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Dialectics of the Akashic Field and Qì Related to the Conceptions of Space in Vernacular Architecture, Vastu Shastra and Fēng Shuǐ

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Abstract

The conception of space is the basis of architecture, influenced by civilization, cosmology, philosophy, mathematics, physics and even language. It is closely related to reasoning and ways of thinking. The phenomenon of the development of science, especially quantum physics, seems increasingly in line with ancient sciences from the East, such as the akashic field and qì.

This research examines the ancient Greek, Indian and Chinese cosmological theories, which have led to the concept of duality and the theory of elements of each civilization. The concept of duality and the theory of elements raises the issue of the conception of space related to the akashic fields and qì of vernacular architecture, vastu shastra and fēng shuǐ.

The study uses a dialectical philosophical paradigm with a qualitative deductive exploratory method in order to find the common threads of cosmological theory, the concept of duality and the theory of elements from the civilizations of Greece, India and China. It gathered data by a document survey.

The findings show that the development of science is in line with the reasoning and thoughts of the Eastern civilization and cosmology, which has influenced the understanding of the conception of space. The paper concludes that the dialectic between the akashic field and qì can become a bridge to the understanding of the conception of space from vernacular architecture, vastu shastra and fēng shuǐ. It argues that architecture, vastu shastra and fēng shuǐ can work together with contemporary architectural theories to produce meaningful and wholesome architecture.

Keywords: *Akashic* Field, Dialectics, *Fēng Shuǐ, Qì*, *Vastu Shastra*, Vernacular architecture

Introduction

Architecture is always based on a particular conception of space; the interrelationships between architectural objects would create space, and then the perception and experience of space would influence architectural space based on a concept of geometric space. The conceptions of space evolves and changes over time. It influences

architecture and *vice versa* while architecture has always been a model where geometry can further develop its spatial concept (Leopold, 2002). The evolution of architecture occurs due to people's interest from different viewpoints and their different thinking methods to improve life processes and advance human culture. (Purwanto & Lake, 2021). Anthropology synthesizes various human knowledge obtained by comparing cultural diversity; they are believed to complement each other and enrich architectural knowledge (Adimihardja & Salura, 2004).

Modern science has universalized our thinking, and the international language of English has allowed ideas and values to be exchanged freely. As a result, cultural differences are diluted, and community and national identities are shattered (Dayaratne, 2006). Meanwhile, it is being discovered that the phenomenon of the development of science, especially quantum physics, is in line with the ancient wisdoms from the East, such as *akashic* fields and *qì*.

This research examines the ancient Greek, Indian and Chinese cosmological theories, which have led to the concept of duality and the theory of elements of each civilization. The concept of duality and the theory of elements is closely related to the spatial conception of each civilization. Therefore, the issue of the conceptions of space and their relations with the *akashic* fields and *qì* of architectural arrangement, *vastu shastra* and *feng shui*, is interesting, significant and relevant for research.

This study examines, to what extent and how the *akashic* field and *qì* relate to the conceptions of space in architectural arrangements, *vastu shastra* and *fēng shuǐ*. In order to do so, the theories of spatial concepts from the Greek, Indian and Chinese civilizations need to be elaborated upon.

The research aims to find common threads from the theory of cosmology, the concept of duality and the theory of elements from Greek, Indian and Chinese civilizations of which, the benefits are expected to provide a new understanding of the conceptions of space in architectural design intertwining modern theories, *vastu shastra* and *fēng shuǐ*.

Table 1: Documents related to dialectic, *akashic* field, *qì*,vernacular architecture, vastu and *fēng shuǐ*.
Source: Author, 2023

No	Title	Description
1	The Dialectic of Space: An Untimely Proposal (Cole, 2020)	This article examines spatial dialectics which still requires constant refinement and refers to it as more of a concept. It offers some foundations for thinking that is relentlessly spatial and unapologetically material.
2	The Socio-Spatial Dialectic (Soja, 1980)	This article presents the socio-spatial dialectic as a means to reopen the debate and calls for the explicit inclusion of the social production of space in Marxist analysis as something more than an epiphenomenon.
3	Mirror Reflections: Robert Smithson's Dialectical Concept of Space (Stückelberger, 2006)	This essay analyzes the concept of space in the work of the American artist Robert Smithson (1938-73). The discussion focuses primarily on his work with mirrors. Smithson believes that sites and non-sites are inseparable, reflecting each other like mirrors and reflections.
4	Geomagnetic Field Effects In Anomalous Dreams And The Akashic Field (Krippner, 2006)	This study examines what Ervin Laszlo did to the ancient concept of the Akashic record that is cited as the basis for the "Akashic Field" (A-Field) model, which has clear implications for parapsychology, the scientific study of human-human and human-environmental interactions.
5	The Four Elements of Santorini Architecture Lessons in Vernacular Sustainability (Stasinopoulos, 2006)	This article presents its characteristics with a systematic approach based on the concept of the "four elements" (fire, water, earth, air), which according to ancient Greek philosophy.

