Original Research Article

Cosmic Bagua theory and the planets of the solar system

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Abstract: Researchers adopt varied thinking modes to carry out scientific exploration, and cross-disciplinary research combining Zhouyi symbolic numerology with astronomical observation has gained growing academic attention in recent decades. Fuxi's Primordial Eight Trigrams form a complete symbolic framework that records ancient Chinese ancestors' long-term astronomical observations and logical induction of cosmic movement laws. Academic disputes have persisted for years over the connection between this eight-trigram system and real celestial bodies within the solar system, with core conflicts stemming from mismatched analytical logics between Yi scholarship and mainstream astronomical paradigms. Taking fourteen Bihe hexagrams with identical upper and lower Five Element properties out of the Primordial Sixty-Four Hexagrams as the core research carrier, this paper integrates the coordinate logic of the Innate Eight Trigrams Coordinate System, Five Element categorization standards and unique symbolic connotations of each hexagram, to rebuild a complete matching framework linking eight trigrams to all large planets and dwarf planets in the solar system. This work corrects biased classification logics widely adopted in contemporary astronomical research on celestial objects. Through systematic sorting of the internal matching laws among the Innate Eight Trigrams Coordinate System, attribute-consistent Bihe hexagrams and various space objects, this paper verifies that the spatial layout implied by Fuxi's Primordial Bagua shares inherent logical coherence with the actual distribution pattern of solar system celestial bodies, and puts forward an original planetary classification standard rooted in traditional Yi ideology. This research eliminates the disciplinary gap between classical Yi learning and contemporary astronomy. It supplies a brand-new analytical path for scientifically interpreting and empirically verifying ancient Chinese cosmic views with modern scientific reasoning, establishes a quantitative communication channel for Eastern and Western astronomical ideological exchange, and delivers innovative research ideas for the integrated evolution of Chinese traditional culture and modern science and engineering.

Keywords: primordial sixty-four hexagrams; bihe hexagrams; five element; solar system celestial bodies; innate eight trigrams coordinate system

1. Preface

Human beings have never ceased investigating the formation and evolutionary origins of the Sun and its surrounding planetary bodies over thousands of years. Mainstream modern astronomical theories attribute the birth of the whole solar system to the aggregation of primitive solar nebula substances under universal gravitational attraction. Nevertheless, if we analyze celestial evolutionary rules under the yin-yang and Five Element theoretical system of Yi studies, these two physical mechanisms alone cannot offer a complete explanatory framework for the birth of all planets. Only by introducing the binary opposition of yin and yang, Five Element attribute division and the eight-trigram symbolic system can we fully interpret the complete evolutionary logic of the solar system. This paper elaborates the one-to-one matching relation between eight trigrams and all solar system celestial bodies, with all detailed matching data displayed in **Table 1**.

Table 1. Matching relations between eight trigram palaces and solar system planetary objects.

Sun													
Yang-planets							Yin-planets						
Metal				Fire	Wood		Wood		Water	Earth			
Qian Palace		Dui Palace		Li Palace	Zhen Palace		Xun Palace		Kan Palace	Gen Palace		Kun Palace	
Qian	Bo	Dui	Qian	Li	Zhen	Heng	Yi	Xun	Kan	Lü	Gen	Guai	Kun
1	6	9	14	17	25	28	37	40	48	51	56	59	64
Mercury	Venus	Earth	Mars	Asteroid	Jupiter	Saturn	Uranus	Neptune	Pluto	Haumea	Makemake	Gonggong	Eris
0.387	0.723	1.000	1.524	2.7	5.203	9.539	19.18	30.06	39.45	43.11	45.79	67.42	67.78

2. Differences between modern astronomical classification and Bagua-based classification

Astronomers have put forward multiple sets of sorting criteria to distinguish various celestial objects within the solar system. The most widely used classification splits planets into rocky terrestrial bodies and gas giants; other common dividing methods separate inner planets, outer planets, large gaseous planets and trans-Neptunian dwarf planets. Every existing sorting standard only relies on external observable features such as material composition, orbital distance and planetary volume, which can satisfy the statistical demands of observational astronomy but fail to distinguish the intrinsic core attributes of each celestial body, leading to obvious logical defects.

