does not need to be addressed here. For introductory discussions of the *hetu*, see Michael Saso, “What is the Ho-tu?” *History of Religions* 17:2 (1977), 399–416; John B. Henderson, “Chinese Cosmographical Thought: The High Intellectual Tradition,” in *The History of Cartography*, vol. 2:2, *Cartography in the Traditional East and Southeast Asian Societies*, edited by J. B. Harley and D. Woodward (Chicago: University of Chicago Press, 1994), pp. 213ff. For analyses of *hetu* numerology and speculations on the *hetu*’s connection to the dynamic *taiji* circle see Schuyler Cammann, “Some Early Chinese Symbols of Duality,” *History of Religions* 24:3 (1985): 234, 252–53; Lars Berglund, *The Secret of Luo Shu. Numerology in Chinese Art and Architecture* (Lund: Lunds Universitet, 1990), pp. 174, 189, 383ff.

secret and did not transmit it, so that even Master Zhu [Xi] did not see it. Now I have obtained it from Mr. Chen Bofu and take pleasure in its perfection. It has the Great Ultimate containing *yin* and *yang*, and *yin* and *yang* containing the Eight Trigrams. The subtlety of spontaneous process truly is the origin of written characters of all ages and the pivot of creation. How divine it is!”

Zhao here discusses the image not as an illustrative diagram in a book, but rather as a rare physical object, an old painted chart which fell into the hands of a nowadays obscure collector Chen and which supposedly had a history reaching back to the scholar Cai Yuanding 蔡元定 (1135–1198) and beyond. Cai was one of Zhu Xi's close friends and most outstanding pupils, and also one of the main commentators of Shao Yong's basic work, the *Huangji jingshi* 皇極經世. Moreover, he is traditionally considered the person responsible for compiling the charts that now form the first two introductory chapters of a heavily augmented and commented later edition of Shao's book.<sup>61</sup> But a *taiji* diagram with the dynamically divided circle never appeared in any known *Huangji jingshi* edition. Zhao Huiqian's comment in fact suggests that he was not aware of any substantial literary history of this image, as he describes it as an antique chart which, although known to a small circle of local scholars, had not yet been widely publicized. Quite possibly because of the relative novelty of this diagram, Zhao published it with precise annotations on how to understand its design.<sup>62</sup> To Zhao, who felt that the central circle expressed perfectly the meaning of the *xiantian* trigram circle, it must have seemed most improbable that Cai Yuanding should have been unaware of it. And so we once again encounter the secret transmission theory already employed in explanations of the *xiantian tu*—this time placed into the twelfth and thirteenth centuries.

Zhao, in reconstructing the provenance of the picture, may have recollected parts of a story that had already been circulating for a

<sup>61</sup> Shao Yong, *Huangji jingshi shuyie* 皇極經世書解 (Siku quanshu edition, 1779), preface A, 12bff.

<sup>62</sup> Zhao's annotations anticipate later Ming and Qing readings, as discussed above in the section on the iconography of the *taiji* diagram, see note 7 and fig. 1. Zhao's comments behind the trigrams read (figs. 11, 12): “*Qian* is the place of pure *yang*; *dui* the place of two parts *yang* and one part *yin*, *li* has *yin* in between *yang*,” etc.

century or so. Around the beginning of the Yuan period, Yuan Jue 袁桷 (1266–1327) makes mention of three charts in the possession of the Southern Song official Xie Zhongzhi 謝仲直 (1226–1289).<sup>63</sup> Those charts supposedly could also be traced back to Sichuan, a region where Chen Tuan had spent some of his younger years.<sup>64</sup> Yuan Jue explains that Zhu Xi, eager to find out what Chen Tuan's charts really looked like, had Cai Yuanding search for them in Sichuan. Cai supposedly returned with three charts, but none of them were made public. The charts are said to have remained in the Cai family collection for several generations, until they were given away and eventually came into the possession of Xie Zhongzhi. Hu Wei seems to have been the first to explicitly connect this story to the image in the *Liushu benyi*, but whether one of these three thirteenth-century images actually looked like the one in the *Liushu benyi* we cannot know.<sup>65</sup>

In the late eighteenth century the young Zhang Huiyan (1761–1802) wrote an astute comment on Hu Wei's findings and rejected the Cai Yuanding transmission theory altogether for lack of evidence. Instead, he concluded that diagrams like the one in the *Liushu benyi* originated from the cosmological speculations of early Ming scholars.<sup>66</sup> Unfortunately, his insightful little book on this subject, *Yitu tiaobian* 易圖條辨, has only recently received wider recognition.<sup>67</sup> Zhang's drastic revision of the idea that twelfth- and thirteenth-century intellectuals, especially those steeped in Shao Yong's *xiantian* theories, must have been familiar with the *taiji* diagram, can be supported by examining more closely the pictorial nature of *taiji* diagrams in Song cosmological discourse. *Taiji* depictions of unambiguous Song date can be differentiated from the *yin-yang* circle of the *Liushu benyi* not only on a conceptual but also on a perceptual level.

<sup>63</sup> Yuan Jue, *Qingrong jushiji* 清容居士集 (Beijing: Zhonghua shuju, 1952), vol. 7, 21.373–74; Hu Wei, *Yitu mingbian*, p. 78. Xie Zhongzhi is Xie Fangde, see Huang Zongxi, *Song Yuan xue'an*, pp. 2845–46.

<sup>64</sup> On the data for Chen Tuan in Sichuan, see Knaul, *Leben und Legende des Ch'en T'uan*, pp. 22, 153.

<sup>65</sup> Hu, *Yitu mingbian*, pp. 73–80; Zhu Bokun, *Yixue zhexue shi*, 2:12.

<sup>66</sup> Zhang Huiyan, *Yitu tiaobian*, 23b.

<sup>67</sup> Zhang Shanwen, *Zhouyi cidian*, pp. 99–100; Zhang Huiyan, *Yitu tiaobian* (Shanghai: Shanghai guji chubanshe, 1995).

Song cosmological diagrams employ only a very limited vocabulary of visual signs consisting of writing, trigrams, numerical signs, circles, boxes, and lines linking individual parts of a chart. These signs are arranged solely according to content, and aesthetic considerations play no role at all. The *taiji* is variously represented by a simple circle, a circle with a central dot, numerical signs (fig. 13),<sup>68</sup> concentric circles (fig. 14), or a circle split into the semi-circular versions of the trigrams *li* (left) and *kan* (right) respectively (fig. 9), as in the classical *taiji* diagram of Zhou Dunyi (1017–1073).<sup>69</sup> In all these cases the pictorial signs are abbreviated, devoid of representational elements, and so general that they usually cannot be comprehended without textual explanation. The only significant recognizable symbols aside from text are numbers and the binary line statements that compose the trigrams. Conceptually, the Song *taiji* diagrams thus functioned within the same framework we have already encountered for the *xiantian* diagrams: their main information was defined textually in relation to the *Yijing* and through the arithmetic qualities of the trigrams or of numbers.

