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Natural Philosophy and Fengshui: A Phenomenological and Ontological Thinking for Sustainable Building

Yifeng Wen

School of Architecture and Urban Planning, Guangzhou University, 510006, Guangzhou, China

Abstract: Sustainable building is hot topic in today. This study tries to throw new light on this issue in terms of fengshui. In study of fengshui, the wisdom of traditional ideas and natural philosophy were combined. Compared with artificial index system of modern science ignored direct indicating function of natural forms and subject's intuitive awareness, fengshui probes into deep correlation among the elements, form and energy in the light of holism and the ontological significance of communication between internal and external life, which reflecting deep resonating between nature and human. Fengshui as archetypical diagrams demonstrates its capacity to make sustainable building, environmental conservation and social betterment.

Key words: Sustainable building, natural philosophy, fengshui, archetype

INTRODUCTION

Whether we can intuitively understand the significance of natural phenomena and adopt a sustainable way of life based on this understanding, or just blindly rely on index data produced by instruments? After all, instruments are just tools; they are not breath, working and having aesthetics feelings in the nature. The direct comprehension to the natural meanings must resort to "human" as subjects. The dialogue between science spirit and the meaning of life is a just topic for this study.

NATURAL PHILOSOPHY IN TERMS OF ONTOLOGY AND PHENOMENOLOGY

Book of changes said: Tai Ji produces two poles which are Yin and Yang. In this article will give Tai Ji an abstract interpretation. Buddha said: world begin from "non-light". The word "non-light" means "transcendental ignorance", which having very similar philosophical meaning with Tai Ji in terms of abstract level: absolute (Tai Ji) in order to show himself therefore to hide himself for producing limited subject and divide into two parts: subject and object. That is to say, the spirit and nature are homology with two bodies, Fig. 1.

Hegel's concept of absolute spirit was also similar with this fundamental view, so he putting forward a primary task for natural philosophy was that "abandoning the separation between nature and spirit, to make spirit

knowing itself being within the essence of nature" (Hegel, 1805). Hegel's logic starts from absolute spirit to reach an understanding of natural phenomena, but Hegel's logic applications (such as in natural philosophy) produces a lot of inference obviously does not conform to experience. Therefore, whether Hegel's logic, or other such and such logic, how can they guarantee the objectivity of experience by an approach of priori logic has become problem. Conclusion is that the priori logic is only a framework for experience to be unfolded, not directly to ensure concrete or perceptual experience,

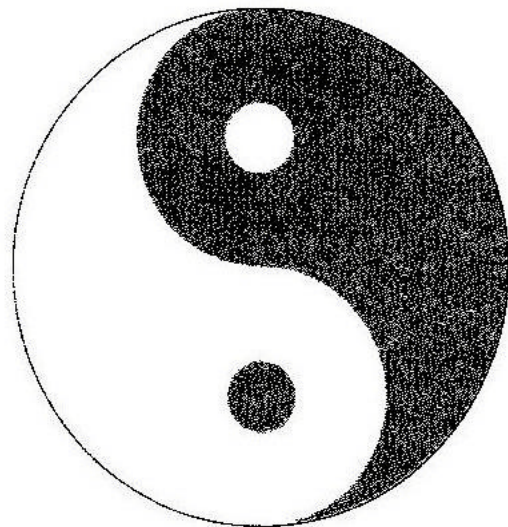


Fig. 1: Tai Ji

because perceptual experience include some subconscious contents endowed by survive will that is non-rational or non-logos, which can be associated with Jung's concept of "archetype" as transcendental ontological being. Reverse with Hegel's logic thinking, whether or not can we interpret logic concepts in terms of phenomenology directly related to meanings of life? That is to say, prior concepts which to be said as empty form in the sense of Kant theory and deviated from perceptual experience, actually may have archetypal meanings for life, thus have their transcendental and ontological "will" waited us to interpret it out? This philosophical task is putting abstract logic concepts such as in geometry or physics back to phenomenological interpretation to give these concepts a foundation of subjectivity.

When Einstein put forward that there must have an external nature world is the premise of physics. This opinion not only tell us that the true meaning of basic concepts of physics in fact is a great mystery, also make us back to Willard Van Orman Quine's (Quine, 1980) question about the ontology of science concepts. Whether physics concepts are convenient conceptual tools in the sense of pragmatism, or some kinds of ontological statements? What is ontology really meaning? This article attempts to give new insights on these issues.

