COMMITTEE VI
Eastern Approaches to the
Unity of Spirit and Matter:
Qi and Science

DRAFT - 8/15/87 For Conference Distribution Only

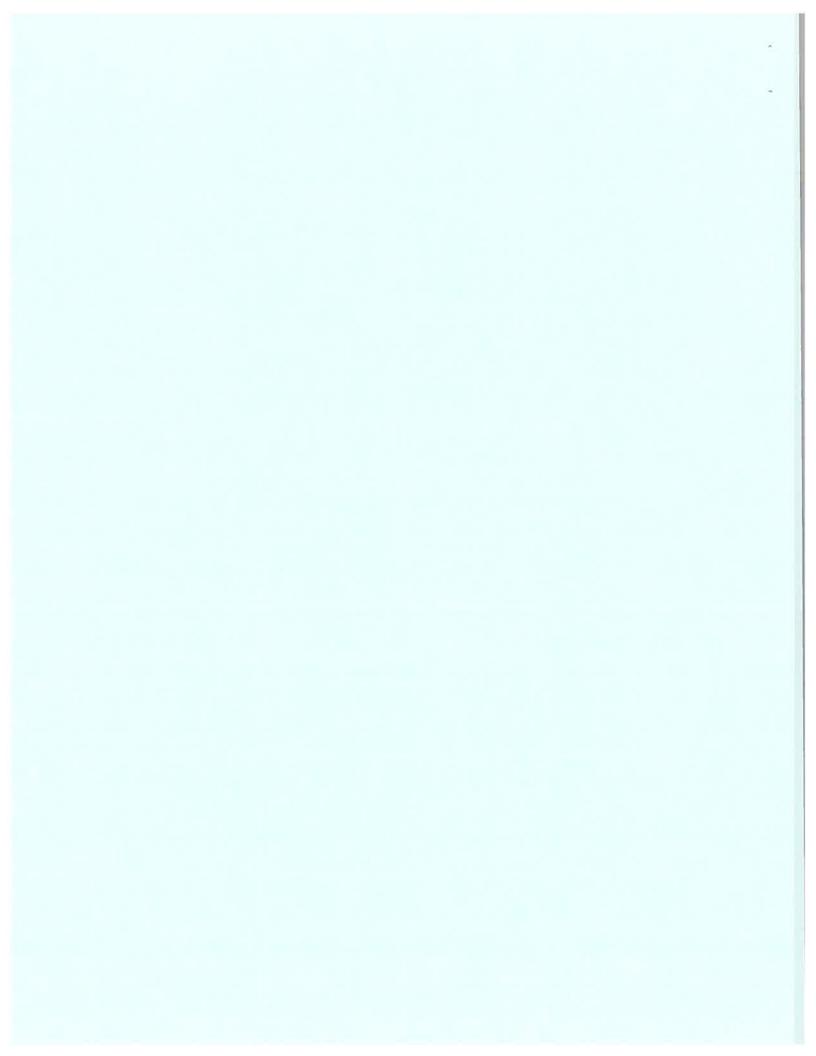
QI AND GEOMANCY IN KOREAN THOUGHT

by

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The Sixteenth International Conference on the Unity of the Sciences Atlanta, Georgia November 26-29, 1987

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Oriental View on NatureChinese Concept of Nature -

The Chinese concept of nature was first conceived perhaps by Laotze: "Humans belong to earth, earth to heaven, heaven to way, and way to nature." (Laotze Chapter 25)

In the Chinese characters standing for nature, tzu(自) means "self" and jan(先) "condition, "and tzujan(自 鬼) a self - becoming condition, a condition as it is.

Laotze regards a self- becoming condition as an ideal one since it is not regulated by others or drawn to them. When wuwei () is added to tzujam () to complete an idea of wuwei tzujam (), a laissez faire self-becoming condition without an artificial touch, which is considered by the Chinese philosopher to be a most desirable condition. This thought was shared by Chaangtze who together with Laotze, forms the Laotze - Chuangtze school of philosophy. This view applied not only to human attitude toward life, but to heaven and earth, i. e., the whole creation or the universe where every thing changes of itself.