The *yin-yang* circle of the *taiji tu*, on the other hand, communicates on an essentially geometrical basis. Its two curved, interlocking geometric shapes depict a rotating, self-creating cycle of complementary opposites, of mutually dependant entities whose beginnings are the other's endings.<sup>70</sup> The interaction of dual opposites in this particular design is self-evident; the cosmological symbolism of *yin* and *yang*—and especially of their waxing and waning—is not. This symbolism requires explanation such as is provided by the *xiantian*

<sup>68</sup> Compare the examples, including a numerical *taiji tu* based on Chen Tuan's explanations in the *Longtu xu* 龍圖序 in volume 143 of *Wuqiu beizhai Yijing jicheng* 無求備齋易經集成 (Taipei: Chengwen chubanshe, 1975). See also the works by the Yuan author Zhang Li 張理, *Zhouyi tushuo waibian* 周易圖說外篇, *shang* 3, *Daozang*, vol. 69; and his *Da Yi xiangshu goushen tu* 大易象數鉤深圖, *shang* 1ff. in *Daozang*, vol. 70; for reprints see also *Wuqiu beizhai Yijing jicheng*, vol. 143.

<sup>69</sup> On Zhou's well-known diagram, which had found doctrinal acceptance among Confucian scholars, see Michael Lackner, "Die Verplanung des Denkens am Beispiel der *Fu*," in *Lebenswelt und Weltanschauung im frühzeitlichen China*, edited by Helwig Schmidt-Glintzer (Stuttgart: Franz Steiner, 1990), pp. 133–56; Fung, *History of Chinese Philosophy*, 2:434–51; Joseph Needham: *Science and Civilisation in China*, vol. 2, sections 8–18, pp. 460–68.

<sup>70</sup> For thoughts on such images and their visualization in various cultures, see Nathan Sivin's contribution in Joseph Needham, *Science and Civilisation in China*, Vol. 5:4 (Cambridge: Cambridge University Press, 1980), pp. 374–88.

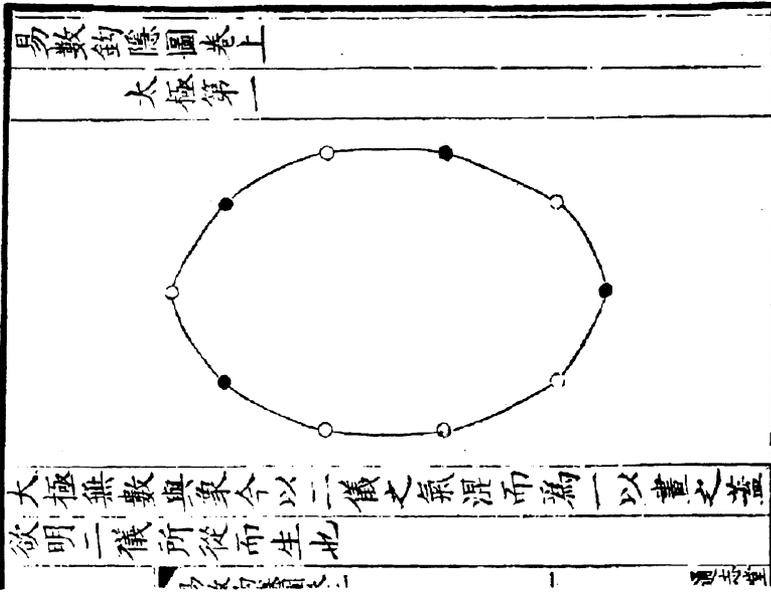
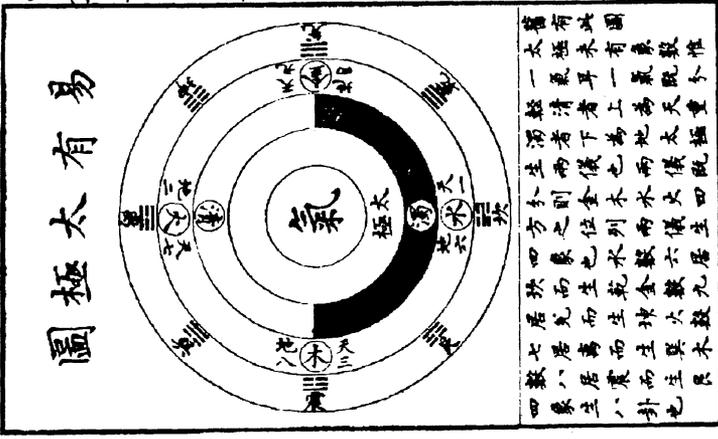


Fig. 13. (left) *Taiji* Diagram, from Liu Mu (1011-1064), *Yi shu jun yin tu* (1681, Tongzhitang edition, rpt. in *Wujiu beizhai Yijing jicheng*, vol. 143).  
 Fig. 14. (right) *Taiji* Diagram, probably of Tang origin. From Cheng Daye, *Chengshi moyuan* (1606; rpt. Beijing: Zhongguo shudian, 1999), 1:2b.

trigrams or additional text. Seen individually, the two halves are basically meaningless shapes, likened by many Chinese commentators to fish (or commas in Western literature). In contrast, the only other *taiji* circle that depicts *yin* and *yang*, the one made famous by Zhou Dunyi (fig. 9), uses traditional, precisely defined symbols of *yin* and *yang*: the trigrams *li* and *kan*.<sup>71</sup>

Curiously, Zhou Dunyi's *taiji* circle fails to represent visually the dynamics of *yin* and *yang* as described in the textual commentary appended to the diagram.<sup>72</sup> Zhou's static design simply serves as a reminder that *yin* and *yang* emerge from the *taiji*, but does not attempt to illustrate the interaction of one taking shape as a result of the characteristics of the other. Zhou communicates this creative process verbally. To the left of the circle he writes: "*yang*—motion"; to the right "*yin*—repose." The concept of *yin* "being the root" of *yang* and vice versa is explained more elaborately in the commentary. One wonders why Zhou Dunyi chose a static *taiji* symbol, if the dynamic *taiji* circle could have expressed his ideas much more emphatically. Was it because he was not aware of a dynamic *taiji* circle? Possibly. Or did he know of the latter, but considered it inappropriate as a diagrammatic sign? Most likely not. For while some of the images he was familiar with may have resembled the design of the *yin-yang* circle found in our *taiji tu*, no Song scholar would

<sup>71</sup> *Li* and *kan*, symbolizing fire and water, are the only complementary trigrams in the *hou-tian* circle and it may well be because of their positions in that circle that they came to represent the juxtaposed *yang* and *yin* sections in other circular *yin-yang* depictions. The *li-kan* circle has been traced back to the Tang period. It appears without a white circle in the center in one of the texts of Zongmi 宗密 (780–841), the fifth patriarch of the Huayan 華嚴 School of Buddhism. Zongmi used it to denote *ālayavijñāna*, the store-consciousness in which the true and the false, i.e. enlightened and phenomenal existence are blended. The *ālayavijñāna* produces all phenomenal existence, yet is never distinct or apart from the true, enlightened existence. Cf. Lackner, "Die Verplanung des Denkens," 142–43; on the *ālayavijñāna* and other ideas of dualism current in medieval Chan and Huayan Buddhism, see Alfonso Verdu, *Dialectical Aspects in Buddhist Thought. Studies in Sino-Japanese Mahāyāna Idealism* (Lawrence: Center for East Asian Studies, University of Kansas, 1974).

