

An Epistemological Interpretation: A Comparative Study of
Ideological Roots in City Planning in China and the West

By

© Dongyang Liu

A thesis
presented to the University of Manitoba
in fulfillment of the thesis requirement for the degree of
Master of City Planning
in
Department of City Planning,
Faculty of Architecture,
The University of Manitoba

Winnipeg, Manitoba

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ISBN 0-315-51601-1

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IN CHINA AND THE WEST

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DONGYANG LIU

A thesis submitted to the Faculty of Graduate Studies of
the University of Manitoba in partial fulfillment of the requirements
of the degree of

MASTER OF CITY PLANNING

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Abstract

This thesis attempts to bridge the gap between idea and form, ideology and city form, epistemology and man's environment. Primarily this thesis began from the insights on the differences in the archetypes of thoughts in ancient China and Greece. Through such a cross culture comparison, the study reveals the inherent relationship between the way of thinking and the way of planning, furthermore, it articulates the potentiality for a Holistic View towards future and an ecological approach in terms of planning and design.

Acknowledgements

Acknowledgements and gratitude is extended to a number of individuals for help during the process of writing the thesis.

First of all, I would like to thank the thesis committee: Dr. Mario Carvalho, the thesis advisor, for his constructive advice and guidance in writing this thesis; Professor Geoffrey Bargh and Professor Carl Nelson, the thesis examiners, for their encouragement and insights.

I also give my thanks to Milosh Takach and many other friends who had assisted me to improve my English.

I am indebted for my country and government for their two and half years scholarship which financially supported me to finish this vast and time consuming thesis.

An Epistemological Interpretation:
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Preface

This is a small attempt or part, perhaps, of a much larger inquiry into the dualism facing city planning the overall title of which is "Symbolism and Man's Environment". It began with a paper in Planning Theory I "The Tao of Planning", followed by a design for an international art competition, and now this thesis entitled "An Epistemological Interpretation: A Comparative Study of the Ideological Roots in City Planning in China and the West", I am hoping to pursue this subject further towards my Ph.D studies and dissertation.

I realize this is a very vast subject and very complex, I realize also my limitations particularly in fully grasping the depth of Western philosophies, but it is a humble and an apologetic attempt on my part to begin to understand the philosophies and culture of East and West as it pertains to planning and to cities.

An Epistemological Interpretation

A Comparative Study of the Ideological Roots in City Planning in China and the West

INTRODUCTION

*"All philosophers share this common error: they proceed from contemporary man and think they reach their goal through an analysis of this man. Automatically they think of 'man' as an eternal verity, as something abiding in the whirlpool, as a sure measure of things. Everything that the philosopher says about man, however, is at bottom no more than a testimony about the man of a very limited period. Lack of a historical sense is the original error of all philosopher....."*¹
from "Human, All-Too-Human". Nietzsche

Ever since I came to Canada, I have been debating on a topic for my master thesis in City Planning. My ambition initially was to deal with some current practical planning problems facing Chinese cities. I began by consulting one of my former Professors in Shanghai who suggested I explored such topics as: Zoning; Land Market Analysis; Impact Assessment; Systematic Decision-Making Study; and Housing. As a result I decided to focus on urban design aspects in revitalization program, and selected as topic "The Old Neighborhood Renovation in Shanghai". This topic I felt offered an opportunity to address some of the practical issues of planning and at the same time offered an opportunity to learn from the Western Revitalization experiences.

I soon realized that Zoning in the West is a product of the free market system and thus intransplanteble to the Chinese context. Similarly, I found that Urban Design here is not merely a technique for urban revitalization but is based upon a particular ideological context. Since China does not share the same ideological constructs nor planing system as the West, it presents serious obstacles and indeed could be counterproductive to simply imitate or apply Western planning techniques.

Over my two years of study in Canada, I began to reflect upon many aspects of my goals, my views of the world, and deep values that I held. The North American "Culture Shock" too often aroused reflections of my own country where I grew up with love, hate, care, poverty, and struggle under

¹ Page 51, *The Portable Nietzsche* by Walter Kaufman. c.1982

political dominance. I have come to a deeper understanding of myself and my motherland by comparing East and West and have come to the realization that to interpret city planning and the urban environment only in a Western scientific manner could not satisfy China's need and aspirations for a brighter future. It is through such cross-cultural experiences that one becomes more aware of their individual identity, their values, , their culture, and their country.

It was through a course in comparing Plato and Confucius, Heraclitus and Lao Zi, Romanticism and Zen, C.G.Jung's Psyche and Lao Zi's Tao, that I recognized a commonalty of ideas and that the modern crisis which we face is deeply rooted in our "unconsciousness" and this characteristic is shared by all over the world. Many of so called "modern" problems are also very ancient-what bother us today had bothered our ancestors long ago. In the roots of almost all cultures we have one or two basic questions, such as the concept of Wisdom, Knowledge, the distinction between Subjectivity and Objectivity, the relationship between Man and Nature, and the definition of Time and Space. We also find that planning principles and methodologies are close branches of this big tree-the tree of wisdom. Therefore, unless we have an epistemological insight of the roots of our knowledge, the problems in planning as well as in the city could never be really understood.

Over the years, many things have been taken for granted. Until such thinkers as Plato, Lao Zi, Newton, Kant, Descartes, and Einstein, the validity of "seeing", "sense", "being", "learning", and "speaking" had seldom been challenged. I had never been so shocked by a book as I was when I read "The Tao of Physics" for the first time. Many abstract topics suddenly become visions flowing in front of my eyes-Taoism, Buddhism, Zen, Christianity, Science, Industrial Revolution, Quantum Physics, City, and Planning. I asked myself what is my own understanding of those things?

When I put two chronological tables of China and the West together, to my surprise, I discovered many resemblances, history is such an intangible river, never ceasing, but civilization does move as the waves, and so does thinking. Chinese philosophy, for example, began in 500

B.C. as a series of political and sociological debates, so did Hellenic culture; China had Lao Zi and his profound dialectical Taoism, Greece had Heraclitus; when Buddhism entered China, Christianity entered the West; when Chinese philosophy transformed into a cosmic religion, the West was experiencing the Medieval Age; As Kant/Hegel proposed the idea of unifying the subjectivity and objectivity, China developed Zen Culture and Yin and Yang synthesis.

The East and West, however, also possess severe contrasts and dissimilarities. From its beginning, the West was based upon a rational archetype while the East was based upon intuition; The West prefers science and growth while the Chinese prefer a stability and self-sustenance; when the Renaissance aroused the consciousness of the human ego, Chinese ideologies encouraged the dissolution of individual; after Marx failed to surge the revolutionary wave in Europe, Marxism became successful in modern China; as more Western philosophers become fonder of Zen Buddhism and call it as the "new" way of thinking, modern Chinese grew more envious of the materialism of North American life.

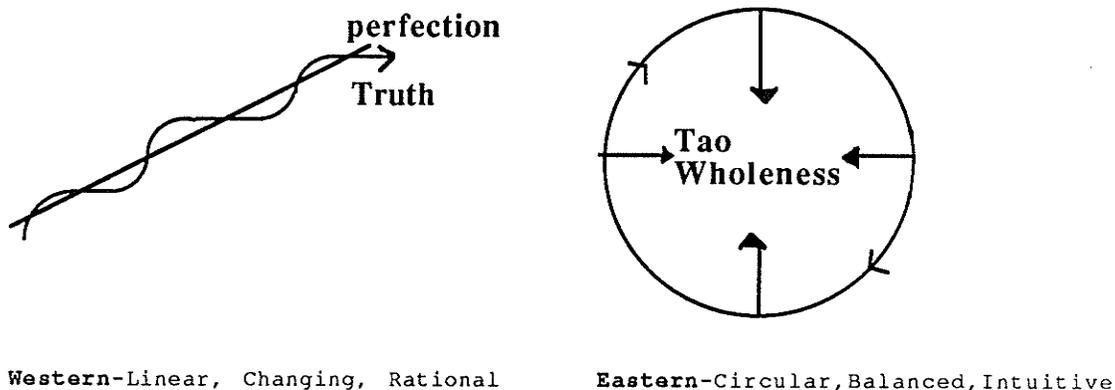


Figure 1. Comparison of the ways of thinking.

All of those similarities and dissimilarities emerge from the epistemological roots of thinking, the essence of the ideological problems. For a Westerner, the world is progressive, and the goal of life is to achieve perfection as a human being. Hegel interpreted that "thesis" and "antithesis" leading to a "synthesis", and "synthesis" evolving into another "thesis" and "antithesis", until ultimately our

knowledge approaches the "Truth". Darwin and Marx believed that the world developed from a simple, lower level to a complex and higher state—the system of matter was always through evolution. However, for a Chinese Taoist, Yin and Yang, Good and Evil are the two sides of the same thing. On one side, the world seems to be ascending. For example, the present world has an incomparable knowledge in terms of science. On the other hand the world is losing its resources, energy, and beauty of nature. Humans have lost their innocence. The faster the scientific world is ascending, the greater the tension between man's aspiration and reality. The Taoism model of thinking is therefore a circle—everything in the world is on the same circle. The beginning and the end of a circle are same, ascending and descending are contemporaneous, new and old are in the state of unity, past and future intermingle. The natural way of living is to keep a system in a dynamic state of balance.

This thesis, then, began from insights on the primary differences in the archetypes of thoughts in ancient China and Greece, (as what Nietzsche described: *back to the original point of ideology, then to search for the future metaphysics.*). Through comparisons, it roughly analyses the contextual differences for planning in China and the West. For me, China and the West are facing different types of problems but the same philosophical question: what is the relationship between Man and Nature? By using a design example, this thesis also tentatively illuminates how the idea of future metaphysics can be transformed into reality. Reality is the starting point of our metaphysics, it is also the ending point of metaphysics.

This thesis reflects my own happiness and sadness as well. Sometimes, I followed Nietzsche; sometimes, I followed Buddhism; sometimes, I followed Adam Smith; sometimes, I followed Marx. They were grieved, I was sad; they were pleased, I was happy; until finally I closed the thesis, I ultimately find myself. I am I; the Past is the past; the Future is the future; China is China; and the West is still the West. I firmly believe this is also the time that people who caused the problems can solve the problems by themselves, firstly by changing their values.

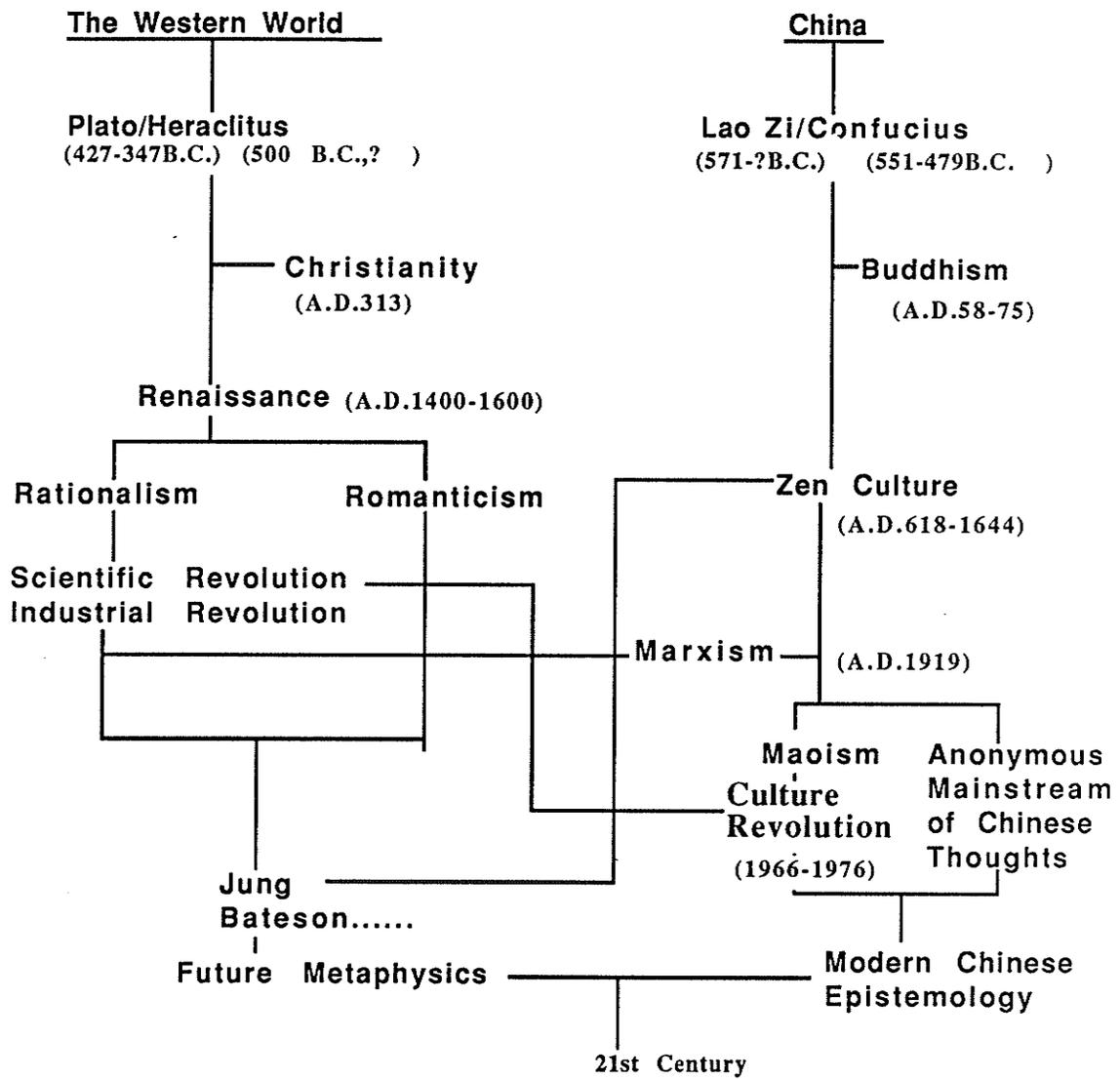


Figure 2. A brief synthesis of the history of thoughts in China and the West

Chapter 1. Traditional Chinese Vernacular Ideologies And Their Transformation Into City Forms

"No doubt I can draw only a one sided picture, for everything I have observed lies in the psyche-it is all inside. I must add at once that this is a remarkable fact in itself, for the psyche is not always and everywhere to be found on the inside. There are people and epoches where it is found on the outside, because they were wholly unpsychological. As examples we may choose any of the ancient civilizations, but especially that of Egypt with its monumental objectivity and its naive confession of sins that have both been committed. We can no more feel psychic problems lurking behind the Apis tombs of Saqqara and the Pyramids than we can behind the music of Bach."
C.G.Jung¹

I encountered the question of how to reinterpret symbolism in architecture, landscape architecture, and city form in the epistemological sense at the end of 1987 when I was preparing for an international arboretum design competition held by The University of California and American Art Endowment Society. The Jury hoped that this competition would give a rein to every entrant's imagination and particularly looked for conceptual future stylistic designs. As I struggled for new ideas, I found my mind was empty, so was the whole of architectural theory. "Over the last decade or two, past architectural values have been destroyed; not only that, new theories and styles that emerged in the meantime have been quickly consumed."² "No one knows for certain what the world will be like in the 21st century, but in view of current trends around the world, which includes environmental destruction, intensive and unbalanced technological development, explosive population growth, and increase in the proportion of aged persons in society, few would hazard to predict a particularly happy future."³ I then determined that there must be something wrong with the prevailing notion of "symbolism" used by Post-Modernism, but what is the problem? I felt deeply perplexed.

¹ See page 78 of *The Spiritual Problems of Modern Man* in "Civilization in Transition" by C.G.Jung. c.1957.

² P 10, "The Preeminence of the Fragmentary Vision:A Symptom of the Contemporary Condition" by Koji Taki in *Style for the Year 2001*.

³ Ibid. p 10.

I came across the statement of Jung (quoted above) and realized that symbolism is only the product of those who, in his epistemological field, can recognize the difference between himself and the rest of the world, between symbols and non-symbols. Why did the modern architecture and planning fail to preserve the enchantment of the world which existed for almost 99 percent of human history? One significant reason is that the dualism of subjectivity and objectivity have been unprecedentedly overintensified in modern times. As we examine the concept of garden design, what the term botanical garden immediately evokes in my mind is a cool image/trees are planted one by one with labels of their names, visitors come to the garden just as they come to a laboratory or a workshop. Man and nature, in most cases of modern architecture or landscape architecture, are separated. Unless we re-establish the belief that man and nature should live as an entire being, there is nothing which can be called "future stylistic design".

As I re-studied the ancient Chinese Garden design philosophy, I found the concept of togetherness between man and nature had already been very well expressed. I thus wanted to know what the spirit of the Chinese ethos is, and why and how it projected upon the city's formation and planning system. For me, if we can reveal our own psychic problems--the determining force of our way of thinking, our behavior, and of history -- by which Jung used to refer to as the deeply rooted "collective unconscious", we can definitely understand the roots of today's ideological battles in planning, whether in China or in the West. Again, I would like to emphasize that what is bothering us had once bothered our ancestors. History itself is a mirror--we can understand ourselves by knowing where we were born, when we were born and how we were born. The simple matter of pursuing architectural style or planning techniques can no longer satisfy the needs of this special period in history when the whole world, the East and the West, are facing the same dull and unhappy future. To avoid the mistakes humans have made in the Industrial Revolution, either the negation or acceptance of heritage and tradition have to be taken more cautiously than ever before. This is the essence of this thesis.

1.1. The Vernacular Chinese Ideologies.

The formation of Chinese thoughts can be traced back at least to the epoch around 500 B.C., which stands as a historical milestone for Chinese civilization. Although the Bible mentioned only four rivers flowing from Garden of Eden -Pishon, Gihon, Tigris, and Euphrates- the Chinese believed their rivers, the Yellow River and Yangtze River¹, also flowed from the heaven. With the nurturing of the Yellow River and Yangtze River, a generation of prophets emerged around 500 B.C. in China. When Heraclitus, Socrates, Plato, and Aristotle spoke to the Greeks, Lao Zi, Confucius, Mo Zi, Xun Zi, Meng Zi, Zhuang Zi were teaching the Chinese. These extraordinary democratic years are now called the era of "A Hundred Schools of Thought Contending" by Chinese Historians. The two most prominent and profound philosophies among these hundred schools are Confucianism and Taoism.

The school of thought of Confucianism

Confucianism was founded by Confucius², a great sage and educator who lived in a period referred to as the "Spring and Autumn Annals" by Chinese historians when the commonly used Slave-Owing System was converted to Feudal society. The rapid development of agriculture and handicraft industries demanded more free laborers who had a personal right to migrate. Inevitably it not only caused national military battles for the partition of labour and resources, but also ideological conflicts. This tangled warfare soon crippled and demolished the power of the central government of the Zhou Dynasty. A new system in terms of politics and the economy had not yet been built up. Confucius was reluctant to promote any new order and hesitated at this critical period of history. One aspect of the new order consisted of the irresistible new way of organizing social

¹ The Chinese name for Yellow River is Huanghe which was often considered as the region for the earliest Chinese civilization. According to the recent archaeological discoveries, Yangtze River has also been a cradle of Chinese culture, at least as early as Huanghe Culture period.

² Confucius(551-479 B.C.): Surname:Con; Given Name:Qiu. Fucius is the ancient respectful form of venerable person.

order, but it took an extreme violent form; the other aspect was the resultant diminishment of social values of hierarchy and kinship -- even an "upstart" without an aristocratic ethnic background could be an official. Confucius believed that the best social system was the Early Zhou Etiquette which preserved both benevolent politics and the aristocratic hierarchy.

Hence, Confucianism was concerned with social organization, common sense, and practical knowledge. It provided the Chinese society with a system of education and with strict conventions on social norms that consisted of a set of principles covering everything from daily life to ceremony. Confucius advocated and indeed promoted in his teaching the early Zhou system of etiquette. This system is an evolution from Chinese Shamanism.¹ This culture was based on kinship, centripetal and social hierarchy, and hereditary system that maintained the coherency and intimacy between man and man, and man and nature. In accordance with the codes of "Technology: Craftsman in Zhou Etiquette"², city form at that time was also based upon the worship function.

Etiquette and rituals are two inseparable parts of Shamanist. Today, we still can see that in the Natives or African tribes, religious ceremony is a stylized process. Priests are also the chosen people, and Confucius often emphasized the same thing: "The monarch should behave as a monarch; the officer should behave as an officer; the father should behave as a father; the son should behave as a son."³ If so, a human autocracy would become possible and people could have peaceful lives.

¹ Shamanism was the primary religion of the Ural-Altaic peoples of Asia and Northern eastern Europe, as well as of some primitive civilization cradles. Shamanists believed that the unseen world contained demons and spirits responsible for placating Shaman, the proper detector and controller of ghostly supernatural power.

² The chapter on "Craftsman" in the ancient book "Zhou Etiquette" is the one centered to urban planning theory and practice. There are detail elaboration on planning methodology.

³ p 554, Chapter 6 "Politics of The Analects of Confucius" in *Introduction to Thirteen Ancient Chinese Books* by Jiang Bo-zhan.

To steer away from dramatic change through the complete dismantling of tradition Confucius had a unique idea called -"The Doctrine of the Mean" which Confucius explained as follows:

*"The fate is called 'nature'
The way of living is called 'Tao'
To cultivate the Tao is called 'Teach'
One can not live without a Tao.....
So a gentleman should be cautious of the unknown
and changing thing
He should not show any inner bias even he has
This is the doctrine of Mean....."¹*

Confucius attempted to convey the idea to be aware that the destination of life by nature cannot be determined by "I" alone. One has to learn and cultivate this "I" to bring this "I" to an optimal solution. The doctrine of Mean, in another words, is to compromise.

Confucius believed that "whenever one was born, he was good in nature"², only the postnatal experience made people immoral. If we can expand the morality in kinship, such as parental, marital, and brotherhood relations, to our friend, our motherland, and the natural environment, "Politics of Humanitarianism" must be fulfilled. The most significant approach towards such a "Benevolent Society" is to keep "the Doctrine of Mean" in practice. Indeed Confucius dedicated his whole life to practicing this rationale. He travelled around the seven countries and persuaded the Dukes to experiment with his Utopian concepts. Frequently, he failed, but he never gave up until death.

If Taoism is a mysticism and Buddhism is a metaphysics, then Confucianism is a logical, rational, but comprehensive formalism. In "The

¹ This is translated form Chinese version of "Lun Yu" the book written by Confucius. It should be noted that the "Doctrine of Mean" had also existed in ancient Greek philosophy.

² This statement is not directly attributed to Confucius, but was published in the book "Three Word Scripture" used by Confucian schools.

Analects of Confucius", the most splendid part in the books about Confucius, there is an interesting paragraph about the life "format" set up by Confucius:

*"To have lofty aspirations at your age fifteen;
to be successful at your age thirty;
to stand up the temptations at your age forty;
to know your life at your age fifty;
to be humble at your age sixty;
then, you will get the truth and live naturally at
your age seventy."*¹

In the process of perfecting his personality, one has to go through several procedures:

- 1. observation: "learn to be as good as a gentleman by watching a gentleman;
learn do not do bad things by watching a villain."*
- 2. correction: "to avoid a second mistake, correct it on the first time."*
- 3. speak cautiously; act quickly;*
- 4. eager to learn: "Don't feel ashamed to ask and learn from others".*
- 5. abide by norm: "to be stoic, then to succeed".*²

It should be realized that Confucius focuses mainly upon the relationship among humans rather than man and God. Instead, to explore the existence of God, Confucius simply claimed that man is unable to know the divine. He frequently taught his students to be practical: "If you do not know what life is, can you know the death? If you do not know how to serve people, can you know how to serve God?" This utilitarian aspect of his philosophy became deeply ingrained into the Chinese ethos, and formed the patience, fortitude, and pragmatic characteristic of Chinese culture.