In this way, Laotze-Chuangtze view on nature is extended to embrace life as well as nature as seen in the expression of Nature of Heaven and Earth (天设立宣统).

Under this view on nature, the theory of the five elements (metal, wood, water, fire and earth) of the cosmogony that divines human fate gave rise to Chinese alchem following the Chinese concept of natural law. In Bao Fuzi (1273), Ge Hong (1974) finds an ideal life in the natural, spontaneous order untouched by humans and in keeping himself in garmony with it.

Wang Yun maintains in the chapter dealing with nature in Lun Heng (論) that heaven and earth combine with Qi (元) to create the universe and nature. This is defined as nature of Heaven and Earth.

In short, ancient Chinese viewed nature as a self-becoming condition or what is independent of others in becoming through its own process. It is an autonomous and voluntary point of view.

II. Chinese Science

China and perhaps the Orient in general created their own traditional science in the past, and it was quite different from Western science. It emphasized strict deductive reason from the given principles and axioms.

There were some fields of science wherein the Chinese distinguished themselves such as meterorology and magnetism. Here, air current, high and low atmospheric pressure and magnet were understood as fluids, and Qi as the Ying and the Yang which provided undulating wave models.

The traditional Chinese philosophy is founded on the Ying and the Yang which in turn rest on Qi. This can be expressed mathematically as -. + theory (theory of the nagative and the positive).

The Chinese were particularly gifted with talent in individual and concrete description of objects and their classification by patterns. This was why Hegel referred to the "Chinese spirit of classification."

The great development of Chinese herb medicine was also due to this way of thinking. Almost all the old Chinese books on science and technology follow this principle of classification. The Chinese understood diverse phenomena as they were and negated to generalize and abstract them. This method was effective when they dealt with organic objects with individuality.

The notion of Qi is omnipresent in all Chinese philosophy.

It first appears in the inscriptions on bones and tortoise carapaces and reveals the primordial Chinese view on life in the Yin-Chou Period (18-7th c.. B. C.).

In the philosophies of Chutzu Pochia (養子百亥) (7th-3rd c., B. C.) of the warring state period, the Qi in humans rapidly proceeded to that in nature. Then in the theory of Li during the Han dynasty (3rd c., B. C. -lst c., A. D.), it took on a character of natural philosophy. In the Sui-Tang period (6th-9th c., A. D.), the Qi became an important element in the then prevalent Taoism, a mystic religion, and was applied both in philosophy and magic. The Qi was transformed into the neoconfucianist philosophy of Li Qi during the Sung-Ming period (10th-16th c., A. D.).

The Qi was conceived as something making clouds, something in human breath, human soul itself, and as something magic. Then it began to be thought of as dynamic energy that is the fountain of life. Thus the Qi was regarded as creating all things — as energy giving life to humans and animals. In this way it was applied widely in Confucianism. Buddhism and Taoism.

Particularly in the philosophy of Li Qi advocated by Chutze and Wang Yangming, the Qi became the foundation of its systematic ontology.

In the concrete description of individual objects and their cognition through classification, the Chinese resorted to bipolar classification. The 64 patterns in I-Ching (The book of change) connote almost all natural phenomena in abstract conceptions and the processes of their change. This is the binary classification using the two lines represented by the Ying and the Yang. The alternation of the ying and the yang for six times, it becomes the combination of

$$2^6 = 64$$

Thus it replaces all natural phenomena by mathematical symbols.

Chutze based his philosophy on Qi and conceived a quality derived through its operation—Li or quality of pattern. "Where there is Qi, there is Li, and vice versa." Or "If there are Qi and form, there are numerals." The operation of Qi changes from activity to inactivity, from inactivity to activity, from progression to retrogression, and from retrogression to progression. Each change has its limit. The change of seasons, the changing phase of the moon and the alternation of day and night all have their limits, and can be shown by numerals.

