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YI-JING INTEGRAL (YI): A NEW NATURAL AND COSMIC BA-GUA

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ABSTRACT: In this paper we elaborate on the neo-Confucian interpretation of the Yi-Jing system. Based on a further exploration of the Diagram of the Supreme Polarity of Zhou Dunyi, we develop a cosmological-anthropological model in constructive engagement with Western thoughts and views on systems and on the universe. The vital energy (qi) and the pattern (li) play central roles in this model and also in the interpretation of the images and forces of the trigrams. This leads to a comparative model, based on a quadrant system with four perspectives: naturality, rationality, humanity and morality. This model fits in the auadrant system of Wilber, and also corresponds to the cosmic ring of duograms. The natural YI Ba-Gua, a cycle of trigrams where Heaven and Earth are seen as elements of the production cycle, supplies an alternative interpretation of the King Wen Ba-Gua. When extending the quadrant system to octants we observe a cycle of trigrams, the cosmic YI Ba-Gua, as a spiralling sequence, following the order of the Five elements. Heaven and Earth are seen, as in the elaborated Diagram of the Supreme Polarity, as instigator and receiver respectively of the production cycle. It forms the framework for an alternative interpretation of the Fu Xi Ba-Gua. In addition to the images, we can display the forces of the trigrams in the octant system of the cosmic YI Ba-Gua as concentric circles. In the YI Ba-Gua we combine both the cosmic and the natural YI Ba-Gua, and compare this with the Ba-Gua of King Wen and of Fu Xi. Finally we present some hypotheses for further analysis of the matrix of hexagrams based on the cosmic YI Ba-Gua. The comparison of the different philosophical views in one framework may lead to further engagement of these ways of seeing. We already conclude that there is so much structure in the Yi-Jing that it is possible to use the wisdom of the Yi-Jing without applying a divination system.

Keywords: Ba-Gua, Five elements, integral theory, Supreme Polarity, trigram, Yi-Jing

1. INTRODUCTION

In the *Yi-Jing* the processes in the cosmos and in the human world are presented as the result of the interplay between *Yin* and *Yang*. The *Yi-Jing* text that is used in this paper is the *Yi-Jing* text in its broad sense: the *Zhou-Yi* plus Ten Wings. It is the Dutch version of the German translation by Richard Wilhelm (Wilhelm, 2016). The

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Yi-Jing and the philosophy of Confucianism have strongly influenced each other. For Confucius, philosophy was a means of learning to become a human being. The moral community and the individual person are inseparable; an individual feels part of a larger whole. The *Yi-Jing* was, and still is, often consulted by people to gain insight into situations and to adjust their actions accordingly.

Neo-Confucian philosophy has contributed to a better understanding of the *Yi-Jing*. Zhou Dunyi shifted the focus to a metaphysical discussion about the origin of the universe. Through his view of the universe and how it came about, Zhou Dunyi underlined the co-partnership of the universe and the innumerable things in the constant self-renewal of the universe. In reinterpreting classic Confucian texts, Zhou Dunyi based his philosophy of the Supreme Polarity on a creative reading of the Doctrine of the Middle, the Analects and the *Yi-Jing*.

The polarities of *Tai-Ji*, *Yin* and *Yang*, are complementary and interdependent. When phenomena come in pairs, but are also part of each other and cannot exist without each other, like *Yin-Yang* in Chinese philosophy, we speak of nondualism. The polarities are therefore indivisible and represent a nondualistic way of looking at reality. In this Eastern view of the world man/woman is nondual. There is one reality and nothing stands alone (holistic). This nondual view of the world is very different from the Western view of the world, which gives an 'I' an important place. For example, Plato's philosophy is known for its dualism, where there is a difference between a reality that precedes the natural things and a reality that is present in the natural order of things themselves. Dualism involves a fundamental split between mental and physical phenomena. This corresponds to the strict distinction that Descartes made between the material body and the immaterial soul. If duality and nonduality is denied, like in Buddhism, we speak of monism. Here, 'I' is more of an illusion.

In this paper we elaborate on the neo-Confucian interpretation of the *Yi-Jing* system. A new elaboration of the Diagram of the Supreme Polarity offers new leads with the *Yi-Jing*. Partly with a western gaze we position the trigrams in a broader context. In this paper we demonstrate this by developing meaningful new trigram and hexagram arrangements. We also give an alternative interpretation of the Fu Xi *Ba-Gua* system and the King Wen *Ba-Gua* system.

Based on the Diagram of Supreme Polarity we develop a cosmological—anthropological model as a quadrant system with axes: energy and intentionality. The energy axis is based on the vital energy qi, and the intentionality axis is based on the pattern li. As the comparative model of Libbrecht (2016) does, this quadrant system gives the opportunity to discuss different philosophical traditions in parallel, and contributes to the theory and methodology of comparative philosophy, engaging with similar accounts in literature. There are some similarities but also differences with the comparative model of Libbrecht. Our energy concept differs from that of Libbrecht. Moreover, we distinguish four perspectives: naturality, rationality, humanity and morality, while Libbrecht considers naturality and humanity as one category.

This model fits in the quadrant system of Wilber, and also corresponds to the cosmic ring of duograms. A natural cycle of trigrams, where Heaven and Earth are

seen as elements of the production cycle, supplies an alternative interpretation of the King Wen *Ba-Gua*. When extending the quadrant system to octants we observe a cosmic cycle of trigrams as a spiralling sequence, following the order of the Five elements. Heaven and Earth are seen, as in the elaborated Diagram of the Supreme Polarity, as instigator and receiver respectively of the production cycle. We also find similarities with the development theories of Graves (1970). It forms the framework for an alternative interpretation of the Fu Xi *Ba-Gua*. In the YI *Ba-Gua*, we combine both the cosmic and the natural YI Ba-Gua and compare them with those of King Wen and of Fu Xi. Finally we present hypotheses for further analysis of the matrix of hexagrams based on the cosmic YI *Ba-Gua*.

2. DIAGRAM OF THE SUPREME POLARITY OF ZHOU DUNYI AND THE CHENG BROTHERS

After the collapse of the Tang Dynasty, the thinkers in the Northern Song Dynasty, Zhou Dunyi (1017 - 1073) along with his nephews, Cheng Hao (1032 - 1085) and Cheng Yi (1033 - 1108), extended the doctrine of Confucius and Mencius into a complete metaphysics (Defoort and Standaert, 1998, 2003). They derived numerous ideas from Daoism and Buddhism, calling their doctrine the 'Doctrine of the Way' (dao-xue), whose cosmological-metaphysical basis was laid by Zhou Dunyi with his diagram of the Supreme Polarity or Supreme Extreme (Tai-Ji-Tu-Shuo) (Adler, 2014, Hon, 2010). The metaphysical and epistemological dimension of neo-Confucianism (from the 11th to the 20th century) was based on the Yi-Jing, in which the processes in the cosmos and in the human world are presented as the result of the interplay between Yin and Yang. Yin and Yang transformations result in the myriad beings, or the 10,000 Things.

The Diagram of the Supreme Polarity describes the evolution of the dynamic and self-generating universe. Graphically, the Diagram consists of five circles, see figure 1.

The upper circle, Wu-ji, is an empty circle that symbolizes the universe as a whole. The round shape of the circle indicates that the universe is an organic entity, which has no beginning or end.

The second circle contains three nested half circles with dark and light colours, representing *Yin* and *Yang*. The arrangement of the half circles symbolizes the changing aspects of *Yin* and *Yang* as a dynamic of bipolar complementarity. From the perspective of the *Yi-Jing* (Wilhelm, 2016), the second circle is actually an image of two trigrams: the *Kan*-trigram (Water) and the *Li*-trigram (Fire). (We use capital letters for the trigrams.)

The third circle consists of a group of five small circles, each of which symbolizes one of the Five phases or Five elements (*Wu-xing*): wood, fire, earth, metal and water. To emphasize the connection of the Five phases, the five circles are arranged in a rectangle with the earth as the source of the other four elements in the middle. The lines connect one circle with the other. It should be noted that this group of circles is

connected to the second circle by a small "V" sign. This sign shows that the Five phases are the products of the interaction of *Yin* and *Yang*.

A small empty circle symbolizes the connection between the Five elements and the fourth and fifth circles. Like the first circle, the fourth and fifth circles are empty circles. They focus on biological reproduction. The fourth circle shows how *Yin*, the female, and *Yang*, the male, move. The fifth circle compares the process by which the innumerable beings are produced by the union of the two sexes. In these two circles the elusive cosmic forces manifest themselves in the creation of the multitude of beings.

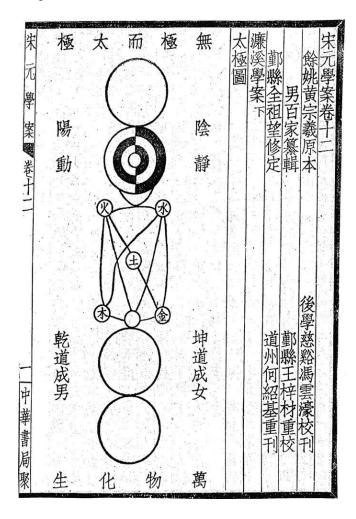


Figure 1. Diagram of the Supreme Polarity (Tai-Ji-Tu-Shuo), source: Hon (2010, 5)

Based on the Diagram of the Supreme Polarity, Zhou Dunyi in the *Tai-Ji-Tu-Shuo* makes three important characteristics about the universe:

First, he emphasizes that the universe, unlike the Buddhist assertion is not empty, but a physical existence.

Second, Zhou repeats that the universe is organic. The transformation of *Yang* and the integration of *Yin* give rise to wood, fire, earth, metal and water. The universe is constantly changing to renew itself. Because the universe is organic, the unfolding of the universe can be understood in two opposite directions: an expansion of the Supreme Polarity step-by-step to the 10,000 Things and a process of tracing the source from the 10,000 things back to the Supreme Polarity. We are talking here about a hierarchical metaphysics. One can descend to the 10,000 Things and ascend to the Supreme Polarity respectively.

Third, Zhou Dunyi emphasizes that the universe and its beings are interdependent as part and whole. The universe and the innumerable things are ontologically the same, but their functions differ. The part and the whole need each other: as the universe unites the innumerable beings, the innumerable beings enliven the universe.

3. FURTHER EXPLORATION OF THE DIAGRAM OF THE SUPREME POLARITY

In this section we explore the Diagram of the Supreme Polarity further and develop a comparative model as a cosmological-anthropological model, that is to say a model that describes man/woman and his/her social behaviour in cosmic development.

3.1 ELABORATION OF THE DIAGRAM OF THE SUPREME POLARITY

As in the original, the elaborated Diagram of the Supreme Polarity also describes in a nutshell the evolution of our cosmos. See figure 2. In figure 2 the trigrams are coloured and the choice of colours is explained further in section 6.

In origin there was emptiness. The primeval beginning is the Wu-ji, drawn as a circle.