<sup>72</sup> In Wing-tsit Chan's translation: "The Great Ultimate through movement generates *yang*. When its activity reaches its limit, it becomes tranquil. Through tranquility the Great Ultimate generates *yin*. When tranquility reaches its limit, activity begins again. So, movement and tranquility alternate and become the root of each other, giving rise to the distinction of *yin* and *yang*, and the two modes are thus established." Chan, *A Sourcebook in Chinese Philosophy*, p. 463. See also Fung, *History of Chinese Philosophy*, p. 435; and Julia Ching, *The Religious Thought of Chu Hsi* (Oxford: Oxford University Press, 2000), p. 22.

have read them as symbols of the *taiji*, or of *yin* and *yang* splitting from the *taiji* as the two creative modes.

#### DEPICTIONS OF COSMIC ENERGY

Between the ninth and fourteenth centuries, images of circles divided into two halves by an s-line or an inverted s-line were by no means abstractions of cosmological concepts, comparable to the symbolic graphs used in Song diagrammatic discourse. On the contrary, they were representational depictions of the concrete physical world and formed part of larger pictorial contexts. They appear only rarely; being small, they are hidden away within the surrounding imagery. No common design elements other than some form of s-shaped dividing line links these circular motifs (figs. 15, 16, 17). And features such as two central dots or the contrasting colors and particular shape of the *yin-yang* swirls—iconographic characteristics of the *taiji* circle seen in Ming and Qing illustrations—are conspicuously absent. In fact, until about the twelfth century, a common iconography was not established through the design within the circle but through additions outside it. Most commonly, flaming halos (and sometimes also mythical animals) identify these circular designs as blazing spheres and discs.<sup>73</sup> Clearly, the specific design of such spheres was determined by an artisan according to aesthetic considerations, not by an intellectual to clarify cosmological speculations.

Early images of flaming spheres divided into two (and sometimes three) curved sections appear in northern China, most prominently on ritual utensils from the Liao empire (907–1125) (fig. 16); their meaning is, however, still largely unstudied.<sup>74</sup> The earliest datable example I have been able to trace is on the lid of a silver reliquary

<sup>73</sup> The history of designs that anticipated such images of spheres and gems cannot be examined here. Suffice it to say that dual, dynamically opposed pictorial entities which are not enclosed by a circular frame can be traced back to antiquity. In many cases these designs can be interpreted on a symbolic level within the larger system of correlative thought.

<sup>74</sup> François Louis, “Shaping Symbols of Privilege: Precious Metals and the Early Liao Aristocracy,” *Journal of Sung-Yüan Studies* (forthcoming). For a rare datable Song example of 1085 on the forehead of a mythical stone beast along the spirit road of the mausoleum of emperor Shenzong (1048–1085), see Ann Paludan, *The Chinese Spirit Road: The Classical Tradition of Stone Tomb Statuary* (New Haven: Yale University Press, 1991), pp. 148–49.



Fig. 15. Decoration on the lid of a silver reliquary casket excavated in 1987 at the Famensi, Fufeng, Shaanxi. Tang, 871-873. Length: 20 cm. From *Wenwu* (1988.10): 21.

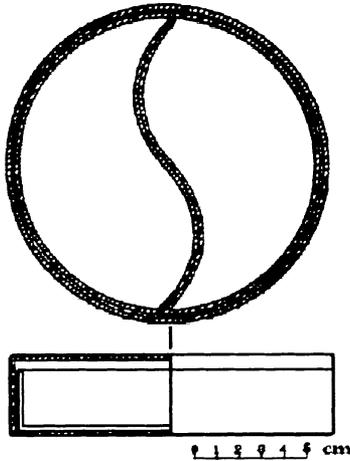


Fig. 16. A composite drawing by the author of the silver funerary crown of Liao prince Xiao Shucheng (d. 1017/18). Excavated in 1986 in the tomb of the Princess of Chen in Naiman Banner, Zhelimu League, Inner Mongolia.

Fig. 17. A drawing of a lacquered box excavated in 1979 in Zhenjiang, Jiangsu. Southern Song, thirteenth century. From *Wenwu ziliao congkan* (1987.10): 186.

manufactured for the Tang emperor between 871 and 874 to enshrine a finger bone of Buddha Śākyamuni (fig. 15).<sup>75</sup> The gem is depicted within slender streaks of clouds with two dragons swirling around it. The dragons' bodies and postures are identical, their heads thrown back, snouts gaping at the sphere between them. The combination of the antithetical elements water and fire, depicted as clouds and halo, and the polarized positioning of the dragon pair leave little doubt that we are presented here with the theme of creation through the interaction of opposite entities.<sup>76</sup> *Yin* and *yang* meet as a roaring clash of elemental powers, their transformational force regulated only by the ornamental symmetry of the design. The cosmological significance of this imagery on the lid is further emphasized by the iconography on the sides of the reliquary, where the four cardinal directions are indicated through the depiction of the four Heavenly Kings (*tianwang* 天王). It is a Buddhist cosmology, to be sure; Vaiśravaṇa, the King of the North, resides on the front panel of the casket.

Having recognized the cosmological symbolism inherent in the lid's main imagery, can we assume that the bipartite design of the gem, because it mirrors the inverted and thus dynamic juxtaposition of the dragons, itself represents the *yin-yang* dualism?<sup>77</sup> The answer is yes, but it requires explanation. Given the specific purpose of the reliquary, we may identify the flaming gem as a representation of the *cintāmani*, a wish-fulfilling gem variously said to be obtained from the dragon-king of the sea, a dragon-fish (*makara*), a bird-king (*garuda*), some other mythical animal, or from the relics of the Buddha.<sup>78</sup> Because we know from archaeological evidence

<sup>75</sup> This casket formed part of a set of eight containers, stored one within the other, discovered in 1987 in the crypt of the Famen Temple in Fufeng, Shaanxi. The casket was the outermost metal case. A sandalwood case originally enclosed it, but had decayed and could not be recovered, see Shaanxi sheng Famensi kaogudui, "Fufeng Famensi ta Tangdai digong fajue jianbao" 扶風法門寺塔唐代地宮發掘簡報, *Wenwu* (1988.10): pp. 20–21.

<sup>76</sup> On the *yin* and *yang* symbolism of dragons, see Jean-Pierre Diény, *Le symbolisme du dragon dans la Chine antique* (Paris: Collège de France, 1987).

<sup>77</sup> On the idea of inverted symmetry as a design choice and its perception as "dynamic," see Ernest Gombrich, *The Sense of Order: A Study in the Psychology of Decorative Art* (Ithaca: Cornell University Press, 1979), pp. 138ff.