¹p 542, *Introduction to Thirteen Ancient Chinese Books* by Jiang Bo-zhan.

²p 528, *Ibid.*

To sum up, Confucianism is a philosophy of national politics, social norms, and individual criteria. The formalist way of living advocated by Confucianism disciplined every generation of Chinese and maintained the cohesion of the Chinese ethos throughout its thousand year history. To understand the significant role of Confucianism in Chinese history is to understand the rational and ordering aspects of Chinese culture. Furthermore, we can understand why China always has centralized politics. Ancient city planning and modern planning practice in China are both associated with Confucianist ideology.

The school of thought of Taoism

Simultaneously paralleling Confucianism, Taoism was established by Lao Zi¹ and was further developed intensely by Zhuang Zi. Tao, in Chinese, means a "way" or "walking with your mind". Taoism is mainly concerned about the probability of universal movements and the ways of social change. Mistrust of conventional knowledge and reasoning is stronger in Taoism than in any other school of Eastern philosophy. Taoism firmly believed that the human language and intellect would be always limited and less comprehensive than the real world. Even Taoism itself, Lao Zi said, "Tao, if it can be expressed by words, it is not the real Tao"². In order to approach Tao, one must obey the order from nature and flow spontaneously in the stream of Tao.

Lao Zi thought that the force for the cosmic was the everlasting Tao, the mysterious great voidness of change. "Tao gave the birth of one, one regenerates the birth of two, two change into three, three transform into everything."³ Taoism therefore emphasized the natural phenomena of transformations. Shown in two passages in "Zhuang Zi" Taoists enthusiastically found how nature, by its own way, changes:

¹ Lao Zi (birth c. 571 B.C.): Surname: Li; Given Name: Dan; The founder of Taoism. "Lao Zi" is the Chinese polite way to call him. One of his followers is also famous, he is Zhuang Zi.

² This is the first sentence in Tao Te Ching, the authority on Taoism and being considered as Taoism Bible.

³ Lao Zi. Chapter 42.

"Is the sky moving and the earth staying still? Why do the moon and sun supersede each other morning and evening? Who is superior or inferior? Could something have the superpower? Does the cloud exist for the rain? or the rain exist for the cloud? Who made all of these? Why does a puff of wind suddenly come and pass? What are their names?"¹

"In the transformation and growth of all the things, every bud and feature has its proper form. In this we have their gradual maturing and decay, the constant flow of transformation and change."²

Taoism is the earliest dialectic³ in the history of human thought. The concepts of Yin(female, passive side) and Yang(male, positive side) can be applied towards interpreting any kind of movements. "Everything consists of Yin and Yang, they are truly united into the whole".⁴ "Beauty exists only because Ugliness exists; Goodness exists only because Evil exists; It is the same that being and non-being, easy and difficulty, long and short, high and low, voice and silence, front and rear, they must appear at the same time."⁵

The concept of Yin and Yang helped Taoism to build a circular and balanced way of thinking. For Lao Zi, the cause is the result, the result is the cause; the new is the old and the old is the new; "Carefully observing, one can see the everything is growing and everything transforms from one to another in a circular way. Everything, after changes, come back to its original point and restarts another life."⁶ Whoever knows such a Tao of the universe has already understood the future and past of the

¹ Zhuang Zi. Chapter.14.

²Zhuang Zi. Chapter. 13.

³ Taoism inherited the Yin/Yang concepts from I Ching(The Book of Change) which has at least a three thousand year history.

⁴Lao Zi. Chapter 42.

⁵ Lao Zi. Chapter 2.

⁶ Lao Zi. Chapter 16.

world. "He knows Yang by knowing Yin; he likes to be humble and he gains the world; he is pure as a baby and he is the sage."¹

Taoism is also the earliest philosophy dealing with the abstruse dualism relationship of existence and non-existence. One of the famous allegories by Zhuang Zi called "Zhuang Zi Dreams of Butterfly" described: one day when Zhuang Zi fell asleep and dreamed that he had transformed into a butterfly, that butterfly was also flying around the sleeping Zhuang Zi and dreamed it had transformed into a human figure. Zhuang Zi then asked which one was the real existence, Zhuang Zi? or the butterfly? This story illicitly a topic about the relationship of the human body and soul-subjectivity and objectivity.

How, then, does one heal the split of body and soul? and how does one apply the balanced way of thinking to life? Taoism insisted that man and nature should live as an entire being. The world come from the Tao and changes with the Tao. Man and nature are the two deviations of Tao, ultimately man and nature integrate into Tao. If man tries hard to fight with Tao, he is always the loser. In practice Lao Zi put forward an idea called "non-action" action, Lao Zi espoused it in many profound writings: "Sage, involves in control without meddling, teaches without speaking, follows the natural laws and does not resist them."² "Doing-Nothing might be the option, often the changes in the world rely upon opportunity rather than a good will. Thus Doing-Nothing means not to do those reluctant things."³ Again, Lao Zi taught us to observe carefully before any action. When one is attaining Tao, his actions and efforts should become "weak" and "soft". He is no longer swimming in the flow of Tao, instead he is floating and melting into the stream. Unlike the study of science where one gains new knowledge everyday, the person who seeks Tao has to break himself day by day, to throw his own intrinsic rationale, logic, and well established knowledge away, day by day. This is a process which opposes what Confucianism encouraged. Once one broke oneself and transcended from reality, "he will not feel glad for the birth; he will not

¹ Lao Zi. Chapter 28.

² Lao Zi. Chapter 2.

³ Lao Zi. Chapter 48.

feel sad for the death; he will not feel satisfied for the prosperity; he will not feel embarrassed for the poverty."¹

As an overall concept, Taoism should be understood as the antithesis to common sense. It reveals the complexity and the simplicity (Yin and Yang only) of life, the regularity of movement, and the coexistence of opposite elements. As the strong complementary philosophy to Confucianism, Taoism had more flexibility, feasibility, and durability; its comprehensiveness helped Confucianism, which was taken as the doctrine for every dynasty's politics, to be more open to social reform. Its intuitive circular way of thinking formed the basic world view of the Chinese and created a special intellectual Zen Culture one thousand years later.

The school of thought of Zen Buddhism

Buddhism is the only religion that was imported from another culture but became widely spread and accepted by Chinese. It was established by Siddhartha Gautama, who was called "Historic Buddha". He lived in India in the middle of the sixth century B.C. during the extraordinary period of geniuses -Confucius and Lao Zi in China, Zarathustra in Persia, Pythagoras and Heraclitus in Greece. "After the Buddha's death, Buddhism developed into two main schools, the Hinayana and the Mahayana, The Hinayana or Small Vehicle, is an orthodox school which sticks to the letter of the Buddha's teaching, whereas the Mahayana, or Great Vehicle, shows a more flexible attitude, believing that the spirit of the doctrine is more important than its original formulation."²

Mahayana Buddhism spread into China around A.D.58-75 in the Eastern Han Period when the country was divided into several regimes. The suffering of ordinary people and the collapse of politics challenged the self-sustaining Chinese religions.³ Mahayana Buddhism offered a new

¹Zhuang Zi. Chapter.17.

² In Chapter 9. Buddhism in the book "The Tao Of Physics".

³ Here I use the word religion not philosophy, because Taoism and Confucianism were mainly philosophies at their inception, however, they were developed into two major religions in China in later dynasties before the Eastern Han Period.

interpretation of life, as it was called "the Doctrine of Enlightenment". It believed that everything in this world, including the good and the bad, were formed by "Genesis"; the "Genesis" was an "Illusory Being". People suffered because they were trapped in the "confusion" of this illusory life which had too much temptation. To get rid of the suffering, Buddhism suggested one should have "right view, right aim, right speech, right action, right living, right effort, right mindfulness, right concentration."¹

By the time Buddhism became widely spread in China, Taoism had evolved from a sociological and cosmic mode into the ontology of man.² Primarily during Song Dynasty (A.D. 960-1279), the concept of Tao in Taoism was specified by Zhang Zhai as a "Vital Spirit". He used this term to explain the dilemma of ethics (the earlier Taoism did not relate to such a topic while Confucianism did). Until Zhu Xi, a Taoist scholar, began to integrate Taoism and Confucianism by focusing on the same ontological emphases of the relationship of the individual to society. Developed by Wang Yangming, Taoism finally expanded into the field of humanity. Wang thought that if one wished to gain the Tao of life he should first of all discover his own nature and reunite the split psyche.³

After Buddhism took root in China, the vernacular Chinese wisdom helped Buddhism develop a special Zen culture. Zen was founded by several Buddhist monks such as Hui Neng, Wei Lang, or Yeno in the Tang Dynasty, which is the golden age for Chinese art, literature, poetry and religion. Then, incorporating Taoism and Confucianism, Zen achieved its dominance in the Ming Dynasty (around the time of Renaissance in the West).

¹ P 26, "Guantama" in *The Nature of Man* by Erich Fromm and Ramon Xirau.

² Ontology is a department of metaphysics concerned with the nature of existence. Ontology of man is about the meaning of human's existence. Taoism, from I Ching, mainly dealt with the changes of cosmic order until Song Dynasty a Taoist scholar Zhang Zhai applied the concept of Tao to interpret the nature of human existence. Hence forth, Taoism started addressing the ontological problems of existence.

³ The split of psyche happens anytime anywhere, and to anybody, however, the collective unconsciousness more accurately reflected the fragmentary nature of human as a whole. One can see the analytical way of researching, humans had already dissolved the wholeness of human characteristics.

"The question, 'what is Zen?' is at once easy and difficult to answer. It is easy because there is nothing that is not Zen. I lift my finger thus, and there is Zen. I sit in silence all day uttering no words, and there too is Zen. Everything you do or say is Zen, and everything you do not do or say is also Zen. You see the flowers blooming in the garden, you hear birds singing in the woods, and you have Zen there. No words are needed to explain Zen, for you have it already before they are pronounced. The question is asked simply because you did not know that you had Zen in you, with you, and around you; and therefore it is easy to answer".¹

Zen is both a process and a state of meditation. There are three levels of "being" which can be elaborated by poem: the first state: Seeking: "The Autumn Leaves messed the roads in the silent mountain, where is the way?" The second state: Attaining: "Tranquil valley, no people, river flows and flowers bloom." The highest state: Transcendent: "The entire past thousand year history, just like a puff of morning wind".² To achieve the highest level of Zen one can sit down for meditation or talk to Zen Masters. The Zen Master will use the some paradoxical messages to enlighten the students' mind by "a sudden blow on the head". He reminded the student "seeing that we are endowed with the power of speech and understand one another by means of this power, we have to appeal to words. But words are such an intractable medium. If we become masters of words we are all right, and when words enslave us we become perfect fools".³ Here is a typical Koan⁴ about enlightenment: "Once there was a young monk who asked his Master what Tao was. The teacher answered 'have you had your dinner?' The young monk said: 'yes, I had.' The teacher blamed him: 'Go to wash your bowls!' The student suddenly attained the Buddhahood." Such a sudden enlightenment can be seen in any Zen case. The Zen teacher often did not follow the question put forward by the student and suggested him to get rid of the "normal logic". According to our normal logic, the "sound of one hand clapping" makes no sound! But in the dimension beyond the

¹ T.D.Susuki has an excellent explanation of Zen in *The Threefold Question in Zen* in "The Awakening Zen".

² This poem analogies that three different landscape scenarios as the three levels of enlightenment and attainment.

³ See page 28 in *Awakening Zen* by Susuki.

⁴ Koan, in Chinese, means Zen cases.

"normality", the "sound of one hand clapping" might be an imaginative sound in the mind. This highly intellectual imagination comes only from free and intuitive thinking that is out of the limitation of one's fixed beliefs. Therefore, besides the two eyes you have, you will also be asked to have a third eye which is not between or above the two eyes you have, but the two eyes are the third eye.

*"a special transmission outside the scriptures,
not found upon words and letters,
pointing directly to the human minds,
seeing into one's nature and
attaining the Buddhahood".¹*

It is obvious that for a Zen person, the objective world and the subjective world are one. There is no strict boundary between objectivity and subjectivity, no boundary between "you" and "I", no boundary between "everything" and "one", no boundary between "good" and "evil". This particularization cannot be analyzed. So the transcendental and immanent Zen exist at the same time, i.e. everything is Tao, is Zen; Everything is not Tao, is not Zen as well. It is worthwhile to notice the paradoxical view of Zen towards truth which originated from both Confucianism and Taoism. Zen brought up the Chinese stylistic arts as well as its aesthetic values. Zen garden, Zen house, Zen Woods, and Zen Temple are the highest level of Chinese arts. Zen built a pinnacle in the mountain of Chinese civilization and also strongly influenced the Japanese culture.

1.2. The Parallels Between Ideology And Traditional Chinese Aesthetics.

Aesthetics as a systematic study of art and beauty seems a very independent subject in the Western history of thought. The question whether beauty or aesthetic value exists only subjectively in the human mind or objectively, not depending upon human mind, has always been a controversial issue. After being introduced by Plato, the aesthetics of

¹Buddhist uses this passage to describe what Zen is.

Western thought developed and progressed along the direction of the objectivity of beauty. Beauty, in Greece, was a term for noble, generous, brave characters, for love, and for artistic bearing. Meanwhile, the classical Greek artists were appealing to sculptural forms such as cube, sphere, and muscular "male" bodies. Unlike the way of Western aesthetics, the paradoxical way of Zen determined Chinese aesthetics. From its beginning, it was not an independent, isolated subject, being instead integrated with many other aspects of thought such as philosophy, politics, and the practices of the arts. Many great Chinese artists were at same time philosophers, writers, painters, scientists, or architects.

While Western artists believed that aesthetic appeal came from the representation of the real world, the ancient Chinese philosophers provided a different explanation. Here is another Koan: "Two Zen students once saw a flag waving in the air, one of them said: 'Look! the flag is waving.' The other one said: 'No. It is the wind moving.' At this time their Master pointed out: 'Those are your hearts moving, not the flag, not the wind.'" The implication behind this statement is: in the relative world, if there is no definite difference between subjectivity and objectivity, how can one split them as the "real" , and "unreal" ? Chinese artists often confessed their thoughts as the relative truth, they acknowledged their aesthetics as being based upon several hypotheses.

The first hypothesis is the judgement by morality proposed by Confucianism. Quite similar to Plato's idea, Confucians thought that internal goodness and kindness were beautiful no matter how "ugly" the form or pattern might be. The other hypothesis is that the nature of existence was the beauty from which came Taoism. For Taoists, every minor change in the natural world—a raindrop falling from a leaf; a cloud slowly floating on the blue sky—could bring them an endless joy. By understanding these two aspects, one can understand why Chinese culture pursued the wholeness and the subtle beauty which is addressed as much in the Western world.

The Transcendent view Of Chinese Aesthetics.

The union of "man and nature", according to Chinese philosophy, is the highest joy. Among the three level of beauty, the Chinese believed in the "sense of beauty" as the primary level; "The satisfaction of mind" is the second level; "The intellectual intuition" is the final and ultimate stage of aesthetic appeal. No doubt the idea was directly associated to the three levels of the Zen Attaining Process discussed before. Through self transcendent, one's mind becomes clear and empty, his body and soul, rational and irrational aspects reunited, the objectivity and subjectivity become a wholeness in being, man and nature reconciled. All of those notions could be well explained by choosing the private Scholar Gardens¹ as the example.

Most Chinese Private Scholar Gardens are located at Su Zhou, a beautiful Romantic water city adjacent to Shanghai. Founded in 525 B.C., Su Zhou has a huge, complex water channel network, which brought a prosperous economy and an active cultural life. During the Song Dynasty, Mongolians invaded northern China. The Song Court and its citizens evacuated to the southern part of the Yangtze River, and Su Zhou rapidly developed into a central city. Among the new immigrants were the landlords or scholars from rural area who grew up in their country hometown to which they were sentimentally attached. The War also changed their values which were influenced by the Confucianism and the contradistinctions between urban and rural, man and land, peace and war created psychic problems for the scholars. When Zen had been popularly accepted by them, a new aesthetic view on arts, including architecture and garden design, become mature.

¹Chinese Private Scholar Garden mainly indicates a type of Zen Gardens in Su Zhou City and during Ming Dynasty.



Figure 3. Perspective and plan of *Humble Politician Garden* in Su Zhou City.

Zen is a daily practice. The closest place to one's bedroom is said to be the court yard. The court yard existed thousands of years ago, but became a religious garden which symbolized the "real nature" only when Zen gained its popularity. The Chinese Scholar gardens do not have any hierarchy which is obvious in Western gardens (strict geometric order; cubic forms and very defined space). Those Scholar gardens are tiny in size, simple in color, but meaningful in design. Architecture, land, rocks, trees, water, light, shadow, space, and form are all arranged coherently and subtly distinguished. Almost every focal point in Chinese gardens have nothing but "penetrating air"-light and shadow symbolizing the great voidness of being. For the Chinese garden designer, the primary beauty is the delicate form, pattern, and space, the "visual component", the art. The higher beauty is the "meaning components", the elegance of literary meaning; and the highest beauty is when one sees through the organic and complex nature of plants, rocks, water, roof, pavilion, wall, and light, and perceives the transcendent view of life. As expressed in a famous Chinese poem: "Whom am I sitting with inside the garden? the moon? the wind? or me?" One can find great joy by participating in the scenery.

The Coexistence Of Chinese Aesthetics

Chinese arts always have an unusual original expression. The unusual quality of thought starts from the acceptance of dichotomy: Interestingly, Micheale Foucault had written a book called "This is not a Pipe" in which he described a drawing of a pipe by Rene Margret, but the title for the picture is : "This is not a pipe". The Chinese Zen Master and Foucault are playing the same language game: what is the difference between "word" and "to what the word referred". In absolute sense, there is no strict definition for the "artistic representation" and "reality". In a relative sense, one can also put another title for Rene Margret's picture: "This is a pipe". Both are right. In one of Zhu Dai's paintings, a distinguished Monk artist's work, vicious eagle, dead wood, and bizarre rocks are all his motives. In many Buddhist relief or murals there were numerous themes about "Hell" which is full of the "ugly forms". Chinese art accepts both beauty and ugliness, just as the Chinese also accept Taoism, Confucianism, and Buddhism at the same time.

Implicitness In Chinese Arts

Chinese arts are full of imagination and metaphors. Here we choose two Tang Dynasty Poems as examples:

Poem 1. By Han Yu

*"Drizzle moistened the alleys in the Capital
fresh and soft
Grass turns to the supple green
Only by a far look
Early Spring is always better
Better than whenever the mist willows bloom around."*

Poem 2. By Li, ShangYin

*Bamboo dock without dust
Athwart near the pool is quite
The yearning of mine transited far and far
Autumn clouds are amassing
Evening frost is flying
Only the withered lotus are staying
to listen the song of raining."*

Poem 1, written by a Tang Dynasty governor who professed to be a Confucius pilgrim, describes the beauty and vividness of the Capital city in the earlier Spring time. Everything becomes so alive just by several "nouns" -moisten streets; crisp drizzle; supple green grass-they remind the reader of the lovely images the spring has. By "Grass turns to the supple green only by a far look", and the whole poem appropriately catches the "spirit" of that special season. Similarly in poem 2, the juxtaposition of images is remarkable, that "bamboo docks"; "water athwart"; "autumn clouds"; "evening frost"; and "withered lotus" are exclusive touching metaphors about the sentimental atmosphere of the slack autumn scenery. Chinese poetry also seldom revealed the "subject" and always omitted the "verb". The poem becomes "fragmentary nouns" but the implicitness arises from this suggestive style.

1.3. Space as a philosophical construct

After this brief analysis on Chinese aesthetics, we will try to understand another higher level of beauty in architectural design by examining "I Ching" (The Book of Change) first. The principles embodied in I Ching, in C.G. Jung's expression, are engraved upon the collective unconsciousness of the human race, it contains magical qualities of its own, and can therefore be used for psychic or divination purpose, the symbols of the trigrams and hexagrams being the means by which its message is conveyed.

"I Ching" described that there was a Pre-heaven arrangement and Later-heaven one which is similar to what the Christian Bible explained about before creation and after creation, but the expression of those ideas were more abstract and symbolic. For example the symbol "--" stands for togetherness the Yang (male, hardness.....) and the symbol "--" means Yin (female, softness.....). Yin and Yang incorporates many other meanings such as Earth, Water, Metal, Creativity, Stillness, and so on. In the Pre-heaven order, opposite ideograms face one another across the circle. "It is concerned with balancing complementary pairs of opposites, the great cosmic forces of Yin and Yang, with time, thought, magnetic waves, the unseen, the unconscious, the unmanifested, the spiritual life, heaven, and

with anything which is intangible. It illustrates that heaven's work with regard to the material world is that of maintaining a state of equilibrium between opposite forces."¹ If the Pre-heaven arrangement can be imaged as the World of Ideas or Before the World, the Later-heaven diagram may be referred to the World of Phenomena or World of the Senses. It "is primarily concerned with the variation of physical phenomena and tangible things. Tangible things which appear to rotate, as though through a circle, from a point in the east, where the trigram of the Arousing  symbolizes their birth or beginning, round through all other trigrams which in turn predict growth and harvest, and finally through to the position in the north-east where the last trigram, namely Stillness , denotes their end or death (note that these particular two trigrams, that is, the symbols of birth and death, are opposites in pattern). Being sequential, this arrangement deals with changes wrought by the passage of time, such as the progression of the seasons; day and night; the birth, development and death of living things, of projects and anything else you wish to consider. It does not represent the passing of time itself, for, being invisible, time would be the concern of pre-heaven, but it deals rather with perceptible physical signs, such as the actual formation of crystals, the ripening of fruit, the growth of a child and so forth. It refers to anything animate or inanimate, which, being of the earth, is impermanent and also in a constant state of change."²

¹ See page 10 in "The I Ching and Mankind" by Diania F. Hook. The author has a detailed explanation on each of the symbols in I Ching and compares the similarity of I Ching and Western religious thoughts. She specially commented and referred to the works by C.G. Jung and used his concepts such as Archetype, Psyche, Collective Unconscious to reinforce her own opinions.

² See page 11 in "The I Ching and Mankind".