Modern western philosophy, especially Husserl's phenomenology proposed an in-depth discussion on the topics of "intuition", "intention" and "meaning". Husserl (1913) put forward subject's "intention" as the origin of meaning and paid more ontological status for phenomenon. The conclusions of contemporary philosophy research reveal that there is no such pure perceptual experience (or phenomenon) which has no structure form, that is to say, no matter how structure form is a prior prerequisite for experience in the light of Kantism. Contemporary philosophical thinking also suggests that the structure form as prerequisite condition for experience is not directly as an object, but a hidden thing not being clearly aware in our experience. Logic is reflective construction of those structure forms; Hegel's logic followed this line of thinking. However, as afore mentioned, Hegel's logic application conducted a lot of deduction obviously not conforming to experience. Why is the reason? To answer this question we have to reflect on "logic" itself. Due to a prior "non-light" (transcendental ignorance) of limited subjects and the acquired nature of symbol systems, logic as intermediary from subjective to objective in itself is inevitable limitative and tentative.

So if we want to find a proper expression for this somewhat fuzzy concept "objectivity", Jung's theories of collective unconscious or "archetype" provided us some relevant reference. Archetype as key word of Jung's

culture theories, different from western traditional philosophy put "reason" in the focus of research, while Jung similar with Husserl also paid much more attention to phenomenon and image. After all, Husserl's ultimate goal is to get no doubt clear things, while Jung allowed some degree complex, fuzzy and poly-meaning things to exist. Jung (1959) said that archetype in itself is not visible and it must be showed by means of mysterious empathy and interaction from person to person and between human and nature. Symbols derived from archetype, at the same time it stimulates the archetype producing tremendous emotional energy. As personal complex just produces idiosyncrasies, the archetype produces mythology, religion and philosophy, to influence and give the whole nation with historical features.

The debate between nominalism and realism in western philosophy reflected an antagonistic dilemma between "sensibility" and "reason". In ancient Chinese thought, it did not make such a clear division between perceptual things and rationality. Brief Example in Book of Changes said: "Phenomena produce intention and meaning and saying interprets the phenomena; to extent meaning is no more than by phenomena and to extent phenomena is no more than by saying. Saying produced by phenomena, so according to saying we can see phenomena. Phenomena produced by intention, so according phenomena we can see intention and meaning. Therefore, meaning extended by phenomena and phenomena outstood by saying." Phenomenon or image thinking is one of the oldest human thinking modes; the psychological mechanism of which is that people have percipience intuition. Compared with western philosophy which focused on binary classification between intuition and rational, while Chinese philosophy put emphasis on communication between perceptive intuition and intellectual intuition. The "Tao", as well as Buddhism ideas concerned from sense to wisdom, emphasizing "observing meanings directly from phenomena and images". Zongbing (in Chinese Southern dynasties) In Landscape Painting Tactic said: "reflecting things by Tao, tasting images by pure mind". Here perception, truth and aesthetics were integrated together.

INTERPRETATION OF BASIC IDEAS OF FORMS IN TIME-SPACE

Either Chinese traditional philosophy or its application in architecture, e.g. fengshui, put extremely importance to the meanings of phenomena and images. To interpret the significance of phenomena and images, it can not do without expounding the basic abstractions principle constructed figures, which just are line and circle.

The straight line and circle are basic concepts of geometry and also basic representation of time-space concepts. A pure linear embodies pure unity of time. Infinity lasting of linear like as infinity lasting time in itself is contradictory, which can not be understood in the end, thus returning to the unity of centre point, not only affirm its pure unity also negate its infinity lasting, that is a circle. Because circle combine infinity in limited, thus it contradicts with limited linear, transiting square to circle is a process never be finished and $\sqrt{2}$ is certainly a irrational number. Meanwhile, the conception of linear in reflection must connecting to a circle with infinity radius can truly certain its essence of not being turned around, conversely the identity of circle's conception also depends on the identity of centre point and linear radius, thus the conceptions of linear and circle are contradicted and dialectically defined by each other, in the end that is mythology about two snake snapping at each other or Mobius strip. Circle as purest and simplest plain geometrical figure, represents the transmigration, which is directly connecting time and space (Wen, 2011).