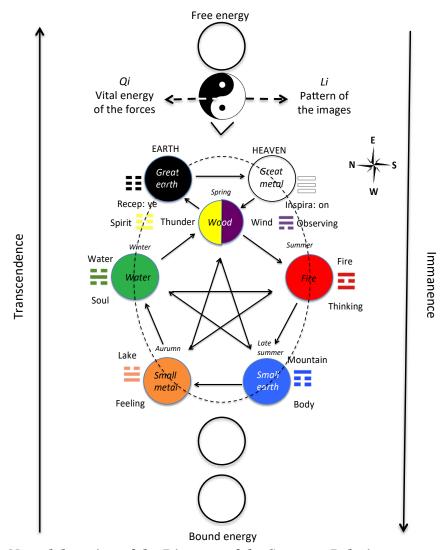


Figure 2. New elaboration of the Diagram of the Supreme Polarity

In the original Diagram of the Supreme Polarity the second circle symbolizes the dynamics of *Yin* and *Yang*. The Supreme Polarity in activity generates *Yang*; yet at the limit of activity it is still. In stillness it generates *Yin*; yet at the limit of stillness it is active. Activity and stillness alternate; each is the basis of the other. In the second circle we recognize the *Yin-Yang* symbol (*Tai-Ji*). According to Wilhelm (2016, 42), the *Tai-Ji* simply posits the line, the ridge beam. The line in itself is one. This generates the two primary powers, with which a twosome enters the world, left right, up - down, front – back. In short the world of opposites makes its entry, *Yang* and *Yin*, respectively, represented by an unbroken and a dashed line: ____ and __. The continuous line symbolizes the light, the heaven, while the broken line symbolizes the dark, the earth. The *Tai-Ji* is prior to heaven and earth. We therefore choose not to symbolize the dynamics of *Yin* and *Yang* through the trigrams of Water and Fire or Heaven and Earth, but through the original *Tai-Ji*.

The void and the nonbeing were replaced by li and qi by Zhu Xi (1130-1200). Each thing has two aspects: that which makes it exist is li, and what it really is, is qi. The existence of qi implies the existence of li, and vice versa. All forces derive from the activity of qi, the material principle of reality in terms of energy (vital energy). However, it is not just a matter of qi, because the principle li of pattern and form, existed before. Both cannot exist without each other. All existence is the result of li and qi (Bor and Van der Leeuw, 2013).

Li refers to the underlying order of nature (xing), as it appears in organic forms. Li is not a thing itself, it exists outside space and time and moves things; If by the li of a type of thing, this thing comes to exist, the li forms the nature of that thing. For example, we can say that the li of a square is what makes a square square. Qi is a part of every living thing. The core of the neo-Confucian view of the origin and structure of the universe is the entire conceptual system of Tai-Ji, Yin and Yang and the Five phases. If we extend this to the trigrams then it is li that makes the images of the trigrams exist and the activity of qi that takes care of the cosmic forces of the trigrams.

The transformation of *Yang* (heaven) and the integration of *Yin* (earth) give rise to the circulation of the Five elements: wood, fire, earth, metal, water and again wood. As in the original Diagram of the Supreme Polarity we use the "v"-sign to express that the interaction of Yin and Yang resulting in the Five elements. In the original Diagram of the Supreme Polarity the Five elements are arranged in a rectangle. We combine the Five Phases with the associated trigrams, including Heaven and Earth. To show that there is also a cycle in this part of the Diagram we add an arrow between Great earth and Great metal, indicating that the cycle starts again and on a new level. We call this the cosmic cycle. The trigrams are empowered by qi and take on forms based on li. The basis of the cosmic development is the force qi, which supplies the cosmic energy from the free energy of the primeval energy so that the pattern li can realize the images. Cheng (2009, 81), points out that in the context of the symbolism of the eight trigrams we can see two sets of qualities that exist side by side, and are never separable. The substance of the qualities such as change, transformation, and movement can be labelled qi and the substance of the qualities such as patterns, forms, and order can be labelled li. Cheng (2009, 85) concludes: " ... order, pattern, form, and structure are not imposed from outside but are born from inside qi. Order and pattern are the end result of the organizing activity of qi, ...". Cheng (2009, 82): "The eight trigrams represent the major forms and patterns of the natural world, which has already been perceived through experience and observation as a well-ordered whole of interrelating and interacting forms." The trigrams: "... constitute the natural referents of the eight trigrams. But the eight trigrams do not just represent concrete natural events and forms; they are also principles and qualities of the natural processes and structures." We designate the forms and patterns of the trigrams as 'images', and the principles and qualities as 'forces'. According to Cheng (2009, 82) the forces are known as Heaven 'strong' (inspiration), Wind 'entering' (observing), Fire 'travelling in pairs' (thinking), Mountain 'stopping' (body), Lake 'joy' (feeling), Water 'falling in' (soul), Thunder 'movement' (spirit), and Earth '

soft' (receptive). Our denomination, which is more related to the power qualities of the trigrams, is placed between brackets. Heaven and Earth are the father and mother of the trigrams. This is in line with the Chinese and Islamic mythology in which pivotal inspired messages are sent to man/woman from the chaos of the night. The Heaven-inspired messages lead man/woman to reach a balanced flow of the Five elements. The different measures of fullness and emptiness, represented by these Five elements, go back to the receptive Earth.

In the elaborated Diagram we sequentially arrange the Five elements according to the production cycle. The arrows in the form of a star indicate the conquest cycle. It shows that in the development process things can go wrong. In the original Diagram the conquest cycle is not depicted.

In the original Diagram a small empty circle symbolizes the connection between the Five elements and the fourth and fifth circle. The individual elements are all connected by lines with this small blank circle, except for the line between earth and this empty circle. In other versions of the Ultimate Polarity, however, we see this line also drawn! See for example from Wang (2005, 110). We solve this connection by drawing a dotted circle around all the trigrams.

Just like the first circle, the last two circles are empty. Together the last two circles symbolize the organic process, with which *Yin* and *Yang* produce the innumerable beings.

3.2 COMPARATIVE MODEL OF COSMIC DEVELOPMENT

The Diagram of the Supreme Polarity as a whole gives an idea of the cosmic development, or the evolution of the universe. To develop a model we use eastern and western thinking (a.m. Haiming, 2012, Gao, 2015, Van Esch, 2017, Wilber, 2004 and Libbrecht, 2016). The vital energy (qi) and the form aspect or pattern (li) plays a central role in this. Libbrecht (1995a) as well sees energy and form/pattern as the most universal basic concepts. Libbrecht (2016) developed a model of comparative philosophy that also distinguishes between an energetic process and a form aspect (inform-ation). Every phenomenon is energy x information. He uses a coordinate system, because in his comparative philosophical model he wants to develop a paradigm-free system. In Libbrecht's view energy in the cosmos transforms from bound energy into free energy. According to Libbrecht everything in nature happens on the basis of fixed and predictable patterns (immanence). In his view, therefore, there is only bound energy in nature. Only man/woman can, in his view, invent new patterns and in man/woman there is free energy (transcendence). This vision of Libbrecht is actually a short-term vision. What happens in nature according to fixed patterns only takes place in the short term. In the long run, the origin and formation of nature (from molecules and cells, via plants and animals to the creation of man/woman) was not a fixed process, with a predictable pattern.

Energy

In this paper we have a different view of energy than Libbrecht does. We think the unfolding of the universe is a cyclical process that starts with free (chaos) energy and goes to a state of bound energy, after which we find a process again towards free energy. Also in the Diagram of the Supreme Polarity the unfolding of the universe is understood in two opposite directions, depicted as transcendence and immanence as we saw in section 2 (see figure 2). This is also in line with the thoughts of Arthur Young (1999), who describes the development of the universe in his 'Reflexive Universe'. As an example on an organizational level, Scharmer (2009) treats a change trajectory as a U-process. Arthur Young considers the development from the very beginning until the onset of consciousness in humans. He shows that at first there is a decline in degrees of freedom (involution) and then an increase in degrees of freedom (evolution). The light that has developed after the Big Bang has maximum degrees of freedom and consists entirely of free energy (transcendent). An involution period of binding of energy then breaks, which leads to bound energy: from highly movable particles, via atoms to immobile molecules. The involution process is essentially an immanent process. The energy is turned inwards. From there begins an evolutionary period of liberation of energy, through the creation of plants, animals and ultimately humans. The evolution process is a transcendent process, where the energy is turned outwards. Young's model is fractal. It can also be used at other levels.

In this paper we assume that in terms of the *Yi-Jing*, as described in the production cycle, with Heaven as a booster and Earth as a receiver, a parallel development takes place. Analogous to the above-described development of the 'Reflexive Universe' we also see in the cosmic development of *Yi-Jing* first a development from free energy to bound energy and then again a development from bound to free energy. See figure 3.

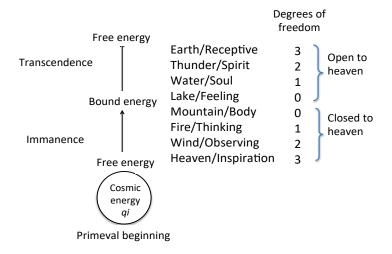


Figure 3. Development of the cosmic energy

In the immanent process of involution we arrive from the free energy of the transcendent three-dimensional Heaven via Wind, moving in two dimensions (Wind can move in all directions and from top to bottom and vice versa), and Fire, moving in one dimension (fire rises), at the, immanent, Mountain and Lake, both of which have no degrees of freedom (Mountain and Lake cannot change places). With Mountain and Lake we have arrived at the point of bound energy (immanent). From here a transcendent process of evolution takes place. We first come to Water, which can move in one dimension (water falls), then we come to Thunder, which can move in two dimensions (Thunder can move in all directions and from top to bottom and vice versa) and finally we come to the three-dimensional Earth. The evolutionary process finally ends up in free energy again (transcendent). In a holistic view, transcendence and immanence are not separate, but two polarizations, which form an integral part of reality. In the immanent process we deal with trigrams that are closed to heaven, while in the transcendent process we deal with trigrams that are open to heaven. Man/woman lives in this field of tension.

Pattern

With respect to the pattern we follow Libbrecht. Nature (xing) presents itself to us in organic forms. It concerns objects and situations in reality. Li is not a thing itself, but refers to the underlying order of nature. It is not about the representations themselves, but about the possibility (of the mind) to form representations. This goes back to Brentano (1838-1917), who calls this intentionality. Libbrecht (1995b) defines intentionality as the whole of spiritual states that focuses on objects or situations in

reality and the intentional actions that are driven thereby (consciously or not). It concerns dealing with all intentional states that are related to each other in a holistic network, i.e. information processing (https://en.wikipedia.org/wiki/Intentionality). Intentionality has a broad scope. In Libbrecht's view the pattern goes from pure knowledge to pure experience. A focus on knowledge corresponds with Plato's dualism, a dichotomy of reality, like a separation between a material body and an immaterial soul. In western thinking intentionality is focused on the self. Starting from an "I" is a characteristic feature of Cartesian philosophy. Libbrecht speaks of ego-intentionality. In the direction of ego-intentionality trigrams are closed to the earth. A focus on experience corresponds to nondualism. The orientation of intentionality is on the other person. Libbrecht calls this alter-intentionality. In the direction of alter-intentionality trigrams are open to earth. From the nature of *li* we see a growth of (intelligent) spirit towards ego-intentionality and a growth of (emotional) mind towards alter-intentionality. The polarities of the pattern axis are therefore ego-intentionality and alter-intentionality. See figure 4.