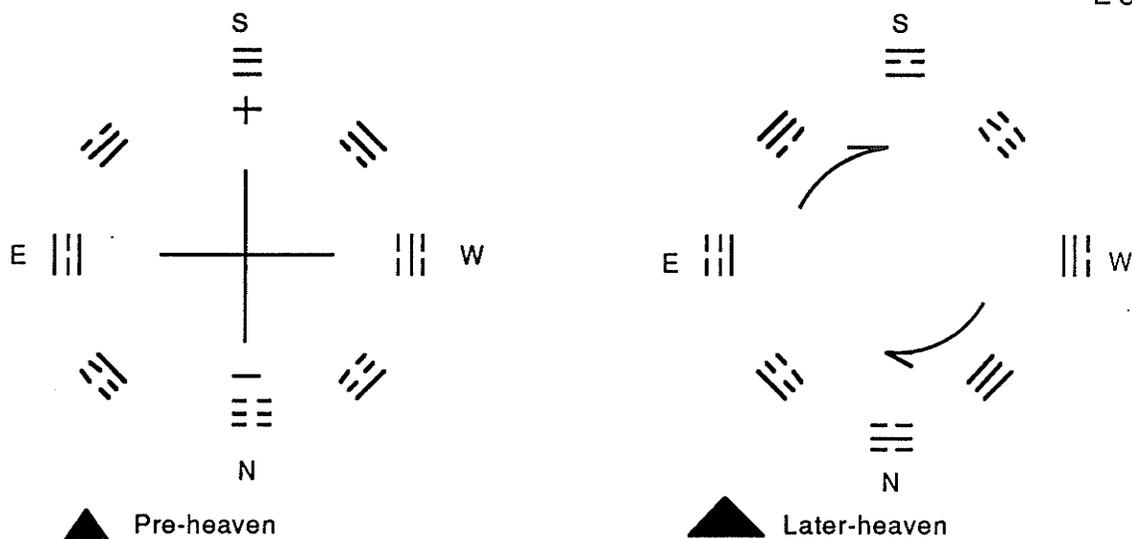


Figure 4. "I Ching"'s Concept of Creation and Change

From these two abstract models "I Ching" developed a Tortoise Diagram (this is why the tortoise is a mysterious symbol in Chinese culture) in which the concepts of geomancy were used to interpret and give the physical environment characteristic roles in the cosmic order. Some modern scholars¹ thought this is because China lacks a rolling topography, the bulk of the Chinese population lives in a land of sharp contrasts: alluvial plains, on the one hand, and steep-sided hills and mountains, on the other. Therefore, people are more aware of their exposure to the cosmic control, psychologically they needed to define their spaces from the surroundings. Yet we might conclude that this cognitive map may reflect the psychic experience of Chinese ancestors even before recorded history.

¹ Such as Yi-Fu Tuan, in his book *Topophilia* he expounded the basic connotations of I Ching and its application to Chinese environment.

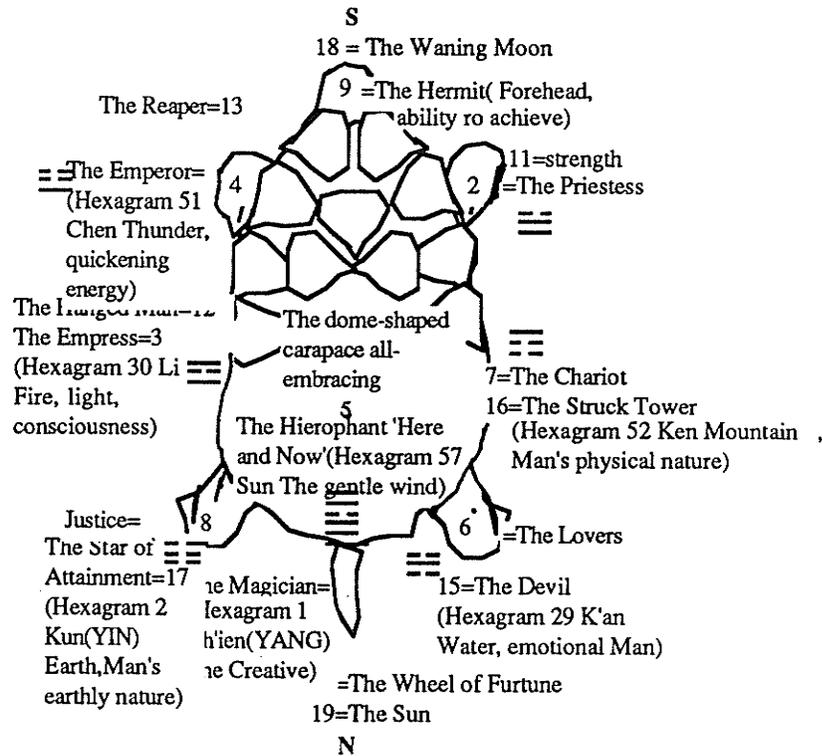


Figure 5. "I Ching"'s Concept of Orientations.

FENGSHUI and its application to design

In accordance with the Tortoise Diagram in "I Ching", the ancient Chinese interpreted nature in a very unusual way called Geomancy (pronounced as FENGSHUI in Chinese) which means the "Wind and Water". They believed that changes in Heaven and Earth would impact their lives, no matter if one realizes this or not. Form, Orientation, Placement, Color, Material, Texture, Numbers all have influences on human behavior. Humans cannot avoid change, such as bad weather, but to obey the order of nature might reduce the damage. "I Ching" was first transformed into an astrological Calender which recorded all the "good and bad" days, months, years. It also advises you when it is good for a Wedding, for Travel, for a Funeral, for a Birth, and when it is not good as well. To follow the circle of change, one might change his "misfortune" to "luck".

When I Ching was specified as FENGSHUI, there were some special group of people in old China called as "Mr. FENGSHUI" who knew how to interpret the natural environment. When one had to plan a city, design a house, build a

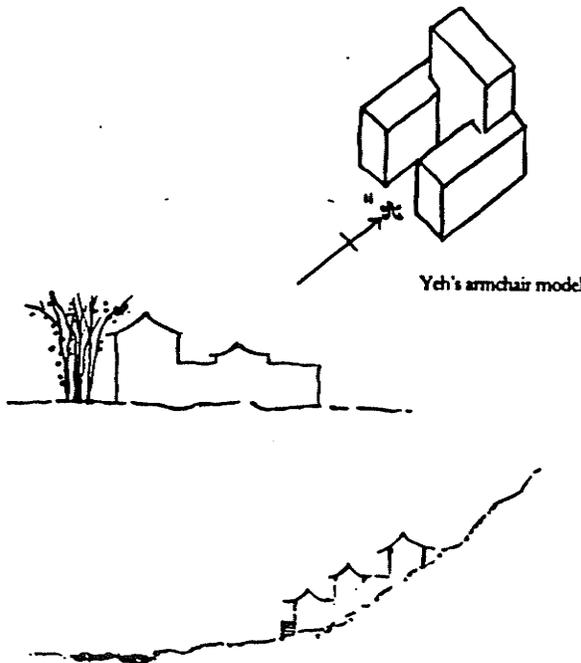
tomb, one had to invite Mr. FENGSHUI to select or analyze the site first, and then to suggest an appropriate plan and design. Here I have selected some of the rules of FENGSHUI which relate to architectural spatial arrangement:

1. Buildings, be they tombs or towns, should if possible, be constructed on sloping or well drained land;
2. The north of any built site should possess a mountainous shield or screen of trees protecting it from malefic "QI"(fortune for a family);
3. The dead should be buried on the south facing slope of the above mentioned shield, facing the town and the living;
4. Entrances to the town or the home should always be from the south and be given a clear view of this orientation to harvest beneficial "QI";
5. In the landscape, dragon and tiger forms denote the presence of Yin and Yang "QI" respectively and are most happily placed when they form a complete horseshoe with the dragon in the east and the tiger in the west. The point of transition is seen as the point of greatest concentration of beneficial "QI";
6. Boldly rising formations are termed Yang whilst gentle, undulating elevations are termed Yin. On ground where male characteristics prevail, the best site is on a spot having female characteristics and otherwise on a predominantly female site;
7. Flat land is not propitious from a FENGSHUI point of view;
8. The ideal proportion determined by Taoists is three-fifths male and two-fifth

female for the active concentration of the
beneficial "QI" on the site.¹

¹ The rules of FENGSHUI and graphic explanations are taken from *FENGSHUI: Its Application in Contemporary Architecture* in MIMAR . 27 March 1988.

Basic form as has been exemplified in case studies takes a U-shaped pattern with a high back. This back generally faces North or if that is inadmissible owing to geography or topography, is up against a hill or backed by trees.

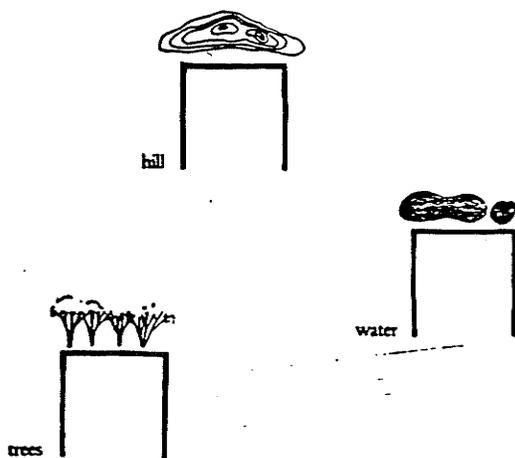


The widespread association of this with good Fengshui may be due to the fact that it effectively contains space, defining an enclave that is sufficiently protected, yet possessing an open aspect.

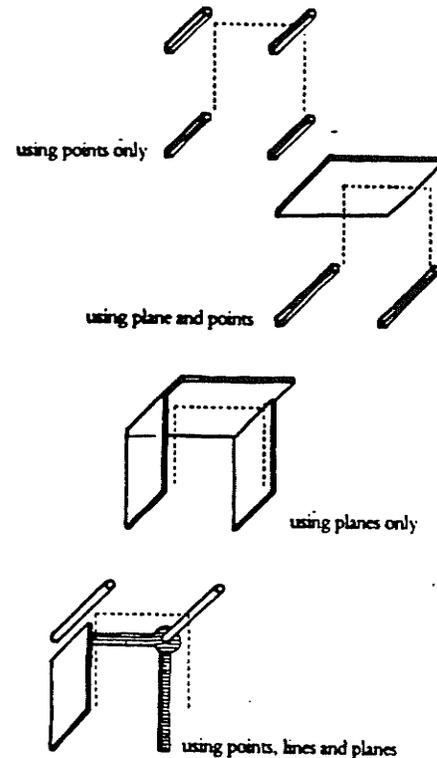
Landscape:

Landscape forms an integral part of Fengshui and should be carefully considered in planning. The principle components in good Fengshui landscape are:

- i. Water
- ii. Trees
- iii. Hilly features.



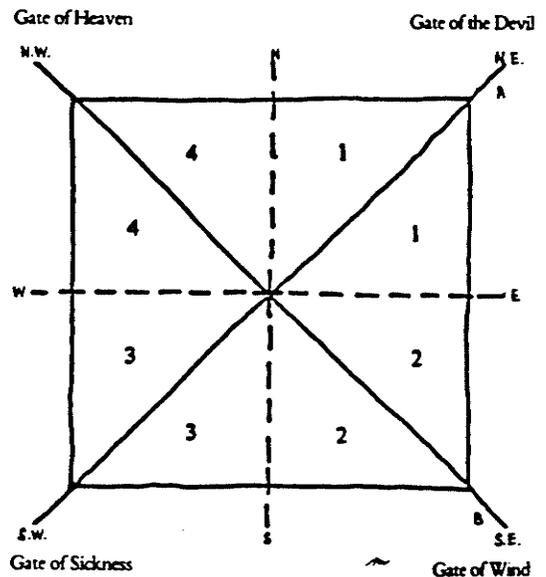
Generally, meandering and undulating features are preferred so as to reduce the amount of malevic *qi* in the site and also as a means of containing good *qi*. All three landscape components (water, trees and hilly feature) are often employed as shields against *sha qi* and should therefore be located in the rear of any U-shaped pattern or in the direction most likely to harbour malevic forces.



Modern city planning however, may not always permit such a connected linear interpretation of this U-shaped pattern. Devices such as points, lines and planes may be put into use to overcome any restrictions.

Orientation:

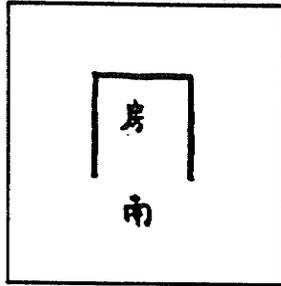
While a generally north-south attitude is preferred, the NW-SE orientation appears to be superior as it conforms favourably with the cosmological conditions of the Universe. NW-SE being locations of the Gates to Heaven.



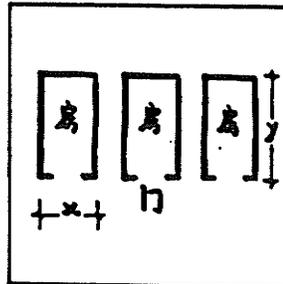
Conversely, entrances in the NE-SW are avoided as much as possible for the Gates of Hell and Gates of Illness are harbingers of ill fortune. The Hongkong and Shanghai Bank represents a prominent case in point where the escalators to the main banking hall take a N.E. aspect.

The following diagrams, digested from Low Wai Lang's extraction from the Imperial Encyclopedia, puts down in graphic form some Fengshui guidelines which I consider to have greatest direct impact on architecture. They exist on the level of general application and in no way takes into account astrological compatibility

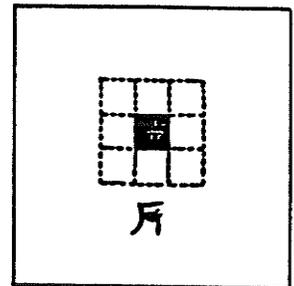
between specific individuals and the buildings or sites which they inhabit. Such an exercise dwells beyond the scope of this thesis. The diagrams are divided into 2 sections: Good (吉) and bad influences (凶) and should provide a fair idea of the overlay of cosmology onto the rational in general Fengshui practice.



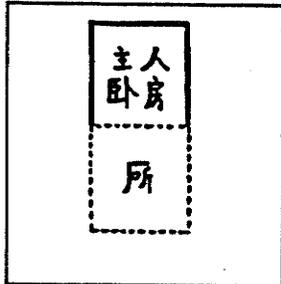
Room facing south



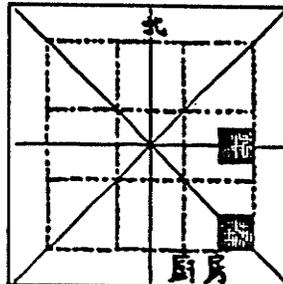
Depth of the enclosure is greater than its width



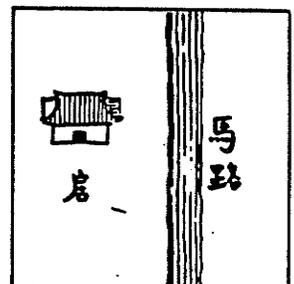
Living room in the centre



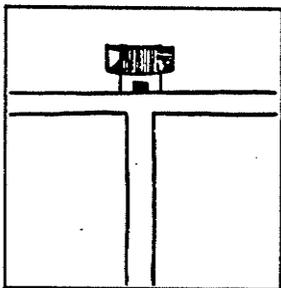
Master bedroom at the head of the living area



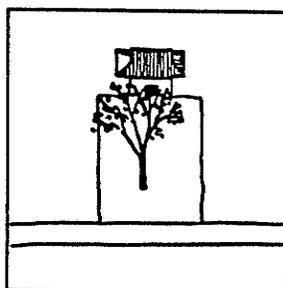
Kitchen in the east or south-east



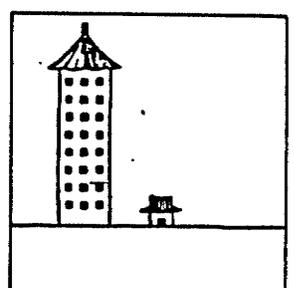
Road to the east



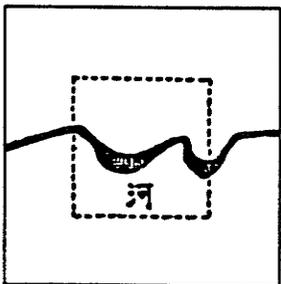
House at a T-junction



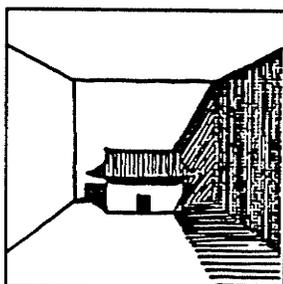
A tree in front of the house



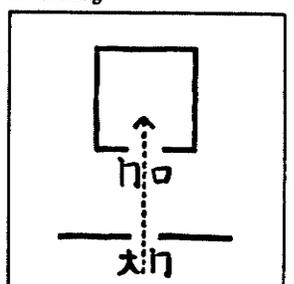
Small building overshadowed by a tall building



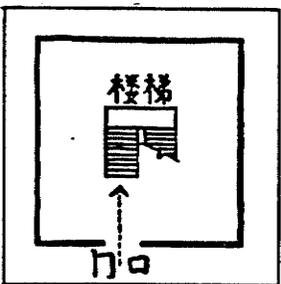
River or stream cutting across the site



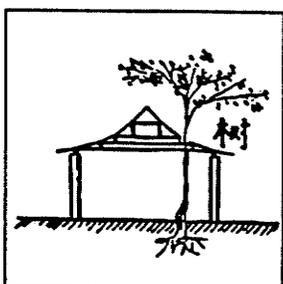
High boundary walls



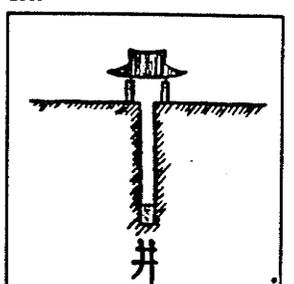
Alignment of main door with subunit door



Staircase facing the main door



A tree growing through the roof



House over a well

Architecture and Ideological Norms

Besides FENGSHUI traditional Chinese architecture also had to comply with the ideological norm. In housing design, a typical court yard house should consist of a central yard for holding "QI" and many subordinate yards. A visitor cannot go to the primary court if he has not been invited. Women have the same social status as the children, so they both should live in the house which is on the right side of the central yard. Men live in the opposite side. The central Hall occupied by the head of the clan is also a place for religious ceremony. The far north row houses are the service rooms, such as toilet, kitchen, and storage. The reading room and family library might be in the small house close to the garden. Overall, the social status and relationship are translated into a spatial pattern.

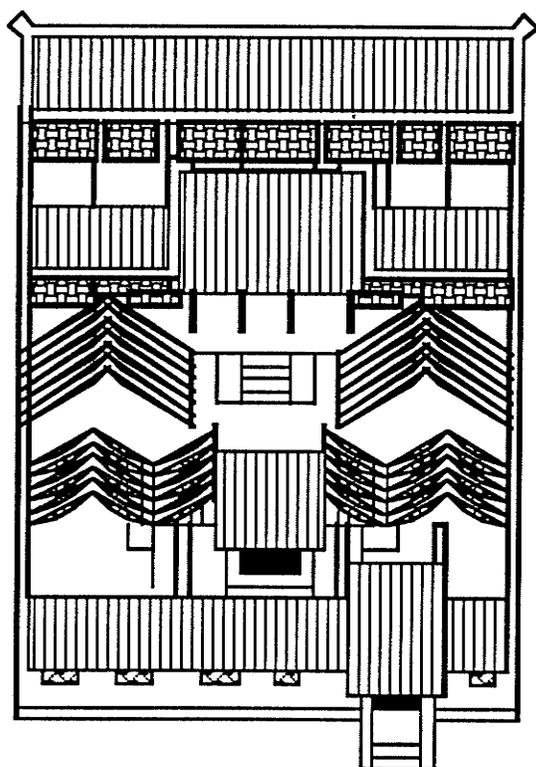


Figure 7. A Typical Court Yard House

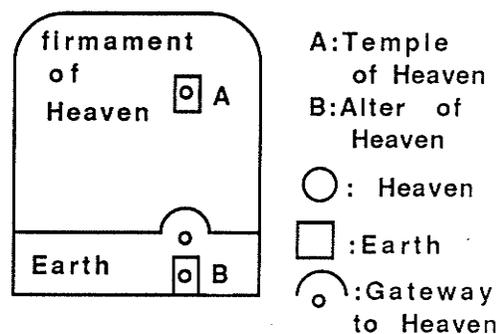


Figure 8. A Plan of Temple.

In the design for a Palace, squares and circles are the only forms allowed which respectively symbolize the earth and heaven. The entrances

envoys. The central territory was open only to the loyal family, some eunuchs, and trusted officials. The emperor was the only one qualified to enter the "Central Peace Hall" talk to the God in the heaven.

Walking in the Forbidden City today, one can imagine the spectacular situation when the Emperor arrived to give summons, thousands of officials kneeling on the white jade marble ground bowing to listen to the calling. The large court yards and squares, the twenty meter high red walls, the deep corridors, the hierarchical spaces, the golden roof and dark red pillars, the gold and silver sculpture, all make one feel he is smaller, inferior, controlled, and suppressed. One has to wonder how this architecture can so brilliantly transform the religious idea into a form, the union of the sacred and the secular.

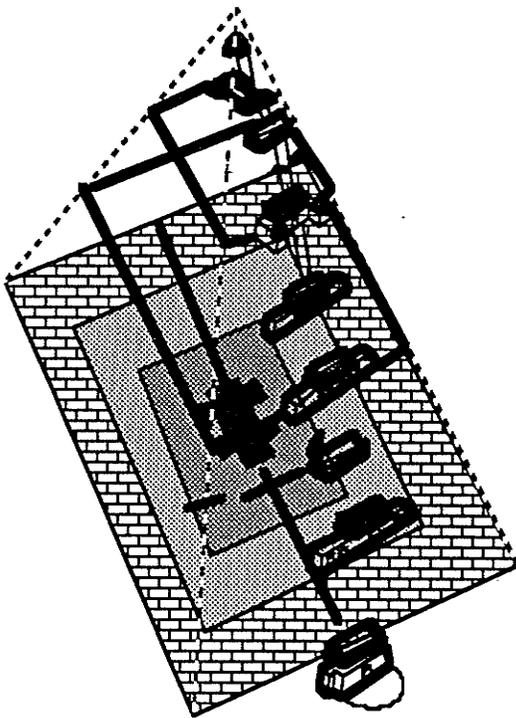


Figure 10. Spatial Layout of Forbidden City in Beijing.

1.4. Prototypes Of Ancient Chinese Cities.

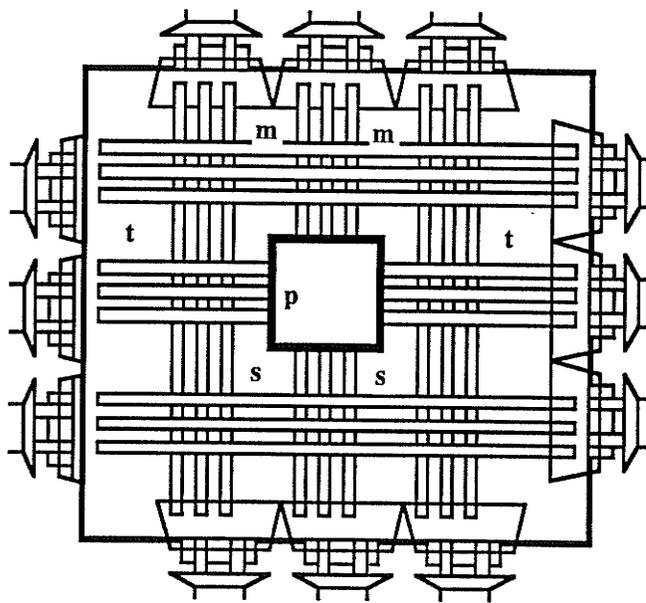
As we discussed above, vernacular Chinese ideology determined the form of architecture, as well as the city form and function. Most Western planning theorists believe the city is a product of the economic and political forces. Therefore, city form merely reflects the spatial needs of the industrial economy and its production and market needs, such as the transportation corridors, the location of residential districts and employment, the distance from noise and pollution, the accessibility of the center city the CBD etc. In traditional Chinese city planning, all of these rules are subordinated to the religious and social-political forces.