The forms of material movement in time-space abstracted by us are nothing more than linear and round as two basic forms or superposition of this two and we just called the exception of which as nonlinear. Strictly speaking, all forms of actual material movement are nonlinear. To this issue, author interpreted it in another study (Wen, 2011). This article further discusses straight line and circle as archetypical conceptions having ontological life meanings, which in ancient Chinese culture was reflected on a typical idea about "heaven round, earth square".

It has multiple levers to interpret the "heaven round, earth square". Chiou (2009) regarded that the word "heaven round, earth square" is most relevant with the ancient astronomy model of "theory of canopy-heavens", which to be said at the latest in the Han dynasty have not so much convincing than "theory of sphere-heavens", but it never end its influence. Chinese ancient artifacts and architectures put "heaven round, earth square" as basic principles for forming, e.g. Fig. 2. Although, the "heaven round, earth square" appears to come from intuitive knowledge of experience, but there should be a priori mental mechanism as a cognition foundation. The ideas behind the "heaven round, earth square" was based on a prior mental mechanism about the dialectic principle between circularity and stability. Circle is regarded as representing the cycle and square representing the immobility. This principle has become the foundation for shaping Chinese culture implements. The Book of Changes said: "the manufacture of implement must esteem the forms". It regard that according to the principle of

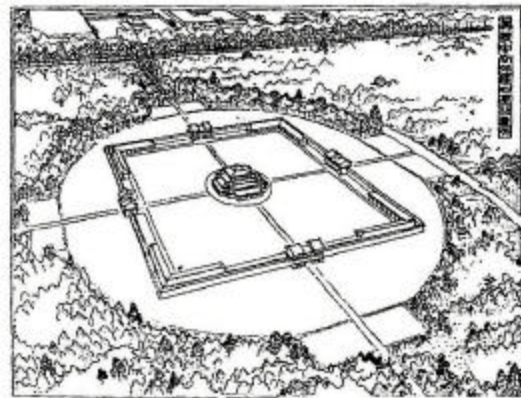


Fig. 2: Han myongdang

"respecting the form of heaven and earth" can get harmony and resonance among heaven, earth and human and can summon the mysterious power of heaven and earth.

The "earth square" as a principle of stabilization, no doubt, is a pioneer of coordinate thought. "Cross" widely refers to the sun god in ancient civilizations and relates with four directions: South, east, north and west. A linear represented a pure pass through a fixed space that in itself forms the significance of a reference coordinate. When we regard a thing moving, which must be interpreted its meanings in logic by two ways: One is that we look the moving thing as an object, the reasons of the movement to be ascribed to the essence of spatio-temporal field gradient; the other one is that we look the movement as subject, the reason why the subject need movement, also because the internal difference existed in time-space and the subject is not content with the status quo to point to a new state (therefore, no matter way Newton's so-called uniform motion in straight line in vacuum space is actually meaningless). Compared these two kinds of movements, they show some essential difference.

The thing of movement to be regarded as object, in other words, the object itself being in a relationship, it has no independent definition. Therefore, the movement in itself is a reflection of the dialectical contradiction and a tendency to eliminate this kind of contradiction and become even (the second law of thermodynamics is based on this principle). If the movement to be regarded as subject's action, which must point to a purpose, that is to say, the purpose of subject's movement or action is highlighting itself from the spatio-temporal framework. The reason why a subject is the subject, because has his own independent defined center from outside world. So, life as logic synonym of subject, its movement began in a circular motion around the center, when the circular

motion forming the whole of complex link, life is emerged; the life is just a circular motion complex around its center as existent significance. Integrating this circular motion with a linear development, it forms a larger cycle of life evolution. Therefore, ontologically line and circle are not pure geometry concepts, but having their archetypical significance for life. The pattern of Tai Ji abstractly reflects this deep idea integrated both of the linear movement which represents two poles principle and the circular movement which represents one center principle, Fig. 1.

MATERIAL, ENERGY AND ELEMENTS IN TIME-SPACE

Today we talk about the issues of life and environment, which is inseparable related with the concept of energy. Yet few people on the philosophical level ask a question about what is energy? What relationship between energy and material? How do they reflect in time-space?