6	Indian Yoni-Lingga and Chinese Yin-Yang: Conceptual Comparisons. In: From Ancient Greek to Asian Philosophy (Ding, 2007)	This essay compares the similarities and differences between the two types of dichotomy, the Sino-Hindu philosophies and theologies, using a theoretical formulation: a certain conceptual, analytical, and cross-cultural perspective.
7	The Five Cosmic Elements as Depicted in Indian and Chinese Cosmologies (Mahdihassan, 1989)	This article compares the Indian and Chinese cosmologies, each containing the five cosmic elements. The Indian elements are akasha, air, fire, water and earth. Akasha connotes creative energy. In Chinese cosmology the full term is "yin-yang-wu-xing." namely wood, fire, water, earth and metal.
8	Understanding Vernacular: Vastu Shastra and Carl Jung"s theories of Psychology (Karani, 2014)	This paper examines ancient Indian architectural practice, Vastu Shastra, with Carl Jung"s theory, which has similarities. Both of these approaches offer new insights into vernacular architecture.
9	The Spatial Science of Vāstushastra in Traditional Architecture of India (Singh, 2019)	This study discusses Vāstu Shastra which is a traditional practice in Indian Architecture, which has five basic elements – Sky, Air, Fire, Water and Earth, reciprocal in the directions of the compass: North, South, East and West based on geographical location. The spatial network such as function: zoning, connectivity: circulation, architectural features: decoration will define the urban design. Logical argumentation and correlational research to organize Vāstu Shastra language through graphic sketches.
10	Redefining Vastu Shastra Principles With Reference To The Contemporary Architectural Practices In India (Dash, 2022)	The purpose of this article is to provide an overview of Vastu Shastra, the ancient Hindu science of building development and current development methods in India. In the ideas and development structures of Vastu Shastra, there are opposites as well as in the present situation. Therefore, an attempt has been made to combine the antiquated standards of Vastu Shastra with the existing planning practice of private structures to achieve the common goals of caring for the well-being of people and the climate.
11	The Aesthetic of the Absent The Chinese Conception of Space (Li, 2002)	This article examines the Chinese concept of space, *fēng shuǐ*, *qì* and Lao Zi's idea that 'carving out a void to create a room, only where there is emptiness, space acquires utility', which is a function of that space, or "emptiness" corresponds to the Dao. According to the Chinese point of view, space is clearly defined not only by itself, but also by its referential relationship with the context.
12	Engaging the Yin-Yang Concept to Produce Comfort and Spatial Experience: An Interior Design for a Chinese Restaurant in Indonesia (Murdowo, 2021)	This paper explores the connection of the concept of *yīn* and *yáng* in restaurant design to enhance the comfort and spatial experience of patrons. The goal is to provide the right solution that will positively affect Chinese restaurants and serve as a basis for future research.

Based on Table 1, it can be seen that there is hardly any research discussing the dialectics of the *akashic* fields and *qì* related to the conceptions of space especially related to vernacular architecture, *vastu shastra* and *fēng shuǐ*. Therefore, this study seeks to close this knowledge gap making it a potentially a new discovery of ideas.

Review of Literature

Cornelis van de Ven (1991) examines the conception of space presented by Antariksa (2018) who says that if we believe that space is architecture, then there are seven theories that provide its philosophical basis. They are Lǎo Zǐ's spatial thinking, Plato's spatial thinking, Aristotle's theory of space, Divine space, the Gothic Light, the infinity of space in the universe, metaphysical intuition and the content of its parts and space-time continuums (Antariksa, 2018).

Weyl (1885-1955) says that space and time are generally regarded as the existence of the real world and matter as its substance (Weyl, 1952). The development of understanding of the conception of space in architecture is closely related to civilization,

cosmology, philosophy, mathematics, physics and even language. Weyl summarizes these changes by beginning with the discovery of the electromagnetic field by the physicists' Faraday and Maxwell and the discovery of non-Euclidian geometries by Riemann that shifted the positions of Euclidian geometries (Ven, 1991).

In the early twentieth century, puzzles and anomalies were accumulating in a wide range of disciplines. Science was experiencing another paradigm shift that may be just as fundamental as the one that led from a Newtonian mechanistic world to an Einsteinian relativistic one (Laszlo, 2004). Currently, a paradigm shift is taking place; some notions that had previously been considered myths are now acknowledged as legitimate scientific hypothesis (Laszlo, 2004).

Based on the explanations above, research on the dialectical issues of the *akashic* fields and *qì* related to the spatial conception of vernacular architecture, as well as *vastu shastra* and *fēng shuǐ* is interesting and important, especially concerning the *akashic* field, which Ervin Laszlo elaborates in in his book entitled Science and the *Akashic* Field.

Akasha (a-ka'ska) is a Sanskrit word meaning "ether", which pervades all space. Originally signifying "radiation" or "light," in Indian philosophy, *akasha* is considered the first and the most fundamental of the five other elements, namely *vata* (air), *agni* (fire), *ap* (water), and *prithivi* (earth). *Akasha* embraces the properties of the five elements, giving birth to everything perceived with the senses arises that arise to which everything eventually returns. The *Akashic* records, called the *Akashic* Chronicle, is an enduring record of everything that happened and has happened in time and space (Laszlo, 2004). It is speculated that this *akashic* field is similar to the concept of *qì* in the science of *fēng shuǐ,* which can be applied in architectural conceptions.