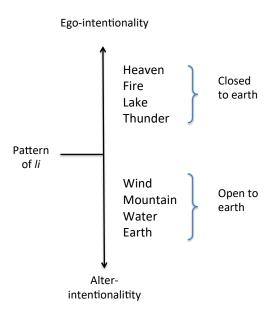


Figure 4. Development of the cosmic pattern

In the West, man/woman is more self-centred. In the East man/woman also gives attention to his/her own inner self, but more to be able to open him-/herself to fellow human beings and the world. 'Letting go' means loosening earthly worries in the West, while in the East it means releasing self-centeredness in order to be able to care for the other person.

Van IJssel (2008, 57) quotes Heelas a.m. (2005), who speaks of a 'self-in-isolation' in the case of ego-intentionality and a 'self-in-relation' in the case of alter-

intentionality. The latter case concerns the orientation 'the we of me', whereby the self is deeply connected to others and develops 'in-relation with'. It is a development in which interdependence and independence go together, according to Heelas.

Model

In our model we place energy on the horizontal axis. The polarities are: free energy directed inwards (closed to heaven) and free energy directed outwards (open to heaven), with bound energy in the origin. The pattern in the vertical axis has polarities: 'I'-focused or individuality (ego-intentionality) and 'We'-focused or collectivity (alter-intentionality). This is the basic model that we encounter further in this paper. The axes in this coordinate system show similarities with the axes of the quadrant system that forms the basis of Wilber's Integral Theory. Wilber (2004) tried with his 'theory of everything' to create a framework for a holistic approach to problems. According to Wilber these quadrants are ways of looking at the world. He assumes that the attitude and behaviour of individuals, and the culture of groups and systems in the environment, are all interrelated and that they influence each other. In general the upper left quadrant relate to aspirational values, the upper right quadrant to behavioural values, the lower right quadrant to social values and the lower left quadrant to cultural values. Note that Wilber calls the aspirational quadrant the intentional quadrant. We, however, use the term 'intentional' in a different sense, namely in the context of ego- and alter-intentionality of Libbrecht.

The two axes divide the coordinate system into four quadrants, defining four fundamental cosmological-anthropological perspectives:

- Aspirational: Ego-intentionality directed inwards = Naturality
- *Behavioural*: Ego-intentionality directed outwards = Rationality
- *Social*: Alter-intentionality directed outwards = Humanity
- *Cultural*: Alter-intentionality directed inwards = Morality

The top left quadrant is the aspirational quadrant with naturality as an important perspective. Naturality is phylogenetic (aimed at the survival of the individual). Humans are seen as manifestations of the natural processes in the world as in Daoism. Thus, humans are a product of reality; the subject is part of the object (S part of O). The art of living in Daoism focuses on following our intuition, arranging for nature and finding harmony. Human life is a process of becoming. The good life in Chinese philosophy is not to carry out a grand program or reaching a goal, but rather to walk a way (Yiming, 2013, Puett and Gross-Loh, 2016).

Rationality is the important perspective in the behavioural top right quadrant. In this quadrant 'being' is central, with roots in Greek philosophy. The subject is opposite to the object (S <-> O). This dualism presupposes a separate existence for both the mind and the body. Dualism assumes that reality consists of multiple substances. One experiences reality in terms of good and evil. In the Western world, dualism can be traced back to Plato and Aristotle. Although Plato (427 - 347 BC) already mentioned 'body and soul', it was René Descartes (1596 - 1650) who made a

distinction between the world of thought and the outside world. The rise of the natural sciences creates a scientific approach to reality and therefore a gap between the material world and the spiritual world.

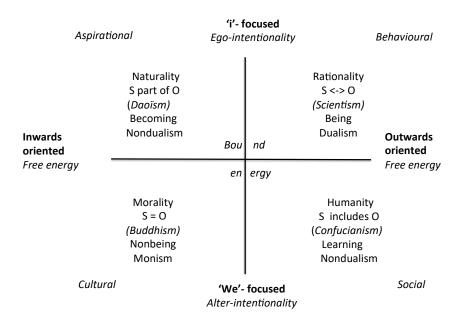


Figure 5. Cosmological-anthropological model of energy and pattern

Dualism, however, is not exclusive to the western world. There is also significant dualism in Chinese tradition. Slingerland (2013) argues that Chinese thought is not radically different from Western thought, concluding that early Chinese thought (from the Shang Dynasty until the period of the Warring States) is characterized by a weak mind-body dualism in which mind and body are experienced as functionally and qualitatively distinct. One argument lies in the afterlife rituals based on the notion of a soul that retains consciousness after death. Some texts (Zuo Zhuan) make it clear that the deceased is thought to continue to exist in individual form, maintaining the same personalities and concerns that they possessed in life. Another argument that the early Chinese were mind-body dualists of a sort Slingerland infers from a textual analysis and cognitive evidence. In addition, with some representatives of neo-Confucianism in the Song Dynasty, like Zhu Xi, we see tendencies of dualism.

The lower right quadrant is the social quadrant with humanity as an important perspective. In this quadrant 'learning' is central. For Confucius, philosophy was a means of learning to be a good person as part of society (a.m. Libbrecht, 2016, James and Bretzke, 1995, Tazelaar, 2012). Humanity (*ren*) was the most important virtue of Confucius. By means of rituals we can come to decent reactions. Experience (of rituals) was important. The human world in Confucianism is sufficient for making the

world a better place, so reality is a product of humans. Thus the object is part of the subject (S includes O).

The lower left quadrant is the cultural quadrant that focuses on morality. Here 'nonbeing' comes first. There is no distinction between material body and immaterial spirit: monism. Here, morality plays a part as in Buddhism. Buddhism wants to teach man/woman how he/she can free him-/herself from the bondage of this world and how he/she can achieve his liberation, or nirvana. The subject is one with the object (S = O) as monism states. For example, in monistic thought, the distinction between the inner and outer world does not exist. For monists, everything is one. Body and mind are outer manifestations of this one. One assumes an underlying unity consciousness behind the world of phenomena. The word 'cosmos' is also monistic and stands for one clean order. A comparison can be made between the Hindu concept of the Brahman and the Dao, which was formulated by Laozi, among others. Reality is not experienced in terms of good and evil. Monism, however, is not exclusive to the eastern world. Western philosophy is increasingly open to a way of thinking that no longer has a dualistic worldview. In Western tradition, nondualistic thinking is present, starting with Parmenides (515 - 450 BC), who formulated monism for the first time. According to Spinoza (1632 - 1677) there is only one substance and body and mind are aspects of this. Hegel (1770 - 1831) also strove for the development of a single overall concept, in which reality is not seen as static but as the outcome of a continuous, dialectical process in which new contradictions are removed each time. The concepts thesis, antithesis and synthesis are originally from Kant (1724 - 1804). He wonders, what we can actually know and what we cannot know. Kant has a great interest in spirituality and mysticism, but how things really are is something we can never discover with our minds. He introduces the notion 'Ding an sich' in his 'Critique of Pure Vernunft'. A well-known modern representative of this position is Daniel Dennett. Dennett (1991) rejects the ideas about mind and body of Descartes. According to Dennett mind and body are not separable entities. Mind arises from physical processes.

The four basic perspectives that we distinguish in this cosmological-anthropological model are: naturality, rationality, humanity and morality. In his model Libbrecht only distinguishes three perspectives. He summarizes naturality and humanity under a common heading of naturality, apparently a limited Daoist vision. Perhaps he saw nature and humanity as a unity. In our model, naturality is confined to a situation where ego-intentionality is inward oriented as in Daoism. Opposite to this situation we see humanity as a situation where alter-intentionality is outward oriented, as in Confucianism. Compared to Libbrecht's model, in our model in figure 5 we can better see the difference between Daoism and Confucianism in that rationality and morality are each other's opposites.

The perspectives in the quadrants of figure 5 are indeed facing each other but are also not strictly separated. When we talk about these perspectives we no longer refer to an unchanging and essential core, but to something that is in constant change. This corresponds to the concepts of *Yin* and *Yang*, which we should see not as fixed contradictions, but forces which constantly merge and complement each other. In that

sense, also the perspectives are complementary to each other. We conclude that philosophy is becoming a world philosophy, a global dialogue between cultures.

4. FROM FIVE ELEMENTS TO TRIGRAMS IN A NEW NATURAL BA-GUA

We start this consideration with the cosmic cycle in figure 6. This cycle shows the relationship between the trigrams and the production cycle of the Five elements, derived from the elaborated Diagram of the Supreme Polarity in figure 2.

In the elaborated Diagram of the Supreme Polarity we have pointed out the special roles of the trigrams Heaven and Earth in the cosmic cycle. As noted in section 3 Heaven is the booster and Earth is the receiver of the production cycle. We have not viewed these trigrams as elements, but as initiator and recipient respectively of the production cycle. An alternative possibility is to consider the trigrams Heaven and Earth, like the other trigrams, as elements. Heaven becomes then great metal and Earth becomes great earth. When we display the trigrams in cycle form, with Heaven and Earth seen as elements, we speak of a natural cycle. We thus consider thus two cycles: the cosmic and the natural cycle. Though both cycles are essentially the same (after all the cosmic cycle is also a natural process) the difference only relate to the way we treat Heaven and Earth in sequences (cycles) of trigrams. In the cosmic cycle Heaven is seen as a booster and Earth as a receiver, while in the natural cycle Heaven and Earth are seen as elements, great metal and great earth respectively. Building a natural cycle is a big challenge if we also want the wind directions to be correct. King Wen, who has established the oldest order of the trigrams, also had the job of connecting Heaven and Earth with the natural cycle (corresponding to the Five elements) and to ensure correct wind directions.

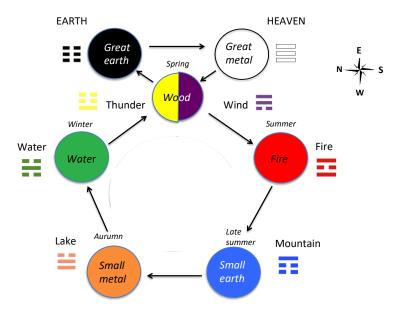


Figure 6. Correspondence between the Five elements and the trigrams in the cosmic cycle

The cosmic cycle is a general basic principle for preparing trigram arrangements. The cosmic cycle is symbolized by the cycle of a plant or tree over the course of a season. We can also think of the cycle of the seasons (spring, summer, autumn, winter). First there is a seed that wants to germinate. That is the beginning, triggered by Heaven as initiator. The seed searches its way (by the Wind) and germinates. It has become attached and comes above the ground in the light (through and from the Fire). The plant grows calmly (like a Mountain) and comes to maturity. Then the plant comes into bloom (as an attribute of the Lake). The Water allows the plant to live. The plant produces new seed and throws it over the fields (as with Thunder). The Earth receives the seed and saves it until the next season starts again.

In Figure 7 this sequence of trigrams is mapped together with the Five elements, the seasons and wind directions.

The development according to the production cycle outlined here begins with individual initiatives and ends with collective peace and progress. Then development starts again.