The specific things we called as material firstly is negation of abstract identity of absolute space-time. Thus material or substance as conceptual identity is first defined as cohesion to a center point in its affirmative form, i.e. space (Hegel, 1805). Time and space as subject's free forms are ideas, while material as negation of subject's free ideas is defined as inertia in time-space. Material acquires its quantity, i.e. mass firstly from its movement, in other words, from its correlation with time-space, i.e. the truth of mass lies in its external time-space. Conversely if in the light of mass, the mass of material meanwhile defines the external time-space, i.e. field. The quantity of field in the light of its negation forms, i.e. time according to one pure direction, i.e. lasting dimension is equally decreasing, but field as material conception concerning its time-space relationship must has its identity, thus in its affirmative form, i.e. space recover its identity, which means in juxtaposition preserve its quantity identity concerning time-space relationship (Wen, 2011). The power of gravity is inverse ratio with squared distance, which as example embodies this principle.

For this reason, energy, first of all, must be defined as a representation form of specified material which reflects the tension and performance between concrete material and spatio-temporal field gradient. The spatio-temporal field as unified the concrete material and abstract spatio-temporal framework is fundamentally defined by abstract unity and opposite relationship between light and material and it is just this abstract relationships that can be called as "ether", by which create various forms and transfer all sorts of efficiency.

Thus, fundamentally energy which origin from unity and opposite between light and material is naturally showed as two kinds of basic form: internal energy unified "material" and "light", which is the configuration ability of "water" and external energy in terms of opposite between "Material" and "light" that is moving ability of "fire" (Wen, 2012). Water as the unity of light and material, thus must be in the right position of the universe space; while fire as the conflict of light and material, must fill in the entire universe space among concrete material interactions. Water and fire are in concreteness combination with the abstractness (the unity and opposite between light and material), they as phenomena directly give a concrete foothold for ancients to do abstract thinking. Water and fire as the most basic natural elements are the most basic source of meanings, also the most basic symbols, which unite signifier and the signified to give great representative force for human emotion and cognition in terms of them as conceptual archetypes. The Book of Changes said: Tai Ji creates two Poles. Two Poles are Yin and Yang, from the modern point of view, namely they are material and light in terms of their natural meaning; in fundamental the material is just the negation of light. The Book of Changes study the changes caused by Yin and Yang, which is simple and also deep thinking concerned above principles.

Water and fire are in materiality and concrete combination with abstraction. While air and earth as elements are respectively full concrete realization of light and material, i.e., air is external light or concrete light and earth is internal light or concrete material. Air and light as two links concerning differentiation and unity thus reflects by each other; light as pure light having no light and temperature if without air. Light is abstract scale of time-space and represents general freedom, while air connects the even of light and the mingling of concrete materials become things with elastic in time-space; air is concrete freedom of external time-space. Air as primitive link of concretion, potentially has solid definition of point existed in itself. Compared with air, "earth" is concrete link of internal forms and concrete "internal light" and has complication of variety. Earth is intimately relate to material and non transparent, thus earth is just concrete materials in terms of as the negation of concrete light. In the forms of material which having cohesion do not depend on general gravity constructs the unity of dispersed concrete materials. As external light, "air" is manifestations and signs of things. As internal light, "earth" is solid and fully realization forms of things. When earth contacts with water and air, interacting with them, the variety of concrete earth or soil as a whole is vigor. Organic is just integrating four elements, i.e. earth, water,

air and fire, has becoming living things. The wholeness of movement about elements is process of meteorology and geology of living earth (Wen, 2011). Integrating various movements of elements into concrete forms by a circulate way is just organic. Organic formed the concept of assemble circling links, is mini-universe and by itself reflects the universe.

ANCIENT NATURAL PHILOSOPHY AND FENGSHUI

To speak fengshui in modern terminology, it is nothing more than the study of correlation among elements, forms and energy in environment for human living. The traditional ideas of fengshui are integration of three things: heaven, earth and people, which emphasizing "people not outside things".

The Ritual of Zhou said:" to construct a country, must set up normative orientations... with the method of earth sundial, soil testing and sun shadow surveying in order to confirm the center of place ". What is the reason to do that, because it brings the result of "heaven and earth join, four seasons being confluence, wind and rain are assemble, Yin and Yang being harmony, so all things are prosperous, then can building the kingdom" (The Ritual of Zhou). The Yellow Emperor’s Book of House in its openings said:" the house is hub of heaven and earth and model of ethics ". The Kinship of Three said: "good medicine have three: Shen (spirit), Qi (energy) and Jing (vigor)." Different with mechanistic, they are organic views. Below is further analysis of fengshui:

- The method of “surveying earth and tasting water” is empiricism. Good soil and water store energy, resulting luxuriant plants and animals. Water tasting pure, cool in summer and warm in winter is auspicious; Water tasting bitter, showing deep muddy and abnormal smell is inauspicious, etc. These methods are similar with that of modern science, but less comprehensive and precision
- The method of "surrounded by mountains and girdled by river" is in empiricism combination with abstract thinking. "Surrounded by mountains" has similar focusing function as paraboloidal antenna in modern physics. The places surrounded by mountains are mostly abundant of water, plants and animals and gathering energy (Liang and Yu, 1999). Water is the base of the internal energy and the source of life. Fengshui regarded that "water flying, the live energy is losing; water stopping, the inner energy is gathering". It emphasizes that building site must be in hidden place can holding water; if river flowing dozen miles don't turn round and back, it is

not the junction point for sites selection. The place surrounded by meandering river at three sides is auspicious sites which means “encircling golden city” (Liang and Yu, 1999). As a principle of “forms school” fengshui, it highlight encircle layout of mountains; which has advantage for forming girdled river pattern, Fig. 3. Circular things imply a center by which a variety of elements and links aggregate together. Mountain as outstanding thing on the earth surface in itself is a sign of earth's vitality, so in fengshui called mountain as dragon. Similar with Schopenhauer said, everything has inner's will and every specific form has its intrinsic vitality, which is also the basic proposition for “forms school” fengshui

- The method of “regulate the flow of vital energy and remove obstruction toil”: generally speaking it originated from ancient Chinese astronomy, combined with certain ideas of The Book of

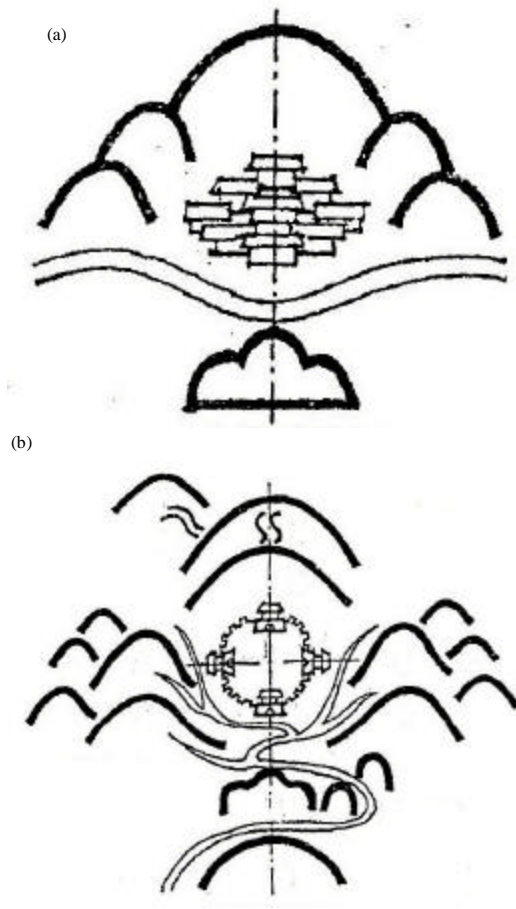


Fig. 3(a-b): Diagram of sites for building

Changes. In summary, it had so-called methods such as nine-grid pattern, eight directions and "three Yuan" (Ding *et al.*, 1996). Its theoretical basis is cosmological holism, i.e. man is an integral part of nature, e.g. "man's life is different, their house have different appropriating and avoiding" (The Book of Eight House). Some its methods obviously can't afford to modern scientific interrogation. The reason is that it put people down as things as its precondition for its operation and adopt a kind of simple and arbitrary manner in terms of its classification of people according to and related to some material properties. The so-called some kind of people with some kind of special nature by which correlated with some kind of special time-space or cosmological movement by which puts forward appropriating and avoiding guidance is poor. The flaw of its methods shows that its abstract deductions lack the foundations of proper concrete corresponding