<sup>78</sup> Cf. Mochizuki Shinkō 望月信亨, ed., *Bukkyō tai jiten* 佛教大辭典 (Tokyo, 1958–63), pp. 4132–33; Ding Fubao 丁福保, *Foxue da cidian* 佛學大辭典 (Beijing: Wenwu chubanshe, 1991), p. 550.

that the liturgical aspects of worshipping this particular Buddha relic were entrusted to chief priests of the Esoteric School,<sup>79</sup> the various types of *cintāmani* recorded in Esoteric texts of the eighth and ninth century are particularly relevant. In those texts one can indeed find descriptions of gems considered to be dualistic embodiments of Buddha's transcendence, their wish-fulfilling creative power being explained by their bipartite nature. The eminent Japanese patriarch Kūkai 空海 (774–835), for example, who introduced the Chinese esoteric teachings to Japan, discussed the view that the *cintāmani* consists of two antithetical entities. He corrects a traditional notion that a true wish-granting gem is made from dragon's liver and phoenix's brain, and explains that the duality in fact reflects the laws of spontaneous process inherent in the Thatāgata's body.<sup>80</sup> It is thus quite possible that the priest who conceived of the decorative scheme on the Famensi reliquary recognized the notion of *yin* and *yang* in the *cintāmani*. In this way, the gem could be interpreted as a magic symbol not only of Buddha's central position in the universe, but also of his transformational power, which transcends the cycle of life and death and promises spiritual salvation in a future existence.

A similar cosmological symbolism was most likely intended in Liao depictions of the flaming sphere, which are usually accompanied by a pair of dragons or phoenixes (fig. 16). Yet, given the representational nature of these gems, their interactive halves should be understood as concrete rather than abstract symbols of *yin* and *yang*. The most obvious choice for such representational symbols in a flaming sphere would have been the contrasting elements water and fire. Support for this proposed reading is found, for example, in a flaming gem with a red and a blue or green half that appears

<sup>79</sup> Han Wei 韓偉, "Famensi digong Tangdai sui zhenshen yiwuzhang kao" 法門寺地宮唐代隨真身衣物帳考, *Wenwu* (1991.5): 27–37; François Louis, *Die Goldschmiede der Tang- und Song-Zeit* (Bern: Peter Lang, 1999), pp. 140–50.

<sup>80</sup> *Goyūigo* 御遺告, T. 77:2431, 413a. One of Amoghavajra's (705–774) sutras similarly recognizes the interaction between *yin* and *yang* in two types of *cintāmani* and expresses this in terms of the polarity of water and fire. Amoghavajra states that *cintāmani* produced by people are thought to embody the virtue of fire, while those which come from dragon palaces are endowed with the virtue of water. *Ruyi baozhu zhuanlun mimi xianshen cheng fo jinlun zhou wang jing* 如意寶珠轉輪秘密現身成佛金輪呪王經, T.19:961, 332a.

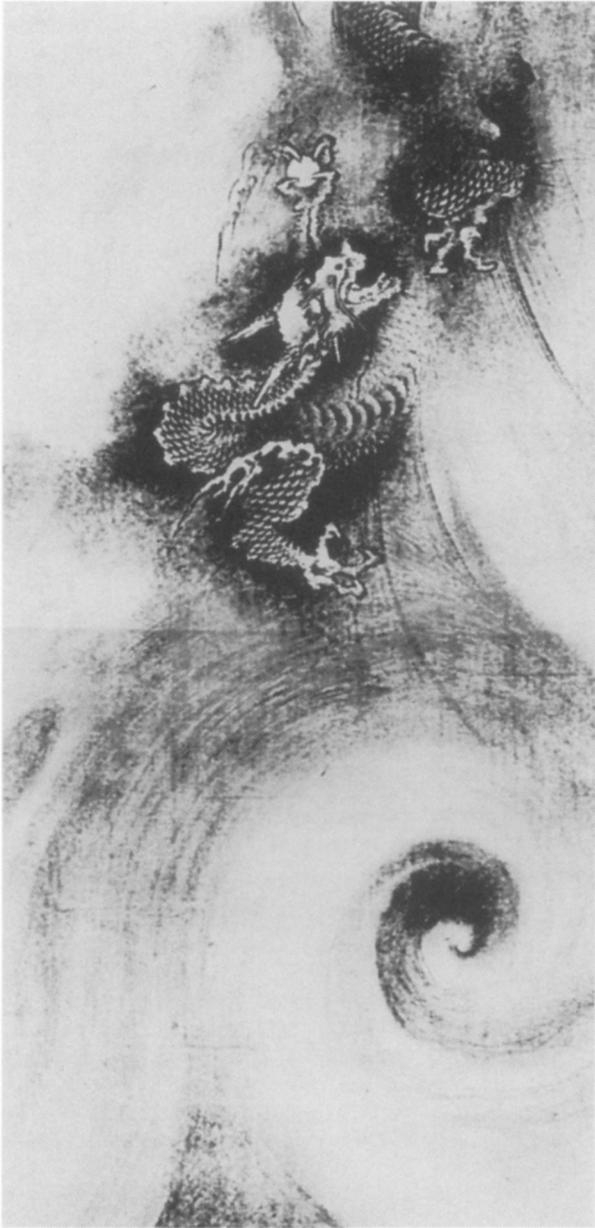
on top of a sedan chair in a Liao tomb mural in Kulun painted around 1080.<sup>81</sup>

By the thirteenth century the choice to divide a circle into two swirls had become a more widespread design principle, now being used also in southern China. A circular lacquered beauty case with two interlocking inserts discovered in a thirteenth-century Southern Song tomb (M6) in Zhenjiang, Jiangsu, may exemplify the gradual abstraction of this design principle from representational depictions into simple geometric forms (fig. 17). Meanwhile the tradition of depicting concentrated cosmic energy continued—be it in images of flaming balls or swirls of clouds. Chen Rong's 陳容 (*jinshi* 1235, d. after 1262) famous handscroll of *Nine Dragons* 九龍圖 in the Museum of Fine Arts, Boston (fig. 18), for example, presents both these images in the exact center of the composition. A great vortex of intertwining dark and light clouds is unambiguously intended to depict nature's creative material force (*qi* 氣). The contemporary colophons make several references to it. Right next to this whirl a young, "inexperienced" dragon has managed to grab a smooth gem with a flame shooting forth that is associated with this center of energy.<sup>82</sup>

It seems likely that by the fourteenth century, images of ethereal whirls and bipolar gems had become stock depictions of organic cosmic energy. The presence of such imagery in the corpus of identifiable visual forms appears to have created the necessary pre-conditions for the conception of a two-dimensional abstract *yin-yang* circle with intertwining black and white halves which could be combined with the *xiantian* trigrams. The *Siku quanshu* edition of the *Liushu benyi*, in fact, preserves a design of the *tiandi ziran hetu* (fig. 12) which appears much more like a whirl than a precise translation of the *yin-yang* valence expressed through the *xiantian* trigrams.