III. Oriental Thought

Comsidered in the vein of the Original sense of the word, nature probably refers to "heaven and earth" or "the whole creation."

In the traditional oriental thought, the legitimacy of regal authority derived from the will of heaven. The movement of heaven and earth and the conduct of the king should be kept in conformity.

The royal curts of cities were considered ideal when patterned after an ideal star chart. Astronomical record constituted a part of the official dynastic history.

The King was held responsible for such unusual occurrences as solar eclipses, and at a time of natural calamity he would release prisoners, discontinue public works and put himself in conformity with nature. Under the worst circumstances, fatalism often emerged and made society stagnant. However, to be harmonious is to protect the ecology of nature.

The Oriental view on nature rests on the philosophy of Laotze-Chuangtze: a self-becoming condition. In particular, Wang Yun's view in the Lun Heng mentioned already that heaven and earth is combined with Qi () for self-becoming of the whole creation has gained importance in the Oriental view.

A peculiar Chinese method of classification and Qi combined to make the site of a dwelling, a tomb, a building, or even a capital city meaningful. It was made to correspond to the Qi of heaven and earth by selecting a propitious location.

A city was planned into a quadrilateral in imitation of the metaphysical shape of the land seen in that form. This rather naive conception was not confined only to geomancy, but later developed into a complex theory wherein the philosophy of Qi had become to be invoked.

Broadly speaking, the Korea's view on nature can be classified in this category of thought. But Korea is distinct even in the Orient in that Korean people have immersed themselves in nature. In a large-scale natural setting, China has found it impossible for its survival only to conform itself to nature.

The Yellow River has had to be tamed and put under control from the time immemorial through gigantic public works. This is very much symbolic of Chinese reality. While being faithful to the traditional view on nature, China has constantly met the challenges of nature.

The natural setting of Japan, on the other name, is smaller in size compared with that of China, but its land has many steep mountains and deep valleys. This topography has subjected Japan to many severe natural disasters and the Japanese have had to cope with them.

Unlike these two countries, Korea's land is neither mountainous nor plain. Keeping with this moderate geography and drastically changing temperature, the Korean people have enjoyed a life against the setting of a self-becoming nature. No two other countries have so successfully adapted their topography to their real life as Korea has done. It is evident from this that the Korean people's aspiration to harmonize with the Qi is unprecedentedly great and has formed one of the peculiar characteristics of the traditional Korean culture.

IV. Natural Conditions of Korea

Except for the northern borderline, no mountain in Korea exceeds 2,000 meters in height. The rivers are gentle and are of easy incline. They flow between the low land and hills and are prone to flood, forming no great alluvial plains.

If we compare the River Naktong in Korea with a typical Japanese river, the Yodo, the gradient of the former is 6.6 cm per km while that of the latter is 113 cm. The annual rainfall in Korea averages 966 cm and that in Japan 1620 cm. Besides, Korea is often subject to torrential rains.

As a result, the rivers in Korea had been left largely as they were until recent efforts began to be made to control them with modern equipment. Most of Korean villages were settled in the valleys. This is why a Korean village is called "kol" of a valley.

Even in settling a village, the theory of Korean geomancy was widely applied. A typical rural settlement has rolling hillocks on its sides and back, and a well in the front. This conforms to the principles of geomancy.

Generally in the Orient, man has striven to keep himself in harmony with nature, but nowhere this is more evident than in Korea.

Because of this, many geomantical theories which devine the future by the formation of mountains and the patterns of rivers have been advanced in Korea.

The Korean scientific philosophy put particular emphasis on conformity with nature.

V. Korean Science

That King Sejong and Ho Jun valued native medicines of Korea should be understood in this context. "Those who were born is this land shouls use the herbs grown in this land in healing their sickness." Humans and berbs alike were born in this country and have grown by themselves in keeping with the Qi of heaven and earth of Korea. The Koreans who were born in Korea can keep themselves in harmony with the Qi of this land by taking in the herbs grown on this land.