This study examines the understanding of the *akashic* fields and *qì* related to the spatial conceptions of architecture, *vastu shastra* and *fēng shuǐ*. However, before that, it is necessary to carry out an elaboration on the theory of spatial concepts from philosophers such as Lǎo Zǐ, Plato and Aristotle, and mathematicians such as Euclid and Rene Descartes as well as the physicists such as Albert Einstein and Max Jammer. This study is based on the idea that there is a connection between the conception of space and the development of physics and element theory, both from the Greek civilization, the Indian civilization and the Chinese civilization.

The cultural and civilizational influences from Greece, India and China must be reasoned with broad insights and appropriate logic. Various cultures have a distinct image of the world and a special language structure, giving birth to a unique way of thinking and logic (Sugiharto, 2010). Being a variety of ways to explain causal relationships, there are many types of logic. It is closely related to the specific ontological worldview of the ethnic culture. Everything is interdependent, as in the concept of *yīn* and *yáng* in the Chinese perspective (Purwadi, et al., 2022).

1. The Theoretical Basis

a. Conceptions of Space

Henri Lefebvre said that every definition of architecture requires a detailed analysis and explanation of the conception of space (Lefebvre, 1991). The concept of architectural space presented by van de Ven in his book titled 'Space in Architecture' mostly tends to be oriented towards the Greek and Roman conceptions of space; only one Chinese philosopher is discussed at the opening of part one of the chapter one.

Architecture, the art of making space, is believed to create boundaries to be experienced from an infinite space through rooms and its systems for excited appeal and sheer pleasure that can be created through the spaces and buildings. This contrasts sharply

with *vastu*, *fēng shuǐ* or geomancy and other traditional principles that guide pre-modern architectural practices that emphasize the expression of identity (Dayaratne, 2006).

Space is a strange entity, but there is an additional dimension in our existence, and it is another strange entity called time; unlike space, the movement of time is not unidirectional, and human beings are aware of it from a very early period (Vahia, 2011). Space includes aspects of place, time, and ritual (Trisno, et al., 2020).

The development of the conception of architectural space is inseparable from the development of physics, especially the current development of quantum physics, which increasingly proves the truth of Eastern thought, such as the *akashic* field from Indian cosmology and *qì* from Chinese cosmology.

In his book 'Science and the *Akashic* Field', Ervin Laszlo discusses in detail the *akashic* field and says that space is believed to be filled with invisible energy fields (Laszlo, 2004).

1). Lǎo Zǐ

Lǎo Zǐ (570-472 BC), through the 11th chapter of *Dào Dé Jīng* conveys three stages of the spatial hierarchy. First, space is a result of the tectonic arrangement. Second, space is covered by stereotomic shapes. Third is the transitional space that forms a relationship between the world inside and the outside. The idea of space associated with architecture from *Dào Dé Jīng* chapter 11 represents the first example of the aesthetics of space. Lǎo Zǐ's reflections greatly influenced architects who considered the intangible content of architectural forms to be the true architectural potential. The space contained within was more essential than its material (Ven, 1991; Trisno & Lianto, 2021).

2). Plato

Plato (427 – 347 BC) understood space as one of the four elements that shape the world: earth, air, water and fire. Thus, space, seen as the air, becomes palpable because it has a character different from all other elements. According to Plato, space is a finite element in a finite world. In contrast to Lǎo Zǐ's thought, space for Plato is not just an accompaniment that does not exist but rather becomes a palpable part of the cosmic construction arranged in certain rules of mathematical comparison. The Platonic world is three-dimensional, whereas any notion of space is understood in a geometric context (Ven, 1991).

3). Aristotle

Aristotle (384 – 322 BC) put forward a new concept of space called the theory of place (topos) which rejected Plato's stereotomic ideas (Ven, 1991). Although Aristotle's Organon was the standard text in logic, it was not until the middle of the twentieth century that Aristotle's Physics replaced Plato's Timaeus. It might not be wrong to assume that the ambiguous and obscure language in the Timaeus contributed to and hindered the conceptualization of space as a part of the scope of mathematical study because Greek mathematicians neglected the geometry of space.

4). Euclid

During the reign of Ptolemy Soter (323-285/83 BC), Euclid of Alexandria codified one of the most fundamental branches of geometry that has stayed largely unchanged and that we still use today in thirteen books titled Stoicheia (Elements). The discipline of architecture, which deals with creating forms, may benefit the most from this knowledge (Sbacchi, 2001).

While comparatively insignificant, other branches of geometry that have developed since the 17th century have impacted architecture. The use of Euclidean geometry in architectural planning throughout history has been far superior to that of projective geometry or topology.