<sup>81</sup> Cf. Wang Jianqun 王健群 and Chen Xiangwei 陈相伟, *Kulun Liaodai bishua mu* 庫倫遼代壁畫墓 (Beijing: Wenwu chubanshe, 1989), color plate 2:2. See also the swirling elements emanating from the beaks of two juxtaposed phoenixes on a set of jade plaques datable to the tenth century, in René-Yvon Lefebvre d'Argencé, *Treasures from the Shanghai Museum, 6000 Years of Chinese Art* (San Francisco: Asian Art Museum, 1984), no. 63.

<sup>82</sup> Wu Tong, *Tales from the Land of Dragons: 1000 Years of Chinese Painting* (Boston: Museum of Fine Arts, 1997), no. 92, pp. 90–95, 197–200.



**Fig. 18. A detail from the handscroll *Nine Dragons* by Chen Rong. Southern Song, dated 1244. Ink and touches of red on paper, 46.3x1096.4 cm. Museum of Fine Arts, Boston (Francis Gardner Curtis Fund; 17.1697). ©2002 Museum of Fine Arts, Boston.**

THE ICONIC *TAIJI* CIRCLE

Perhaps the most striking conclusion to be drawn from the above brief survey of early circular designs divided into two interlocking halves is that circles with two colored halves and two antithetical dots do not seem to appear before the Ming period. The design in fact begins to proliferate in decorative as well as literary contexts only in the sixteenth century. As this section will show, it was only during the later half of the Ming period that our specific *taiji* circle became truly iconic, that is, widely recognized as a cosmologically meaningful design. The new icon was the result of the circular whirling image of creative energy merging with the *xiantian* trigram circle into one cosmological diagram. As a result of this combination generic images of interlocking swirls were modified into the specific abstraction of a circle with a clearly defined appearance that would eventually retain its abstract cosmological symbolism even without the trigrams.

Judging from the *Liushu benyi*, it was during the fourteenth century that a small number of intellectuals began to abandon concerns over the diagrammatic usefulness of an organically designed *yin-yang* circle. However, because this circle evolved from a pictorial tradition, and because its geometrically complex design contrasted sharply with the numerically encoded trigrams, its transfer into diagrammatic discourse hinged upon a systematizing and rationalizing of the design. This need for explanation is amply demonstrated by the annotations in the *Liushu benyi* and later illustrations on how to understand the relationship between the circle's design and the *xiantian* trigrams. The subjectivity of the design, particularly the way the swirls intertwine at the center of the circle, must have been recognized as mathematically inaccurate and quite different from the more precise symbolic codes of trigrams and numbers. Indeed, the history of the *taiji* image in the Ming period is to a large extent dominated by scholars trying to come to terms with this inaccuracy. To remedy the subjectivity of the circle's design, some scholars of the late sixteenth and early seventeenth centuries began to reconstruct it, basing themselves on the increasingly familiar methods of geometry, as introduced most influentially by the Italian missionary Matteo Ricci (1552-1610). The result of this new geometric

approach was a distinction between what may be labeled an “objectively” and a subjectively designed version of the *taiji tu*.

Such late Ming approaches are best exemplified in the *Tushu bian* 圖書編, a massive, encyclopedic collection of diagrams and writings drawn from over two hundred earlier publications.<sup>83</sup> Zhang Huang 張潢 (1527–1608) compiled the book between 1562 and 1585 in an attempt to sort out the true Confucian illustrative materials from those of Daoist and Buddhist provenance. Because of financial constraints, he never published his seven-thousand-page compendium; only after his death was one of his disciples able to afford the cost of having the wood blocks carved, and the book could finally be printed for the first time in 1613.<sup>84</sup>

Zhang Huang included two images of the dynamically divided circle surrounded by the *xiantian* trigrams. In one illustration the circle is subjectively designed and the image is called “Ancient *taiji* Diagram” (*gu taiji tu* 古太極圖) (fig. 19); in the other the circle is constructed with a sensitivity to geometric principles in order to match more precisely the *yin-yang* flux indicated by the trigrams (fig. 20). This latter image, which we shall discuss first, is called “Diagram of the Trigrams Drawn Prior to Heaven” (*xiantian huagua tu* 先天畫卦圖). The circle here is divided into four sectors and the intertwining *yin* and *yang* halves are aligned along the diagonals, resulting in a sliding join rather than a hooked one as seen in the *gu taiji tu* (fig. 19).<sup>85</sup> The quarters of the circle represent the four *xiang*, the second stage in the binary exponential process which links *yin* and *yang* to the eight trigrams. The four *xiang* are called greater or lesser *yin* and *yang* respectively (cf. fig. 3). But while this manipulation of the circle helped to clarify to some extent the joining of the two halves in the center, the splitting of *yin* and *yang* is neither visually convincing, nor do the positions of the resulting four *xiang* appear to be related to those of the trigrams. The sectors are merely superim-

<sup>83</sup> The first Western author to point out the *Tushu bian* in connection with the history of the *taiji tu* was Joseph Needham: “The Institute’s Symbol,” in *Biologist. Journal of the Institute of Biology* 24, (1977): 71–72.

<sup>84</sup> Goodrich and Fang, *Dictionary of Ming Biography*, vol. 1:83.

<sup>85</sup> The bad quality of the print is due to a flaw in the 1613 printing block—a wide scratch near the trigram *kan* on the right. The same flaws seen in the Columbia University version also appear in the copy reprinted in 1971 by Chengwen chubanshe in Taipei.



Fig. 19. "Ancient *Taiji* Diagram," from Zhang Huang, *Tushu bian* (1623), 1:1a. Courtesy of C.V. Starr East Asian Library, Columbia University.