Also in music, hyangak, the native Korean music, was put above classic Chinese music as it was in conformity with the Qi of this land. In the environment where every thing Chinese was respected, King Sejong strongly valued what were native to Korea. This had ended up in Korean contents with classic Chinese methods in science.

King Sejong and his scholars all attached importance to astronomy in which important achievements were made.

During the King Sejong's reign (1409 -1450) astronomical instruments were made and astronomical observation was encouraged. It was also during his reign that the first rain guage in the world was invented in Korea.

All these scientific achievements were conducted not for the sake of science and technology, but more basically for keeping in harmony with nature. In can be said that the supreme goal of the traditional Korea science was to harmonize with nature: harmony with the Qi.

Korea was known as an "Eastern Land of Civility " and was true to this ever in the field of mathematics. In other words, Choson dynasty arithmeticians held quite different values from those of Western scholars.

This phenomenon should not be observed in isolation, but in the broader context of culture. Here, we are in need of another criterion which applies to "the values and methods common to all cultural phenomena under the same social conditions." This is called pan -paradigm to distinguish it from Kuhn's.

R. Benedict traces in her book <u>Patterns of Culture</u> the essence of a culture to cultural configuration. She studied cultural activities of primitive tribes and likened the difference between a closed group and outsiders to that between Christians and pagans. By the same token, the difference between the belief of Choson dynasty arithmeticians and that of their Western counterparts may have been as great as that existing between Christians and pagans.

Throughout the seclusionist Choson dynasty, cultural configuration was made possibile by highly tradition-oriented people with the same values. The belief prevailing among the common Korean people that theirs was a "Eastern Land of Civility" contributed to the definition of the meaning of science including mathematics. Conversely, scientific activities served to justify the belief. This relationship can not be explained by the concept of Kuhn's paradigm.

Benedict goes on to say :

The group is fed by tradition; it is "time binding", it is quite justifiable to call it an organic whole.

Each configuration is an empirical characterization, and probably is not duplicated in its entirety anywhere else in the world."

As Benedict's view is based on her observation of primitive tribes, it cannot explain the developmental structure of cultural activities including geomancy.

A pan-paradigm is formed by the interaction of traditional thoughts inheriting the archetype of the nation, the current thoughts and the political structure: it creates new traditions; and hands them down to the succeeding generations. By bringing to light the character of a pan-paradigm, we can grasp accurately cultural phenomena such as scientific activities in their relations hip ideology and economy.

Beneath the Korean pan-paradigm lies the Qi Which finds its realistic expressions in the <u>pungsu</u> theory. No other nation in the oriental cultural zone to which Korea belongs has ever succeeded in harmonizing itself with nature or the Qi to the extent of Korea. This is particularly evident in the indigenous Korean ideology which was consummated during the reign of King Sejong (1419-1450) when Korea was regarded as Eastern Land of Civility.

The Korean theory of <u>pungsu</u> or geomancy is not a mystic thought. Wind (air) and water exist everywhere in nature and affect human organs: the vocal chord, palate, pharynx and larynx produce vowels and consonants and hence languages through the vibration of the air.

They also create meteorological phenomena, geography, physical aspects and configurations of earth. In short, wind and water are the basic rhythm of nature and bear closely on the rice growing farmers. The theory of <u>pungsu</u> is the human geography, science and religion of Korea and has regulated Korean way of life.

VI. Korean View of Nature

Chai Chi-won's spirit of hyonmyo(- abstruseness) is founded on the way of wind flow () or the harmony with nature as symbolized by the flow of wind to which one conformed. The hwarang(-knights) of the Silla dynasty trained and cultivated themselves wandering through the mountains and wading through the rivers, while Korean literati learned life from the changing phenomena of nature. This tendency was particularly strong during the isolationist period of the Yi dynasty which the country was cut off from the outside world.

Why the blue mountains are ever blue?
Why the running waters run day and night?
Should we stand still?
Nay, be evermore youthful.