However, despite no longer being an absolute entity, space is, in fact, Euclidean and shares this characteristic with other such entities. But in the special theory of relativity, the space-time continuum by which any observer identifies events in their physical world is considered Euclidean, or pseudo-Euclidean, if the Minkowski representation is adopted. Before the discovery of general relativity, there was a debate over whether the space of perception was Euclidean. Absolute space was inevitably regarded as Euclidean by Newton and his successors. These latter features of conventional space were eliminated by finding non-Euclidean geometries. Ultimately, the Riemann idea of n-dimensional manifolds as the foundation for modern physics' understanding of space (Jammer, 1993).again

5). Cartesians

For Rene Descartes (1596 – 1650), space and mass are the same; he sees spatiality as synonymous with mass extension (res-extension). We often hear the expression of 'Cartesian space' when referring to geometric regularities such as two or three-dimensional grids (Cartesian grid). Still, Descartes' concept of space must be interpreted, as was done by Heidegger, as a three-dimensional existential expansion of reality (Ven, 1991).

6). Einstein

Einstein's theory of relativity is based on the concept of a continuum between space and time. This means that space is a field and not an 'empty space', which depends on four parameters involving the three dimensions of space and one dimension of time. According to Einstein (1879 – 1955), space is only Euclidian when it is far enough away from matter, but the presence of matter makes it slightly non-Euclidian. Einstein reduced the concepts of space in physics into three main categories, namely

1) The Aristotelian concept of space as a place.
2) The concept of space as a container refers to Newton's absolute space idea.
3) The concept of space as a four-dimensional field that Einstein developed due to the influence of Faraday and Maxwell (Ven, 1991).

7). Max Jammer

Space is a topic in the extensive metaphysical and epistemological literature, particularly for contemporary philosophy (Jammer, 1993). Max Jammer (1915 – 2010) said that the scientific interpretation of space had undergone many changes depending on the development of human thinking about the universe. Still, the development of concepts about space was not linked to architectural theories until the late half of the nineteenth century. Louis Isadore Kahn coined the idea of space in new architecture in 1957; that architecture means creating space in a planned and thought-out way. Continuing architectural renewal is rooted in changing spatial conceptions (Ven, 1991).

b. *Akashic* field

Throughout Laszlo's review of the conundrums of mainstream science, it has been suggested that the mysterious field implied by the correlations of space and time that transcend the cosmos and consciousness may be the information field at the heart of the cosmos. The quantum vacuum zero-point field is not only a super-dense energy field but also an extremely rich information field, the holographic memory of the universe. This

discovery is reminiscent of the *Akashic* Chronicle: a record of all the events in the universe traced in the *Akaschic* field central to Indian philosophy. The term "A field" refers to the universe's information field, which was recently discovered. The A-fields occur among the fundamental fields of the universe, joining scientific G-fields (gravitational fields), EM fields (electromagnetic fields), and various nuclear and quantum fields (Laszlo, 2004). It is referred to as the *Akashic* field in the East; however, Western scientists regard it as a myth (Laszlo, 2004).

Like the G and EM fields, the *Akashic* fields are imperceptible to sight, sound, touch, taste, and scent. However, numerous things that could be and could be felt substantiate it. This subject is not considered in the general theory; it is confusing and mysterious to the conservative scientific mind. But these puzzles and mysteries share the same drive when we review the bold but hotly debated hypotheses related to scientific tales by leading experts in subjects as varied as biology, cosmology, quantum physics, and consciousness study (Laszlo, 2004). The recent resurgence of the *Akashic* field strengthens quantitative data produced by the experimental scientific techniques with qualitative human experience (Laszlo, 2004).

c. *Qì*

The concept of *qì* is one of the main but frequently misconstrued topics in *feng shui*; although many people mistakenly think of *qì* as energy, it is not. Several comments have been made to explain the meaning of *qì*, which is similar to energy but more challenging to translate accurately into English. While the term "energy" can only describe a few of its physical traits and does not discuss its spiritual qualities (Field, 1998), "*qì*" and "air" are represented by the same character in Chinese (Chou, et al., 2007).

To correctly translate *qì* is challenging. The definitions provided by the dictionary include those for air, gas, and vapour. This term, which relates to the pneuma of ancient Greece and the prana of ancient India, seemed to early Chinese naturalists to closely mirror what we now refer to as matter energy (Ho, 1985).

Every living object possesses *qì*, which is present throughout everything. In order to achieve beneficial effects, it is necessary to control both the flow and the presence of *qì*. *Qì* is based on the *yīn - yáng* principle, which can be either positive or negative (Teh, et al., 2018). *Qì* can be in two states, still or moving, and can contract or expand, giving rise to two states, *yīn* and *yáng* (Ho, 1985).

The distinct functions that *yīn* and *yáng* play produce the two *liăng yí* forces. These forces combine with *yīn* to create water, fire, wood, metal, and earth. The five *qì* would be distributed harmoniously, allowing the four seasons to run their course. *Wŭ Xíng* is described as the theory of five elements in *feng shui*: Water, fire, wood, metal and earth (Ho, 1985).