The analytical logic derived from the Zhouyi eight-trigram system is completely different from modern astronomical categorization modes. When scholars analyze the solar system from Yi thought, they regard all celestial objects as an interconnected organic entirety, while being capable of distinguishing the independent essential features of every single planet. The mapping system built between eight trigrams and solar objects takes both the balanced operation of the whole star system and exclusive symbolic features of individual celestial bodies into full consideration.

According to the trigram-celestial matching data listed in **Table 1**, all solar system objects can be divided into two major groups based on yin-yang attributes: Yang-planets and Yin-planets.

Yang-planets include Mercury, Venus, Earth, Mars, Jupiter, Saturn, and all tiny asteroids scattered across the Mars-Jupiter asteroid belt.

Yin-planets cover Uranus, Neptune, Pluto, Haumea, Makemake, Gonggong and Eris.

The Five Element attribute division rules for all planetary bodies are sorted out as follows: Mercury, Venus, Earth and Mars belong to Metal element; all fragmented asteroids in the belt match Fire element; Jupiter, Saturn, Uranus and Neptune fall under Wood element; Pluto independently bears Water attribute; Haumea, Makemake, Gonggong and Eris are classified as Earth element bodies.

Modern astronomical academia uniformly defines Pluto and four outer trans-Neptunian objects as dwarf planets, and further categorizes Pluto, Haumea and Makemake as Kuiper Belt members. From the perspective of Yi theoretical logic, this classification arbitrarily mixes celestial bodies with Water and Earth core essences. Although these three dwarf planets share similar surface physical parameters, their internal fundamental natures are totally distinct. We can take the asteroid belt between Jupiter and Mars as a comparison: If all scattered asteroids merged into one complete large planet, astronomers would not group this new body with the four terrestrial planets to form a five-rock-planet cluster. Hence the astronomical circle needs to rethink whether trans-Neptunian dwarf planets should be divided via surface observational indicators or their inherent Five Element essences.

A. One-to-One Matching Rules Between Eight Palace Bihe Hexagrams and Planets.

The full set of Sixty-Four Hexagrams is split into eight independent trigram palaces, with eight unique hexagram texts contained in each palace. Every palace contains several attribute-consistent Bihe

hexagrams, which form exclusive one-to-one mapping links with different solar system planets. An attribute-consistent Bihe hexagram refers to a two-layer trigram whose upper trigram and lower trigram carry identical Five Element attributes. After sorting all sixty-four hexagram texts, we screen out fourteen such Bihe hexagrams, each corresponding to an independent celestial body. Detailed matching rules are listed item by item below:

(1) Qian Palace Group: The pure Qian hexagram matches Mercury, while the Bo hexagram corresponds to Venus. Since both hexagrams belong to the Qian Palace system, Mercury and Venus display plenty of consistent orbital and physical features.

(2) Dui Palace Group: The Dui trigram hexagram stands for Earth; the double-Qian Bihe hexagram corresponds to Mars. As both texts belong to the Dui Palace, symbolic analysis of trigram logic often describes Mars as a miniature copy of Earth.

(3) Li Palace Group: The Li hexagram represents the whole asteroid belt zone. Astronomers still lack a unified, widely accepted explanation for the absence of a complete large planet in this orbital region, which is instead filled with fragmented rocky debris. Interpreted from Li trigram's symbolic meaning: Li symbolizes separation and dispersion, with Fire as its Five Element attribute. Fire generates light and heat by consuming combustible materials; once fuel is fully burnt out, flames vanish and leave scattered ashes, which perfectly explains the fragmented distribution feature of the asteroid belt.

(4) Zhen Palace Group: The Zhen hexagram matches Jupiter; the Heng hexagram corresponds to Saturn. Both texts are categorized under Zhen Palace, which accounts for massive shared physical and orbital characteristics between Jupiter and Saturn.

(5) Xun Palace Group: The Yi hexagram corresponds to Uranus, and the original Xun hexagram matches Neptune. Their shared Xun Palace membership explains the large number of similar traits observed between the two ice giants.

(6) Kan Palace Group: Only the pure Kan hexagram serves as the attribute-consistent Bihe hexagram here, independently corresponding to Pluto.

(7) Gen Palace Group: The Lü hexagram matches Haumea, while the Gen hexagram corresponds to Makemake. Comparative orbital data show lots of identical features between Haumea and Makemake, yet Pluto barely shares any common traits with them, thus forming an independent attribute category alone.

(8) Kun Palace Group: The Guai hexagram corresponds to Gonggong, and the pure Kun hexagram matches Eris.