Yi Hwang (16th century poet)

The ultimate truth of life lies buried in nature. In Korea an ideal man is referred to as a " man who can do without law." The law flows in a running water and can be identified with the world of wind flow. The traditional Koreans did not look into the running waters or a natural law, but unconditionally tried to harmonize themselves with nature. Evident here is the idea of laissez faire self-becoming nature ().

Every nation has adapted itself to nature and developed its culture through mediation. But the traditional Koreans carried this to its extremity. They were perfect naturalists who identified a wise way of life with a natural way of life.

In nature there is the Qi in heaven and on earth; only when man is in harmoney with the Qi should there be a cosmos in order.

Blue mountains stand of themselves,

Green waters run of themselves;

Mountains and waters become of themselves;

Growing up of ourselves in this, we get older of ourselves.

Kim In-hu (16th century poet)

This poem is suggestive of the harmony of the Qi between nature and the poet himself.

Much of Western city planning and landscaping is done in a geometrical way. The beautiful and proud city of Paris with wide avenues shooting out in all directions from the Arch of Triumph may not look so beautiful or proud to Koreans.

The Koreans hold an ideal to conform to the Qi of heaven and earth. The idea of ch'onwonjibans (大月 秋方 - the round firmament and the square earth) resulted in Korea in building a city in a square shape with four major entrance gates at the corners. In most cases, the ancient Korean cities did not use direct lines in the planning, whereas their Japanese counterparts amply used straight lines.

Nature has no geometric lines. Western and Japanese use of geometric lines may imply that they meddle in things natural. The west has less rainfall and less weeds, and its weather in general tends to be more regular. Pastures and dry fields are tilled there and they usually return as much as farmers toil. As seen in tending lawns, western people tend to manage land in an artificial way. Hence geometrical lines.

The rainfall in Japan doubles that in Korea and weeds luxuriate there. Unless weeds are ruthlessly controlled, the land does not yield as much as the farmer
expects. The deep rivers run fast through the farms between high mountains.
But the farms are easily manageable because of their small sizes. Thus, Japanese
have had to control nature and developed a liking for geometrical lines.

VII. Geomancy and Korea

Geomancy is a Chinese philosophy based on the five-element theory of the yin and yand, and is illustrative of a peculiar Chinese method of classification.

According to the theory, an ideally propitious site is to be so selected as to place an architecture under the protection of the four animal deities: the Turtle in the north, the Red phoenix in the south, the White Tiger on the right, and the Blue Dragon on the left.

However, this theory has not been widely applied among the Chinese people vis-a-vis enormous Chinese nature.

Geomancy was introduced to the ancient Japan through Korea and was applied to the construction of the capital cities of the Heian and Nara dynasties. But the highly mountainous Japanese topography has made this theory unfit for widespread application. Nor has it influenced its people greatly.

Perhaps best fit for the application of this theory is Korea whose topography is neither mountainous nor plain and where such propitious sites abound.

This theory has continued to exert a powerful influence among the Korean populace ever since the ancient times.

In the construction of a metropolis, a canal, a temple, an individual dwelling or even a tomb site, geomancy has played a crucial role. In this sense, it may be said that Korean thought has in its core a touch of geomancy.

Geomancy is called <u>pungsu</u> (): <u>pung</u> stands for climate or weather, and <u>su</u> for heaven and earth. The Qi emitted by heaven by means of wind is received by earth. <u>Pung</u> or wind comes first and su or water follows it.

Pungsu is nature or the environment wherein human beings live. Accordingly, it is not the means whereby the Qi of earth is to be divined. Heaven should be reckoned in divining earth.

Earth is alive; it is the fountain of vitality that gives life to everything. Some spots on earth are full of animated Qi while others are not. As rice-growing farmers, the Korean people have carefully selected the benign places benefitted by the Qi for rich crops.

The theory of pungsu is applied to the selection of vangei (parties - positive spots) for dwellings, and untack (parties - negative spots) for tombs.