H eaven	Great metal				Decisive inspired messages send to man/woman
	Small wood	Wood	Spring	East	The cycle of the Five elements, starts from Wood to Fire
Wind Fire	Fire	Fire	Summer	South	The Fire nourishes the Earth
Mountain	Small earth	Earth	Late summer	Centre	In the Earth grows Metal
L ake	Small metal	Metal	Autumn	West	Metal can be made fluid, like Water
Lake Water	Water	Water	Winter	North	The Water nourishes the Wood
Thunder	Great wood	Wood	Spring	East	Returning to Wood completes the basic cycle of nature
Earth	Great earth				The various degrees of fullness and emptiness, represented by the Five elements, go back to the receptive Earth

Figure 7. Relationship between trigrams, Five elements, seasons and wind directions

In figure 6 Heaven and Earth are placed outside the production cycle. We now will place these trigrams within the cycle so that they match the corresponding elements and form a natural cycle. See figure 8.

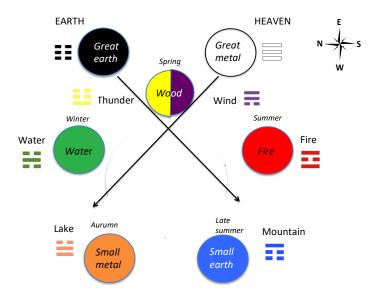


Figure 8. Positioning Heaven and Earth between the Five elements

This action yields the following picture in which the order of the trigrams now matches the order of the elements. This gives us the natural cycle or natural growth process. See figure 9.

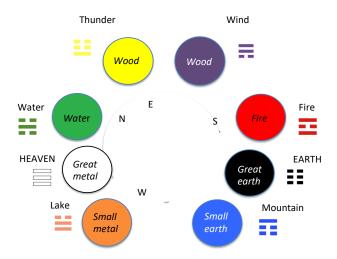


Figure 9. Correspondence between the Five elements and the trigrams in the natural cycle

In Figure 9 the sequence of the trigrams, including Heaven and Earth as elements corresponds to the order of the Five elements. However, the wind directions in this figure are not in accordance with the wind direction as indicated in the Hetu diagram. The Hetu diagram, or the Plan of the Yellow River, indicates the origin of the Five elements from the even and odd numbers, with the earth in the middle: the water in the north, the fire in the south, the wood in the east and the metal in the west (Wilhelm, 2016, 265). North (Water) and east (Thunder) are directly adjacent to each other in figure 9, while between south and west there is even room for two trigrams: Earth and Mountain. There are two options to make it better. We can either place Earth (great earth) or Mountain (small earth) between Water and Thunder. King Wen has chosen to place Mountain between Water and Thunder.

Positioning Mountain (small earth) between Thunder and Water, as in figure 10, solves the dilemma in a way that the wind directions are correct again. This move leads to the *Ba-Gua* of King Wen, which has been enduring for more than two thousand years now.

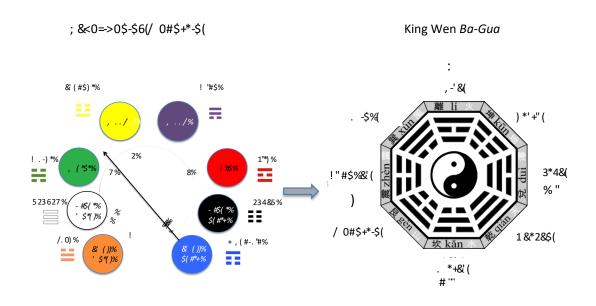


Figure 10. Solution of the dilemma by King Wen

We choose to move Earth (great earth) and leave Mountain in the original place, as in figure 11.

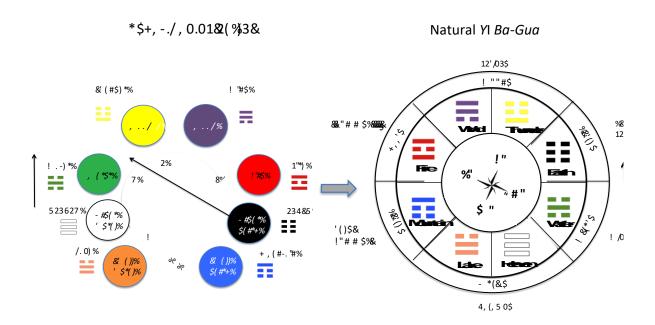


Figure 11. Alternative solution of the dilemma gives the natural YI Ba-Gua

This movement has the advantage in that, apart from the special roles of Heaven and Earth, the correspondence between the trigrams and the Five elements is maintained, as it is in the elaborated Diagram of the Supreme Polarity.

In figure 11 the dilemma is solved by shifting Earth (great earth) between Thunder and Water, so that the wind directions are correct again. This provides an alternative *Ba-Gua* of the natural cycle. Because we keep the order of the trigrams, exclusive of Heaven and Earth, the same as in the production cycle of the elaborated Diagram of the Supreme Polarity and there is some coherence between this elaborated Diagram and Wilber's Integral Theory we call this the natural (*Yi-Jing* Integral) *YI Ba-Gua*.

The sequence of trigrams in this alternative arrangement of the natural cycle is also plotted in figure 12. The production cycle is depicted with arrows, starting with Heaven as instigator of signals and ending with Earth as receiver.

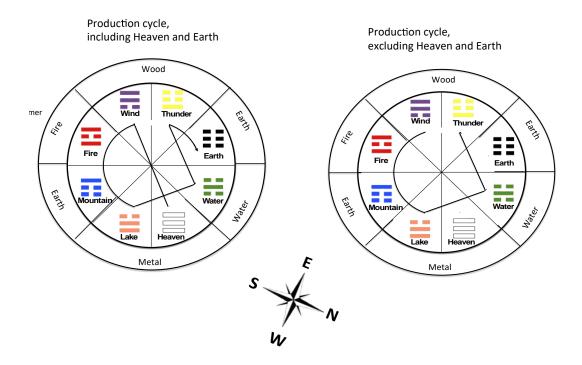


Figure 12. Sequence of the production cycle in the natural YI Ba-Gua

If we disregard the special roles of Heaven and Earth in the sequence, we will see in this figure exactly the sequence of the Five elements.

5. FROM DUOGRAMS TO TRIGRAMS IN THE COSMIC CYCLE

5.1 DUOGRAMS

As we saw in section 2 in origin there was emptiness. The primeval beginning is the Wu-ji, drawn as a circle. The Tai-Ji generates the two primary powers. These in turn generate the four images of the duograms. Duograms consist of all possible combinations of the two lines of Yang and Yin. The two lines are placed one above the other, the upper place being the heaven-place and the lower place the earth-place. So, man/woman is in-between earth and heaven. Boering (1994) displays the duograms in the cosmic ring, see figure 13. In this figure, with monad, the interactions between Yin and Yang are mapped in a system of axes according to the classical Chinese representation.

In this classical Chinese representation, young *Yang* grows into old *Yang*, which culminates and turns into young *Yin*, which in turn grows into old *Yin*, which culminates and turns back into young *Yang* (Boering, 2010). Clockwise we see: old

Yang (summer), young Yin, (autumn), old Yin (winter) and young Yang (spring). N.B. In his translation of the Yi-Jing Wilhelm (2016, 271) inverts the names for young Yin and young Yang.

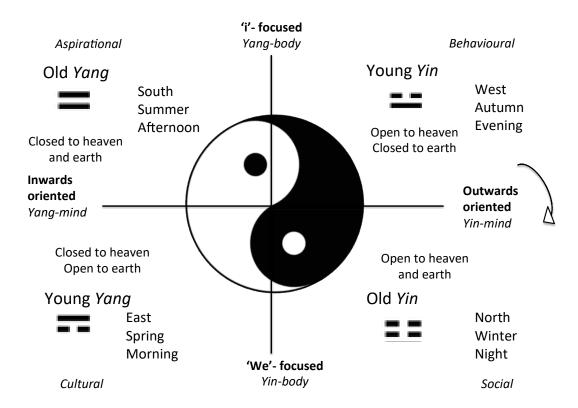


Figure 13. Cosmological-anthropological (Tai-Ji) model, according to the classical representation of the cosmic ring

In the cosmic ring the inwards versus outwards orientation contrasts with the 'I' versus 'We'-focus. We observe that the axes in figure 13 are the same axes as in the cosmological-anthropological model in figure 5 and the same as in Wilber's quadrant system. We now develop the cosmological-anthropological model in further detail.

a. Old *Yang* in the aspirational quadrant

In the upper left quadrant, the naturality (self-so) of the model is now concretized in old *Yang*. Man/woman is closed between heaven and earth. He/she is individual and inwards oriented. He/she is busy with him-/herself, developing insights, making plans, without expressing it. As far as spirituality is concerned, it is oriented at the own person. It stands for subjective feeling and inner of individuals. These include personality traits, intelligence and associated values and value systems. What one experiences from within is internal consciousness. It goes about his/her intentions, goals and values he/she strives for.

b. Young *Yin* in the behavioural quadrant

In the upper right quadrant, the rationality (I think therefor I am) of the model is concretized in young *Yin*. Man/woman is closed to earth and open to heaven. He/she is individual and outwards oriented. As far as spirituality is concerned, it is directed at the other/environment. Human expressions are open minded and visible. It stands for the 'visible appearance' of an individual, such as observable behaviour and skills. These are objective external descriptions.

c. Old *Yin* in the social quadrant

In the lower right quadrant, the humanity (all people will be brothers) of the model is concretized in old *Yin*. Man/woman is open to both heaven and earth. He/she is collective and outwards directed. Human activities are constantly in contact with the earth and with heaven and therefore with the environment. It concerns the 'visible appearance' of the collectivity. This concerns the inter-objective material basis and the external form of collectivity. We can think of the values of the economic base, the (management) systems, the (economic) structures of the society.

d. Young Yang in the cultural quadrant

In the lower left quadrant, the morality ("I" is more of an illusion) of the model is concretized in young *Yang*. Man/woman is closed to heaven but open to earth. He/she is collective inwards oriented. Human activities in this quadrant are earth-oriented and are not disturbed by heaven. The quadrant represents the inter-subjectively shared norms and values of a collective. These are internal opinions / meanings and values that are shared within a community. It concerns the culture, the worldview or the prevailing mutual understanding within a group, organization, sector, region or country.

5.2 TRIGRAMS

In Chinese philosophy, the doubling of the lines in the duograms still did not bring about sufficient differentiation in the worldviews. Therefore a third line was added, which led to the trigrams. The trigrams consist of all possible combinations of three stacked lines, which can be whole or broken. As a result there are eight trigrams. The bottom line is Earth / Body, the middle line is Human / Psyche and the top line is Heaven / Mind. Many ways exist to present the trigrams. Schöter (1998) uses a mathematical principle to display the trigrams. In the general situation we consider a three-dimensional space to get an overview. See figure 14.

From the origin, point D, *Yang* pops up. The faces of the cube that touch the origin are respectively the *Yang*-body (DCGH), *Yang*-psyche (ADHE) and *Yang*-mind (ABCD) planes. The surfaces that do not touch the origin are the *Yin*-body (ABFE), *Yin*-psyche (BCGF) and *Yin*-mind (EFGH) planes.

Working in three dimensions is a bit challenging. We can also work in the flat plane and continue to view two of the three dimensions in an axial system with four quadrants. Because we have eight trigrams we must move from quadrants to octants.