In the Chinese five arts (*wŭ shù*), the concept of *qì* is converted into symbols such as trigrams or *bāguà*, heavenly stems and earth branches which are very closely related to the theory of the elements or also in figures, as in the flying star method in *fēng shuĭ*, which can later be translated and decoded by *fēng shuĭ* practitioners to read the information.

d. Vernacular Architecture of the Greek, the Indian and the Chinese

1). Greek Vernacular Architecture

Stasinopoulos (2006) saya that the Santorini vernacular settlement is an excellent case for demonstrating the applied approach of the Greek element theory because it provides numerous features at different scales that illustrate how the built environment and element theory relate to one another. When applied, it considers how natural forces have

shaped architecture at all scales, from tiny buildings to entire environments and man-made to natural formations. When examined through the lens of element theory, Santorini emphasizes both traditional responses to natural conditions as well as natural forces (Stasinopoulos, 2006). The element theory described by Stasinopoulus, such as the earth element, is associated with the use of lava rock, geographic location related to volcanoes and earthquakes and topography. The fire element is associated with the cooling and heating of buildings. The water element is associated with rainfall and local water cleanliness. The air element is associated with wind and ventilation.

2). Indian Vernacular Architecture

Karani's research on understanding vernacular: Vastu Shastra and Carl Jung's theories of psychology says that Indian architecture based on *Vastu Shastra* needs to balance elements of elemental theory at three levels: namely the universe level, the environmental level and the human body level. In applications, for example, the air element, *vayu*, is associated with adequate air circulation. Regular air change is necessary for every architectural space as it allows cooling and temperature control, which relates to the Northwest cardinal direction. The element of fire in a house is associated with the appropriate use of light and colour; this is important because it can make the difference between a relaxed and comfortable space. In architectural spaces, the Fire element is in the Southeast corner. The water element located in the Northeast is associated with the placement of toilets, wells, water tanks and mirrors. At the same time, the earth element is located in the Southwest sector and is used to place heavy objects (Karani, 2014).

3). Chinese Vernacular Architecture

Saran and Shirodkar in a study titled *Vastu Shastra* and *Fēng Shuǐ* the ancient sciences and their fusion in the context of Indian architecture says that *fēng shuǐ* is the art of ancient Chinese civilization to live in harmony with Nature and the environment. The interactions of the five elements in element theory occur in the human body, land, landscape, buildings, and between the elements in interior design. Therefore, they must be used wisely. The use of the theory of the five elements in *fēng shuǐ* evolved from several *fēng shuǐ* schools, such as the form school and the compass school with the flying star method, which arranges all entities such as shape, colour, and direction (Saran & Shirodkar, 2017).

2. Research Method

This study focuses on the conception of space and its theoretical roots to find the common threads from the Greek, Indian and Chinese cosmological theories, associated with their articulations in architecture, *vastu* and *fēng shuǐ*.

The study uses qualitative and deductive exploratory methods to examine the conception of space through platonic forms, *akashic* fields and *qì* to arrive at conclusions that present concepts and alternative theories to provide feedback. The exploratory research fits well with a deductive approach (Casula, et al., 2020). Procedurally, it is divided into three parts, namely:

The first stage: This introduces the theories of the conception of space from both the Greek and Chinese philosophers, mathematicians and physicists. The conception of space is inseparable from the development of civilization. In this case, we would discuss the Greek, Indian and Chinese civilizations. The theory of the concept of this civilization is closely related to cosmology and involves the theory of the elements.

The second stage: Greek cosmology involves Plato's thinking from the Timaeus, and Platonic solids and the Greek elements theory. Indian cosmology involves the concepts of the *Lingga Yoni* and the *akashic* field as well as the Indian elements theory. The Chinese cosmology involves the concepts of *yīn yáng* and *qì* and the Chinese elements theory, namely *wǔ xíng*.

The final stage is the dialectics of the *akashic* fields and *qì* related to the theory of the elements from each civilisation to obtain findings from research in the form of their application in architecture, *vastu* and *fēng shuǐ*.

Findings and Discussion

1. Greek, Indian and Chinese Conception of Space and Cosmology

The Greek, Indian and Chinese civilisations of have their cosmological theories, which have similarities because they all discuss the theory of the elements.

Table 2: Elements theory
Source: Author, 2023

Elements theory					
Greek	*Ether*	Air	Water	Fire	Earth
India	*Akasha*	Air	Water	Fire	Earth
China	Metal	Wood	Water	Fire	Earth

The elements theory in Greek cosmology involves Platonic solids. The Indian cosmological theory applied the concepts of *Lingga Yoni* and *akashic* fields, and the Chinese cosmological theory involved the concepts of *yīn yáng* and *qì*.

The influence of Plato's thought on Western architectural theory is quite significant (Ven, 1991). Although the Greek element theory appeared in the sixth century BC by Thales (624 – 565 BC) and the Pythagorean school used element theory in geometric forms, these five geometric forms popularized by Plato are known as Platonic solids (Ho, 1985).

Stasinopoulos, says that Greek philosophers associated the theory of the elements with the five Platonic solids. Aristotle linked the four main elements with the senses and the four seasons, fire with the summer, earth with the winter, air with the autumn, and water with the spring. This connection is used as a systematic tool to study how architecture relates to Nature; buildings in Santorini are the product of a long struggle to survive in a harsh environment by generations who have succeeded in sustainably utilizing the available natural resources. Indeed, locals have adapted the notions of comfort and other necessities to local customs and have combined the effects of the four elements into a frankly minimalist architectural idiom, thus offering a shining example of vernacular environmental sustainability (Stasinopoulos, 2006).