Korean people believe their Qi could be kept in rapport with nature. When a parent dies, the death is referred to as "returning.' The place to which the deceased returns is the ancestoral grave-yoard on the hills behind the village. When the graveyard is kept in harmony with the Qi of nature, the Qi of the deceased keeps itself in rapport with the living to bless the latter with the Qi of earth. This is why the Koreans are after ideal burial sites for their deceased ancestors.

This can be put in the following way:

The Qi of the five elements (metal, wood, water, fire and earth) that comprise the traditional Chinese view on the cosmogony flows through earth. Human beings are the alter ego of their ancestors. The corpses of the dead parents receive the Qi of the five elements; the Qi of the deceased and that of the living are thus communicated. This can be likened to the legendary Copper Mountain; when it leans westward the Holy Bell tolls. So the Qi received by the corpses are communicated to the living to bless them.

The Korean geomancy fourished in Buddhist temples and royal courts during Shilla (57 B. C. -935 A. D.) and Koryo (936-1388 A. D.) dynasties.

When the topography of a certain site was considered illomented, a Buddhist temple was constructed there to make up for the defect.

In the following Chosun dynasty (1392-1910 A. D.), the theory of geomancy applied mostly to individual tombs. This indicates the changing tendency in the application of geomancy from public to individual causes, from the core of society to nobility and villages.

The Korean geomancy was influenced greatly by Buddhism, particularly by Zen Buddhism which attaches greater importance on the mind of man than to physical and material things and which links the visible natural phenomena with the invisible future and the unknown.

The practicians of geomancy were expected to have unusual capability to read into the future. They started their training first as Zen Buddhists, visited scenic spots and places of historic interest, and practiced asceticism and Zen catechism to attain and develop the capability.

Earth is the body of the Qi which in turn is the mother of water; there is water where there is the Qi. The Qi and water are the life and soul of ricegrowing farmers.

The animated Qi passes along a fold in a earth stratum and converges on the place where mountains and rivers meet. This is an ideal tomb site, called myongdang (DF).

The Qi rides on wind and stops where the land is bounded by water.

Therefore, a site should be sought where the Qi could not be carried away by winter but be kept. A blissful site where mountains screen off wind and which is surrounded by water.

The geomancy has cardinal elements of mountains, rivers and directions.

The Qi passes round a mountain range. Some embrace it while others don't.

A mountain lively expanding and contracting is replete with the Qi; a gently-sloping mountain is devoid of it; a stony mountain without soil, a mountain cut off from others, a lone mountain or one without vegetation are all considered ominous.

The physical aspects of a mountain is compared to the human body: an ideal site is a critical acupuncture point in the body. Evident here again is an oriental analogy.

Geomancy is thus not a superstitution, but reflects a shared view of the traditional Korean people to keep themselves in harmony with nature. Even today, Koreans call natural water "medicinal water" since it is immersed in the Qi of nature.

I now behold Mt. Turu and River Yangdan of legendary fame, And see peach flowers afloat to obscure mountains shades; O! Where is the paradise! Is it not right in here.

Cho Sik (16th century poet)

This old poet, like Chai Chi-won of the 9th century Silla dynasty, does not simply look for the paradise, but strives hard to locate it, applying the principles of geomancy to topography, finding the Turtle here, the Red Phoenix there and interpreting nature to identify himself with nature.

REFERENCES

- 1. Benedict, R.: 1959, Patterns of Culture. Boston: Houghton Mifflin Co.
- 2. Chai, C. J.: 1966, Bun-Soo in Korea: Seoul, Minum-Sa.
- 3. Kim, Y. W.: 1986, Pan-Paradegme and Korean Mathenatice in the Chosun Dynasty, Korea Journal, 26:25.
- 4. Kuhn, S.: 1962, The Structure of Scientific Revolution.
 Chicago: University of Chicago.

This view on nature shared by the traditional Koreans should be understood in the vein of Korean people's sense of identity and thought.

An idea of laissez faire self-becoming nature (至多自然) has been born of the particular Korean climate.

It is no coincidence, therefore, that the ancient cities and architectures conform to nature and form a integral part of nature itself. To the Korean people, nature is so close as to allow them to interpret it in quite an independent way.