Confucianism as a Normative Model

"City", in Chinese, means "military walls" and "market place", they are both the primary functions, however, City should first symbolize the religious and political power. The Confucian philosophy that emerged from the Zhou Etiquette provides the normative planning model. City planning is described extensively in "Technology:Crafts in Zhou Etiquette":

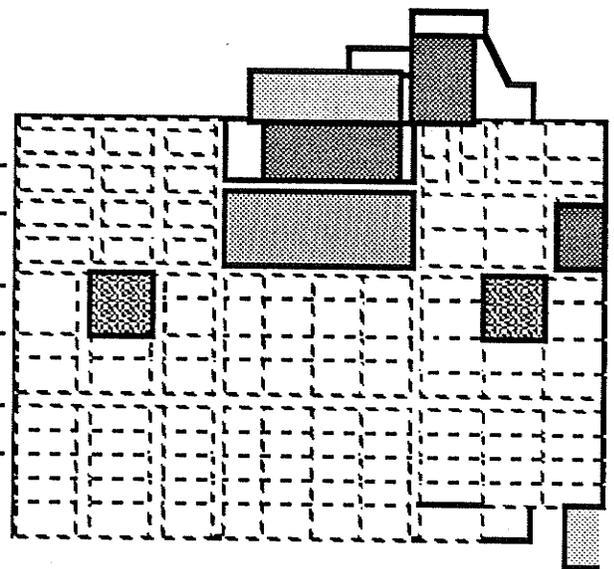
"Craftsman plans a city. It should be nine by nine li in size and square in shape; it should have three gates in each side. Inside the city, there should have nine longitude roads and nine latitude streets; The Western part of the city should be the temple for ancestor and Eastern part should be the temple for the God charging the earth; the Southern part of the city should be worship square and the Northern part should be the market."¹

¹ See page 35 in "Traditional Chinese Architectural History"



p:palace
 m:market
 t:temple
 s:square

The Typical Zhou
 Dynasty City Form



palace
 loyal place
 market
 garden



Figure 11. The Ideal City Form based on
 Zhou Etiquette

Figure 12. Typical city form based
 on Confucian Normative Model.

Why did the Zhou Etiquette emphasize the number "Nine" so much? In his essay "Research On the Planning System Of Zhou", Mr.He Ye-ju explained that the city framework with "nine longitude and nine latitude roads" was directly copied from the agricultural administration system of the Zhou Dynasty. At that time each slave farmer had to take care of one hundred acres of field and nine farmers were grouped as a working unit. "Nine" is also a number for "togetherness" in "I Ching". If the city had nine square districts, the palace of royal family will have a right center, center was the symbol for everlasting power(Chinese call China as the central kingdom of the world). That is probably why the Zhou Dynasty determined such a form.

Two centuries after Zhou, in his book "Guan Zi",¹ Guan Zi developed a more detailed definition of the Zhou Planning Model: "the site of a city should be under a high mountain or above the river. If it is too high and far from the water source, it will cause drought; if too low and close to the river, it will cause floods....."² More than this, Guan Zi also revealed the relationship between population distribution and the natural environment: "For a ten thousand household population central city and for one thousand household population, eighty square li will be enough, if the land is very productive; it needs one hundred square li for the middle quality land; and it needs one hundred and twenty square li for the poor place."³

During the beginning of the Tang Dynasty, China became the most advanced country in the world in terms of its national economy. With abundant financial resources and democratic Feudalist politics, the Tang Emperor built the biggest city in the world at that time (A.D. 583, Capital City-Chang An, about 84.10 Km²). The planning system still exhibited the fundamental principles of Zhou, but the size of the city, the connection to its surroundings, and the standards of architecture were totally out of the norm. The Tang Emperors were also fond of religions, so the Buddhist, Taoist, and Confucianist temples and towers sprouted everywhere, particularly in the public open spaces.

In the Yuan Dynasty, the majority Han culture merged with the minority culture through military invasion. Reform of the planning model became possible, so Beijing was built with a mix of stylistic characteristics. It consists of the Chinese understanding of cosmic and geomancy interpretation of the environment. The Sky, Sun, Earth, Moon, the four temples were located in the south, east, west, and north directions respectively to define the territory of Beijing. On the central axis, the Forbidden City stands with many layers of territorial spaces, each of them representing one state of importance of politics.

¹A famous philosopher and politician in ancient China, who lived around 500 B.C.

²p 63, *History of Ancient Chinese City Planning* by He Ye-ju.

³p 63, *Ibid.*

The Confucianist normative planning model achieved its highest accomplishment at this time.

Referring to those cities planned with the Zhou Etiquette as Confucianist Normative Model is simply because they have so many common characteristics. They are both based on the expression of political power as well as a clear zoning associated with political functions, they are fitted to the Feudalist context which Rational Confucianism predominated, and they have regular city grids which were imposed artificially on a plateau by FENGSHUI's rules. Therefore, they are the cosmic model cities as well.

Taoism as a Romantic Model

Taoism, as it was cultivated along the Yangtze River range, impacted on the design of cities after the national economic gravity shifted to the Southern Yangtze area when Northern China was occupied by Mongolia. This happened during the Southern Song(A.D.1129) period when the Song Emperor settled in HangZhou the new Capital. With a beautiful romantic landscape, the Southern part of Yangtze River was also very productive agriculturally because of its water resources and mild climate. Moreover, the Song Loyal family brought with it the whole national treasury and many scholars to the Southern China which further enriched the region. This eager migration of population, economic activity, and culture opened a new urban era .

Among many beautiful cities in Southern China, two of them are worthwhile to point out. One is HangZhou, the Capital city of Southern Song; and the other is Su Zhou, the so called "Eastern Venice" for its wonderful urban design art and fabulous Oriental Scholar Gardens. Su Zhou was initiated in 525 B.C. as the Capital for the Wu Kingdom. The city had eight gates for land traffic and eight water gates for boating, both of them imitated the eight states in heaven and earth. After 1129 A.D., Su Zhou was reconstructed. Almost at the same period the first "Chinese Architectural Design Drafting Book" was issued by the

Song architects and engineers which influenced and guided all the subsequent revitalization work.

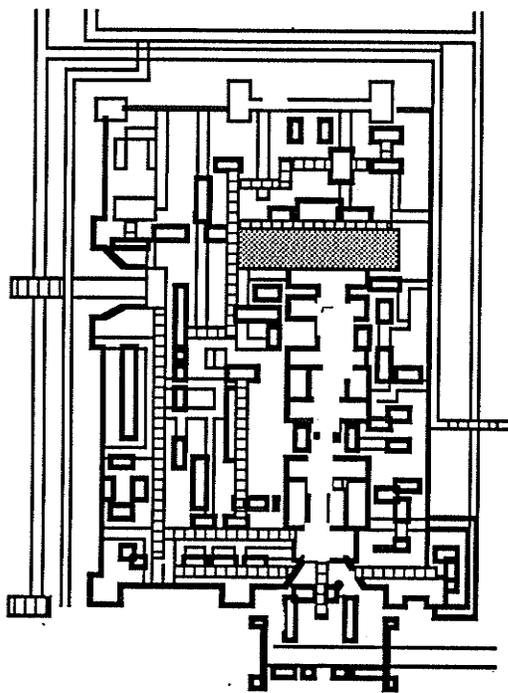


Figure 13. Song Dynasty Downtown
Su Zhou Plan.

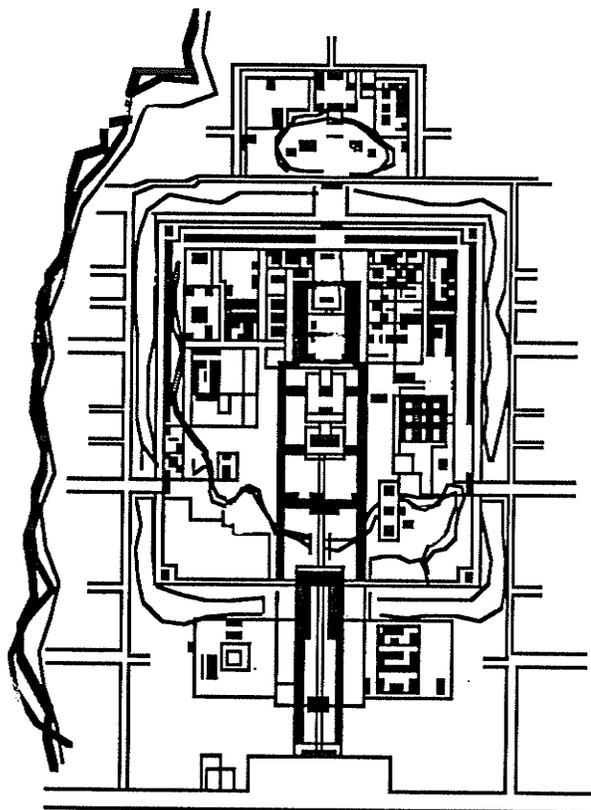


Figure 14. The Confucianist Model
of City Plan

Very significantly, the new planning scheme eliminated the classical symmetrical layout. Even the core area of Su Zhou had been designed with free and harmonious spaces. Such an active and crisp method of spatial arrangement indicates that the Taoist Romantic Model began to break the strict Feudal hierarchy. In terms of the residential neighborhood design, it was a very spectacular work: almost all the tiles are black and the walls are white, but no two houses have exactly same plan and elevations. Within the city there were 20 canals and 82 Km of water streets, 295 stylistic bridges, and 13 pagodas, but they all have different characteristics.

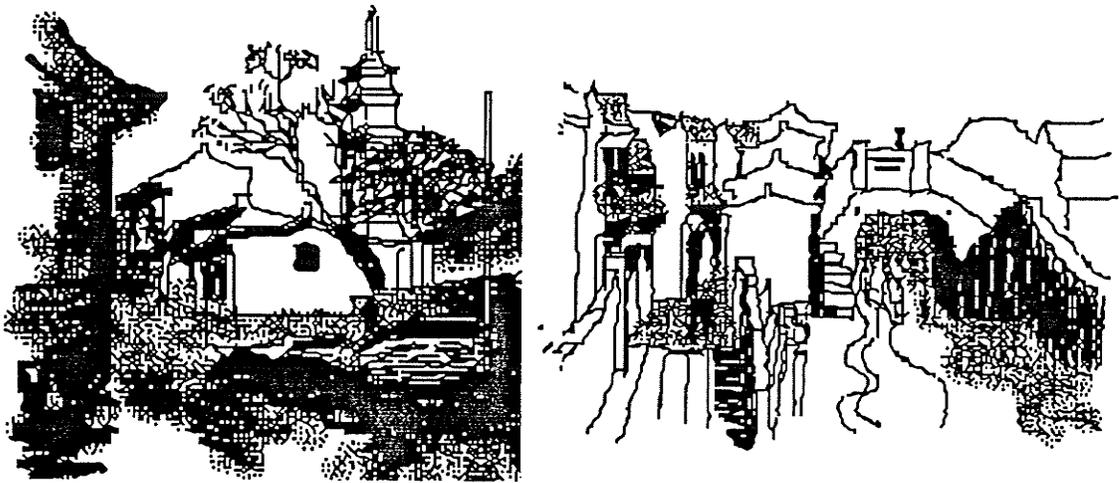


Figure 15. Two Typical Water Street Scenes in Su Zhou

The image, space, and characteristics of Su Zhou gave it a Spirit. Even today, if you visit Su Zhou, you still can feel the Romantic atmosphere. Before the sunrise, the city is always covered by a mist, and one can hear the calls of venders traveling along the deep streets, the atmosphere is remote and clear. After the city awakes, the noises and smells act as a symphony. One can see people walking or bicycling to their destination to factories or shops.....etc. At nine o'clock everything suddenly becomes quiet and slows down. Many high pagodas appear in the cloudy sky, the sounds of bells and drizzle pass the trees closer and closer. Some elders come out of their deep courtyard houses, but only to sit down in front of their black door with a cosy dressing and sleepy eyes. At noon time the traffic in the canals becomes busy and immediately the rivers are fully occupied, all the boats transporting products and supplies for the people. No matter if it is alcohol jars or bamboo furniture, they are swaying colorfully under the contrasting white houses. At dusk the roads and rivers stop, and the boats park near the houses. The light and the Su Zhou Opera together float out of the windows, many neighbors rally around the ancient wells or the tiny gardens chatting, drinking, or exercising, and the sky becomes more cloudy. Then the rain comes and the the drizzle falls down silently, but nobody realizes it. In one day many lives just passed through such a beautiful dream in nature.

The Taoist Romantic city responds to the topography and its surroundings. It emphasizes the organic way of organizing space, yet the spaces are mostly enclosed with much intimacy. They are full of spirits. Taoism believes that man and nature should integrate as one being-Su Zhou fulfilled this utopian thought.

Summary of Chapter 1

In this chapter we briefly examined the three dominant religions in China and their impacts on Chinese thinking, art expression, architectural design, and city planning. Geographically, Confucianism gained a much longer and more firm popularity in the Yellow River region while Taoism was flourishing in the Southern part of the Yangtze River. As complements of each other, Confucianism advocated rationalism and formalism of thinking and living, Taoism encouraged a changing and dynamic free life. After the importation of Buddhism, the three religions became integrated and created a special Zen Culture. The paradoxical world view of Zen strongly influenced the formation of Chinese aesthetic values and the criteria for the arts. Architecture and city planning were also bound by those philosophies and beliefs. In order to understand the issues of planning in modern China, one has to understand these ideological backgrounds.

Chapter 2. Planning Issues in Contemporary China.

"The communist world, it may be noted, has one big myth(which we call an illusion, in the vain hope that our superior judgement will make it disappear). It is the time hallowed archetypal dream of a Golden Age(or Paradise), where everything is provided is abundance for everyone, and a great, just, and wise chief rules over a human kindergarten."¹

From "The Soul of Man" by C.G.Jung

"In societies which call themselves 'socialist', Marxism is, on the one hand, a method for understanding and changing social life and, on the other, an ideology which rationalizes from any other system of thought."²

Planning and design in ancient China cannot be studied without an understanding of the Feudal system of ancient China and its influence on the vernacular ideologies. Likewise planning issues of contemporary China cannot be understood without an understanding of Communism and Mao's ideology. When in 1949 Mao and his comrades took over the Republic of China, Communism was instituted as the only legalized ideology in the national constitution. The penalty for anti-Communism was often death. Even today, Deng's government still labels itself as an orthodox Marxist and severely attacks political dissenters as "Capitalists".

People living outside China too often consider the main stream of Chinese culture as consisting only of Taoism, Confucianism, and Buddhism and seldom explore the significant influences of Marxism and Maoism in modern Chinese society. They wish China could be more traditional and preserve its own cultural identity. Those who live inside mainland China, especially the younger generations, are educated in Communist ideology and are too often unable to access the traditional philosophies of Chinese culture. After the "Open Door" policy of 1979, the prevailing Chinese opinion has been how China can become "Modernized" and "Westernized" as fast as possible. Nevertheless, both of these views reject the rationale that China should continuously adhere to Marxist rules, and both lack a comprehensive understanding of Marxism and its integration in China's ethos.

¹ p 74, *Man and His Symbols* by C.G.Jung.

² p 1, *Introduction of Chinese Marxism in Flux*.

2.1. Marxism in China

Marxist Epistemology and the Chinese Revolution

As the founder of the Communism, Karl Marx influenced the process of human history, no matter how many controversies this may provoke. He represented the commencement of Social Scientific Philosophy and summarized the work of the Utopian socialists from Saint-Simon and Fourier to Owen and Proudhon. Facing the dramatic social changes in the nineteenth century the severe poverty, brutal capitalist exploits, and class disparities Marx was the first to apply mechanics such a scientific principle in interpreting history and social phenomena. He labeled his philosophy as "dialectical materialism".

In his notion of economic theory (which will be elaborated in the next chapter), Marx stated a formula in which the economic structure of a society determines the formation of ideology, and by doing so, ideology reshapes the economic basis of the society. Through discourse on the labour force and the organization of productivity which determine the superstructure of ideology, he believed man had to confirm himself by recognizing that he indeed lives in a material world and that the material world of matter comes first and then human consciousness. The authenticity and objectivity of the material world has existed since history began and will continue to exist, as long as man is part of the objective world. According to Marx, the fundamental changes in a society should come from its economic system: a new way of resource distribution, a new way of cooperation, and a new way of ownership.

The characteristics of Marxist economic determinism originates from Marx's epistemology of dualism, "Marx defended a distinction between the real object and the object of knowledge, and in doing so broke with empiricist epistemology. Central to his position was the distinction between ideology and science. Ideology concentrated only on 'phenomenal forms', arising from a perception of how things 'represent themselves'. Ideological knowledge, therefore, was produced on the basis of a

correspondence between categories of thought and experience. On the other hand, scientific knowledge was produced on the basis of a distinction between appearance and essence." Marx had made a clear point on this" but all science would be superfluous if the outward appearance and essence of things directly coincided".¹

Marxism opposes any theology and empiricism. The two spheres in Marxism, knowledge and materialism, are synthetic and eventually understandable, that the development of science can ultimately discover the "truth" of the objective world and of man himself. "Morality, religion, metaphysics, all the rest of ideology and their corresponding forms of consciousness, thus no longer retain the semblance of independence. They have no history, no development, but men, developing their material production and their material intercourse, alter, along with this their real existence, their thinking and the products of their thinking. Life is not determined by consciousness, but consciousness by life."² As an application, Marx explained that human history changes according to certain principles:(1). changes start from quantitative variation to qualitative alteration; any quantitative change results in a final qualitative change; (2). new society emerges by negating the old; (3). the world consists of two contradictory realms. He forecasted that the current capitalist society would eventually bankrupt itself and collapse through crises of its own making. By this rationale Marx advocated that the proletariats should consciously fight against capitalism, which would be ultimately negated.

Surprisingly, Marx, in his early works appeared more like a humanitarian. In the Economic-Philosophical Manuscripts of 1844, Marx spared no effort in discussing the human alienation phenomenon accompanying industrialization:" Since alienated labour:(1) alienates nature from man; and (2) alienates man from himself, from his own active function, his life activity; so it alienates him from the species. It makes species-life into a means of individual life. In the first place it

¹ Mark. III Capital, 1959, p.817.

² p 223, "Karl Marx" in *The Nature of Man*.

alienates species-life and individual life, and secondly, it turns the latter, as an abstract and alienated form." ¹

Today's "Orthodox Marxism" practiced by the socialist countries refers only to the economic determinism of Late Marxism which, although Marx emphasized the role of the economy as a "synthesis of many determinations", is a fixed, linear, and static framework. Engels delivered a concise message about Dialectical Materialism at Marx's funeral: "Man, first of all, has to eat, drink, and settle down, then be involved in politics, science, art, religion, etc.; Thus the direct productivity of materials, and the economic development status of a nation or an epoch formed the fundamentals. The political system, legislation, art and religion were based on such fundamentals, therefore, ideology must be defined by the fundamentals."² To alter a social system, for a Marxist, is to alter the economic foundations. "Material force must be overthrown by material force, but the theory too becomes a material force once it gets hold of men. Theory is capable of getting hold of men once it demonstrates its truth with regard to man, once it becomes radical. To be radical is to grasp something as its roots. But for man the root is man himself."³ Here Mao noted: "The consequences of the struggle between the classes must be that some classes succeed, some do not. This is called history, this is the history of civilization for thousands of years."⁴

Introduction of Marxism in China-the Critical period of history

It is no accident that Marxism, as a Western philosophy, was imported into contemporary China and that it was once popularly favoured by the intellectuals. Throughout the dark ages of the Qing Dynasty-the last Feudal Emperor, China was conquered by eight Western Imperialist countries who brought their military power, opium, church, and scientism into China.

¹p 222, Ibid.

² This as according to the Chinese copy and translated into English.

³ p 224, Ibid.

⁴ In 1949, Chairman Mao addressed a speech called: "give up the Utopian, and prepare the fighting", in which he synthesized this point.

In 1840, eight years before Marx's Communist Manifesto, China surrendered under the attack of Britain's invasion. After the door of China was opened, most intellectuals felt surprisingly inferior. Why is China so poor? Why is China so backward? It is the endless suffering. In one aspect they had to accept the fact that China had already lagged behind the rest of the world, meanwhile they had to learn not from somebody else but from their enemies. Until the news of the October Revolution in Soviet Union spread into China, the Chinese believed that Marx was a brilliant prophet who represented the poor people and thus applauded him.

Besides these external factors, there was a gradual awareness by these Chinese patriotic individuals of the insufficiency of the traditional Chinese culture. The rooted Confucianism was, for the first time in Chinese history, criticized for its introversive and self-sustaining framework. The Chinese Feudalist hierarchy was based upon the social hierarchical model set up by Confucius, which severely restricted the reform or progress of the political system. After Yan Fu translated and introduced Darwinism into China in the late Qing Dynasty, Li DaZhao, Chen DuXiu, and a group of scholars had put forward a serious debate about Confucianism. In 1919 this philosophical dispute triggered a demonstration by thousands of radical students in Beijing against Imperialism, Feudalism, and Confucianism. They called themselves the "New Culture" movement. pioneers. Mao was one of those radical students.

Mao "Sinoficated" Marxism

In July 1921 the Chinese Communist Party was secretly established in Shanghai. Mao, who came from a rural landlord family from Southern China, soon become one of the party members. He was educated at a local institute where he learned the vernacular Chinese philosophies and witnessed the miserable life of the impoverished people. In his two early essays "The Analyses on the Different Classes in China" and "The Survey of HUNAN Farmer Campaign", Mao proposed that the most realistic way for a Revolution in China was to start from the countryside, particularly the remote mountain areas which have no political and military control. After he and his comrades successfully led a rebellion in a rural area,

they went to a "Red Power Base" in JinGang Mountain. Mao decreed that the solution for China's revolution was to arouse the masses to action, especially farmers and that China faced two specific tasks: one was to solve the peasants' poverty problem and the other was to overcome the dominance of Imperialism and Feudalism.

Mao's ideology was a combination of Marxism, Taoism, and Confucianism. Although Mao himself continually declared his dislike for Confucianism, he nevertheless believed in Confucianism and in the Feudalist roots of Chinese society, as he himself could not cast off the yoke of Confucianism. Confucianism is utilitarianism; Maoism is also very practical. Mao said: "Hence a man's knowledge comes from two parts, that which comes from direct experience and that which comes from indirect experience. Moreover, what is indirect experience for me is direct experience for other people. Consequently...knowledge of any kind is inseparable from direct experience."¹ That, as a theoretical basis of Mao's methodology, is called the "mass line" for the Chinese revolution: "take the ideas of the masses (scattered and unsystematic ideas) and concentrate them (through study turn them into concentrate and systematic ideas), then go to the masses and propagate and explain these ideas until the masses embrace them as their own, hold fast to them and translate them into action, and test the correctness of these ideas in such action".² During the Cultural Revolution, the influence of Confucianism upon Mao became significant. Hatred of the city, arbitrary ways of decision-making, intoxication of being worshipped by people, and linear thinking were all characteristics of Mao which were deeply related to his role of a Confucianist-Feudalist Emperor.

From Mao's ideology one can also find certain vestiges of Taoism. In his many books Mao directly used the concepts Yin and Yang to explain the dichotomy of the universe and the revolutionary processes. He developed his own concept of "Dualism of Contradictions" which was another version of Yin-Yang of Taoism and provided many examples demonstrating how

¹ p 300, Mao Zedong, (1937), SW., I, 1965.

² p 119, Mao Zedong, (1943), SW., III, 1965.

goodness may be transformed into badness as we tend to overdo something good without limitation. To be always balanced, "one should not feel too proud of himself when he gains achievement; he should also not feel too disappointed when he fails to fulfill his goals." Self reflection and criticism are always needed.

Mao's personal tragedy resulted from not practicing what he preached. He and his socialist system alienated him from the general public, and from himself. The Chinese, after a long history of worshipping the Lord, unconsciously demanded another heroic icon, Mao shaped himself into this image and filled the position. He made Communism synonymous with China, carried a socialist banner to confront the people, and walked along a Feudalist path which he couldn't change. He created the current totalitarian political system in which he controlled every aspect of civic life just as a grandfather controlled his children in kindergarten. He forbade people to access to the traditional philosophy and religions of China, instead promoting Marxism as a new religion for the whole country. No doubt, Mao changed Chinese history.