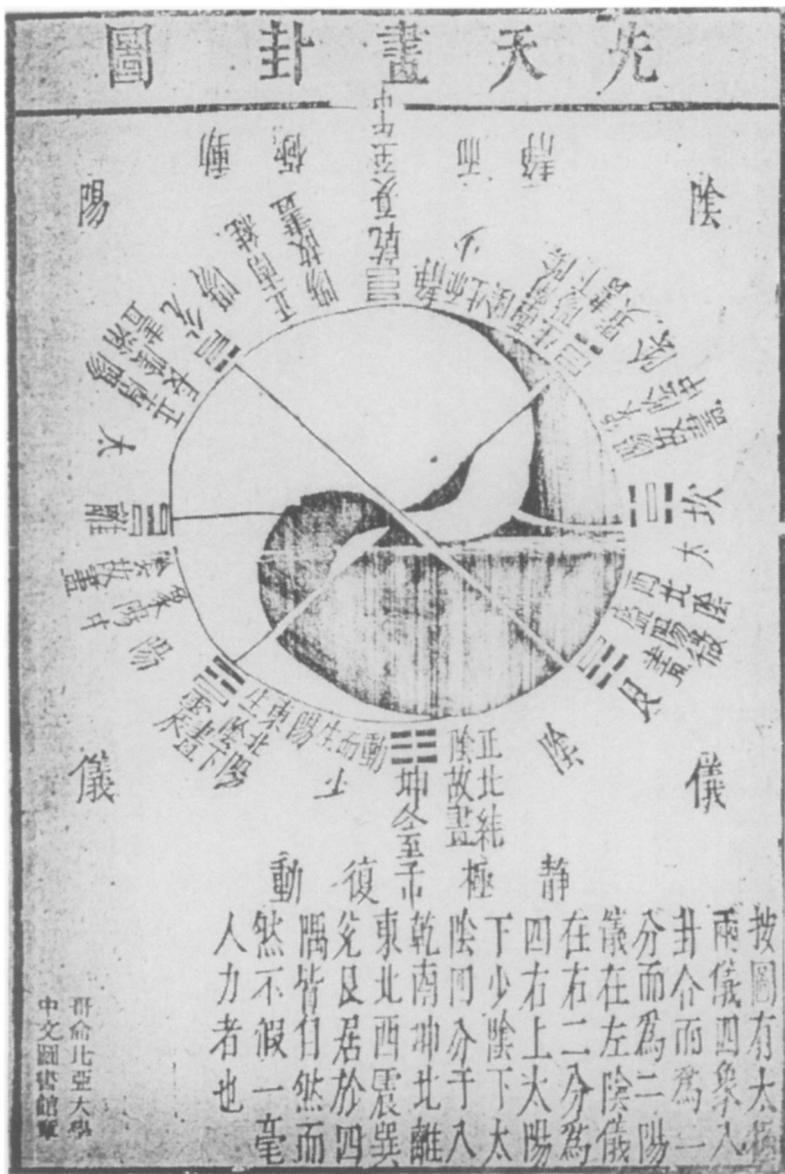


Fig. 20. "Diagram of the Trigrams Drawn Prior to Heaven," from Zhang Huang, *Tushu bian* (1623), 2:5a. Courtesy of C.V. Starr East Asian Library, Columbia University.

posed over the circular design, and information about the four *xiang* must be conveyed textually.<sup>86</sup>

In seventeenth-century adaptations of this *xiantian* image the central circle is sometimes divided by four lines into eight sectors (fig. 21). These lines function as guides for creating two sine curves with continuously decreasing radius, helping render the trigram code more accurately in the curvilinear mode. In the example illustrated here from 1688, the *yin* and *yang* halves join along the *dui-gen* diagonal.<sup>87</sup> Eventually, as knowledge of Western geometry increased, their outline would become a true sine curve that uses the *qian-kun* or north-south axis as a guide for alignment. In a detailed article explaining the astronomical and mathematical dimensions of circular *taiji tu* Li Shicheng 李仕澂, a Nanjing physics professor, has recently presented the trigonometric decoding of this most accurate diagram (fig. 22).<sup>88</sup>

Nowadays, one also finds the diagram with the central circle's dividing curve simply constructed from semi-circles. However, this construction is geometrically unrelated to the *xiantian* trigrams, because the curve does not continually decrease in radius.<sup>89</sup> While this design has appeared in decorative contexts since the seventeenth century, its use as a literary diagram is more recent. It has mainly been employed by twentieth-century Western scholars such as Marcel Granet (1884–1940) to explain Chinese cosmological thought (fig. 23). In China, its diagrammatic use is a phenomenon of the late twentieth century: it occurs mostly in connection with the practice of *qigong* 氣功 and traditional Chinese medicine.<sup>90</sup>

<sup>86</sup> Zhang Huang, *Tushu bian* (1623), 2:5a. It is theoretically possible to recognize the four *xiang* in the four design elements that make up the central circle: the two fish shapes and the two central dots. But such an interpretation was apparently not yet envisioned around 1600. Even a hundred years later, Hu Wei still understands the central dots in relation to the trigrams *li* and *kan* and interprets them as the sun and the moon which had traditionally been represented by these two trigrams, see Hu Wei, *Yitu mingbian*, p. 81.

<sup>87</sup> Published in the *Yijing Lai zhu tujie*, where it belonged to one of the additions to Lai Zhide's 來知德 (1525–1604) original work entitled *Zhouyi jizhu*, first published in 1599. See note 7.

<sup>88</sup> Li Shicheng 李仕澂, "Lun taiji tu de xingcheng ji qi yu gu tianwen guan cha de guanxi" 論太極圖的形成及其與古天文觀察的關係, *Dongnan wenhua* 東南文化 85/86 (1991/3,4): 17–19.

<sup>89</sup> For examples, see C.A.S. Williams, *Outlines of Chinese Symbolism and Art Motives* (rpt. of third revised edition of 1941, Rutland: Tuttle, 1974), pp. 121, 150, 188.

<sup>90</sup> Li Shicheng mentions a 1990 publication by an agronomist and *qigong* adherent named