A CASE STUDY

Dwelling in hilly areas in south China in long settlement history have emphasized water element in environment and especially pay attention to the coming and going of water and the situation of water converging, most important of all being the position of water outlet (Cheng, 2009). For example, the Yingde city in north Guangdong province was located in an intermountain basin in hilly regions. As seen in Fig. 4, Beijiang River going through the basin from north to south has a confluence with Wengyuen River at the southeast of Yingde city. The site is open, fertile soil, beautiful natural scenery and a place with traffic convergence of around hilly terrain. Because of these advantages, it formed the city's natural location. But downstream water of Beijiang River directly from the north to the south, was thought by fengshui as energy losing, so in the confluence islet of Wengyuen River and Beijiang River built a Wenfeng pagoda with 48.5 meters high closing the gate of water outlet, as seen Fig. 5. The pagoda corresponds with city's South Mountain face to face by each other, forming a balance and beautiful city scenery as showed in Fig. 6. The South Mountain also called Penholder Hill and Crane Mountain according to its shape to highlight its form's vitality and its humanism connotation. A Buddhism temple was built in it with monuments such as inscription on carved cliffs, together with Wenfeng pagoda forming the unique cultural landscape of Yingde city and becoming an important local tourist attraction. This kind of refining and re-constructing natural landscape to make it becoming a meaning condensation of local culture and to create a unique place spirit is also one of the important contents of fengshui.



Fig. 4: Yingde city located in a basin



Fig. 5: Pagoda and South Mountain



Fig. 6: Beautiful scenery of water outlet



Fig. 7: Picture of internal classic



Fig. 8: Landscape of four seasons

Practice of fengshui often finally forms a beautiful cultural landscape, which show a deep idea of Taoism. To Taoism, landscape beauty is not outward, but a part of ontological meanings of life. As showed in Fig. 7. Picture of Internal Classic, Taoist drew the human body meridians into a landscape painting "the interior figure of human

body" to visualize it. If one can achieve this kind of resonance between interior and exterior, namely he became immortality. As showed in Fig. 8. Song dynastic painting "landscape of four seasons" concretely represented fundamental living ideals and dwelling concepts pursued by fengshui,

CONCLUSION

The elements thought of ancient natural philosophy was regarded by modern science as naïve, because compared with chemical elements, they are not simple, but this view was strongly criticized by Hegel. The natural element's classification due to its natural being has ontological significance of cosmology, while most of chemical elements are man-made products stripping the natural process, so most of their independent existence is not stable and also dangerous for life. Because most of chemical elements are not directly given phenomena, thus their meanings is unclear in graphic express system of human culture and lacking direct connection to human spiritual world. In otherwise, natural elements by themselves gather together in natural process to form life. In human cultural system they are the most basic meanings and also the most basic symbols, setting up a start point for human metaphysical thinking. Due to natural elements showing a balance between concrete and abstract, thus in researching the relationship about human and environment are more positive and ontological than artificial index system ignored direct indicating function of nature forms and subject's intuitive awareness. Fengshui probes into deep correlation among the elements, form and energy, even in today as archetypal diagrams demonstrating its capacity to make sustainable building, environmental conservation and social betterment.

REFERENCES

- Cheng, J.J., 2009. The Conception and Practice of Water-course Junction in China Traditional Dwelling. In: The Volume of Chinese Architectural History, Vol. 1, Wang G.X. (Eds.). Tsinghua University Press, China, pp: 409-437.
- Chiou, B.S., 2009. An Inquiry on the Manipulative Schema of the Eight Human Dwellings from the Viewpoint of Heaven Round, Earth Square. In: The Volume of Chinese Architectural History, Vol. 1, Wang, G.X. (Eds.). Tsinghua University Press, China, pp: 383-408.
- Ding, Y., Y. Lu and H. Yong, 1996. Geomancy and the Selection of Architecture Placement in Ancient China. Hebei Science and Technology Publishing House, Hebei, China.

- Hegel, G.W.F., 1805. *Philosophy of Nature*. Commercial Press, Beijing, China.
- Husserl, E., 1913. *Logic Study*. Martinus Nijhoff Publishers, The Hague, Netherlands.
- Jung, C.G., 1959. *The Archetypes and the Collective Unconscious*. Vol. 9, Princeton University Press, New York.
- Liang, K. and K. Yu, 1999. *Fengshui and Building*. Baihua Literature and Art Publishing House, Tianjing, China.
- Quine, W.V.O., 1980. *From a Logical Point of View*. Harvard University Press, Harvard, USA.
- Wen, Y.F., 2011. The fundamental conception and theory of natural philosophy: A mega-theory of green building and eco-homeland. *Applied Mechan. Mater.*, 71-78: 4701-4709.
- Wen, Y.F., 2012. Reflection on natural philosophy and traditional ideas concerning energy, environment and building sustainable development. *Adv. Mater. Res.*, 524-527: 2615-2622.