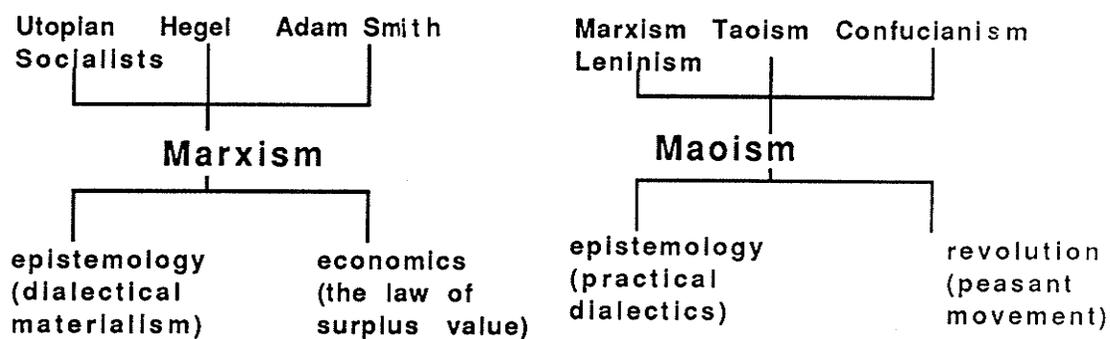


Figure 15. Comparison of the formation of Marxism and Maoism.

2.2. Urbanization under Mao's Politics

Under Mao's dominance China's national economy became militarized. Policy was like a military order. Everything, including urbanization, must be in control of the central government. Initially, urbanization meant the standard and natural process of industrialization and was usually indicated by the percentage of urban people among the total

population. After the Industrial Revolution most cities in the West became rapidly "urbanized" physically and demographically. Through Colonial invasions of Shanghai, Qingdao, Dalian, Shengyang, Hong Kong and other cities, numerous Chinese coastal cities were developed as industrial centers. Mao and his Communists subsequently condemned "urban" as a "paradise for the Colonists and Opportunists". Thus, it is not surprising that after the 1949' Liberation the new government set up strict laws to control the urban population and economy.

Mao's biases towards the City

Above all, Mao advocated and ordered the confiscation of private property. Since ninety per cent of the comrades in the new government had a rural background, they also believed the city, as a commercial place, was contaminated with Capitalism and so applauded Mao's ideas. This work he carried out in the first three years of his new political system, thus immediately fulfilling his dream of governmental ownership and usership. Mao further announced that the national economic sectors should be divided into two sectors: the productive sector, such as heavy industry; and the unproductive sector, such as urban construction and housing. The productive sectors are the national economic pillars and generate more Gross National Product; the unproductive sectors are the public welfare system which should be non-profitable. Mao insisted that China should invest more in the productive sectors and reduce the cost of the unproductive sectors, hence the size of the city, in terms its population and land, should be strictly administered and controlled in order to achieve these goals.

Mao's government developed varieties of passive and active measures to restrict the growth of the urban population, namely migration controls. Urban policies demanded that urban residents should have a "permanent registration booklet" and "working identity document", otherwise he or she was living illegally within the urban area. Through the "rationing system", illegal residents could not get any grain, cloth, meat and egg "rationing tickets" which meant he or she could not obtain basic

supplies. As well underground trading for "rationing tickets" issued by the government would illicit penalties from fines to imprisonment.

A more effective control policy was the "Sending-down policy" which returned urban citizens back to rural areas. People who initially came from the countryside before liberation; who politically disagreed with Communism; who caused crimes or social troubles; and those intellectuals including comrades, were designated to be returned to the rural areas. This active policy reached a critical point during the Cultural Revolution (1966-1976), where millions of Red Guards (organization of leftist communists) and graduates were expelled. In Shanghai, for example, within these ten years, 1.29 million youth were driven out.¹

Mao's anti-urbanism policy had nothing to do with his birth-control plan. He once advocated a "more-babies" policy as the Soviet Union did until the mid-1970's, but became aware of the serious population problem in China and attempted to correct his mistake with a family planning program. His decentralization strategy cannot be understood as an effort to solve population congestion in the metropolis, but rather due to his antagonistic feelings towards cities, like Karl Mark was about the possible disparities between urban and rural, between workers and peasants, between intellectuals and the labouring masses.

Urbanization in China-period of frustration

Mao's extreme anti-urban attitude caused serious disruptions in the urbanization process in China. There were at least two significant nationwide migrations from city to country-in 1958 and the 1970's. In 1970 the urbanization level in Europe was 66.0%; 74.2% in North America; 56.7% in Soviet; 71.4% in Japan,² but only 12.84% in China(see table 1). More importantly the dramatic migration of unskilled urban youth from the city to rural areas surpassed the sustaining capacity of the agricultural system. The "Red Guards" who were expelled on one hand could not help

¹ p 445, Asian Survey, Vol. XVII, no.2. (May 1976).

² p 99, in Introduction to Urban Geography by Yu Hongqun.

farming; on the other became a burden for the villagers. Within the metropolis, since the intellectuals were sent to the countryside, the urban economy declined severely, particularly the service sectors. Shanghai, for instance, once the biggest harbor city in the Far East before 1949 as well as the central commercial and trading metropolis on the Pacific Coast, under Mao's government, lost its flourish and was replaced by Tokyo and Hong Kong as major centers.

Mao was illiterate in terms of knowledge of the economy. His governmental investment for the city depended not upon its economic function but on its political significance. Although the national urbanization policy was synthesized as: "positively encouraging the development of small cities; appropriately building the mid-sized cities; strictly controlling the big cities,"¹ most of the coastline cities of Eastern China, which had been well established before the liberation and had played a significant role in national economic development, were ignored by Mao's government. Mao stubbornly infused money into his hometown, those "Red Army Bases" and Political Capitals(see table 2).

Unlike Mao's original intentions, his decentralization policy did not immediately transform China into a Communist society, rather, it brought economic disaster. The pervasive national economic crisis pressed more people to migrate to the cities, especially along the eastern coastline. People earlier moving out of the city soon fled back to the city through various means. About 0.5 billion Chinese live along the eastern coast which is only one tenth of the national territory(see table 3) but consists of an urban population of 118 million. Around Shanghai, Nanjing, and Wuxi Delta, the urban population is 42% of the total with 33.3 million people living within a 46,000 square kilometer area. Around Beijing's area of about 52,000 square kilometers, there are a total of 28 million people (10 million urban people). In the Shenyang area (Mudrian), there is a 53.5% urban population. In fact, 42% of the total urban population lives within several metropolises of over 1 million people(see table 4).

¹ The City Size, according to 1984 Central Government Planning Ordinances, ranges from big city(population over 500,000); middle city(population over 200,000 but below 499,999; to small city(population below 199,999).

Housing, transportation, and employment in those cities over one million are causing serious problems. Mao's urbanization policy failed in reality.

Table 1. Urbanization in China under Mao's Government.
(from 1949 to 1976)

Years (millions)	Total Pop. (millions)	Urban Pop.	% Urban
1950	551.96	61.69	11.2
1956	628.28	91.85	14.6
1960	662.07	130.73	19.7
1966	745.42	102.66	13.77
1970	829.92	106.54	12.84
1976	937.17	112.43	12.00

(Source: China: A Statistic Survey in 1986. Beijing)

Table 2. Comparison of Population in the Political and Economic Cities.

five provinces	political center	economic center	population in political city		(Ratio)
			1953	1978	
			population in economic city		
Sichuan	Chengdu	Chongqing	0.48	0.72	
Hebei	Shijiazhuang	Tangshan	0.54	0.98	
Anhui	Hefei	Huainan	0.64	0.96	
Inner Mongolia	Huhehaote	Baotou	0.99	0.54	
Shangdong	Jinan	Qingdao	0.74	1.00	

(source: Same as Table 1)

Table 3. Population in Coastal Provinces and Non-Coastal Provinces in China

Province	No. of cities per province	Urban Population (million)
<u>Beijing</u>	1	5.86
<u>Tianjin</u>	1	5.38
<u>Hebei</u>	12	7.35
Shanxi	10	6.38
Mongolia	16	5.35
<u>Liaoning</u>	17	18.82
<u>Jilin</u>	12	7.27
<u>Heilongjiang</u>	16	10.62
<u>Shanghai</u>	1	6.98
<u>Jiangsu</u>	13	9.66
<u>Zhejiang</u>	11	6.93
Anhui	15	6.47
<u>Fujian</u>	10	4.30
Jianxi	12	5.75
<u>Shandong</u>	19	18.48
Henan	18	8.82

Hubei	14	11.64
Hunan	20	8.39
<u>Guangdong</u>	17	11.9
<u>Guangxi</u>	11	5.35
Sichuan	19	15.18
Guzgou	6	4.88
Yunnan	11	5.39
Tiebet	1	0.11
Shaanxi	8	5.40
Gansu	12	5.24
Qinhai	2	0.66
Ninxia	4	1.13
Xinjiang	15	4.18
Total	324	211.87

Note: The underlined provinces are those located along the eastern coast line. Source: Same as Table 1.

Table 4. The Size-Class of Chinese Cities and Its relationship to the Urbanization Process.

Size-Class	No. of cities		Share of city (%)		Population (millions)		Share of all urban pop. (%)		Share of all city pop. (%)	
years	53	82	53	82	53	82	53	82	53	82
<u>over 1,000,000</u>	<u>9</u>	<u>20</u>	<u>5.5</u>	<u>8.2</u>	<u>17.5</u>	<u>42.1</u>	<u>22.6</u>	<u>29.0</u>	<u>40.4</u>	<u>42.8</u>
500,000-999,999	16	28	9.8	11	9.38	19.9	12.1	13.7	21.7	20.3
200,000-499,999	28	70	17	29	7.06	21.9	9.1	15.1	16.3	22.3
100,000-199,999	49	70	30	29	5.99	10.6	7.8	7.3	13.8	10.7
under 100,000	62	57	38	23	3.63	3.78	4.7	2.6	8.4	3.8
totals	164	245	100	100	43.3	98.2	56.3	67.7	100	100

Source: Same as Table 1.

Planning Issues in Contemporary China

Mao died of cancer on September 9th, 1976. However, the vicious consequences of his policies did not vanish. Two important planning issues in contemporary China are Housing and Urban Land Use, and the roots of these problems seem very irreconcilable.

Housing in China was considered a public welfare. Civic governments and factory working units have the obligation for housing construction, which has been taken for granted. The allotment of housing takes account of the housing stock, the number of applicants and the needs of the people to be housed. Generally, a family of one to three members is allotted a one-room unit of about 30 to 40 square meters, a family of two to four can have a two-room unit of about 50 square meters, and a family of more than

four can have a three-room unit of about 60 square meters. However, a national survey in 1982 revealed that the overall average living space per person was only 4.4 square meters; and even smaller for most citizens in the metropolis. Almost one-third of urban inhabitants were on a waiting list for new homes or for improvement of their present building.

What are the causes for housing famine then? The first major reason is the very rapid urbanization and increases of the urban population over the last decade of Mao's tenure. Due to Mao's anti-urbanist policy, China's urban population remained at 12% of the total population for almost ten years since 1979 Mr. Deng¹ abrogated Mao's Communist Utopian policies and urban population began to increase. The government allowed the informal sector to play a major role in the urban economy which allowed the urban population to grow at an unprecedented rate. Estimates indicate there will be an increase of 110.1 million in the urban population by the year 2000. China already has 20 cities of more than one million population. It seems likely that China's urban population alone could reach more than 250 million by the end of the century. Such a rapid growth of the urban population inevitably places heavy housing burden on housing needs.

The second major reason for the severe housing shortage is that housing construction had been almost ignored for two decades. under Mao The proportion of national investment in construction committed to housing was as low as 4.3% during the Cultural Revolution(see table 5). Although the current national investment in housing has risen from 7% to 8% of the GNP, only 12.6 million dwelling units were constructed in 1985. This increase seems almost fruitless.

Table 5. The Pattern of Investment in Capital Construction, 1953-84.

Interval Investment (hundred million yuan)							
Productive construction	%	Non-productive construction	%	Housing construction	As % of total investment	Urban Public utilities investment	As % of total investment

¹ Mr. Deng Xiaoping took the Premier position after Mao's death and become the first Chinese leader who initiated the national economic reform since 1979.

1953-57	394.50	67.0	193.97	33.0	53.79	9.1	14.43	2.5
1958-62	1029.66	85.4	176.43	14.6	49.56	4.1	27.55	2.3
1963-65	335.05	79.4	86.84	20.6	29.09	6.9	12.31	2.9
1966-70	818.02	83.8	158.01	16.2	39.32	4.0	17.38	1.8
1971-75	1455.16	82.5	308.79	17.5	100.74	5.7	33.61	1.9
1976-80	1729.94	73.9	612.23	26.1	2771.29	11.8	95.12	4.1
1981-84	1345.17	57.6	190.48	43.0	111.19	25.1	31.85	7.2

(Source:China:A Statistics Survey in 1985. Beijing:Statistical Bureau, pp. 67-9)

Note:The time intervals are unequal because of the nature of the data and also the political history of China in the past three decades.

Housing does not simply provide a shelter, it links economic, social, and political spheres. To construct new housing means to build more roads, more schools, add more buses, and provide more employment opportunities. Housing construction in China is strictly controlled by these restrictions. In Shanghai, approximately 60% of the workers have to transfer at least twice every day on their way to work because of the random arrangement of public housing and the strict legal system of housing ownership and management: whereby a household has no right to switch dwelling units without governmental permission.

Behind housing shortage is yet another unbelievable fact of the failure of Mao's economic and political system. Typically, the average monthly rent for a family was 0.13 yuan(\$0.05) per square meter of usable floor space in 1985. Each family, if the householder works for governmental factories or institutions, can receive monthly rental subsidies from the government according to dwelling unit space-the bigger the unit the greater the subsidy. Since most comrades and government officials receive larger houses or rooms, they obviously gain more benefits from this rental subsidy policy.

On the one hand the Chinese government declared that urban land has been in rather short supply over the last several years which meant that national housing programmes could not be carried out smoothly. On the other hand there is tremendous land being wasted and used inefficiently. Military bases, for example, still occupy a large portion of most Chinese city' downtowns or public park spaces. Different Government Departments, such as the Industry Ministry and the Communist Committee of the Central Government exert strong influence in the decision-making processes of city planning.

Planners in China are often caught in a dilemma of planning for the general public or for political goals. Every issue of planning is directly related to the Communist ideological roots which were legalized as the essence of Chinese belief. Most cities in China are experimenting with the idea of housing commercialization, i.e. housing is no longer a welfare from government but a commodity that can be bought or sold. However, this immediately brings up the question of who is going to provide the land for these privately owned houses? who will provide and own the urban infrastructures? If land becomes privatized, so will the urban economy; then what would it be really meant by "Socialist China"? This is a dilemma which cannot be solved only by planners.

2.3. Planning and the Role of the Planner in China

What is the role for the planner in Socialist China? By definition, socialism is a planned political system. Planning is, therefore, the main characteristic of a socialist system. If we examine the practical experience of planning in China, we find that the previous assumption could not be taken for granted. On one hand, socialist politics enhances the advancement of social cooperation, but on the other it emphasizes the role played by the central government and always tends to revert to political totalitarianism within a single ideological doctrine. Socialist planning inevitably denies the law of value and the diversity of individual needs. "To serve the people" is the slogan of Socialist planning which seems beneficial to every individual, but in fact Socialist planning is only for the good of the politician.

Contemporary planning in China commenced at the turn of this century when a group of architects who were educated in Europe and America went to China and formed a planning board under the prevailing government. This was a crucial time in that "Functionalism" was replacing "Classicism" in the West. The Chinese pioneer planners were subsequently influenced by both functionalism and the Classical school thereby advocating both a beautification movement of the metropolis and the preservation of the traditional style of Chinese architecture. "To preserve the classical

Chinese architecture style, especially for the public buildings" was, for example, legalized in the planning guidelines of the "Capital Plan" (Plan for Nanjing, 1929). Overall, however, this period in planning did not influence any systematic approach towards a Chinese style of planning.

The Planner as the Political Servant

Since 1949, when the People's Republic of China was established, the new government completely adopted a Soviet style planning system. At the Municipal level, Planning Bureau was made responsible for urban policies, implementation, and control of urban construction. In addition, every major center had a Planning Institute which directed physical planning, civil engineering, and housing programs. This legal process for planning of cities is still carried out today, which includes:

No.12:City planning consists of a Master Plan and an Area Plan.

No.13:Under the leadership of the municipal government, city planning should be done by planning institute incorporated with other sectors such as economic, cultural, and military sectors.

No.14:The general planning period for the Master Plan is twenty years. The Master Plan should cover: the nature and size of the city; construction standards and indexes; land use and development strategies; engineering, planning and other sectoral planning; economic and technical evaluations; implementation procedures; and a short period plan...

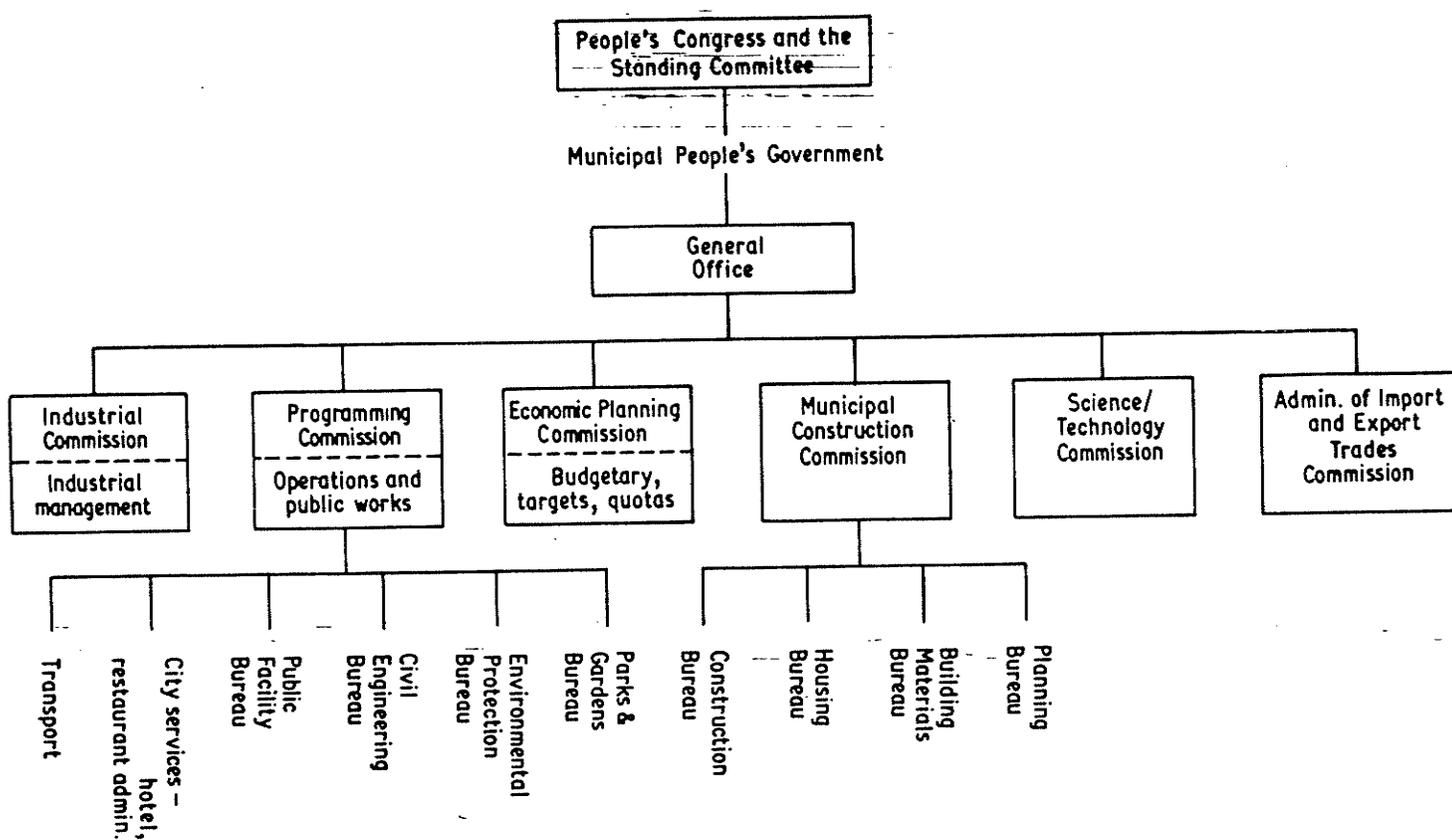
No.18:The Master Plan, before submission, should be approved by the municipal people's congress.

No.19:The approval rights depend upon the city's importance: The plan for provincial political capitals and any city over one million population should only be approved by the central government; others can be approved by provincial level

governments; Town planning should be approved by the municipal government.

No.20. The Master Plan cannot be changed by any individual or organization unless approved by the municipal government as well as the people's congress. Municipal government has the obligation to report on the evaluation and the implementation of the Master Plan to the relevant authorities every five years.¹

¹ Source from the government document "1984 City Planning Ordinances" published in China. The numbers is the code on the Ordinances.

Figure 16. Typical City Planning Administrative Structure in China¹

¹ p 154, "Land and Housing Policy in Chinese Urban development, 1976-86" by A.Badcock in Planning Perspectives, 1(1986) 147-170.

Guided by Mao's ideology, China deviated from the Communist path of the U.S.S.R. increasingly after 1958 when Mao realized the Soviet planning model largely served large-scale industry. China, he decided, should go for a populist, voluntarist approach. Mao then launched "three forms of services": to serve proletarian politics; to serve socialist production; and to serve the livelihood of the labouring masses. It is undeniable that Mao's ideological notion intended to change China into a participatory socialism, i.e. every citizen should be a master for his own country. By doing that, Mao ordered intellectuals, including planners, to more directly keep in touch with the general public by working together, living together, and planning together. As a consequence of Mao's anti-urbanization policy, planning's targets focused upon small-scale industries in the city as well as in the country. In the 1970's, the planning goals were: combining agriculture and industry; combining urban and rural, benefiting production and facilitating the people's livelihoods.

The experience of planning in China proves that city planning, at its most basic, is a reflection of the political system. Under a monopoly political system planning more directly serves political operations and the state propaganda system. The real planner, in a socialist country, is the politician himself. A socialist politician should be competent and very knowledgeable in sciences, philosophy, economics, and management in order to be a good master. This standard is almost unachievable for most of us, therefore, no doubt, planning gradually becomes rigid. For decades, Chinese planners have been planning for public facilities and housing based on a standard called the "Thousand People Index", which means the public facility index per one thousand population, such as 2.5 hospital beds for 1000 people, 1.3 M2 floor space for cinema, so on. Hence, planning seems to supply a scientific quantification method of determining size and spatial dimensions of the city.

Since 1978, Mr. Deng Xiaoping has promoted economic reforms in the city. Many changes have taken place. In terms of the economic aspect, Deng Xiaoping reinterpreted Socialism from Maoism and Stalinism: "For many

years, urban development has been regarded as nothing more and nothing less than the industrialization of a city. The formula of transforming consumer cities into producer cities was put forward by our Party long before the cities were entered. It was directed towards the situation in the old society, in which their productive capacity was low... But over a long period to grant this formula primary status is totally unscientific."¹ Deng's Pro-Urbanism originated from his pragmatic views towards the socialist system. He believed that Marxism did not provide a systematic and clearly delineated blueprint for Socialism, therefore, it had an inherent flexibility and it was the responsibility for the Socialist to practice it in many ways. He thus explained the Socialist economy entirely differently from Stalin and Mao. Deng insisted that the Socialism in China could separate the usership and ownership from each other, meaning that the private sector could make use of State owned materials or enterprises. He called this the multiple channels of construction. He eliminated the need for all the profits to be donated to the central government each year, substituting taxes instead. In other words, the more they produce the more benefits that can be shared by all the workers. The encouragement of private sector dynamics soon stimulated the market, and then, the industry, and the needs of urban renewal and construction.