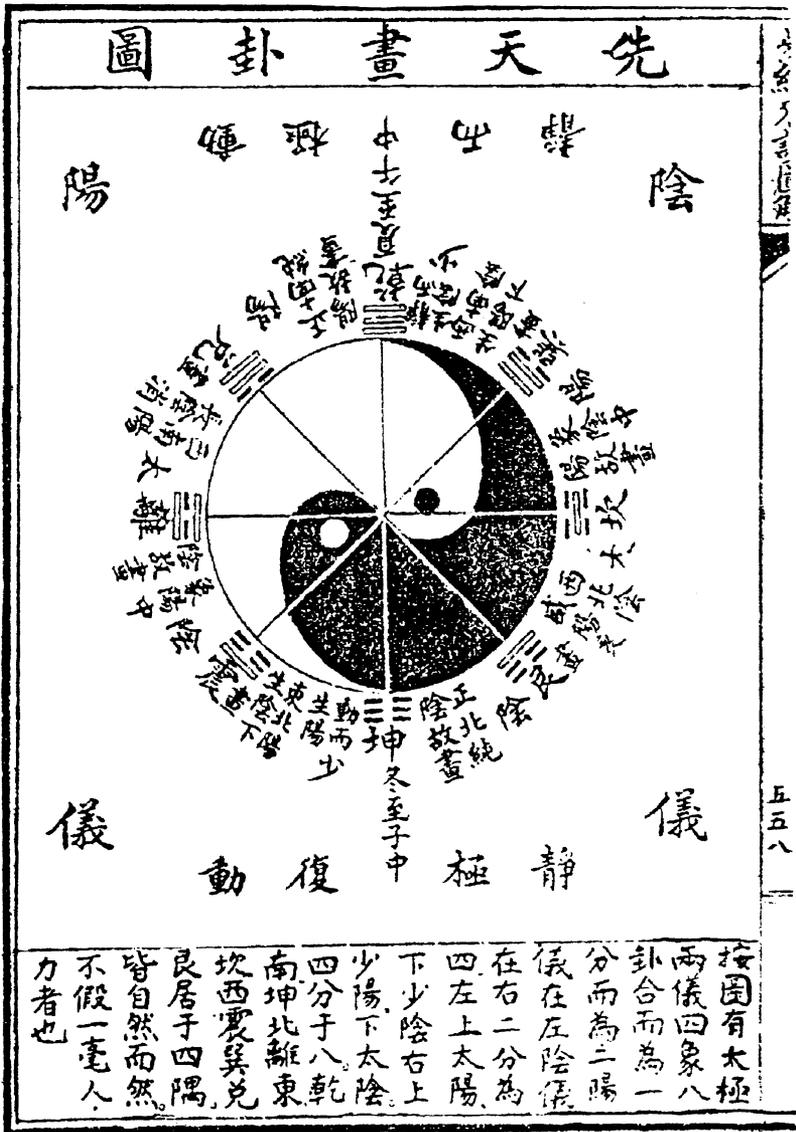
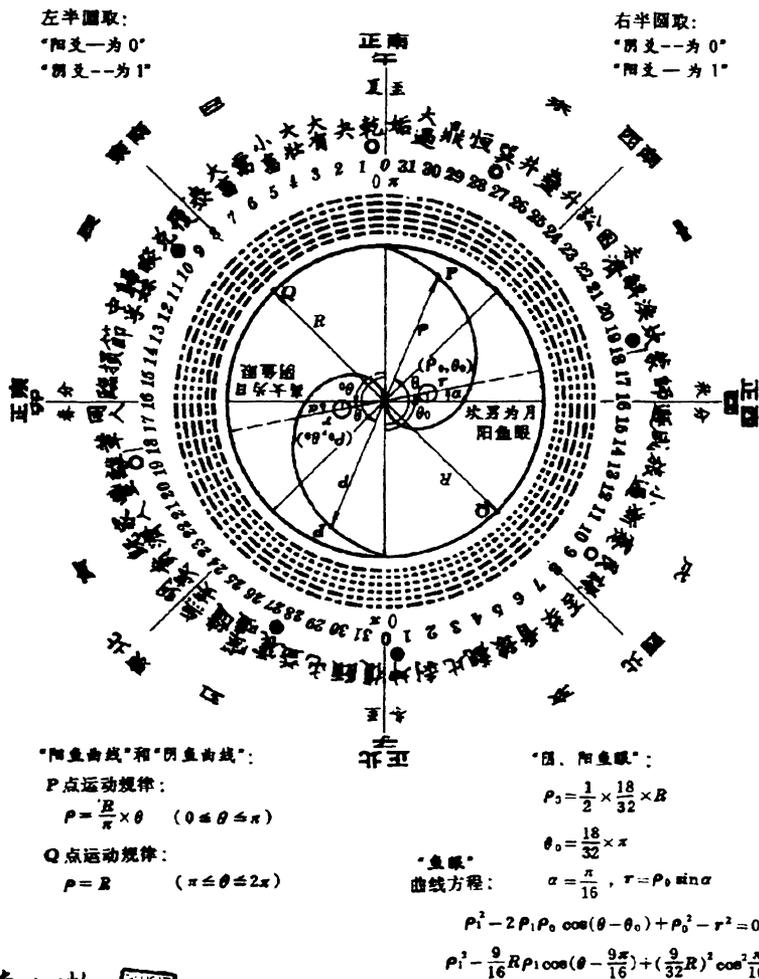


Fig. 21. "Diagram of the Trigrams Drawn Prior to Heaven," from Lai Zhide, *Yijing Laizhu tujie* (1688; rpt. Chengdu: Ba Shu shushe, 1988).

### “太极曲线”是卦位幅长的运动轨迹



李士激 1990.11.26.

Fig. 22. Geometrically constructed *xiantian* diagram, by Li Shicheng, 1990. From *Dongnan wenhua* (1991.3/4): 18.

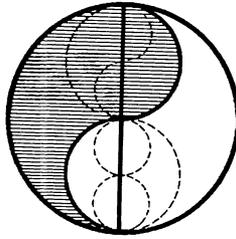


Fig. 23. *Taiji* Diagram, from Marcel Granet, *La pensée chinoise* (Paris: La Renaissance du Livre, 1934), p. 280.

It is significant that Zhang Huang placed the *xiantian* diagram (fig. 20) only into the second *juan* of his compendium, while he saw the so-called “Ancient *Taiji* Diagram” fit for the very beginning as the appropriate first image (fig. 19). The importance that latter image had gained by the early seventeenth century as a universal symbol of creation, as a primal *tu*, could hardly have been stated more explicitly. In Zhang’s “Ancient *Taiji* Diagram” the trigrams appear as small characters, dwarfed by a giant central circle with sharply interlocking black and white halves. The trigrams are still an essential part of the iconography of this image—relevant to maintain the directional positioning, the clockwise rotation, and the two dots near the center of the *taiji* circle—but they are visually subordinate. Moreover, the analytical rigor we saw in the depiction of the *xiantian* diagram’s central circle is here sacrificed in favor of a blatantly subjective design. The prominent central circle emphasizes recognizability over mathematical exactness. As a result, it subsumes the full load of associations of the entire diagram into one self-explanatory pictorial symbol.

Three lengthy commentaries celebrate this image. Rather than treating it like a diagram that is part of an argument, these texts

---

Han Yongxian 韓永賢 as one of the first scholarly attempts in China to explain the geometry of the semi-circle-based design adhering to Neo-Confucian terminology. See Li Shicheng, “Lun taiji tu de xingcheng,” 19–22. For another example, see Wang Rongkui 王榮奎 et al. eds., *Zhouyi baodian* 周易寶典 (Hohhot: Neimenggu daxue chubanshe, 1998), vol. 4:3722.

discuss the image as a symbol, as an icon that can be interpreted in manifold ways because it functions independently of text. It is described as a symbol of the way to physical as well as moral perfection, as an abstraction of the principle workings of nature and the beginning of all creation. It is also presented as a symbol for the origin of culture, as an image that creates basic insights and thus symbolizes all scholarly pursuit. Two hundred years earlier Zhao Huiqian, in order to claim this image for the Confucian elite, had to connect it to the Song literati's philosophical discourse with diagrams. By Zhang Huang's time, it could be separated from the tradition of intellectual diagrams and be perceived as a timeless symbol. There was no longer a need to explain its uncertain provenance with theories of secret transmission. Rather, it was accepted as a suggestive image which evokes, elucidates, and embodies fundamental cosmological and moral ideas described in the *Yijing* and later reinterpreted and popularized by Song philosophers. One of the commentaries bluntly states that "it is unknown who painted [this image], or under which dynasty this came about. Because it has been circulating for a long time, it is known as the Ancient *Taiji* Diagram. When looking at the opening passage of the *Xici* commentary in the *Yijing*, this diagram and that text elucidate each other. The passages in the *Shuogua* commentary 'heaven and earth determine the position' and the resulting intermingling are explained by this picture."<sup>91</sup>

The visual distinction in Zhang Huang's *Tushu bian* between the subjective "Ancient *Taiji* Diagram" and the objective *xiantian* diagram is paralleled by the differentiation of the origin of the two images. The subjective circle is perceived as a popular symbol of unclear provenance while the analytical circle is traced back as part of the *xiantian tu* to famous members of the Chinese intelligentsia. Around 1600 scholars were thus increasingly aware of the popular nature of this *taiji* circle and some, such as Zhang Huang, attempted to separate it from traditional Confucian illustrative discourse by treating it as a primary symbol rather than as a diagram. Others, like Lai Zhide, felt the imprecision of this *taiji tu* to be too unsatisfactory and devised more rationally designed versions that became

<sup>91</sup> *Tushu bian*, 1:4a.