Postulating in each case two diagonal axes can do this. There are then three possibilities:

- 1. Psyche versus mind
- 2. Body versus psyche
- 3. Mind versus body

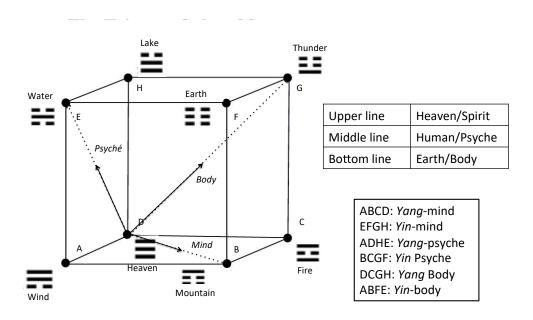


Figure 14. The three dimensions of the trigrams

Ad 1. Psyche versus mind

In the first alternative coordinate system we combine *Yang*-psyche versus *Yin*-psyche and *Yang*-mind versus *Yin*-mind. In the cosmic ring we consider the duograms as consisting of the lines (from below) for psyche and mind. We add the bodyline by placing *Yang* and *Yin* in each quadrant in the bottom position (body line), see figure 15.

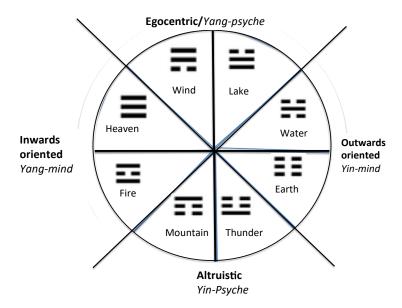


Figure 15. Trigrams in an octant system with axes inwards versus outwards oriented and egocentric versus altruistic

The vertical axis shows the opposition among *Yang-Yin*-psyche. With *Yang*-psyche, man/woman him-/herself is closed and therefore self-centred or egocentric and with *Yin*-psyche man/woman him-/herself is open and therefore altruistic. The horizontal axis shows the opposition among *Yang-Yin*-mind. In the *Yang*-mind dimension, the duograms are closed from above. When man/woman looks upwards he/she sees the sky closed. If he/she sees the sky closed he/she is directed inwards. In the *Yin*-mind dimension, the duograms are open from above. When man/woman looks upwards he/she sees the sky open, lf he/she sees the sky open, he/she will turn outwards towards the environment. He/she is then directed outwards.

In this system the axes are directed inwards versus outwards and egocentric versus altruistic. We see no further points here and leave it for what it is.

Ad 2. Body versus psyche

The second alternative coordinate system consists of the dimensions *Yin-Yang-*body on the vertical axis and *Yin-Yang-*psyche on the horizontal axis. In the cosmic ring we consider the duograms as consisting of the lines (from below) body and psyche. We add the mind-line by putting *Yang* and *Yin* at the top of the duograms in each quadrant, see figure 16. The horizontal axis shows the opposition between *Yang-*psyche and *Yin-*psyche, which is already discussed ad 1. The vertical axis shows the opposition between *Yang-*body and *Yin-*body. In the *Yang-*body dimension the duograms are closed from below. When man/woman looks down, he sees the earth closed. If he/she sees the earth closed, he is alone. He/she is then individually oriented. In the *Yin-*body dimension, the duograms are open from below. When

man/woman looks down he/she sees the earth open. If he/she sees the earth open, he/she will come into contact with others, in search of social contact. He/she is then collectively focused.

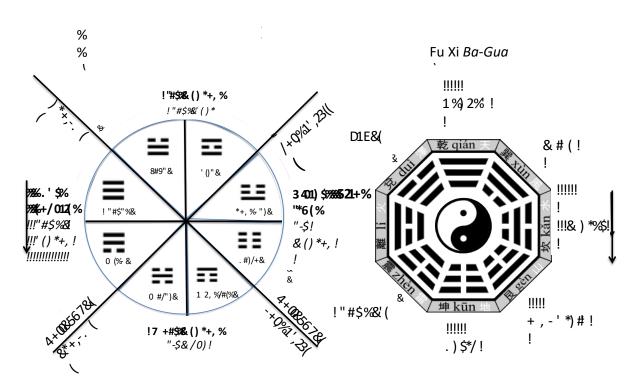


Figure 16. Trigrams in an octant system with axes egoistic versus altruistic and 'I'-focused versus 'We'-focused, corresponding to the Fu Xi Ba-Gua

In this system on the horizontal axis we have the opposite polarities of egocentrism versus altruism. On the vertical axis we have similarly opposite polarities, individuality and collectivity. See figure 16. In order to achieve octants, we have added diagonal axes, one connecting the upper left quadrant with the lower right and the other connecting the upper right quadrant with the lower left. In the upper left quadrant, man/woman is egocentric and individual, so egoistic. In the upper right quadrant, man/woman is individual and altruistic, so he/she lives in solidarity with his/her counterpart. In the lower right quadrant, man/woman is altruistic and collective. This is therefore, about collective solidarity. In the lower left quadrant, the human being is egoistic and collective. This is therefore, about collective egoism. We recognize here the *Ba-Gua* of Fu Xi, albeit in reverse order, see figure 16.

The trigram arrangement in the coordinate system of figure 16 corresponds to the *Ba-Gua* of Fu Xi. Only the direction is different. If we follow the sequence of the

trigrams in a counter clockwise direction, we get exactly the order of Fu Xi. As the *Ba-Gua* of Fu Xi is generally known, we will not go further into the Fu Xi package.

Ad 3. Mind versus body

A third coordinate system knows the dimensions of *Yang-Yin*-mind on the horizontal axis, which has already been reviewed ad 1 and *Yang-Yin*-body on the vertical axis, which has already been reviewed ad 2. In the cosmic ring we consider the duograms as consisting of the lines (from below) body and mind. We add the psyche-line by putting *Yang* and *Yin* in every quadrant in the middle place (human line). This corresponds to a logical extension of the cosmic ring, see figure 17.

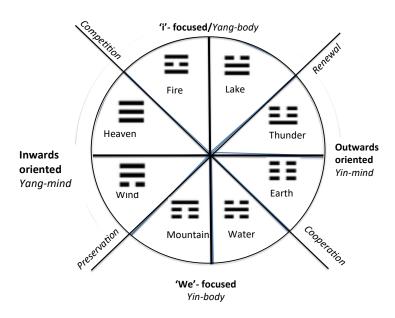


Figure 17. Trigrams in an octant system with axes inwards versus outwards oriented and 'I'-focused versus 'We'-focused

We are dealing here with inward-directed versus outward-directed axes and individuality versus collectivity. These axes correspond to the axes of the cosmological-anthropological model in figure 5, to the axes of the quadrant system of Wilber and to the axes of the cosmic ring of figure 13. This approach leads to a new arrangement with special characteristics, as we will see in the next section.

We can interpret the diagonal axes as follows. The contrast between the upper left and the lower right quadrant is a sharp contrast between a self-emerging or competing person and a person involved or cooperating with the other. On this diagonal axis, the competition or the struggle in the aspiration quadrant is compared with the cooperative (plus harmony, humanity and meeting) in the social quadrant. This diagonal axis thus combines competition with cooperation. The contrast between the upper right and the lower left quadrant is a sharp contradiction between the outwards expressive and innovative man/woman and the more conservative man/woman set on traditions, rules and norms. On this second diagonal axis, innovation (and development, creativity and pleasure) in the behavioural quadrant is set against the preservation / controlling (aimed at control and safety, security) in the cultural quadrant. This diagonal axis thus connects innovation with preservation.

6. A NEW COSMIC BA-GUA

We will now continue with the quadrant system that we discussed ad 3 in the previous section. The horizontal axis shows the opposition between *Yang*-mind and *Yin*-mind and the vertical axis the opposition between *Yang*-body and *Yin*-body see figure 18.

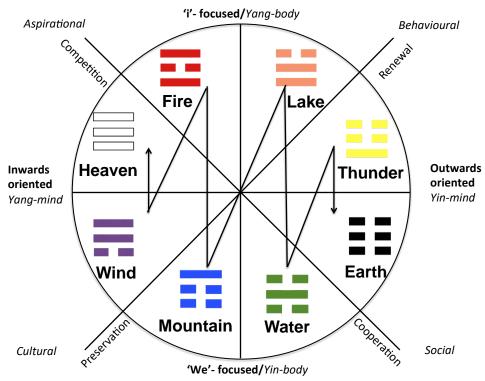


Figure 18. Trigrams in an octant system based on the cosmic ring gives the cosmic YI Ba-Gua

As said in the previous section the axes in figure 18 correspond to the axes of the cosmological-anthropological model of energy and pattern we discussed in section 3, to the axes of the cosmic ring in section 5 and also to the axes in the quadrant system of Wilber.

Donkers (2016) used the same quadrant system with accompanying diagonal axes to introduce octants with a view to a connection with Spiral Dynamics, originally

developed by Graves (1970) and further popularized by Beck and Cowan (2006). This has led to a new integration between Wilber's Integral Theory and Spiral Dynamics. This new integration differs from 'Spiral Dynamics Integral' and also from the approach to integrate these models by Cacioppe and Edwards (2005). Spiral Dynamics is focused on societal developments, largely based on Western thinking, whereas we are now dealing with cosmological-anthropological developments. There are similarities between the images of the trigrams and the 'Life conditions' of Graves (1970) / Beck and Cowan (2006) and the 'Kingdoms' of Young (1999). Because the basis of this coordinate system lies with our elaboration of the Diagram of the Supreme Polarity and the Integral Theory of Wilber we call this system the cosmic (*Yi-Jing* Integral) *YI Ba-Gua*.

In the octant system of figure 18 we obtain eight ways to look at the cosmological-anthropological development. This approach leads to a new *Ba-Gua* with special characteristics.

In the first place this *Ba-Gua* follows directly from the cosmic ring when we add in every quadrant the psyche-line to the duograms by putting *Yang* and *Yin* respectively in the middle place, which is the natural place of the human line.

In the second place, it is noticeable that if we follow the path spiralling from *Yang*-mind to *Yin*-mind we the follow an order with decreasing *Yang* and increasing *Yin*. Starting with Heaven, then Wind, Fire, Mountain, Lake, Water, Thunder and finally Earth, we get the trigram sequence corresponding to the production cycle of the Five elements. See figure 19. Here we recognize the sequence of the cosmic cycle that we already saw in the elaborated Diagram of the Supreme Polarity.

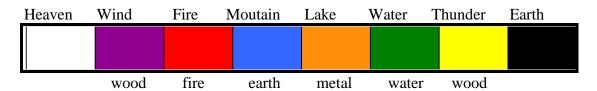


Figure 19. Sequences of trigrams corresponding the Five elements

Thirdly, we see that if we only look at the trigrams, the pairs of Fire-Water and Lake-Mountain are interchanged, compared to the Fu Xi *Ba-Gua*.

The spiral sequence in figure 18 shows a development process. Heaven indicates a clear path with clear initiatives. The Wind provides some reflection. Fire promises action. It ensures a breakthrough. The Mountain collects information, analyses and searches for a balance. The Lake makes great plans to flourish so that success can be achieved. Water brings people together. The Thunder brings strong energy with it in a chaotic quest and contributes to inner development. The Earth stimulates collective peace and progress. In the next discussion of the octants we follow the spiral sequence.