This complete theoretical system fully answers the long-debated academic question about the number of core major planets in the solar system via Yi ideological logic.

3. Sorting logic of primordial sixty-four hexagrams

There is only one unified standard layout mode for Fuxi's Primordial Eight Trigrams, while scholars have proposed multiple sorting plans for the Primordial Sixty-Four Hexagrams over history. The Fuxi Sixty-Four Hexagram Circular Graph remains the most acknowledged arrangement within current academic communities. German mathematician Gottfried Leibniz carried out thorough research on this circular diagram, captured its core internal logical rules, and extracted vital theoretical enlightenment to invent binary counting methods, establishing a connecting bridge between binary and decimal arithmetic systems.

To support follow-up research on the matching relations between eight trigrams and solar system celestial bodies, this paper reorganizes the eight-palace sixty-four hexagram system originally created by Western Han Yi master Jing Fang, and puts forward an adjusted sorting order for the Primordial Sixty-Four Hexagrams. The most obvious shared characteristic of both Primordial Eight Trigrams and Primordial Sixty-Four Hexagrams is the clear partition of yin and yang attribute groups. The revised eight-palace hexagram sequence is listed below:

Qian Palace: Qian-1, Gou-2, Dun-3, Pi-4, Guan-5, Bo-6, Jin-7, Dayou-8.
Dui Palace: Dui-9, Kun-10, Cui-11, Xian-12, Jian-13, Qian-14, Xiao Guo-15, Guimei-16.
Li Palace: Li-17, Lü-18, Ding-19, Weiji-20, Meng-21, Huan-22, Song-23, Tongren-24.
Zhen Palace: Zhen-25, Yu-26, Jie-27, Heng-28, Sheng-28, Jing-30, Daguo-31, Sui-32.
Xun Palace: Gu-33, Yi-34, Shike-35, Wuwang-36, Yi-37, Jiaren-38, Xiaochu-39, Xun-40.
Kan Palace: Shi-41, Mingyi-42, Feng-43, Ge-44, Jiji-45, Tun-46, Jie-47, Kan-48.
Gen Palace: Jian-49, Zhongfu-50, Lü-51, Kui-52, Sun-53, Dachu-54, Bi-55, Gen-56.
Kun Palace: Bi-57, Xu-58, Guai-59, Dazhuang-60, Tai-61, Lin-62, Fu-63, Kun-64.

This adjusted sequence of Primordial Sixty-Four Hexagrams can precisely reflect the formation and evolutionary laws of all solar system planets, and further optimize the theoretical foundation for planetary system research. This layout visually presents the generation and development rules of all cosmic objects: The whole sequence initiates with yang attribute hexagrams and terminates with yin ones, starting from pure Qian trigram and ending with pure Kun trigram.

This sorting logic directly derives from the coordinate rules of the Innate Eight Trigrams Coordinate System, which acts as the core foundational basis for this revised hexagram order.

4. The innate eight trigrams coordinate system

We can observe two core objective rules from the trigram-celestial matching table and attached schematic diagram of the Innate Eight Trigrams Coordinate System (**Figure 1**). First, the matching standards for Yin-planets and Yang-planets against eight trigrams possess obvious fundamental differences. Second, the orbital distance between nearly every pair of adjacent planets is less than double the orbital radius of inner planets; Uranus is the only exception, whose orbital semi-major axis is far more than twice that of Saturn. Up to now, modern astronomical academia has not provided a widely recognized reasonable interpretation for this massive orbital blank zone between Saturn and Uranus. A number of astronomers guess an undiscovered large planet may exist in this gap, yet this paper puts forward a contrary judgment that such a celestial body cannot exist. To validate this research conclusion, the author constructs an exclusive theoretical framework based on the Innate Eight Trigrams Coordinate System. After systematic analysis of the Innate Eight Trigrams Coordinate System, two major defects in previous relevant studies are discovered: The wrong matching relation that assigned Xun hexagram to Uranus and Yi hexagram to Neptune, plus structural defects within the traditional sixty-four hexagram sorting system; both problems need overall correction.