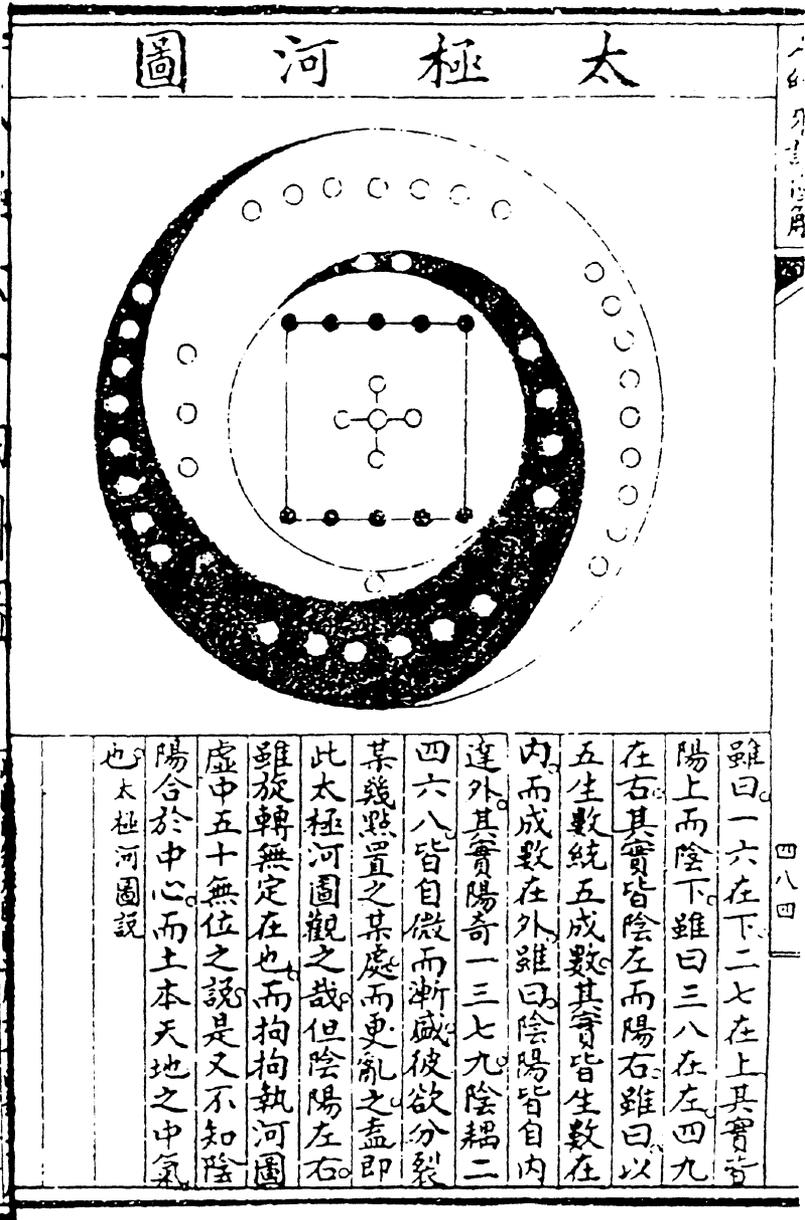


Fig. 24. "Taiji River Diagram," from Lai Zhide, *Laizhu Yijing tujie* (1599; rpt., Zhanghua Shi: Yichun chubanshe, 1969).

very influential in later Confucian discourse on cosmology (fig. 24).<sup>92</sup>

### CONCLUSIONS

This paper set out to clarify the provenance of the *taiji tu* by treating its two main components, the *xiantian* trigram circle and the *taiji* circle with its interlocking *yin* and *yang* swirls, as separate pictorial entities. This resulted in the following significant conclusions. The *xiantian* trigram circle is not an ancient chart, as is often implied by its association to Fuxi and the *Yijing*, but was conceived during the Northern Song period as a result of cosmological and alchemical speculations with numbers and trigrams. It was successfully promoted during the twelfth century by intellectuals of the Neo-Confucian Daoxue school, most effectively Zhu Xi, whose writings secured the ultimate acceptance of this trigram arrangement. There is no evidence throughout the Song period that the circular *xiantian* arrangement was in any way connected to a *taiji* circle with interlocking *yin* and *yang* swirls. The earliest known text that illustrates a diagrammatic synthesis of these two entities is the *Liushu benyi*, an etymological treatise written in the 1370s, but apparently only available now in editions of the early sixteenth century. The book claims that the actual, physical chart it illustrated dated from at least the twelfth century and had passed secretly through the collections of various noted Song and Yuan intellectuals; the image itself, however, was understood as having been invented in archaic times by Fuxi. Thus a myth created during the twelfth century to promote the *xiantian* trigram sequence was appropriated here for a more complex diagram.

Ever since the *taiji* diagram first appeared in the early Ming period, scholars discussed the *yin-yang* circle not as a later addition to the *xiantian* trigram circle, but as an intrinsic part of it. To Ming and early Qing scholars the image simply presented the information encoded by the trigrams in an alternative visual mode. A look

<sup>92</sup> Lai Zhide, *Yijing Lai zhu tuji* (Chengdu: Ba Shu shushe, 1989), p. 484; Schulz, "Lai Chih-te," pp. 141-68. Ironically, later interpreters of Lai's work did not make his distinction and hence included the *taiji* diagram into his book, see note 7.

at the pre-Ming history of the *yin-yang* circle, however, reveals that a diagrammatically abstract image with two swirls of complementary colors and two central dots had not gained any currency. Circular designs with an implied *yin-yang* symbolism nevertheless existed before the fourteenth century as part of Buddhist or Daoist cosmologies in the form of flaming spheres and atmospheric whirls depicting concentrated, creative energy. Such representational cosmological imagery can be traced back to the ninth century, but it seems to have gained wide recognition only by the thirteenth century. These early designs should not be confused with the *taiji* circle used since the Ming period in diagrammatic discourse. They should instead be considered as predecessors which paved the way for the conception of a graphic, abstract *taiji* circle designed like the images of swirling energy. The specific iconography of two antithetical dots near the center and the contrasting colors of this circle were determined by the positions of the surrounding *xiantian* trigrams. With the acceptance of the *taiji* diagram as part of the scholarly discourse on cosmology over the course of the Ming period came the recognition of the dynamically divided circle as an iconic symbol. Since the late Ming period design variations of this circle have proliferated in contexts far beyond the confines of Confucian ideology. Today, designs alluding to the *taiji* circle abound, while their symbolism tends to be far removed from anything we encountered in Ming and early Qing writings.<sup>93</sup> Nevertheless, the popularity of the design would be unthinkable without Ming diagrammatic discourse on cosmology that created and justified the prototype.

<sup>93</sup> For an assembly of illustrations of nineteenth and twentieth century uses of the design, see Li Shicheng, "Lun taiji tu de xingcheng," 9.