In this octant system and also elsewhere in this paper we have provided the trigrams with colours. In the literature we encounter trigrams in different colours,

which often lack a logical basis. We use a simple and logical reasoning here. *Yang* is always coloured white and *Yin* black; we leave this as it is. When we then start to give the colour red to Fire in figure 18, and we choose further the colours of the rainbow in a clockwise direction, then the colours of the other trigrams follow naturally. The warm colours (red, orange, yellow) belong to *Yang*-body and the cold colours (green, blue, purple) belong to *Yin*-body. A green colour for Water can be a bit surprising, but remember that Water and Fire are contradictory / opposed to each other. From this the choice of green for Water follows as the complement to the warm colour red.

Regarding the introduced colours, we notice the following. In his introduction of octants in Wilber's quadrant system, Donkers (2016) found a fit with the categories of Spiral Dynamics, which are also connected with a colour. Although it is said that the colours of the Spiral Dynamics' categories are chosen randomly, they match - with the exception of the first (Heaven) and the last (Earth) category - the colours we have chosen above, on a logical basis, for the trigrams in the relevant octants.

Correspondence between the production and conquest cycle

The complementary trigrams form two sides of one medal. Heaven - Earth, Fire - Water, Lake - Mountain, Thunder - Wind. The trigrams that face each other are not so much to be seen as each other's opposites, but just as each other's complements, each other's polarities. This is in line with the importance of *Yin* and *Yang* at the time of Daoism.

From the octant system of figure 18 we can show both the production cycle and the conquest cycle. See figure 20.

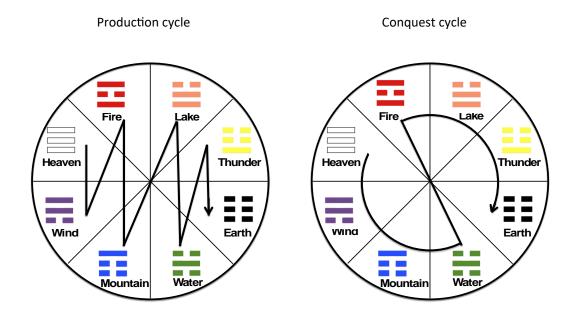


Figure 20. Cosmic YI Ba-Gua in relation with the production cycle and the conquest cycle

The correlation between the production cycle and the conquest cycle can thus be represented in the same figure. In the conquest cycle the wood assimilates the earth. The earth absorbs the water. Water extinguishes fire. Fire melts the metal and the metal saws the Wood.

Forces of the trigrams

With respect to the trigrams two sets of qualities are at stake, as mentioned in section 3. Apart from the qualities such as forms and pattern, labelled as li, which relate to the images of the trigrams, we have qualities such as change, transformation and movement, labelled as qi, which relate to the forces of the trigrams. The forces of the trigrams provide the energy to realize the images. These are steps in a cyclical process. The energy forces in the cosmos were also studied by Maturana and Varela (1989) and applied to living systems. We think that similar forces work in the cosmos, where man has found a place. Both nature and man can disturb the harmony. A big difference is that people are aware of this with their consciousness. Because the energy from the primeval beginning works in all directions at the same time, the forces of the cosmos are hidden metaphorically in the circles of a water surface, which arise when we throw a stone into the water. We can also compare these forces

with the 'levels of development' of Wilber, with the 'stages' of Young (1999) and with the 'mind coping capacities' of Graves (1970)/ Beck and Cowan (2006). It concerns the steps in a cyclical development process.

Images and forces in the cosmic YI Ba-Gua

In the figure below we show the essence of the images and forces of the trigrams in a general framework combining eastern and western thoughts. Because the forces work in all directions at the same time, we can incorporate the working of the energy forces into the coordinate system as concentric circles. Our denomination of the forces differs from the one used by Cheng (2009), as explained in sub-section 3.1. This keeps the model two-dimensional. In figure 21 we combine these forces with the images, as discussed earlier.

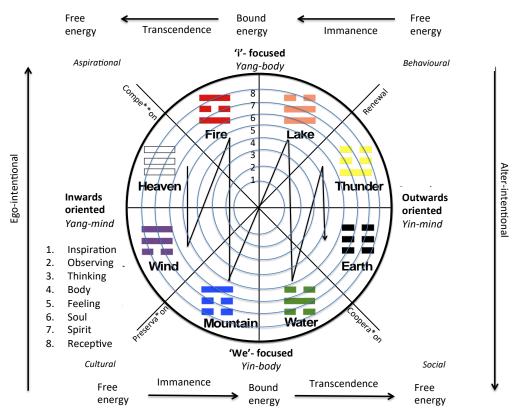


Figure 21. Images and forces in the cosmic YI Ba-Gua

Figure 21 shows the complete picture of the new *Ba-Gua* of the cosmic cycle. This coordinate system not only shows the images (what the trigram is), but also the forces (what the trigram does). In doing so, we must remember that the forces, not only influence their own trigram, but also affect the other trigrams. In addition, the directions of movement of ego- and alter-intentionality and of immanence and transcendence in relation to the energy status are also indicated.

Description of the images and forces of trigrams

In describing the trigrams in the octants we look at man/woman and his/her social behaviour in the cosmos (a.m. Wilhelm, 2016, Mesker, 1999, Hamaker-Zondag, 1989, Boering, 1994, Garofaio, 2013). It shows characteristics of the way people deal with themselves, with others and with the world around them. This is a broader view of reality than the psychological types of Jung (1971), which describe people's preferences, which indicate how someone stands in the world in a certain way. In comparison, we discuss both the images and the forces of the trigrams.

Heaven/Inspiration

In the octant of inward-directed aspiration (Heaven), the target values are turned inward. Competition has created unlimited possibilities, new ideas and impulses. However, these are not yet expressed. The trigram that is part of this is the creative and resourceful Heaven. It is pure *Yang*. Heaven is the beginning of the creation of all things. It stands for movement, light, brightness, sun and action. This is the mental, the spiritual, what is in essence consciousness. The beginning of Chinese thinking about man/woman, society and cosmos is Inspiration, the awakening of the creative power, with which ideas and initiatives come into being. Inspiration stands for the creative power of the universe. This is about living in harmony with nature and with the spirit of the times.

Wind/Observing

In the octant of inward-directed culture (Wind), the conservative man/woman is traditional, familial, aimed at pleasing others, sacrificing culture, mythical, interest in symbolism, inherited matters. Preservation stimulates a family culture. The trigram that fits in this octant is the penetrating Wind. It is small (little) *Yin*. Wind is only open to the earth. That is why wind is mainly directed inside. Wind stands for subtle nature, pure and without bad intention. It is about continuous work. The image is grass and wind. The wind does not damage the rooted grass. It is the picture of perseverance and patience. It stands for exchange, communication and attention to details. Observing is central here. Observing is about orienting and setting small steps. Observation concerns soft and penetrating forces. Wind represents small, stagnant steps. These inherent human forces are the conditions for human action and cultural relationships.

Fire/Thinking

In the octant of individual aspiration (Fire), the target values are individually oriented. The thoughts of the individual lead to considerations and choices. People can wonder. Challenged by competition, they search individually for a meaning in their lives. The trigram that is part of this is the Fire, focused on insight and attachment. It is clear (bright) *Yang* and especially individually focused (insight). Fire concerns growth,

light, and is looking for altitude, tied to the source. It stands for dependence, attachment and loosening, insight, seeing the truth. Convictions are established here by thinking. Thinking has a beginning and an end, visible in the image of burning wood. Thinking is about thoughts, words, ideas and information, in response to wishes or motivations and impulses. Thinking, like dialogue, is not an end in itself, but wants to lead to something. These are intrinsic human values that feed the free will of people. These values play a central role in determining which choices people make: ethical or unethical. What all people want is to determine a meaning in their lives. Meaning or purpose can be formed in different ways. Most people determine their meaning on the basis of spiritual intuitions.

Mountain/Body

In the octant of collective culture (Mountain) one looks for ways to preserve the culture in the collectivity, among other things by setting rules. Mountain interprets the principle of stability. Mountain stands for rest, meditation, The conservative man/woman, who stands with his/her feet in the world, seeking connection with other people, market culture, an instrumental approach, order, mental, performance culture. The trigram that is part of this is the controlling and stable Mountain. It is great *Yin*. Mountain is collectively oriented and turning inwards, stopping processes. Mountain sets boundaries, makes things concrete and tangible. Stagnation, obstruction, passes, ports, fruits, and seeds aim at planning. Mountain has, like the body, a certain shape. You cannot change it, and you must accept it as it is. The motivation is to stay still. Only in the peace of silence, deep sleep or illness, your body can talk to you about its motivations. At rest, forces are released to reflect on the process.

Lake/Feelings

In the octant "I"-focused behaviour (Lake) the innovative, but quiet type of person directs the energy to his/her individual persona. Renewal drives him/her away from people, shows introverted behaviour. The trigram of this is the more calm and focused Lake. It is great *Yang* and especially individually (inner signals) focused. Though it also has a tendency towards depression, Lake is focused on uplifting, mirror image, and joy. Lake is easy, cheerful, fun. Lake stands for the positive in life, carefree and naivety. The image is the pure lake, through which you can look. Here psychic maturity arises. Feelings experience the inner signals, in contrast to the external signals of the senses. Feelings come loose and bring out inner signals, so that creativity can be used for good work. Inner signals are powerful. When under the right circumstances all components of a biological system are present, that system will be 'automatically' formed, will sustain itself and start to grow.

Water/Soul

In the octant collective social values (Water) people will seek connections between people. Cooperation makes man/woman strive for strong mutual bonding, towards common characteristics, homogeneity. This endeavour is also aimed at being strong against calamity, which may come to him/her. We against the others. The trigram that

fits in this octant is the turbulent Water based on family relationships. It is clearly (bright) *Yin* and more collective (based on relationships) focused. Water is the power that lets itself be guided; smooth movement, danger. It is also a destructive force (danger, risks, threats). Water integrates all obstacles in its path. When psychological depressions occur, people can overcome these by flowing with them. Bonding is the central theme here as we know it from the six most important relationships of the family: Mother, Father, Sister, Brother, Daughter, and Son. Like the river also the soul – which is between heaven, earth and body - metaphorically, must flow from the well in the mountain to the sea, then be transformed, die, turn into clouds, and eventually be reincarnated as rain in the mountains. Now the stage is reached that the process enters a flow and transformations may be needed to avoid bottlenecks. Mobility is the key word here.

Thunder/Spirit

In the octant of outward-directed behaviour (Thunder) the innovative behaviour is more extroverted. This innovator is focused on the outside world. Renewal directs his/her energy outside and towards action. He/she wants to co-create. There is outgoing behaviour. The trigram that comes with this is the powerful acting Thunder. It is small (little) *Yang*. Thunder stands for intense action. Thunder delivers one-off creativity at full power. Thunder stands for creating the big lines, the rough image. The image is that of thunder and lightning. The total effect here is greater than the effects of the individual actions. That creates synergy. Spirit, which is only achieved in the awake state, is always holy spirit. First you experience awe and fear, then laugh, because you understand the game and the rules. In the process dynamic forces go to work that make creative expressions possible. The big story can be presented. Even though the process runs at certain times against certain 'limits', there are always viable new ways of working and thinking, which continually create dynamics.