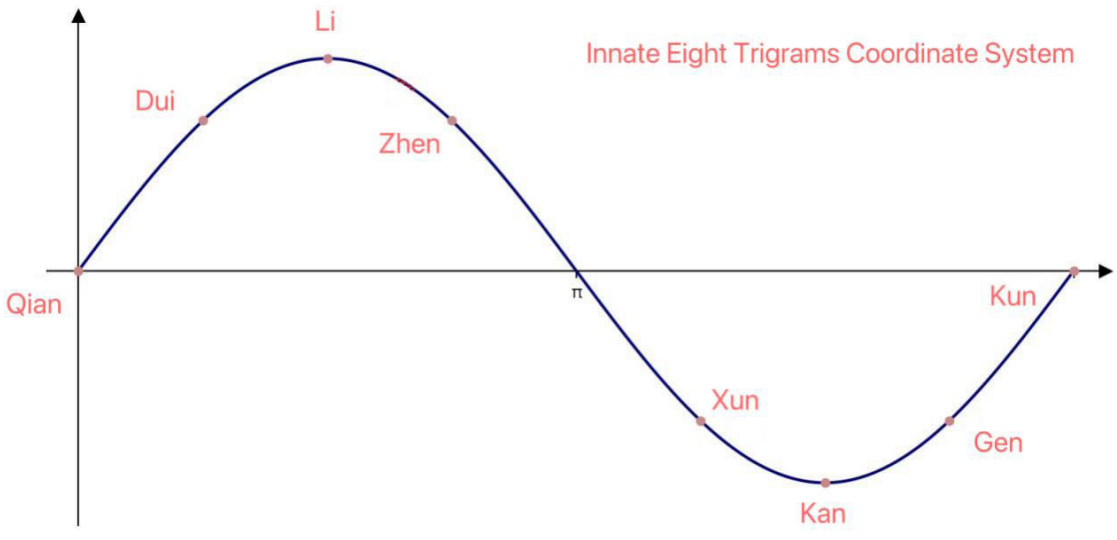


Figure 1. The innate eight trigrams coordinate system.

In-depth analysis of the Innate Eight Trigrams Coordinate System proves that if a planet existed between Saturn and Uranus, it would correspond to the empty Pi coordinate node inside the framework. Following the universal natural law that every tangible material object matches exclusive numerical symbolic marks, the Pi node has no corresponding numerical value, which directly verifies no hidden planet exists in this orbital zone. This result exposes the strict internal logic of cosmic material formation: All celestial bodies essential for the star system's operation will naturally generate, while no redundant space objects will be created out of nowhere. Even though the Pi node remains blank without matching planets, it forms an explicit dividing line separating Yang-planets and Yin-planets, exactly located in the orbital gap between Saturn and Uranus.

5. Research prospects and follow-up research directions

Centuries of development have enabled modern natural science to accumulate huge volumes of observational data and experimental results, yet human civilization still cannot fully grasp the fundamental laws that dominate the origin and evolution of the whole universe and all cosmic materials. At present, institutions worldwide invest tremendous manpower and financial funds into dark matter and dark energy research projects, but related investigations have not yielded unified, conclusive academic results. Faced with such prominent research bottlenecks, academic researchers should expand their research horizons and adopt cross-cultural analytical perspectives to re-examine the composition and evolutionary laws of the whole cosmos.

Famous historian Arnold Toynbee once put forward systematic judgments about the global status and developmental prospect of Chinese traditional civilization, which provides valuable reference viewpoints for the cross-disciplinary research of this paper. Chinese traditional civilization retains unique Eastern thinking logic embedded within Yi scholarship, Confucian theories and Taoist doctrines. The classic academic concept of "Chinese learning as the root, Western technology as auxiliary tools" draws an obvious dividing line between the inherent cosmic operating laws summarized as Dao and tangible testing instruments adopted by modern natural science. Every celestial body moving in outer space follows steady internal operation rules, and these universal core laws are contained within the philosophical connotations of Dao, instead of only being captured by precision scientific testing devices.

All living organisms and material substances in nature maintain mutual connection and mutual coordination, and Dao covers every single operation rule of the entire universe. The Innate Eight Trigrams Coordinate System transforms abstract Dao philosophical logic into operable symbolic standards, and supplies new theoretical evidence to interpret the ordered formation and periodic orbital movement rules of all celestial bodies.

It needs to be clearly emphasized that this paper never claims Yi learning can replace modern astronomical research. On the contrary, this study proves that the symbolic numerology system of the Zhouyi can serve as an auxiliary analytical perspective for natural science research. In the future, more interdisciplinary cooperative research integrating Yi learning and astronomy will be continuously launched, supplying diversified analytical methods for human long-term exploration of cosmic mysteries.

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