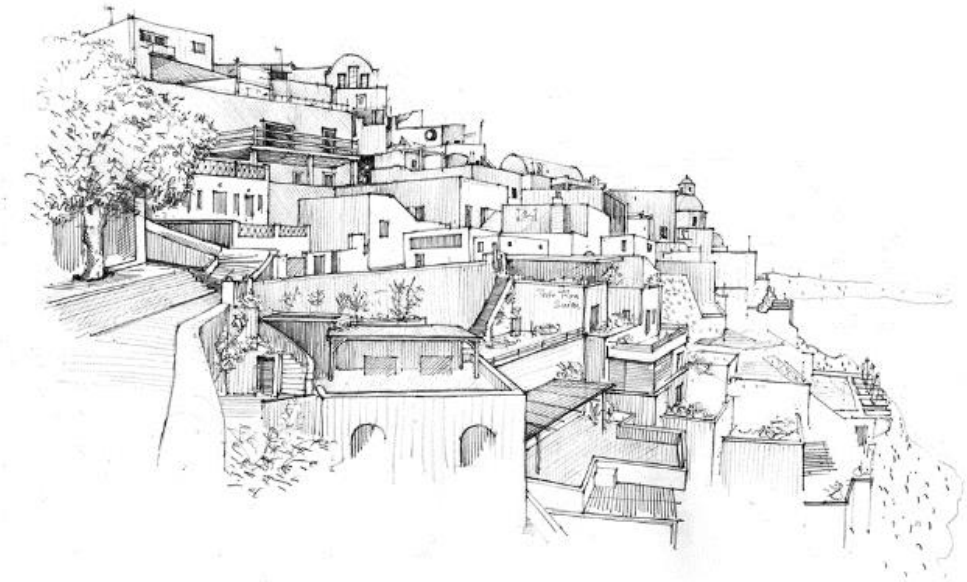


Fig. 1: Santorini's vernacular architecture
Source: https://www.greece-is.com/santorinis-architecture-defines-the-structure-of-life. accessed February 15, 2023, 15:20

Meanwhile, in Indian vernacular architecture, there are aspects which are the main elements or principal aspects of vernacular architecture, such as *vastu shastra*, *vastu purusha* mandala and mandala (Sarkar, 2015). One of the key terms in *vastu shastra* is *panch maha bhuta* or the theory of five elements. *Vastu Shastra* states that these five elements are important in maintaining positive nuances in every built space (Karani, 2014).

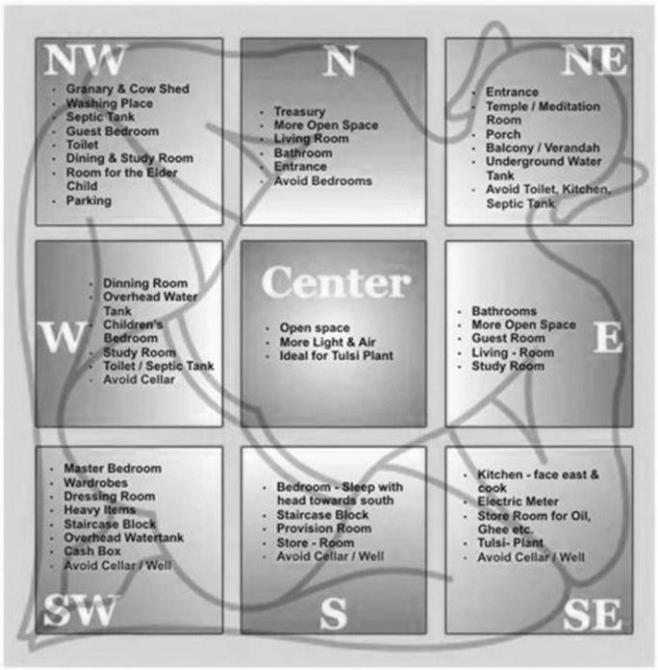


Fig. 2: *Vastu Purusha Mandala*
Source: https://www.indiamart.com/proddetail/vaastu-for-residential-1810002162.html. accessed February 15, 2023: 16:30

Fēng shuǐ is the Ancient Chinese art of living in harmony with the environment. It is often defined as the art of placement as it revolves largely around determining positive or negative directions for people, the places they live in, and the relationships between them (Saran & Shirodkar, 2017). *Fēng shuǐ* is a traditional Chinese architectural theory of selecting favourable sites for residence and provides building layout theory and design related to local architecture (Mak & So, 2015).