The Planner as a Technocrat

In 1978, the Central Government introduced a new law regulating five per cent of all profits made by industrial and commercial enterprises within an urban area be invested in urban construction. In 1979, the State Administration for Urban Construction was formed in Beijing as the highest administrative body to guide urban renewal, housing, and land uses. In 1981, at the meeting of the Urban Construction Bureau in Beijing, the Vice Premier emphasized that city planning in China should be legalized, and standardized. The work of urban planners and architects must receive formal approval from city governments and from the local people's congress. A planning framework which included a planning board, city

¹ GuangMing Daily in Shanghai, 21 May 1980.

government, and local congress was thus officially established. In 1984, the Central Government promulgated "City Planning Ordinances" and in 1987, the first draft of a constitution of planning was approved.

Today is a turning point for Chinese planners: from the political servants to the professional technocrats assisting in decision-making. Mr. Wang Hua-bin, the vice-president of the Chinese Architectural Society, interpreted the main tasks of the planner as: (1) revising urban plans with an emphasis on housing and public facilities; (2) overall development of rural villages and market towns; (3) rational utilization and reconstruction of older cities. Facing severe pollution problems and chaotic urban land uses, the planning theorists in China are looking for experiences from the West. Very realistically, Mr. Wang regards the emergent planning issues in China as being land use management, rational planning, protection of the environment, and resource distribution strategies.

Although Deng's government still claims that China is a "socialist" country, he devised the new term the "Preliminary Socialism Stage" to describe the present situation of China. He agreed that China should give up those aims which are beyond anyone's grasp and try to incorporate the economic theories of the Western world. Since 1979, China has begun to open several eastern coastal cities for foreign investors, and within those "Special Economic Zones" Capitalism was allowed by the Chinese government.

Under this new economic circumstances, the traditional planning methodologies lose their validity. The rapid change of land uses, new construction, and private ownership of land and industry, destabilized the city planning policies made by Mao. Planners may now even complain to the policy makers for more freedom and rights to make planning decision by themselves. Many of them wish China could have a zoning-by-law as the United States does. Others believe that by importing such Western Planning techniques, China could shorten its process of modernization in terms of scientific planning. Notwithstanding, the question becomes: can the Western Rational Planning Models fit into China's political context?

As a planner in China, what and how much can they do to overcome the ideological limitations? Modern China is a paradox itself. The hopes and disappointments come together; the new and the old come together; socialism and capitalism come together. What is the path for China towards a brighter future?

2.4. The Paradoxes of Modernization

As I thought about the dilemma of China, I often recalled an ancient Chinese Parable which says "a long time ago, a man in Zheng Country wanted to buy a new pair of shoes. He measured his feet with a ruler, then left home for the shoe shop in the town center. As soon as he entered the shoe shop he found that he forgot to bring the ruler with him. He dashed home, found the ruler, and returned to the shop just after the shop closed. He felt greatly disappointed, when a friend met him and asked why he did not try the shoes on his feet directly. He answered: 'I'd rather trust my ruler.'" Today's China is similar to that man in the parable. The "shoes" and ideologies we use have become older and out-dated. The "ruler" and new way of thinking we seek is still a long way off. Though changes may take place in a short period of time, "ruler" and "feet" still seem separate, as do theory and practice. The only hope is to examine the ideological roots of city planning and determine those paradoxes which we may or may not avoid, but we believe that a prepared mind is always better.

The Five Paradoxes

The first paradox is the balance between the negation of tradition and the recognition of tradition. Such a contradistinction can be seen even in Mao's philosophy. Mao attempted to neglect the essence of Confucianism in order to change the negative aspects of Chinese tradition, however, Mao's work in nature can still be identified as a reinforcement of Feudalist and Confucianist ideologies, which emphasize social hierarchy. Mao could not escape the shadow of Chinese tradition and ultimately reached the same goals as Confucianism but with different approaches. The same risks exist today, both the antagonism to the Chinese traditional

ideologies and the antagonism to the Western culture could bring China to an unbalanced modernization in future.

The second paradox is the general attitudes towards science and technology. As the West has experienced, science and technology can not only determine the advancement of civilization but may also enslave human life. From advocacy of science to superstition of science, man lost his mutual-relationship with science and become a slave of his own intelligence. "Four Modernization Aims by the Year 2000" is the myth for the majority of Chinese, after the close door policy for almost half century, Chinese realized that the key point for Western civilization was the contribution of science. They hoped that science and technology can strength their country, however, they have to be clear what modernization really means.

The third paradox is the awakening of individualism and the collapse of the collective of the Chinese ethos. Many classical Chinese philosophers emphasized the importance of humanity, such as Confucians' "Doctrine of Mean" or the "transcendent" view of Taoism, but none of these concepts relates to the individual's significance in the society. In contrast, emphasis is placed on the importance of the collectiveness of man and the dissolution of the individual ego. Under Western influence the new democratic tendency in the Chinese social system led to the dissolution of traditional values. The new generations do not easily accept that the individual should submit to the social norm. The question then is how to balance the needs from these two opposite forces.

The fourth paradox is the correlation between economic reforms and political reforms. The initial motivation for economic reforms was to change the unbalanced economic structure, however, after several years of experimenting, people began to realize that the economy is tied to politics. Planning for the national economy or urban economy must thus be associated with the success of the political system.

The final paradox is the pluralism of contemporary Chinese ideologies and the national identity of its culture. Many different Western schools

of thought have been introduced into China in the past ten years such as Freudian, Structuralism, and Existentialism. The humanitarianism of the Western Philosophies has been especially appreciated by Chinese artists, students, and scholars. The tendency of pluralism in thoughts is inevitable, but the question becomes how to preserve vernacular culture and ethnic identity?

The Process of Modernization

The above five paradoxes will consistently accompany the process of modernization in China. In my opinion, whether or not China can achieve its modernization depends upon whether or not China can manage these paradoxes. The former Premier, Zhou En-Lai, proposed "Four Modernization Aims for the Year 2000" when China could be one of those countries whose industry, agriculture, science and technology, and national defence have been "modernized". By definition "Modernization" implies the process of a country or a group of people up-dating and fitting into the modern context in terms of their living standard and the way of thinking. Simply, "Modernity" or "Modernism" has been used to refer to mean the advancement of material aspects, but more frequently, "up-dated" knowledge and thoughts. To live in a modern society does not automatically give a person a "modern mind" or "modern consciousness". "Many people call themselves moderns, especially pseudo-moderns. Therefore, the real modern man is often to be found among those who call themselves old-fashioned."¹ The "Four Modernization Aims" itself creates a paradox in that without the modernization of man and his thought, the modernization of materialism will never be sufficient.

The "Four Modernization Aims" myth and Mao's totalitarian ideology have one thing in common, that is their single dimensional thinking. Mao's Cultural Revolution failed to eliminate the impacts of traditional ideology on modern China, instead destroying the previous contextual framework of culture and religion. The "Four Modernization Aims" will also be in vain in terms of solving the economic problems without a grass

¹p 76, *Civilization in Transition* by C.G.Jung. c. 1957.

rooted change in ideology. Indeed it will demand political reforms eventually. In other words, tradition tends to be invalidated and a holistic approach still seems beyond the majority of Chinese. Chinese planners no longer take FENGSHUI into consideration in planning and Chinese architects no longer include Confucianist social norms and religious rules into their designs. Science and Marxism woke up the Chinese consciousness from dreamland; "symbolism" is nothing more than a substitute term for "style" or "fashion".

Can the Chinese regain their unconscious world again? We all know it is not only a matter of necessity but also of impossibility. The dualism between consciousness and unconsciousness, between materialism and mentality cannot be simply solved by withdrawing from the conscious part and reverting to the former situation. Because Mao's totalitarian ideology cannot relate to an open and dynamic economy does not mean we should give up economic reform and return to the Maoist road. Many of us are struggling between religion and science from day to day, and the answer should not be as simple as simply giving up our scientific thoughts and going back to the mysterious world of Buddhism or Taoism.

The hope of China's modernization relies upon the establishment of a new view of the world which can accept the paradoxical situation and live with it. This is a new belief system in some ways can and cannot be identified with religious or scientific movements from previous times. The dualism of consciousness and unconsciousness of human beings can only be healed through: (1) conscious efforts of finding those paradoxes and attempting to balance them with the new way of thinking; (2) time which is an unconscious process that cannot be wholly decided by any individual. In this way, China's modernization depends upon both the distinguished efforts of every Chinese as well as the opportunities.

Planning's Response to Modernization

A city planner in modern China has to know both what he can and cannot do, because planning will play a significant role in the modernization process of China. If it targets a comprehensive vision, however, it may

also be very true that the important task for today's planning is not just to strive for a specific Utopian as we once did, but also to learn to adjust itself to become more adaptable to every situation. I think what I can put forward in my thesis is not a framework or methodology which can be popularly used by planners in China, rather, a general understanding from the "inside out" and from the "outside in". Hence, I would like to enumerate three aspects which I think should be addressed in Chinese planning practice.

(1) Planning with a New Belief

Planning inevitably is connected to our belief system. Rational planning relates to Scientism, zoning relates to Capitalism, traditional Chinese planning relates to Confucianism or Taoism, and Mao's planning system relates to Marxism and Feudalism. Modern Chinese planning cannot evade this situation. In that sense, any effort which tends to copy Western planning techniques will be in vain because technique cannot be used without a certain belief system.

Religion is a kind of belief, ideology is a kind of belief, science is also a kind of belief; belief comes from faith and intuition. My personal belief will be elaborated primarily in the last chapter of this thesis. I would like to point out, however, that belief is generally concerned about the relationship between man and nature, man and man, and man and the unknown mystique. This is also what Greek metaphysics was concerned about. For me, the new metaphysics will emphasize the unity of the Trinity of nature, man, and the unknown. For China, the reconciliation between man and his natural environment becomes not only a desirable thing but a necessity. Planning should integrate this notion into its value system.

(2) Planning with Rationality and Intuition.

The new belief system should not consider Rationality and Intuition as two opposites but as two characteristics of a single whole. Learning Western planning techniques and practicing the Chinese way of planning

should not be considered as a contradictions but as complementary. Cost-Benefit Analysis, Future Forecasting Techniques, Decision-Making Methodology can be also applied to China, yet the assumption is that the Chinese planner should also trust his intuition and insights for the future.

(3) Planning for Economy and Ecology

One of the foremost challenges for Chinese planners today is to understand the correlation between the economy and ecology (this will be also elaborated in the next two chapters). A similar point of view held by the Western world is: "Present-day economics is characterized by the fragmentary and reductionist approach that typifies most social sciences. Economists generally fail to recognize that the economy is merely one aspect of a whole ecological and social fabric; a living system composed of human beings in continual interaction with one another and with their natural resources, most of which are, in turn, living organisms. The basic error of the social sciences is to divide this fabric into fragments, assumed to be independent and to be dealt with in separate academic departments. Thus political scientists tend to neglect basic economic forces, while economists fail to incorporate social and political realities into their models. These fragmentary approaches are also reflected in government, in the split between social and economic policies and, especially in the United States, in the maze of congressional committees and subcommittees where these policies are discussed."¹

On the way towards the "Four Modernization Aims", Chinese planners must continue to ask themselves the question: what is the economy for? If China does not want to build its economy upon the violence and the exhaustion of energy, it must cease to follow the U.S. way of "modernization" and seek to maintain a balance between economy and ecology. This is the topic of the next two chapters: the Western experience of planning and the "new way" of planning

¹ p 188, Chapter 7. The Impasse of Economics in "The Turning Point".

Summary of Chapter 2

In order to understand the complexity of planning issues in modern China, one has to know what is meant by Marxism and Maoism and how Marxism was introduced into China under special historical circumstances. Mao's anti-urbanist policy and Deng's pro-urbanist policy are related to their own interpretations of Marxism and Socialism. Chinese planners inevitably have to follow the will of politicians. From Mao to Deng China has consistently faced many paradoxes, and modern planning has to take responsibility to balance those paradoxes.

Chapter 3. Western Thoughts and Their Influence on Planning Discourse

"We have lost the core of Christianity. We have lost Shiva, the dancer of Hinduism whose dance at the trivial level is both reaction and destruction but in whole is beauty. We have lost Abraxas, the terrible and beautiful God of both day and night in Gnosticism. We have lost totemism, the sense of parallelism between man's organization and that of the animals and plants. We have lost even the Dying God..... Observe, however, that there have been, and still are, in the world many different and even contrasting epistemologies which have been alike in stressing an ultimate unity and, although this is less sure, which have also stressed the notion that ultimate unity is aesthetic..... A part of the story of our loss of the sense of unity has been elegantly told in Lovejoy's 'Great Chain of Being', which traces the story from classical Greek philosophy to Kant and the beginning of German idealism in the eighteen century....."

From "Mind and Nature" by Gregory Bateson¹

In this chapter we will shift our views from China to the West. It is hoped that if we can understand the correlation between the epistemology of the West and its planning thought and practice, we can begin to understand some of the problems in planning. Heraclitus said thousands of years ago: "It is wise, listening not to me but to the Logos, to acknowledge that all things are one." A famous worldly philosopher, Levi Strauss, also asserted that all civilizations must have something in common; that may not be shown as fragmentary components but revealed as things that are connected through structures and relations. I firmly believe that what had bothered the ancient Chinese were also bothering the Westerners; what bothers the Chinese today is also bothering the rest of the world.

What the East and West really share is the same psychic dualism between body and soul, between subjectivity and objectivity. As Gregory Bateson suggested, in order to establish a Holistic view towards the future, we should start the journey at the beginning of Hellenic culture.

¹p 20. Introduction of *Mind and Nature* by Gregory Bateson.

3.1. Hellenic Archetypes of Western Thoughts

what is referred to by "Western Civilization" is the general evolution of "European Classical Culture", the integration of Ancient Greek and Roman culture. It began as early as 1100 B.C. when Greece was divided into several city-states (Athens, Sparta, Miletus, Corinth, so on.), partly influenced by Ancient Egypt and partly by its own refinement through all kinds of activities, such as voyage, trading, and production, those countries formed a special and dynamic ethos called "Hellene".

Ancient Greece was a land of knowledge. Poetry, sculpture, music, athletics, and all the arts in the West originated mostly in Greece. Pythagoras, Heraclitus, Parmenides, Socrates, Plato, Aristotle; so many geniuses in the history of civilization were born in Greece. Two of them, Heraclitus and Plato, should be recognized as the founders of Western metaphysics, which, in conjunction with Christianity, has formulated a culture which is masculine, rational, scientific, and anthropo-centric.

Heraclitus and notions of change and unity

Hellenic culture possesses an undisputable delicacy of logic and countless questions of "truth". One eventually realizes that Greek philosophy is a "reasoning" philosophy. Heraclitus praised that "The dry soul is the wisest and best", so whoever has a fire in his soul has the energy for exploration and reasoning. Socrates elaborated on this by emphasizing the close connection between virtue and knowledge which definitely depend upon education and learning, but more importantly as a gift from God. He thought that only ignorants made sins, the wise should have the ability to be Stoic and skeptical towards truth. If one has all of these conditions he would eventually reach immortality in another world.

Some philosophers such as Heraclitus (500 B.C.) however thought differently. Heraclitus was, if not the first, definitely the most fruitful and influential philosopher of "intuitive thinking". Bertrand

Russell described him as: "a mystic, but of a peculiar kind." Heraclitus was especially fond of the meaning of changes. He confessed that : " all things exist and take place because of Logos", which is both discourse and content, both truth and principles. He regarded fire as the fundamental substance; everything , like a flame, is born by the death of something else. He thought "Mortals are immortals, and immortals are mortals, the one living the other's death and dying the other's life". (This statement is similar to what Lao Zi's " the presence is the relative existence; but the absence is the eternal existence".) Heraclitus further declared that there is unity in the world, but it is a unity formed by the combination of opposites, similar to Yin and Yang. He choose Fire and Water as the primary elements of this complexity.

His exposition of this complexity goes as follows:

"The transformation of fire is, first pf all, sea; and half of the sea is earth, half whirlwind".

"This world, which is the same for all, on one of gods or men has made; but it was ever, is now, and ever shall be an ever-living fire, with measures kindling and measures going out".

"Couples are things whole and things not whole, what is drawn together and what is drawn asunder, the harmonious and the discordant, the one is made up of all things, and all things issue from the one".

"Good and Ill are one".

"Nothing ever is, Everything is becoming."

"Nothing endures but change."

"To God all things are fair and good and right, but men hold some things wrong and some right".

"God is day and night, winter and summer, war and peace, surfeit and hunger; but he takes

various shapes, just as fire when it is mingled with spices, is named according to the favour of each".

"It is the opposite which is good for us".¹

Unlike many Greek philosophers of the same period, Heraclitus' intuitive insights into the world were much more organic, dynamic, and balanced. It is he who revealed the relativity of time and space, on which, he pointed out: "you cannot step twice into the same river, we are, and are not"; "all things are flowing". Later Hegel developed as: "Changing is the dominating feature of society" which inspired another thinker-Karl Marx who established his revolutionary theory.

Despite Heraclitus' great emphasis on the validity of sense perception, his notion is basically a dialectical one. Even as he praised the "dry soul" he maintained that the most pleasurable souls tend to be "moist" and "full of water". When a person's soul becomes "drunk" his hidden "intuitive water" springs up. Death is when the soul becomes water completely. More important is Heraclitus' awareness of dynamic chaos in which all the things are in transition, and transition occurs in a circular pattern. The death of one thing is the birth of another. Somewhat abstract, his thoughts were often considered as mysticism until modern quantum physicist, such as Heisenberg, found that Heraclitus' philosophy is the one, out of many Western schools of thought, validated in describing "matter" at the sub-atomic level. Heraclitus deserves to be remembered as the originator of the idea of "wholeness" as a philosophical principle in the West. Whenever we refer to such people as Kant or Hegel in the eighteenth century's Romantic Movement, for example, we should be referring to Heraclitus first as the one who strived to address the gap between subjectivity and objectivity.

Plato and Rationalism

¹ P.57-65. "Heraclitus" as quoted in *A History of Western Philosophy*. Bertrand Russell. c. 1979.

We will now examine the other foremost figure in the West, Plato. He was a well-to-do aristocrat who was born in 428 B.C. and who, as a student of Socrates, inherited the Stoic and Skeptical spirits of his teacher. He also acquired the fruits of thoughts of other early philosophers: from Pythagoras, he gained interest in mathematics and mysticism; from Parmenides, he partook of the idea that all changes are illusionary; more importantly from Socrates, Plato learned to look through the screen of unexamined ideas and the veiled questions of philosophy.

Plato defined philosophy as the "vision of truth" and a philosopher as the "lover of wisdom". Why did he believe there is something called truth?... because he thought there is a distinction between reality and appearance, between objective and subjective world which was firstly set forth by Parmenides. Plato carefully differentiated between "knowledge" and "opinion". His logic was that knowledge means truth of "something"(objective); opinion may be wrong because it does not come from "something" but from our minds(subjective). Knowledge stands for the absolute truth, and all individual objects have imperfections which "makes themselves intermediate between being and not-being", therefore, from the imperfect, special objects, we cannot draw knowledge but an opinion. We are usually careless about our language, as we say:"He is a human", somehow it is wrong according to Plato, because the "human" is a general and ideal human, "he" only partakes of the nature of "human", as Plato argued, it is thus wrong when you equate "the relative truth" with an "absolute" concept.

Many of Plato's discussions uses apologies to distinguish between what is "apparent" and what is "real". There are generally three interconnected theses in those discussions:(1) knowledge is perception(from Socrates); (2) man is the measure of all things(from Pythagoras); (3) everything is in a state of flux(from Heraclitus). The phrase "knowledge is perception" must be understood as "knowledge is the judgement of perception", by which Plato means that to gain new knowledge from observation depends upon "seeing". Seeing is a process consisting of "looking at" and "looking through". "Sense" means only "to look at", "Perception" is to "look through", thus perception needs wisdom and

judgement which, for Plato, requires Logic and Mathematics. By "man is the measure of all things", Plato built a "Percipient" and "Object" relationship in which man is the eternal percipient, and nature is the object, therefore, the basic reference and measurement unit for the universe, given by Gods, is human himself¹.

Plato is probably the originator of the idea of dualism of the world Subjectivity and Objectivity. Unlike Heraclitus, he had a linear structure to his logic and sequential time in his knowledge. Events happen step by step, time passes day by day, the past is the base for today, today is the past for the future. By questioning the unknown, Plato believed we could reach the ultimate truth. He established the fundamental notion that man is the center of the universe, which influenced the formation of Cartesianism and "Humanitarianism" during the Renaissance period.

Plato's metaphysics deals primarily with the interrelations of animals, humans, and gods based upon, according to Plato, ethical and logic principles that gods in fact preassigned to different beings one of their position in life. This point of view is prominent in his book "The Republic"-the earliest Utopian thoughts. In the plan for an ideal city he divided citizens into three classes: the common people, the soldiers, and the guardians; The assignment for guardians came from the gods. Being proud of his ethos, Plato advocated education for all people, especially children, in "Music"(culture) and "Gymnastics"(Athletics) in order to make men "gentlemen". Children should then be taken away from their mothers after birth in order to be collectively and systematically trained, no special kinship existed in Plato's idealistic Republic.

Together with Aristotle, Platonism was the most influential philosophy in the West. Plato was sure that a wise Creator had made the living cosmos out of chaos, with a soul of its own. The universe, instead of being purposeless, was full of purposes. Plato and some other great Greek thinkers somehow underestimated the complexity of the world. Plato even advised the astronomers to look, not up into the sky, but inward, into

¹p 166, Ibid.

their mind. Ideas, according to Plato, are much superior to "objective" world. By the word "metaphysics", Platonist really meant, was the purified subjective abstraction.

From its origins, Plato's metaphysics took an opposing position to Eastern mysticism. Plato's rationalism encouraged many thinkers to construct a scientific pyramid. The dualism of Plato, subjectivity and objectivity, has been a subject of disputes for centuries. If China can be seen as a deep valley for an intangible river of ever flowing intuition, the Western World had been opened up as a rationalist sky for many of the brightest individual thinkers to shine in. Plato opened it.

3.2. The influence of Scientism and Romanticism

After a long journey through the dark Middle Ages, religious doctrine had hardened into dogma, and the Church claimed complete control of the human spirit. "It taught, moreover, that man was as nothing; no longer 'a little lower than the angels', he was a helpless creature utterly dependent on God for his daily bread and also for all wisdom. The truth about everything had been revealed; what need was there to investigate, or even to speculate about, the universe? This, at least, was the sterner Church Fathers such as Tertullian, who said: 'curiosity is no longer necessary for us after Jesus Christ or inquiry after the Gospel.'"¹

Forbidden by the Church, the works of Aristotle were lost to the Christian West until the twelfth century when most of them were translated from Arabic. The re-emergence of the Platonian archetype instantly caused serious arguments among Christian believers and philosophical sceptics. Changes took place gradually, eventually leading to the scientific revolution through the distinguished efforts of Copernicus, Kepler, Galileo, and Descartes.