Earth/Receptive

In the octant of outward-directed social values (Earth) space is created. Cooperation makes that man/woman strive for bridge building. He /she seeks space for diversity. The trigram that belongs to this is the receiving Earth. It is pure *Yin*. Space will be created in which the process will be able to land well and produce fruit. Keywords are: flexibility, speed, and reception. Earth is the material from which it is made, the tangible, dark, heavy, non-active. The image is the immensity of our planet. The receptive earth wants to receive the seeds and save it for the future. Looking at the distant future is difficult. There is no one who is currently able to answer the question where social development ultimately goes. There are many philosophers who have dealt with this question. A possible and, in itself, plausible explanation would be that the individual consciousness will evolve into a collective consciousness that encompasses all thoughts about humanity and the entire universe, that Teilhard de Chardin calls a sort of 'terminal stage'.

7. CORRESPONDENCE OF THE NATURAL AND COSMIC YI BA-GUA

We show the natural and the cosmic YI Ba-Gua in one figure, see figure 22. This is an important figure, because here the connection becomes clear between the two Ba-Gua, one on the basis of polarities, which is an alternative to the Fu Xi Ba-Gua, and one on the basis of a cycle, which is an alternative for the King Wen Ba-Gua. In both Ba-Gua the sequences of the Five elements can be traced.

In the inner ring of figure 22, energy is spiralling around the horizontal axis, following the sequences of the Five elements, from free energy via bound energy towards free energy again. The outer ring follows the sequences of the Five elements, whereby the trigrams are seen as elements. Around the vertical axis we recognize the pattern of the immanent process from wood to metal and the transcendent process from metal to wood again.

Now it becomes clear why we reversed the sequence of the trigrams in figure 11. *Yang* trigrams are placed in the left and upper quadrants and *Yin* trigrams in the right and lower quadrants.

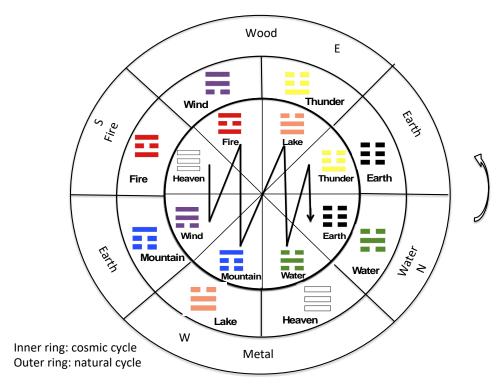


Figure 22. The YI Ba-Gua as a combination of the cosmic YI Ba-Gua in the inner ring and natural YI Ba-Gua in the outer ring

In comparing the two *Ba-Gua* we see that the role of Heaven and Earth in the inner ring (cosmic cycle) is taken over by Fire and Water in the outer ring (natural cycle). The wind directions only apply to the outer ring of trigrams.

The two most common sequences, the Pre-Worldly Sequence of Fu Xi and the Inner Worldly Sequence of King Wen, are arranged independently of each other. The connection between them is thus not clear. The order in the Fu Xi Ba-Gua is called pre-worldly, although it is of a younger date than the order of the King Wen Ba-Gua. The Ba-Gua of King Wen and Fu Xi are independently developed. The YI Ba-Gua makes it possible to relate them to each other. Figure 23 shows the relationship between the YI Ba-Gua and the Ba-Gua of King Wen and Fu Xi. The natural cycle in the outer ring of trigrams turns into the Ba-Gua of King Wen by interchanging Mountain and Earth. The cosmic cycle in the inner ring of trigrams turns into the Ba-Gua of Fu Xi by exchanging the pairs of Fire - Water and Lake – Mountain.

The YI Ba-Gua carries both the characteristics of the cosmic cycle and the characteristics of the natural cycle. The trigrams in the coordinate system of the inner ring show the cosmic cycle (like that of Fu Xi), and the spiral sequence of this arrangement in the outer ring show the natural cycle (like that of King Wen).

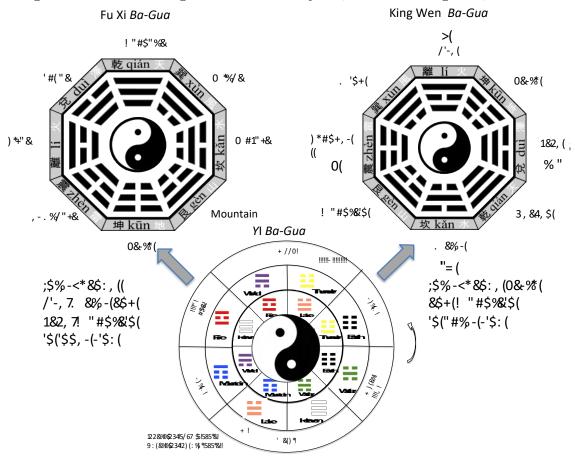


Figure 23. Correspondence between the Ba-Gua of King Wen, Fu Xi and the YI Ba-Gua

It is possible that this figure can function basically as an alternative to both the sequence of Fu Xi (cosmic cycle) and that of King Wen (natural cycle), whereby the connection between the two can also be indicated. Probably, we can usually work with the cosmic YI Ba-Gua (inner ring of trigrams). Only if the wind directions and seasons are explicitly discussed, we also need the natural YI Ba-Gua (outer ring of trigrams).

8. ARRANGEMENTS OF HEXAGRAMS

In the hexagrams we combine the images of the trigrams with the forces of the trigrams in a matrix. We have seen that the sequence of trigrams in the cosmic YI Ba-Gua focuses alternately on the individual and on the community. That also applies in a sense to the hexagrams. The images of the trigrams form the basic trigrams of the hexagrams and the forces of the trigrams form the top trigrams of the hexagrams. This leads to an arrangement as in figure 24.

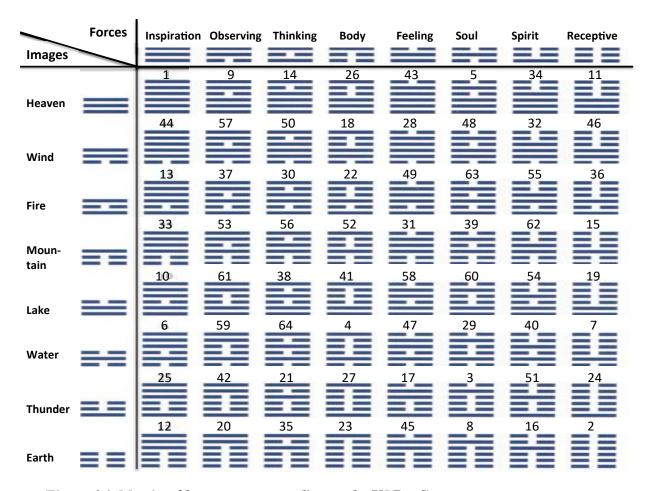


Figure 24. Matrix of hexagrams according to the YI Ba-Gua

There is a relationship between the hexagrams in the rows on one side and the hexagrams in the columns on the other. In the rows the structure of images is created via the sub-images and in the columns the build-up of the forces is effectuated via the sub-forces, so there is a certain interaction between image and force in each hexagram.

Dierselhuis (2013) also uses a hexagram arrangement like this in his mini-*Yi-Jing*. Dierselhuis came to this arrangement when he made for himself the idea in what steps he would create the world from the primeval chaos if it were in his ability.

The matrix of hexagrams needs further elaboration. We present the following observations as hypotheses that need to be further investigated. If we look at the rows of the matrix, in our opinion we see the representations or sub-images. In the *Yi-Jing* these portrayals are discussed under the heading 'The Image'. They represent all the changes and connections that result. The images are designated to act accordingly. The images show the way. The hexagrams in the columns represent the sub-forces. In the *Yi-Jing* these are discussed under the heading 'The Judgment'. The Judgment conveys the image: salvation or doom, repentance or shame. As a result, people can independently decide to go in a certain direction. It provides a coherent overview of the different life formations and enables man to form his life into an organic whole with his own sovereign will.

It is interesting to compare the Early Heaven arrangement of hexagrams of Fu Xi with the model of Kolb (2014). Kolb distinguishes four learning styles in a coordinate system with dimensions 'concrete versus abstract' and 'active versus reflective'. When translating this to our YI arrangement of hexagrams on the rows we expect alternately to see a concrete and an abstract image of the hexagrams. In the columns we expect alternately to see an active and a reflective force.

In summary, the sub-image in which a certain hexagram is located is discussed from 'The Image' and the sub-force is discussed from 'The Judgment'. The hexagrams on the rows of the matrix alternately display a concrete and an abstract image. Similarly, in the columns of the matrix the hexagrams alternately exhibit a picture of action and reflection.

9. SUMMARY AND CONCLUSIONS

Zhou Dunyi, a thinker of the Northern Song Dynasty, extended the work of Confucius and Mencius into a complete cosmological-metaphysical basis with his Diagram of the Supreme Polarity. We elaborate on this Diagram towards a cosmological-anthropological model of cosmic development. The vital energy (qi) and the pattern (li) play a central role in the images (what the trigram is) and forces (what the trigram does) of the trigrams. In the cosmic cycle Heaven and Earth are seen as instigator and recipient respectively of the production cycle. As in the Diagram of Supreme Polarity, and also in Arthur Young's 'Reflexive Universe', the unfolding of the universe is understood in two opposite directions. An involutionary process takes place from Heaven (transcendent, free energy, three dimensional) moving via Wind (two dimensional) and Fire (one dimensional) to Mountain and

Lake (immanent, bound energy). From there a process of evolution takes place via Water (one dimensional), Thunder (two dimensional) and finally to Earth (transcendent, free energy, three-dimensional). A cosmological-anthropological model is developed as a quadrant system with axes inward versus outwards orientation and 'l'-focused versus 'We'-focused. This model, with basic perspectives of naturality, rationality, humanity and morality, fit in Wilber's quadrant system of his Integral Theory, and correspond to the cosmic ring.

In the natural cycle, where the trigrams Heaven and Earth are seen as elements of the production cycle, we display the trigrams in cycle form following the sequence of the Five elements. This approach supplies an alternative interpretation of the King Wen *Ba-Gua*, who has established the oldest sequence of the trigrams. To keep the wind directions correct we solved the challenge by moving great earth (Earth) - and not small earth (Mountain) like King Wen did - between Thunder and Water. With this action we keep exactly the sequence of the Five elements, as in the elaborated Diagram of the Supreme Polarity. Because we keep the order of the trigrams, exclusive of Heaven and Earth, the same as in the production cycle of the elaborated Diagram of the Supreme Polarity and there is some coherence between this elaborated Diagram and Wilber's Integral Theory we call this the natural (*Yi-Jing* Integral) *YI Ba-Gua*.