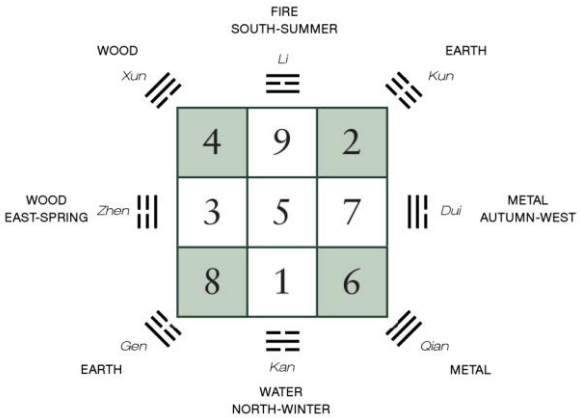


Fig. 3: Complete Lo Shu
Source: Scientific *Feng Shui* for the Built Environment (Mak & So, 2015)

In the art of making space, India adheres to the *vastu shastra* principle, which is closely related to Indian cosmology; meanwhile, the art of making space in China adheres to the principle

of *fēng shuǐ,* which is closely related to Chinese cosmology. Following the term used by Dayaratne (2006), 'the art of making space', it can be said that the Greek art of making space is architecture, the Indian art of making space is *vastu shastra*, and the Chinese art of making space is *fēng shuǐ*.

Indian cosmology has five cosmic elements, namely *Akasha*; air, fire, water and earth. Greek cosmology has ether, fire, air, water and earth. It turns out that ether resembles *Akasha* (Mahdihassan, 1989). Meanwhile, the elementary theory of Chinese civilization has metal, wood, water, fire and earth, which are all tangible. These elements interact with each other following the three natural cycles, namely the productive, destructive, and weakening cycles. This theory is commensurate with the thermos-dynamic theory of Antoine Laurent Lavoisier (1743 – 1794) (Teh, 2007).

The thoughts of philosophers and cosmologists from various civilizations and developments in the world of science presented by Laszlo are fascinating to study. This closely relates to and influences the development of understanding of the space conception from architecture, *vastu* and *fēng shuǐ*.

2. Form Concepts Related to Greek, Indian and Chinese Element Theory.

The product of an architectural work cannot be separated from the form that surrounds space. Thus, it is necessary to elaborate on the relationship between architecture and the platonic solids of Greek civilization as well as the relationship between architecture and the forms of various elemental theories.

Plato popularized the Platonic solids due to the development of the element theory introduced by Thales (624 – 565 BC) and then continued by Anaximenes (570 – 526 BC), who later by the Pythagorean school linked this element theory with geometric shapes: the four-sided tetrahedron pyramid with the earth element, the six-sided cube with the air element, the eight-sided octahedron with the fire element and the twenty-sided icosahedron with the water element. At the same time, it was also linked with the twelve-sided dodecahedron that represents the universe or the ether (Teh, 2007).

In Timaeus, Plato presents the idea that the Creator creates a world resembling a geometric progression. The Platonic solids, the five basic forms comprise the four elements and the heaven. In fact. Plato describes the need for four elements. First, fire makes the world visible, and earth makes it impervious to touch. Fire belongs to heaven, and earth belongs to the earth; these are the two extreme elements that show that the world's four basic elements are earth, air, fire and water (Hejazi, 2004). However, Western philosophy has its roots in the sixth century BC in Greece, where Heraclitus believed in a world of perpetual change and eternal becoming and that all changes in the world arise from the dynamic and cyclic interplay of opposites, with any pair representing a unity of opposites (Mak & So, 2015).

The Indian philosophy of *lingga yoni* can be compared with the Chinese philosophy of *yīn yáng*. The *alu* and *pesung* artefacts, which function as pounding tools and mortar, symbolize the Hindu cosmological concept of the duality of *lingga* and *yoni*. The *lingga* is the masculine aspect of the pair, while the *yoni* represents femininity. Together, they symbolize harmony, balance, and the concepts of birth, destruction, and rebirth. However, in shape, the *lingga* is characterised by a vertical axis representing the relationship between the heaven and the earth. It can also mean the relationship between the abstraction and the real. *Yoni* is characterised by a horizontal axis representing the past and the present, or causality (Sunoto, 2017).

Both *lingga yoni* and *yīn yáng*, are metaphors for some signs, symbols, characteristics, models, or patterns of certain things or ideas, as well as signs of gender, or generative power. It is the same with *yoni* from India and *yīn* from China, an icon of the female organ, *lingga* from India and *yáng* from China, as a symbol of the male organ.

The theory of *yīn yáng* is associated with the five elements theory *wǔ xíng*, metal, wood, water, fire, and earth which can be considered as an elaboration of the idea of *yīn yáng* which adds the important concept of rotation of the five elements (Ding, 2007).

The five elements theory *wǔ xíng* from the Chinese civilization symbolizes many things. It is interrelated with the theories and schools of *fēng shuǐ* such as the theory of *bāguà*, the theory of the heavenly stems and earth branches and the famous *fēng shuǐ* forms school, which is famous

for the symbols of *fēng shuǐ* like a white tiger in the West, a green dragon in the East, black turtle in the North, and red phoenix in the South (Trisno & Lianto, 2023).

3. Dialectics of *Akashic* Field and *Qì* Related to The Elements Theory and Forms in Architecture, Vastu Shastra and *Fēng Shuǐ*.