Rene Descartes (1596-1650), a philosopher and mathematician who invented coordinate geometry, is generally regarded as the founder of modern

¹p 34, *The Scientific Revolution* by W.E.K.Middleton.

philosophy. With the encouragement of discoveries by Newton and Galileo, Descartes began to suspect the medieval cosmology that humans and nature are full of the spirits of God. The medieval interpretation of "sense" was the communication between percipient and the object. Descartes postulated that the being of Self is intuitively known in the act of Self-Consciousness(*Cogito Ergo Sum*). He also proceeded by mathematical analogy to illustrate that the Being of God and the external world are separate. He then concluded:"while I wanted to think everything fake, it must necessarily be that I who thought was something; and remarking that this truth, I think, therefore I am, was so solid and so certain that all the most extravagant suppositions of the sceptics were incapable of upsetting it, I judgedI could receive it without scruple as the first principle of the philosophy that I sought".¹

Descartes delineated that God is far from us and that our world does not have a spirit, only mechanical elements. He did not give God a "death penalty", instead killing the living world! Descartes gave a boundary to body/soul, matter/mind, nature/spirit, world/God. And according to Descartes, the former is inferior and the latter is superior, it is God who created this hierarchy. Humans thus have the right to control their environment, because we "think" we have the superiority.

"I think, therefore I am" is the essence of Cartesianism. It is the first outcry of Human Consciousness in recorded history! With the enthusiasm of an awakening cogito, Cartesianists were confident that technology ultimately would clear away all uncertainties. "Divide..... into as many parts as possible," Descartes wrote, "there is nothing so far removed from us as to be beyond our reach or so hidden that we cannot discover it".²

Cartesianism, or Scientism, was also a collective intellectual movement at the end of the Middle Age and beginning of the Renaissance. Although "Discourse on Method"(1637) and "Meditation"(1642) by Descartes are the

¹p 53, *Discourse on Method and Meditation* by Rene Descartes, translated by F.E.Sutchifte, c.1968.

² p 41, *Ibid*.

most remarkable works for the scientific movement, other famous philosophers such as Francis Bacon (1561-1626) also contributed to this school of thought.

Descartes opened a new epoch for the West, and subverted many religious dogmas. Morris Berman commented that Scientism changed the human value system to establish a new knowledge structure:

"Nature is known from the outside, and phenomena are examined in abstraction from their context(the experiment);
 Goal is conscious, empirical control over nature;
 Descriptions are abstract, mathematical;
 Only that which can be measured is real;
 Time is linear, infinite progress; we can in principle know all reality;
 Only matter and motion are real;
 The whole is nothing more than the sum of its parts;
 Living systems are in principle reducible to inorganic matter, nature is ultimately dead."¹

The power of rationalism altered the conventional world view. The Enlightenment movement engulfed the entire medieval world, including the church. Protestant Christians dared to deviate from the Church of Rome to support the Reformation of Christianity(early in 16th C.). **RATIONALISM PROGRESSED HUMAN'S KNOWLEDGE, ESPECIALLY ABOUT THEMSELVES.** Scientism could not ultimately bridge the gap between subjectivity and objectivity. The more analytical the approach, the more difficult it became to explain the intuitive nature of man, so Romantic philosophers proposed to address this problem by another approach.

¹p 237, *The Renchantment of the World* by Morris Berman.

From the works of Rousseau and Kant to Hegel, Romanticism came to be considered as complementary to Cartesianism. This new paradigm developed towards extremity under Nietzsche's hand. However, the proposition that man and nature should be inseparable is consistent with such Neo-Romantics as Heidegger, Foucault, and Derrida.

Hume, who suspected the certainty claimed by Cartesianism, "proved" the law of causality is not analytical, instead showing the existence of only relative truths which opened the minds of Western Philosophers to another dimension. Immanuel Kant suggested a concept called "priori" in his "The Critique of Pure Reason". Kant's definition resembles what C.G.Jung referred to as "psyche", i.e., there is a foundation for our mental and intuitive processes beneath the known, which imposes itself upon our way of knowing without our awareness. Kant wrote:"the outer world causes only the matter of sensation, but our own mental apparatus orders this matter in space and time, and supplies the concepts by means of which we understand experience". Hence, in Kant's glossary, "space" and "time" are no longer objective, absolute, and unchangeable measurements. In contrast, he saw them as intuitive entity.

If the definition of Space and Time is not accurate, like a ruler which changes length all the time, there must be an inconsistency from "reality" to "our sense", Kant thought, so he suggested examining things based on four aspects:

- (1)of quantity: unity, plurality, totality;
- (2)of quality: reality, negation, limitation;
- (3)of relation: substance and accident, cause and effect, reciprocity;
- (4)of modality: possibility, existence, necessity.¹

To challenge conventional thinking, Kant gave four anomalies which could not be proven or disproven:

¹ p 681, *History of Western Philosophy* by Bertrand Russell.

(1) THESIS: "The world has a beginning in time, and is also limited in regards to space."

ANTITHESIS: "The world has no beginning in time, and no limits in space; it is infinite in regards to both time and space".

(2) THESIS/ANTITHESIS: "Every composite substance both is, and is not, made up of simple parts".

(3) THESIS: "There are two kinds of causality, one according to the law of nature, the other to that of freedom".

ANTITHESIS: "There is only causality according to the law of nature".

(4) THESIS/ANTITHESIS: "There is, and is not, an absolutely necessary being".¹

Kant's thoughts illuminated Hegel's mind, who developed Kant's "priori" into his own "Absolute Idea". In his works "Logics", Hegel asserted that "reality" and "the real" are "the rational"; "the senses" are irrational; but both the "rational" and "irrational" cannot prove themselves, unless by uniting themselves and referring to the "Absolute Idea". "The rational" and "the irrational" together with the "Absolute Idea" form the "thesis", "antithesis", and the "unity of both" the synthesis. My own understanding of Kant and Hegel's mysterious theories is based on my Taoist interpretation. Lao Zi also believed that the only absolute truth in this world is that there is no truth! Yet this sentence itself is a contradictory statement. If, by using apology, one points out if the world has no truth, then is the statement still true?; if the world has truth, then the statement should not say there is no truth. Yet when we think about the function and limitations of language, we soon realize that "knowledge" is indeed limited and is based on limitations of man himself (Plato is correct here in that man is the measure of all things),

¹p 681, Ibid.

"concepts", "notions", "philosophies" are the terms we imposed upon nature. This is why Zhuang Zi (Taoist) said: "to free ones' mind, don't draw a boundary when one faces unlimitedness; don't project one's own idea to the other."¹

Language is so incredibly limited; imagine how many colors we can name, and how many kinds of colors there are in the world; think of how many we can see in the color spectrum, and how many we cannot see. I have no answer, but I will say: "even the relative truth(all knowledge of man is relative since it is true for him) could not be exactly conveyed by our limited language!" We can label the outside world as "reality" only when we have named ourselves as the "percipient". If we "forget" ourselves, we will not be able to tell the distinction between subjectivity and objectivity, as an Alchemist or Taoist does when in transcendent meditation. This intuitive perception should, therefore, enable us to accept the subjectivity/objectivity of existence at the same time.

Now we may understand what Hegel meant by: The Absolute is pure Being, the Absolute is Nothing; The union of being and not-being is becoming, thereby inferring a way towards "wholeness"! It's true that we cannot really change ourselves into another Being, therefore, we ultimately, as Plato said, measure everything by our own minds. "Wholeness" man should think not in one dimension, he can be more vital if he can change his point of view from a static and fragmentary one to the totality and wholeness of being.

Romanticism reflected Heraclitus' dialectics as well as Platonism. Nietzsche probably is the most interesting example who declared himself to be a worshipper of Heraclitus but not of Romanticist. He pursued the Absolute but contemplated Christianity and Buddhism; he loved Music and Arts but also War; he was a passionate individualist but was eager to become a tyrant. Nietzsche's greatest contribution(also perhaps a destructive force in a way) to Romanticism was his challenge of the traditional notions of morality, by which he ridiculed the world by

¹p 1, *Zhuang Zi*.

emphasizing that nothing can be called "good" or "bad". Such extreme thinking of Nietzsche, reflected similar fatal characteristics of most Romanticists who could not get rid off the restriction of linear thinking which ultimately differed from the "Wholeness" of Chinese Taoism. Nietzsche occupied a transitional position, leading both Existentialism and a new Holistic World View.

3.3. The Industrial Era

In spite of resistance from Romanticists, the ingrained scientific values soon steered Western civilization in another direction. The eighteenth century is usually called the "Discovery century"-a new continent, new chemical elements, and new mathematics. New discoveries slowly changed conventional notions which existed for thousands of years. Contradictions such as the Church and Market, Aristocrats and Merchants, Tyrants and Humanitarianists, War and Art, compromised and followed the same trends, eventually leading up to the early stage of the industrial revolution. When Columbus found the New World he exhilarated: "Gold is a wonderful thing! whoever possesses it is master of everything he desires. With gold one can even gets souls into heaven." It seems there is the third choice coming out between right and wrong, between good and evil. "Don't try to do good," Adam Smith said, "let good emerge as the by product of selfishness."¹

Before we go into any detailed discussion about the Industrial Revolution, we have to understand the term "CIVILIZATION" which, in "New Standard Dictionary", is defined as: the accumulation and perfecting of techniques; elaboration and conscious purpose given to arts; systematic observation, experimentation, and reasoned inference in science; logical consistency of theology and religious practise; reduction of the instances in which emotion, not reason, controls activities; cosmopolitanism and tolerance; humanitarianism and a social conscience; and independence and integrity for the individual. CIVILIZATION mainly refers to CULTURE in which ECONOMY plays an insignificant role. What is "ECONOMY" then?

¹See "Adam Smith" in "The Worldly Philosophers" by Robert L. Heilbroner.

"ECONOMY" is defined as "administration, arrangement, dispensation, law, management, rule, and system" or, by my understanding, the resource distribution and production process. In other words, production is as old as human history, economy, somehow, should be considered more as a by-product of Scientific Movement and Industrial Revolution. ECONOMY relies on science, technology, and resource, or more appropriately, on wealth. CIVILIZATION relies on the richness of culture, not only material wealth. As far as the success of the Industrial Revolution is concerned, CIVILIZATION has to be given a new meaning: Economic-Culture which is deeply rooted in modern epistemology.

The Emergence of Industrial Economics

Possessing both collective and individual characteristics, humans are sometimes selfish and sometimes cooperative. To survive in a primitive society, man has to depend on the work of collectiveness. This occurs in mainly situations of poverty, but once the society has a surplus, man will show his self-centredness. Before the Industrial Revolution, production activities were conducted by religious power, or an authoritarian force, but in eighteenth century, both of them began to be invalidated. Science freed humanity from doctrines, and freed humans in turn freed science from doctrines.

In 1776 Adam Smith, a professor in the University of Glasgow, published his milestone book "The Wealth of Nations", in which he revealed the answer to two questions: (1) what is the mechanism by which society holds together? (2) whether the society? Adam found that the mechanism of a society comes from the contradictory nature of man to promote the Self and to promote the Society. He pointed out that man works half for self-interest and half for self-regulation to meet the demands of the others. If the production process can meet both self-interest and social interest, i.e., by alienated labour and specialization, then industrialization and urbanization would be inevitable.

Seeing the neon light of Capitalism Adam Smith predicted: "The Industrial Revolution in its early stage provided a veritable grab bag of riches for

whoever was quick enough, shrewd enough, industrious enough to ride with its current."¹ Seemingly in response Adam Smith's prophecy, the snowball of Capitalism grew larger over the next two hundred years. The centripetal force of Capitalism concentrated the wealth in a polarized Bourgeoisie, the centrifugal force generated the poverty to millions of working class people. Unpleasantly the urban population and the poor grew larger. From 1750 to 1850, the population of London quadrupled and was accompanied by slums and disease. Due to the violence of this transition, Marx and Engels proposed a new theoretical framework- Marxist political economics-part of Marx's Dialectical Materialist Philosophy. For Marx, the civilization of Capitalism had an incurable problem. On one hand, it depends on technology and wide social cooperation, but on the other hand, the private owning system does not allow systematic planning and complete cooperation. Consequently the incompatible relations of these two aspects would destroy the mechanism of economic development. Moreover, the polarization of wealth eventually stresses the innate tension between the Capitalist and the Proletariat, "the development of modern industry cuts from under its fact the very foundation on which the bourgeoisie. Therefore producers, above all, are their own gravediggers. Its fall and the victory of the proletariat are equally inevitable."²

We thus face several perplexing paradoxes: Capitalism is both reasonable and unreasonable; Marxism is both right and wrong; Capitalism is a new way of organization which enhances economic performance and technological advancement; the Industrial Revolution created the most wealth of any era in history; Marxism may also be correct that Capitalism will eventually disappear and be replaced by something else. Both Capitalism and Marxism, however, were limited to the perspective of materialism. Both of them believed that humans can control their own history, and both of them emphasized the determinism of the economy.

The Values of Industrial Civilization

¹Ibid.

²See "Karl Marx", Ibid.

Although industrial civilization is a very short period in the long river of human history, for those of us who live in the present the world is still under the shadow of the Industrial Revolution. Today is a time of technology, industrial civilization counts on the machine more than humans, a boss of a factory counts upon his equipment more than his employees. Machines symbolizes factories, factories symbolize industry, industry symbolize the economy. In any position of this long chain, the individual human being seems to be eliminated.

In theory, Industrial civilization opened up democratic prospects for every "ego", but it brought with it a compulsory value system defiling any "ego" of the world. This "invisible hand" embodied upon science, material, art, machine, market-everything including man himself-became supervised including our life style, our values, our biases, and our belief system. Alvin Toffler synthesized the compulsory values as followings: (1) *Standardization* (2) *Specialization* (3) *Synchronization* (4) *Concentration* (5) *Maximization* (6) *Centralization*.

To be brief, I would say that the industrial civilization basically cherishes two things-one is efficiency and the other is function. Efficiency indicates speed and quantity. If work can be carried out within a shorter time, then it is good. The pursuit of efficiency reflects the deep-seated fear of modern man, he who is reluctant to change but is facing the competition has no other alternative except change, and change must be, and it must be fast. Function means things are "workable", at least "workable" right now. Almost everything in industrial society is evaluated on in a very critical deductive manner. From Frederick Winslow Taylor, a machinist, a doctrine that work could be made scientific by standardizing the steps each worker performed was adopted by his followers. Language, School Education, Fast Food, National Policy, almost nothing in this industrial society can escape the measurement of "Efficiency and Function".

Behind the measurement of "Efficiency and Function" is the ruler of "MONEY", or more appropriately "ECONOMY". Our age is one which can be

called "THE ECONOMIC ERA". Who else in this world can really despise money?... don't we judge a country by money? don't we judge a community by money? don't we judge people by money?... aren't the so-called developing countries, primitive communities, or urban poor, defined by their economic status?

The "Economy" has become a man-made Neo-God. Scarcely do people nowadays talk about life or the city without referring to the economy. The former Chairman of the U.S. President's Council of Economic Advisors, Professor Walter Heller said: "I cannot conceive of a successful economy without growth... We need expansion to fulfill our nation's aspirations. In a fully employed, high-growth economy you have a better chance to free public and private resources to fight the battle of land, air, water, and noise pollution than in a low-growth economy."¹ Clearly expressed, the economy is no longer just a means for surviving but a goal of society. It is the major indicator of civilization.

Economic Rational Man-the psychic problems

Economic determinism turned the state of modern men into the most depressed and hollow situation. We have already achieved a high level of technology; we can produce a space shuttle for space travel but we have lost the basic happiness of life. "The city man in a modern metropolis has reached a degree of anonymity, social atomization and spiritual isolation that is virtually unprecedented in human history. Metropolitan life is breaking down, psychologically, economically and biologically. Millions of people have acknowledged this break down by voting with their feet; they picked up their belongings and left. If they have not been able to serve their connections with the metropolis, at least they have tried. As a social symptom the efforts is significant."²

Medieval man enjoyed the fruits of his labour no matter if we consider him helpless or controlled by that unknown God. Renaissance man still

¹p 120. *Small is Beautiful* by E.F.Schumacher.

² *Our Synthetic Environment* by Murray Bookchin.

possessed the impetus for scientific discovery as well as a sentimental attachment to nature no matter whether we consider him naive or silly. For twentieth century man the world is a wreck. We are proficient at destroying the environment but totally hopeless if we face our inner self. In his two act tragicomedy Samuel Beckett described us as someone who is waiting but does not know what he is waiting for, as one who likes to talk but does not know what he is talking about, and as one who is living but does not know why he is living. Morris Berman pointed out: "For more than 99 percent of human history, the world was enchanted and man saw himself as an integral part of it. The complete reversal of this perception in a mere four hundred years or so has destroyed the continuity of the human experience and the integrity of the human psyche. It has very nearly wrecked the planet as well."¹

By enjoying the modern arts or listening to a piece of modern music, one can much more easily discover the psychic problems of modern man than before. Our arts are so sensitive, so fragmentary, and so frustrated that it is close to the whimper of the homeless. Western Culture, from its inception, had planted the seed for tragedy wherein Western people love to pursue perfection, greatness and growth too much and too often. Once disasters were caused by growth, and the idealistic, rational Utopian the over-confident Westerners could not accept the reality. This dilemma was frequently projected into arts form such as film and even architecture. Television and news paper came to be used for political propaganda and enhancement of self-image. We have furthermore lost the courage to be self-reflective and self-critical, and in process lose our human innocence.

Barely anything today deserves the name planning, because most city planning works are already contaminated by bureaucracy and economic determinism. This is inevitable, for just as in other categories, there is no way planning can maintain its social justice or community roots. Planning, for the majority planners, means to plan for future economic growth, population growth, and urban land growth. It may also be true

¹p 10. *The Renchantment of the World* by Morris Berman.

that modern planners have become the victims of planning, too often they are not leading the communities towards a hopeful future, rather communities are leading them. Modern planning, in many ways, is the tool of our Neo God, the ECONOMY.

3.4. Modern Planning

"The Planner has become the victim of planning: his own creation has overwhelmed him. Planning has become so large that the planner cannot encompass its dimensions. Planning has become so complex planners cannot keep up with it. Planning protrudes in so many directions, the planner can no longer discern its shape. He may be economist, political scientist, sociologist, architect or scientist. Yet the essence of his calling-planning-escapes him. He finds it everywhere in general and nowhere in particular. Why is planning so elusive?"

from "If Planning is Everything, Maybe it's nothing"

by Aaron Wildavsky¹

Modern Planning stems from several roots but was launched primarily for the purpose of making the city more healthful, convenient, and pleasurable. By the late eighteenth century and the early nineteenth century, Europe, the United States, Canada, and the rest of the Western World were experiencing an unprecedented massive urbanization. From 1850 to 1900 the urban population in Britain had increased from 45% to 75%; in the U.S., within the same half century, the urban population increased from 15.3% to 40% of the total. Canada's urban population rapidly grew from 1901 to 1920. This concentrated population and capital created many wealthy families in a short period of time, but on the other hand, created millions of working class people who suffered from poverty, disease, and poor living conditions. In most people's minds at that time, filth caused disease, slums caused filth, therefore planning was meant to provide a proper home and abolish those slum areas. Charles Hodgetts, the federal government's medical expert and one of the most famous planners in Canadian history, described: "Bad housing conditions inevitably lead to drunkenness in parents; to delinquency in children; to immorality in the

¹In *Policy Science*. Vol.4, No.2, Summer 1972.

growing generation; to the spread of typhoid, fever, diphtheria, scarlet fever and ravages of the great white plague."²

This is the basic rationale for "City Beautiful" movement. The idea of "City Beautiful" focuses upon three things: (1) to build monumental civic centers to enhance civic pride; (2) to build wide boulevards; and (3) to build a system of linked parks to create healthy amenities. In U.S., the 1893 Columbia Exposition in Chicago was the starting point of "City Beautiful". In Canada, it took place within a short period of time around the 1890's. In Europe, especially in Britain, the "City Beautiful" movement was tied to Ebenezer Howard's Garden City Idea and the New Town Act. The City Beautiful faded gradually out of planning due to its superficial concern for the social aspects of civic life. The aesthetic concern for the three-dimensional design returned with vigor after World War II under the influence of Le Corbusier and the *Congres International de l'Architecture Moderne* (CIAM).

With the importation of Zoning from Germany, North American planning shifted its emphasis from city beautiful to city functional. The essential purposes of applying the zoning-by-law are to protect public health and welfare, to protect property values, and to keep the order of the city. Zoning supposedly should bring order to the city, and order is nothing more than the understanding of structure. Generally speaking, in North America zoning fails to reflect the complexity of the city structure and soon becomes the means for the rich and opportunists to prevent social change. The most notorious examples were the "Laundry Cases" from 1870 to 1890 in Northern California where the civil governments used zoning to forbid Chinese families, who were always living upon laundry services, to move into certain areas.

It is worthwhile to mention Frederick Taylor and Henri Fayol, who set up organizational theory and advocated the rational scientific method in decision making and administration, and Simon, Baufield, and Lindblom, who

²p 44. *"The Evolution and Practice of Urban and Regional Planning in Canada 1900-1960"* by Thomas Gunton.

applied organizational theory in city planning. With the extensive application of statistics, probability, and linear programming, Frederick Taylor proposed a new way of organizing labour, material, and capital in an industrial setting by relying not only upon tradition or commonsense but " a true science resting upon duly defined laws, rules, and principles." (Taylor 1949). By providing mathematical comparisons, organizational theory move into decision-making and Cost-Benefit analysis thus provided a clear distinction between cause and effect in terms of money.

In addition to mathematics, Structuralism encouraged modern planning to be qualitatively oriented in the philosophical sense. Structuralists such as J. Piaget, established that the structure and relations of a system have the same importance as the components, (i.e., the effect of a system does not equal the sum of its components), by changing the structure, the totality of the system changes. hence, the sequence of actions, the structure of organizations, and the compromise between good and bad can determine the effect of a system. Piaget furthermore proposed: "Whereas other animals cannot alter themselves except by changing their species, man can transform himself by transforming the world and can structure himself by construction structures; and these structures are his own, for they are not entirely predestined either from within without."¹ Modern planning became based on two types of rationality: (1). formal rationality, based on Taylorism, which is concerned with the accurate calculation and maximization of economic outcome and profits in the budgetary stage; (2). substantive rationality, which is based on Structuralism, which emphasizes the society as a "whole" by putting values, ideals, and moral thinking to the forefront in order to justify the planning structure. (Weber and Manheim)

During the 1920's and 1930's, modern planning received input from sociologists and social reformers. In Chicago, a group of naive social Darwinists led by Herbert Spencer held that poverty and slum conditions were the just "deserts of the inferiority" and necessary conditions for

¹ P.118. *Structuralism* by J.Piaget. New York. c.1970.

social progress. They were deeply suspicious of corrupt municipal governments and advocated the use of appointed commissions who could keep their hands clean of filthy politics. They were the earliest urban planning radicals.

Modern planning can never really solve the political problem since it cannot be really separated from the belief system. The over-dominance of economics in the Western culture and the deep rooted dualism of Scientism and Romanticism cannot disappear. Should planning be reactive or proactive to politics? Many such controversial issues can be associated with the linear rationality model of modern planning.

To avoid such philosophical but essential planning questions some planners followed John Dewey's pragmatism: "truth emerges when an idea (alternative hypothesis or plan) proves successful in solving a problem". For Dewey, "experience in its vital form is experimental, an effort to change the given; it is characterized by projection, by reaching forward into the unknown; Connection with a future is its salient trait." (Bernstein 1966) Scientific experimentation represented the most highly developed form of our natural capacity for adaptive development. In John Friedmann's words, the best solution to serve the general public interest will come out through intelligent and reflective transaction which consists of such activities " as bargaining, negotiating, and persuasive argument rather than regulations or commands."