When extending the quadrant system to octants we observe a cosmic cycle of trigrams as a spiralling sequence. The trigrams Heaven and Earth are seen, as in the elaborated Diagram of the Supreme Polarity, as instigator and receiver respectively of the production cycle. It forms the framework for an alternative interpretation of the Fu Xi *Ba-Gua*. We make the switch from quadrants to octants by adding diagonal axes and moving from duograms to trigrams by adding a third line to the duograms. In general three quadrant systems arise. First, a quadrant system with dimensions psyche and mind. In this quadrant system we see no further points. Second, a quadrant system with dimensions psyche and body. We recognize the *Ba-Gua* of Fu Xi, albeit in a reverse order. Third, we have, like in the cosmic ring, a quadrant system with dimensions mind on the vertical axis and body on the horizontal axis. Compared to the *Ba-Gua* of Fu Xi the trigram pairs Fire-Water and Lake-Mountain are interchanged.

This third variant has special features. In the first place it follows directly from the cosmic ring when we add the psyche-line in the duograms by putting *Yang* and *Yin* on every quadrant in the middle (human) place. In the second place, this variant corresponds to the coordinate system of the abovementioned cosmological-anthropological model. In the third place, if we follow in the octant model the path spiralling, like in 'Spiral Dynamics', starting with Heaven, then Wind, Fire, Mountain, Lake, Water, Thunder and finally Earth, we get the sequence of the images of trigrams corresponding to the production cycle of the Five elements. The correlation between production cycle and conquest cycle is represented in the same octant system. Apart from the images of the trigrams we incorporate the forces of the trigrams in the same coordinate system as concentric circles, because the forces work in all directions at the same time. The complete picture of the new *Ba-Gua* shows the

images and the forces in one coordinate system. In addition, the directions of movement of ego- and alter-intentionality and of immanence and transcendence are also indicated. Because the coordinate system corresponds to the Integral Theory of Wilber and there also is a relationship with Spiral Dynamics we call this system the cosmic YI Ba-Gua.

The YI Ba-Gua is a combination of the natural and cosmic YI Ba-Gua. In one figure we display the sequence of the natural YI Ba-Gua as an outer ring in the coordinate system of the cosmic YI Ba-Gua. Both the natural and the cosmic cycle (in spiral form) show the sequence of the Five elements. The natural cycle in the outer ring turns into the Ba-Gua of King Wen by interchanging Mountain and Earth. The cosmic cycle in the inner ring turns into the Ba-Gua of Fu Xi by interchanging the pairs of Fire - Water and Lake – Mountain.

In the hexagrams the images of the trigrams and the forces of the trigrams are combined in a matrix. The spiral sequence of trigrams in the cosmic YI Ba-Gua focuses alternately on the individual and on the community. That also applies in a sense to the hexagrams. Concerning the matrix of hexagrams, we present some observations as hypotheses that need to be further investigated. The hexagrams on the rows of the matrix alternatively display a concrete and an abstract picture. Similarly, in the columns of the matrix the hexagrams exhibit an alternating picture of action and reflection. In the Yi-Jing the sub-images of hexagrams are discussed from 'The Image' and the sub-forces are discussed from 'The Judgment'.

In this paper we built a cosmological-anthropological model. When building this model we used neo-Confucian interpretations of the Yi-Jing system in constructive engagement (Mou, 2010) with western thoughts and views on systems and on the universe. In building this model of comparative philosophy, we distinguish among four perspectives: naturality, rationality, humanity and morality. Both naturality and humanity are characterized by nondualism, as in Chinese philosophy, rationality is characterized by dualism as in western scientism, and morality is characterized by monism as in Indian Buddhism. These different philosophical approaches are placed in a quadrant system that matches the cosmic ring and Wilber's four-quadrant model. Following the path in the extended eight-octant model spiralling, in the trigrams we recognize the order of the Five elements. We compare different philosophical views in one framework. We can look at this as the pre-engagement phase (Mou, 2010, 17) of constructive engagement, which may lead to further engagement of these views. It can already be concluded that there is much more structure in the Yi-Jing than people would think at first sight. This may, among other things, mean that it is not necessary to use a system of divination to find a proper hexagram that applies to a certain situation. It is possible to use the wisdom of the Yi-Jing in a more structured way, for example by using a questionnaire.

Though the different approaches in the quadrant system are placed opposite to each other, we emphasize that these portrayals are not absolute, but just centres of gravity. Just as with the opposite poles of *Yin-Yang*, these approaches are not strictly separated. In this model we can study Chinese, Indian and Western philosophy in parallel in a coherent way. In this paper we mentioned examples of monism and

nondualism in western philosophy and examples of dualism in Chinese philosophy. In this way this paper engages with other approaches in early and contemporary philosophy.

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REFERENCES

- Adler, Joseph, A. (2014), *Reconstructing the Confucian Dao, Zhi Xi's Appropriation of Zhou Dunyi* (Albany, NY: State University of New York Press).
- Beck, Don, E. and Cowan, Chris, C. (2006), *Spiral Dynamics: Mastering Values, Leadership and Change* (Malden, USA: Blackwell Business).
- Boering, Han (1994), *Handboek I Tjing* (Utrecht: Servire Uitgevers by).
- (2010), *I Tjing essenties, Inzicht in het Boek der Veranderingen* (Cothen: Uitgeverij Juwelenschip).
- Bor J. en Van der Leeuw, K. (red.) (2013), 25 Eeuwen Oosterse Filosofie (Amsterdam: Uitgeverij Boom).
- Cacioppe, R. and Edwards, M. (2005), "SeeKing the holy grail of organizational development: A synthesis of integral theory, spiral dynamics, corporate transformation and action inquiry", *Leadership & Organization Development Journal* 26.2: 86-105.
- Cheng, Chung-Ying (2009), "Li and Qi in the Yi-Jing: A Reconsideration of being and nonbeing in Chinese Philosophy", Journal of Chinese Philosophy, Supplement to Vol. 36: 73-100.
- Defoort, Carine en Standaert, Nicolas (1998), In Gesprek met Mencius, Monografieën (Kapellen: Uitgeverij Pelckmans).
- (2003), Hemel en Aarde verenigen zich door Rituelen, een Bloemlezing uit het werk van de Chinese Wijsgeer XUNZI (Kapellen: Uitgeverij Pelckmans).
- Dennett, Daniel C. (1991), Consciousness Explained (USA: Little, Brown & Co).
- Dierselhuis, Marcel (2013), Mini Yi-Jing, voor een meer duurzame besluitvorming door leiders (Better Decision Institute).
- Donkers, Harry (2016), "Integral Dynamics, A new Integration of Wilber's Integral Theory and Spiral Dynamics", *International Journal of Humanities and Social Science* 6.6: 86-106.
- Esch, Wil van (2017), Palet van Oosters en Westers denken: Tegenspraak of Samenspraak? Een Literatuuroverzicht (Soesterberg: Uitgeverij Aspekt).

- Gao, Yan (2015), "Confucius and Plato on Virtue and its Implementation in Education for International Understanding: A Comparative Study", *American Journal of Educational Research* 3.1: 25-30.
- Garofaio, Michael P. (2013), Eight Trigrams I Ching (Book of Changes), Eight Gates to the Greater World (Red Bluff, California: Green Way Research).
- Graves, Clare, W. (1970), "Levels of Existence, An Open System Theory of Values", *Journal of Humanistic Psychology*, November.
- Haiming, Wen (2012), Chinese philosophy (Cambridge: University Press).
- Hamaker-Zondag, Karen M. (1989), Management I Tjing (Purmerend: Bona Futura).
- Heelas, Paul and Woodhead, Linda, Seel, Benjamin, Szerszynski, Bronislaw and Tusting, Karin (2005), *The Spiritual Revolution: Why Religion is giving way to Spirituality* (Ames, USA: Blackwell Publishing Professional).
- Hon, Tse-ki (2010), "Zhou Dunyi's Philosophy of the Supreme Polarity", in Makeham 2010, 1-16.
- IJssel, Suzette van (2008), Daar hebben humanisten het niet zo over, Over de rol van spiritualiteit in het leven en werk van humanistisch geestelijk raadslieden (Delft: Eubaron).
- James T. and Bretzke, S.J. (1995), "The Tao of Confucius Virtues Ethics", *International Philosophical Quarterly* 35.1: 25-41.
- Jung, C.G. (1971), "Psychological Types", in *Collective Works of C.G. Jung*. Vol. 6 (Princeton University Press).
- Kolb, David (2014), *Experiental Learning, Experience as the Source of Learning and Development,* 2nd Edition (Upper Saddle River, New Jersey: Pierson Education).
- Libbrecht, Ulrich (1995a), Geen muren rond culturen (Leuven: Davidsfonds).
- (1995b), *Oosterse Filosofie, Een Inleiding* (Leuven: Davidsfonds).
- m.m.v. Heinz Kimmerle, Els Janssens (red.) (2016). *Filosofie zonder grenzen* (Antwerpen Apeldoorn: Garant).
- Makeham, John (ed.) (2010), *Dao Comparison to Neo-Confucian Philosophy* (Berlin: Springer).
- Maturana H. R., and Varela, F. J. (1989), De boom der kennis. Hoe wij de wereld door onze eigen waarneming creëren (Amsterdam: Uitgeverij Contact).
- Mesker, Harmen (1999), *De I Tjing Stap voor Stap* (Deventer: Uitgeverij Ankh-Hermes).
- Mou, Bo (2010), "On Constructive Engagement Strategy of Comparative Philosophy: A Journal Theme Introduction", *Comparative Philosophy* 1.1: 1-32.
- Puett, Michael and Gross-Loh, Christine (2016), De Weg, Wat Chinese filosofen ons over het goede leven leren (Utrecht: Ten Have).
- Scharmer, Otto (2009), *Theory U: Leading from the Future as it Emerges* (San Francisco, CA: Berett-Koehler).
- Schöter, Andreas (1998), "Boolean Algebra and the Yi-Jing", The Oracle: The Journal of Yi-Jing Studies 2.7: 19-34.
- Slingerland, Edward (2013), "Body and Mind in Early China: An Integrated Humanities-Science Approach", *Journal of the American Academy of Religion* 81.1: 1-50.

- Tazelaar, R.S. (2012), Confucius en God, Een kritische analyse van de natuurlijke theologie van Leibnitz met betrekKing tot het neoconfucianisme. Bachelor scriptie Wijsbegeerte.
- Wang, Robin (2005, July), "Zhou Dunyi's Diagram of the Supreme Ultimate Explained: A Construction of the Confucian Metaphysics", *Journal of the History of Ideas* 66.3: 307-323.
- Wilber, Ken (2004), Een Beknopte Geschiedenis van Alles, een schitterende synthese van wetenschap en spiritualiteit (Rotterdam: Lemniscaat).
- Wilhelm, Richard (2016), *I Tjing, Het Boek der Veranderingen, Met een voorwoord van prof. dr. C.G. Jung.* 21e druk, Eindredactie Harmen Mesker (Deventer: Uitgeverij Ankh Hermes bv).
- Yiming, Liu (1734-1821) (2013), *Cultivating the Tao, Taoism and Internal Alchemy*, Translated by Fabrizio Pregadio, "Masters" Series, Vol. 2 (California: Golden Elixir Press).
- Young, Arthur (1999), *The Reflexive Universe; Evolution of Consciousness*, Revised edition (September 15) (Anodos Foundation).