Table 3: Cosmology and element theory
Source: Author, 2023

Cosmology and Element Theory									
Civilization	*Art of Making Space*	Duality Concept	Elements Theory						
Greek	Architecture	Unity of Opposite	Ether	Air	Water	Fire	Earth		
India	*Vastu Shastra*	*Lingga Yoni*	*Akasha*	Air	Water	Fire	Earth		
Chinese	*Fēng Shuǐ*	*Yīn Yáng*	*Qì*	Wind	Water	Fire	Earth	Wood	Metal

Greek civilization, through Heraclitus, introduced the concept of Unity of Opposites (Nisbett, 2003), which can be said to be identical to the concept of *Lingga Yoni* from the Indian civilization and the concept of *Yīn Yáng* from the Chinese civilization.

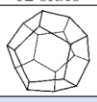
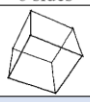
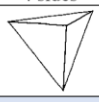
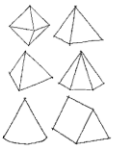
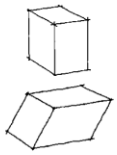
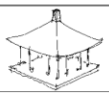
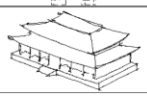
Meanwhile, the concept of ether from the Greek civilization is the same as the concept of *Akasha* from the Indian civilization (Mahdihassan, 1989) and is very similar to the concept of *qì* from the Chinese civilization

Plato said that fire belongs to the sky and earth belongs to the earth; this is similar to what was conveyed in the *bāguà* theory; in later heaven *bāguà*, the *lí* trigram, which symbolizes fire, is placed above, while in early heaven *bāguà*, the *kūn* trigram which has an earth element and symbolizes the earth is placed below.

Fig. 4: Early & Later Heaven *Bāguà* combined
Source: Author, 2023

In Greek and Indian element theory, there are four elements in common, and Mahdihassan says that ether is the same as *Akasha*. The Greek element theory is related to the Platonic solids, concerned with the number of sides associated with a particular element. Meanwhile, Chinese element theory relates to basic geometric shapes in two and three dimensions.

Table 4: Elements with platonic solids and basic geometric shapes
Source: Author, 2023

Cosmology and Element Theory								
Greek		Ether	Air	Water	Fire	Earth		
		Dodecahedron	Cube	Icosahedron	Octahedron	Tetrahedron		
		12 sides	6 sides	20 sides	8 sides	4 sides		
Platonic Solid								
Indian	Lingga Yoni	*Akasha*	Air	Water	Fire	Earth		
		East	West	North	South	Centre		
Chinese	*Yīn Yáng*	*Qì*	Wind	Water	Fire	Earth	Wood	Metal
				North	South	Centre	East	West
Basic Forms								
Greek Architecture								
Indian Architecture								
Chinese Architecture								

From the table 3 above, it can be seen that there are differences and similarities in the attributes of the element theory. The Greek and Indian elemental theories are practically similar. Still, the Greek elemental theories are not related to the cardinal directions, while the Indian elemental theories exist but are not related to form so that these things can complement each other. Meanwhile, the Indian elemental theory and the Chinese elemental theory have similarities. These are, the concept of *Lingga Yoni* and the concept of *Yīn Yáng* as related to the direction of the cardinal directions. They are the water element in the North, fire in the South, and earth in the middle.

There are differences that come into being from this element theory. The first is from the element itself; the Greek and Indian elemental theories have ether or *Akasha*, but there are no wood and metal elements. Then on shape, the Greek element theory relates shapes with the number of sides of the form, while the Chinese element theory associates geometric shapes in two and three dimensions. Then on the cardinal directions, the Chinese element theory relates the wood element to the East direction and the metal element to the West direction. At the same time, in the Indian element theory, the East direction is related to *Akasha*, and the West is associated with the air element.

The cosmological theory and concepts from the Greek, Indian and Chinese civilisations related to element theory are very closely related to architecture, *vastu shastra* and *fēng shuǐ* especially in terms of tangible forms. Because of that, the applications in architecture, *vastu* and *fēng shuǐ* are obvious. However, intangible things such as ether, *Akasha* field and *qì* need to get more recognition to achieve a balance between the tangible and the intangible.

Conclusions

Based on the analysis above, the questions about what and how the *akashic* fields and *qì* relate to the conception of space in the arrangement of vernacular architecture, vastu shastra and fēng shuǐ are answered. The conclusion is that space is a field consisting of various fields such as gravitational and electromagnetic fields, the ether field, the akashic field and the qì field. From this it is proven that the spatial conception of the akashic field and qì tend to speaks of the intangible.

This field contains information that can be converted into symbols in element theory. These symbols can be converted into tangible forms or intangible things such as qì and applied in architectural design, vastu and fēng shuǐ.

The dialectic of the *akashic* fields and *qì* can be concluded as a bridge to understand the spatial conceptions of vernacular architecture, *vastu* and *fēng shuǐ* following the connectedness of scientific developments with the *akashic* field and the similarity of the *akashic* field with the *qì* field.

Greek vernacular architecture seems to be related to tangible forms. In contrast, Indian and Chinese architecture seem to be quite balanced both in terms of tangible forms and the calculation of the quality of the akashic field or qì field. These are intangible either through the practice of vastu shastra and the practice of fēng shuǐ, such as the flying star method or other fēng shuǐ methods.

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