Inspired by Dewey, Martin Meyerson suggested that planning should clarify all the implications of alternative policy decisions and enhance pluralistic, democratic discussions for choice. Paul Davidoff asserted that the planner should act as an advocate, proposing a client's alternatives in the public arena. John Friedmann, in his book "Retracking America: A Theory of Transactive Planning", put forward that modern society is facing a crisis of value, an "innovative form" of planning is needed in response to the practical institutional contingencies of social development."

Eventually, more and more planners realized the inefficiency of the paradigm that indicates Modern Planning. In "Foundations for a Radical Concept of Planning" in 1973, S. Grabow and A. Hesking wrote the following critique of modern planning (has elitist, centralizing, and change-resistant tendencies):

PERCEPTIONS OF DUALITY

"From this critique of modern planning, several dichotomies suggest themselves: elitism versus anarchy, manipulating versus relating, centralization versus decentralization, control versus chaos, programming versus creativity, objectivity versus subjectivity, and rationality versus irrationality. In the original debate over planning, these or similar dichotomized issues that this debate was now presented. In 1959, John Friedmann stated that this debate was now closed: We no longer ask: Is planning possible? Can planning be reconciled with a democratic ideology? But: How may existing planning practice be improved? The problem of planning become a problem of procedure and method.

From our perspective, Friedmann spoke too soon. In the crisis of the 1960's, the debate has been reopened. There are today two principal methods for resolving this new debate, most simply stated as the dichotomy between planned action and spontaneity. These two methods grow out of different perceptions of duality: dominance and balance. A third view, dialectic, constitutes the foundation for a more radical perception of duality than either of these two.

The first view, dominance, perceives the parts of dichotomy as unrelated opposites and chooses one over the other, as good over evil. The original debate was won by planned action, interpreted as and distorted by objective consciousness.

The second view, balance, perceives the entities as related opposites—two ends of a continuum—and tries to strike an 'acceptable' point midway between them. This is the characteristic mode of perception of liberalism. An attempt to balance has been evident in the "modifications" of the rational-comprehensive model.

These are the two principal modes. A third view, dialectic, sees the entities not as related opposites but as components of the same thing—only their immediate context causes them to appear contradictory. The dialectic acknowledges an unbearable tension, an incongruity in the context of presently perceived reality, and gives rise to forces which are wholly at odds with existence as we know it to be. It aspires to go beyond our present notions of 'reality', redefining the meaning of existence in such a way that the contradictions between the specific instances of the duality of the same thing. The process by which this transcendent

*state is attained is synthesis. It is our intention in this essay to attempt that synthesis."*¹

"It is ironic that planning itself, which is historically associated with notions of 'community', with its substantive, unifying content, and with more or less utopian visions of the good life, has become in the West, a part of the technocratic apparatus with its commitment to instrumental rationality and to 'process' goals" (Dykman. 1983).

Modern planning is facing a world wide crisis. Today's planning is looking for a new VISION, looking for CREATIVITY and IMAGINATION. In order to make ourselves and our cities healthier, we have to trace back planning history from the beginning to understand why and how modern planning was pushed to the point wherein mistakes were made in our way of thinking. Similarly, the future of planning will depend upon how deeply we can explore our own value system.

It is worthwhile to discuss here about the influence of Phenomenology on planning practice in recent years. Phenomenology was conceived firstly by Edmund Husserl (1859-1938) as the "descriptive analysis of subjective process". Merleau-Ponty (1967) defined it as the "study of essence". Norberg-Schulz (1979) applied it into environmental study, he professed that the conventional "scientific" approach had separated things, abstracted things, and atomized things, therefore, failed to capture the essential meaning of a space (Genius Loci). "Being qualitative totalities of a complex nature, places cannot be described by means of analytic, scientific concepts. As a matter of principle, science abstracts from the given to arrive a neutral, objective knowledge. What is lost is the everyday life-world, which ought to be the real concern of planners."²

By applying Phenomenology into planning, planner should understand that he is not only a provider of knowledge but also the user of the knowledge, not only a theorist but the practitioner. Planner should not alienate

¹ "Foundations for a Radical Concept of Planning" in JAPA ? 1973.

² p 7, *Genius Loci: Towards a Phenomenology of Architecture* by C. Norberg-Schulz.

himself from community, reality, and uncertainty, rather, should seek a dynamic approach of learning, understanding, and planning. Thereby, planning is not a value free process, rather, it embraces all the diverse varieties of ideology and thought, and then directs to a balanced future.

Before we end this chapter, I will summarize the modern planning thought according to the different historical periods:

Modern Planning History from 1900's to 1980's:

TURN OF THE CENTURY TO THE 1930'S

Professional planning was first transformed from architecture and landscape architecture into an independent subject. The purpose of planning was to improve the poor living environment in large cities, such as Chicago and London, and to control the rapid growth of the industrial city. The rational planning model was developed from prevailing scientific paradigm and decision theories and late engineering efficiencies and practicality.

KARL MANNHEIM AND BARBARA WOOTON thought the planner was the technocrat for social problems. Planning was freedom.

1930'S

Social scientists put forward that the bureaucracy was one of the most important features of a modern industrial society.

LINDBLOM AND DOWNS thought that planners were bureaucrats.

POSTWAR TO 1950'S

Planning was a general decision-making process composed of three components: (1).value formulation; (2).means identification; (3).effectuation.

KAYEK AND POPPER thought planners were public servants. Planning was control.

1950'S

Planning was a seemingly irrational process dominated by more by political concerns than science.

CHARLES LINDBLOM thought the planner was the assistant to the policy makers.

MID-1950'S

SCHOEFFER thought no real decision-making process could meet the requirements of normative rationality. We could not gain

complete information or determine all the possible consequences.

1960'S

Planning was a process to determine appropriate future action through a sequence of choices.

DAVIDOFF AND REINER thought that planners were the advocators. Planning was a bargaining process.

LINBLOM AND WILDAVSKY thought planners were facilitators in the bargaining process.

1970'S

The planning process was to help clients to identify goals, develop plans and implement policy in the way a doctor treated his patient.

BOLAN thought that planners were expeditors and social learners.

1980'S

(1) NEO-MARXISM THEORY

Planning serves the interest of capital at the expense of the rest of the society. Planners are inevitably forced to be the state agents.

(2) OWEN A. ANDERSON

Planning is a process by which we set up goals, analyze opportunities and constraints, project and select strategies. The professional planners are advisors and facilitators. Everybody can be and should be a planner in the social planning process. Planners are scientists and technocrats in the cooperative planning.

(3) DE NEUFVILLE-PHENOMENOLOGICAL APPROACH

Planner serves as a provider of knowledge as well as a user of knowledge.

Planning is a process of understanding the root of our cause-human action and behavior and closing the gap between acquisition of knowledge and application of it to real situation.

Summary of Chapter 3

This chapter mainly explores the archetypes of the Western thoughts from Plato and Heraclitus to Scientism and Romanticism. By understanding the rational way of the Western thinking, one can understand why and how Renaissance and Industrial Revolution could have achieved their popularity, and, why the dualism of subjectivity and objectivity was particularly created in the West and not in the ancient East. The essence of Modern Planning is Rationalism enhanced by the successes of Industrial Revolution. It is now widely recognized that planning in the West faces deep-seated crises, and the causes are in its epistemological problems.

Chapter 4. Future Metaphysics and the New View of Planning

"There are no longer any gods whom we can invoke to rely us. The great religious of the world suffer from increasing anemia, because the helpful numia have led from the woods, rivers, and mountains, and from animals, and the god-men have disappeared underground into the unconscious. There we fool ourselves that they head an ignominious existence among the relics of our past. Our present lives are dominated by the goddess Reason, who is our greatest and most tragic illusion. By the aid of reason, so we assure ourselves, we have 'conquered nature'.

But this is a mere slogan, for the so-called conquest of nature overwhelms us with the natural fact of overpopulation and adds to our troubles by our psychological incapacity to make the necessary political arrangements. It remains quite natural for men to quarrel and to struggle for superiority over one another. How then have we 'conquered nature'?"

From "Approaching the Unconscious" by C.G.Jung

After thousands of years, the East and the West finally met at the point where the masculine and rational Western world has rapidly climbed up a cliff with seemingly no way down; and the mysterious Eastern philosophies and endless ideological battles have overshadowed millions of Easterners in a deep valley of poverty. In today's world Capitalism is divorced from Communism, the East from the West, the City from the Country, Morality from Behavior, Man from Woman, and Man from Himself. Through this victory, Man a masculine, rational, wise, good, white Man eventually threw himself into a deep, hollow vacuum.

This man's heart
 ...
 ...loves
 nothing
 as much as
 how (first
 the arri
 -v-
 in
 -g)a snowflake twi-
 sts
 , on
 its way to now
 -here¹

Both come together Here, yet Nowhere! A Japanese Architect, Arata Isozaki said "if we were still living in the days where society charged recklessly ahead in quest of the fiction we call Utopian, like a horse with a carrot dangling in front of its nose, everyone would no doubt think

¹p 433, Poems 1923-1954 by E.E.Cummings.

seriously about the future. However, the bonds of that society have loosened, and the road has become slippery. We are in the midst of perpetual, catastrophic changes. Space has become twisted, fragmented and disordered. Under these circumstances it is virtually impossible to predict the future..."¹

The future reveals itself to us according to the way we respond to it, but we certainly do not want the simple negation of the present-this type of error we have repeated many times. Only when a new way of thinking is proposed will changes occur. The most precious property of the present world is the billions of individuals and billions of minds. If these billions can watch the same Olympic Games in the City of Seoul, or panic about the stock inflation on Wall Street, or worry about Hong Kong's future after 1997, then those same billions of people can also change to a new view of the world and a new way of thinking. Only when these billions of mind are committed to a common future will the hope of the world be truly planted.

4.1. Holistic View of Man

From the Greek philosophers to Kant, man was defined as a rational being. Man is the animal that can produce, whose existence is necessarily bound up with a social organization. Marx further pointed out that the animal produces according to an instinctively built in pattern but man produces according to a plan which he evolves in his mind beforehand. Some philosophers, such as E.Cassirer added that man is a symbol-making animal, and the most important symbol he has created is the word. Ortega y Gasset posed that man himself is in the process of evolution, an evolution that at the same time will lead him towards a greater socialization and a greater individual freedom. Thus, what is "Man"? Probably the more we define "man" , the less defined "man" becomes.

A simple and profound question is therefore: Can we define "man" in terms of WHAT and WHY without defining HOW man is linked to his context-

¹ p 115, *Style for Year 2001* by JA (Japanese Architect Magazine).

"Nature"? WHAT relates mainly to identity, WHY relates causality, and HOW relates to the structure and process. Western culture has very well refined techniques to define HOW and WHY which are no longer sufficient when the meaning of existence is challenged. BEING depends upon WHAT, WHY as well as HOW; Knowing only WHAT, only WHY or only HOW presents simply a one-sided picture. Western culture often seems impotent when dealing with paradoxes that cannot be answered by simply a "Yes" or "No".

The handicap of Western thought created the dualism of body and soul, man and the world. Moreover, it seems unable to heal the split itself. Heraclitus, Plato, Kant, Descartes, Nietzsche, Marx..... all Western civilization was and is incessantly swaying from the extreme right to left, yet in nature, Scientism and Romanticism shared one thing -the idealistic linear thought. Since God was buried by Nietzsche and Man was buried by Sartre, science and economy have replaced religion as a Neo-God, and the machine has become the new age actor.

This insufficiency can be seen through the collapse of Western religion and culture. For me, the withering of the Church is mainly caused by the Church itself. Western religion is basically one-sided in its pursuit of good by suppressing the evil, or in pursuing the beauty by covering the ugliness. Western culture collects almost everything in the world, but in fragmented and scattered manner without integration or context.

The tragedy of our modern society is that there are few people really concerned with the examination of the insufficiencies of our psyche. "In a period of human history when all available energy is spent in the investigation of nature, very little attention is paid to the essence of man, which is his psyche, although many resources are made into its conscious function. But the really complex and unfamiliar part of the mind, from which symbols are produced, is still virtually unexplored. It seems almost incredible that though we receive signals from it every night, deciphering these communications seems too tedious for any but a very few people to be bothered with it. Man's greatest instrument, his

psyche, is little thought of, and it is often directly mistrusted and despised. 'It's only psychological' too often means: It is nothing."¹

Modern Man has clearly not used his unique talent----"self-consciousness", which our Medieval brethren did not recognize but they were happy, and which we have but we do not want to understand it. "Our intellect has created a new world that dominates nature, and has populated it with monstrous machine. The latter are so indubitably useful that we cannot see even a possibility of getting rid of them or our subservience to them. Man is bound to follow the adventurous promptings of his scientific and inventive mind and to admire himself for his splendid achievements. At the same time, his genius shows the uncanny tendency to invent things that become more and more dangerous, because they represent better and better means for wholesale suicide."²

Modern man has killed symbolism by reducing the metaphor to a meaningless object. "Modern man expects nothing from the psyche which the outer world has not given him, doubtless something which our religion ought to contain, but no longer does contain, at least for modern man." "A ram's horn is a SHOFAR"³ for a primitive man, it is just a ram's horn for modern man. "We laugh at primitive superstitions, thinking ourselves superior, but we completely forget that we are influenced in just as uncanny a fashion as the primitive by this background, which were, are, won't to scoff at as a museum of stupidities."⁴

Now is the time that we should stop playing the arrogant and dangerous game we are proud of and by which we are pretending to be superior, more scientific, and much more confident than our ancestors in terms of dealing with nature. Man feared Nature, submitted to Nature, and was caring and loving of Nature, but the modern men pretend we have already conquered nature by showing how hard we have tried. We are always the losers in this battle particularly when we think we are the winners. The new

¹p 93. *Man and His Symbol* by C.G.Jung.

²p 91, *Ibid.*

³ A Christian/religious symbol for a "calling-horn".

⁴p 11, *Civilization in Transition* by C.G.Jung.

Quantum Physics tells us: even in the new scientific sense, man is completely inseparable from the rest of the world. We are alive inasmuch as we are part of nature. There is a boundary between you and me, between you and the world in accordance with the classical Newtonian View point. This boundary vanishes when we choose a sub-atomic level in which body and soul, subjectivity and objectivity, idea and form, information and action, and all things are connected into an entire network everlasting and dancing. The world, in this sense, is both matter and spirit and at the same time, neither of them(see appendix 1. The News From Quantum Physics).

Linked with such a great network of being we are given birth, and we are eventually going to die. But there is something we come from, and something we become; our present presence is the bridge between past and future, between each of us, between the last generation and the next. In our society and civilization, what our ancestors did such as Plato, Heraclitus, Lao Zi, Confucius, and what we are doing today will never ever vanish from the long river of civilization. "When a thing is forgotten, it does not mean that it is extinguished; it simply means that the memory has become subliminal."¹ All of our happiness comes from how we fulfill the transition of our civilization to the succeeding generations.

It is incongruous to create a goal called "perfect life" because a life can never cease and never be perfected. We can, however, achieve a dynamic balanced life in which we follow the way of change and the process of transformation-this is the time of our self-revelation through understanding and fulfillment. By understanding ourselves and communicating with the world, both human and nature, we will attain the "Wholeness" of life.

The idea of "Wholeness of Life" comes from a new way of thinking, a Holistic approach proposed by a scientist and philosopher Gregory Bateson. For Holism: "Fact and Value are inseparable; Nature is revealed in our relations with it, and Phenomena can only be known in

¹p 8, *Civilization in Transition* by C.G.Jung.

context(participant observation); Unconscious mind is primary; Goal is wisdom, beauty, grace; Descriptions are a mixture of the abstract and the concrete; Quality takes precedence over Quantity; Mind/Body, Subject/Object, are each two aspects of the same process; Circuitry(single variables in the system cannot be maximized) we cannot in principle know more than fraction of reality; Logic is both/and (dialectical); the heart has precise algorithms." "Process, form, relationship are primary; Wholes have properties that parts do not have; Living systems are Minds, are not reducible to their components; Nature is alive."¹

By practicing the "Wholeness of Life", one will find that his mind begins to accept paradoxical truth, and he will realize that balance is the important means to transcendent. Inward, when a man changes his mind, he gradually obtains the comprehensive "Logos", "Tao", or "Nous". God is a being nitched inside our unconsciousness, wisdom comes from two opposite forces. When rationality and intuition integrate, the body and soul reunite.

Zen and the psychological world

As a Chinese, I see the power of Zen at this crucial moment. I see that Zen embodied the most brilliant Chinese wisdom and that it can overwhelm the psychic split and bring one an "authentic" self. Nature, in Chinese, means both the "ecological world" and "psychological world". Zen practitioners train themselves by directly touching the "ecological world", but more profoundly seeking their "psychological nature". The contemporary western world has changed the ecological world within a short period of time which eventually changed the psychological world. To balance the development between physical world and spiritual world, Zen demands us to have two kinds of souls "Heaven Soul" and "Earth Soul". The former is causeless, creative; the latter is effective and a product of cause-Jung explained them in terms of the anima/animus(Yin/Yang). One must understand that to bring the idea of Zen to the West, I do not intend to export Buddhism, rather, to introduce what one might think a

¹p 237, *The Renchantment of the World* by Morris Berman.

very paradoxical way of thinking which is old for Chinese but new to Westerners. We cannot demolish highways or high-rises in one night, or change Manhattan into a big Central Park. Ecology does not simply mean trees, mountains, and water, it covers any man made nature and man's psychological world as well. If we treat man and nature as an entire being, we have already changed our conventional paradigms of the city and the world. I believe that we still have hope to save our culture, our community, our ecological world, and our value system, but we have to have a very healthy economic system.

4.2. City in a New Perspective

There is always a bridge between idea and form, religion and city, belief and planning. Eventually, Holism will also reinterpret the meaning of the city-the container as well as the content of life. Plato believed that virtually all change is decay, accordingly his Utopian blueprint aims at arresting all change. Marx cherished revolution or "dynamics" so that his ideal city always embodied the highest anticipation of human unconscious the dream of Communism. Wright's Broadacre City, Howard's Garden City, and Le Corbusier's Ville Radiense have one thing in common, that is by changing the structure of city form they wish to change the structure of social form.

Recently in Europe, the ideas of Urban Design initiated by Le Corbusier have been rediscovered by a group of architects, such as Tafuri and Leon Krier. As Krier asserted : "Our towns have suffered from a vertical and horizontal over expansion creating the separations of downtown and suburbs. Another aspect of the towns we build today is the use of three types of building: the bungalow, the skyscraper and the landscaper(factory) spread out all over the landscape in loose functions of suburb, downtown and industrial zone. With this arrangement we will not be able to 'do' towns. They will always be just collections of buildings. The zoned city, the anti-city as we have it today, separates all functions into different localities and links them by telephones, satellites and other mechanical and electronic systems. This system may be interesting and many people love it, but it cannot continue for more

than two or three centuries when it will exhausted natural resources. It is not only Europe and America that will be involved in exhausting the world's resources, but the rest of the world as well-the other five billion to whom we have brought these ideas who will want to spend exactly as much petrol as the Americans and Europeans. It is at that point that the planet will become uninhabitable. This is the direction that today's designs are leading us." He further proposed "To do towns they must be based on the concept that the city must be mature to be a city at all. To have maturity it must be limited in size, population and height and have a certain sense of meanings which are receptive and profoundly universal so that everybody can accept them, and they cannot be just personal whims."¹

For myself, I feel unsure of following Mr. Krier's philosophy. First of all, urban problems cannot be completely solved by a new city form or an architect or planner. Secondly, a meaningful space or form cannot emerge automatically as a symbol unless there are some meaningful people to interpret them. If modern epistemology is just as dry as a desert, no matter how limited the city is in terms of size, population, and height, the city is still a hard, fragmentary, and boring network. In fact, many people enjoy life in New York which has a simple and regular grid and is filled with skyscrapers but where lives and activities are always happening in the streets. (This is only the above ground level) I would therefore like to say that a utopian style urban design approach can only be treated as a special and unique alternative; unless we have a new meaning of life, we will not have a new type of city.

The best example to confirm this notion could be the formation of the "Medieval City" by which I do not simply refer a city in the "Medieval Age", but the "Medieval Type" city (Some cities in the Middle Ages do not contain the spirit of Medieval Times, and some Chinese Taoist cities have almost the same strong spirit of those Medieval Towns in Europe). Whoever visits a city like Prague, as Christian Norberg-Schultz insists, cannot reduce the quality of his expression of the city into one stereo

¹.Page 21, Recording for Leon Krier's Lecture in The University of Manitoba by City Magazine. Vol.10, No.2 Fall 1988.

typical image. The narrow streets, cobble stone alleys, crowded houses, suspended bridges, spirals of churches, mysterious castles, beautiful mountain, and lovely river, have to be sensed piece by piece, and then form the "spirit of a place"(Genius Loci) which a modern city lacks.

But why did the Medieval City have a spirit? Bear in mind, the city is both a container and the contents of life. Medieval cities had a very interesting religious content, that is Alchemy: "Alchemy was first and foremost a craft, a 'mystery' in medieval terminology, and all crafts, from the most ancient of time, were regarded as sacred activities. As Genesis tells us, the creation or modification of matter, the crux of all craftsmanship, is God's very first function. Metallurgy was intentionally compared to obstetrics: ores were seen to grow in the womb of the earth like embryo. The role of the miner or metal worker was to help nature accelerate its infinitely slow temp by changing the modality of matter. But to do so was to meddle, to ? into scared territory, and thus, down to the fifteen century, the sinking of a new mine was accompanied by religious ceremonies, in which miners fasted, prayed, and observed a particular series of rites. In a similar fashion, the alchemical laboratory was seen as an artificial uterus in which the ore could complete its gestation in a relatively short time (compared to the action of the earth). Alchemy and mining shared the notion, then, that man could intervene in the cosmic rhythm, and artism... writes Mircea Eliade, was seen as 'a connoisseurs of secrets, a magician...' For this reason, all crafts involved some kind of initiation and (were) handed down by an occult tradition. He who 'makes' real things is he who knows the secrets of making them."¹ Similarly, in traditional Chinese culture, Alchemy, "FENSHUI", and successive ceremonial activities played a significant part of city life in the ancient China.

This discovery evokes the idea that FORM can be the same for thousands of years, but the MEANING OF THE FORM can be incessantly reinterpreted. The key point is that WE SHOULD HAVE A HOLISTIC WAY TO CONSTANTLY FIND A MEANING FOR PLACE AS WELL FOR OURSELVES. Yet the Logic of the Medieval

¹p 78, *The Renchantment of the World* by Morris Berman.

city was a mystery itself since our Medieval brothers fused REASON and FAITH together, which the modern man has not done. If the Holistic View of life is to be translated into a Holistic View of the city, first of first, we have to have a new approach for thought and practice.

In 1984 WHO (World Health Organization) held an international conference entitled "Beyond Health Care" in which the concept of "Healthy Community" or "Healthy City" was launched. Traditionally, Western city planning emphasized the biological health of the individual or city; that if an individual or city is biologically well-functioning, then the individual or city is considered as healthy. City planning's task was concerned about a clean environment, clean air, safe and clean water, trees and green spaces, housing, and medical care system. However, the new view of the city established a new logic for a "Healthy City", as one that is "continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential." (Hancock and Duhl, 1986)

The re-definition of the meaning of city as a place with a better quality of life raises a series of questions. The essential one is that if we all agree that we should have a holistic life and holistic city, how can this philosophical notion be used to re-evaluate our economic policy, political framework, environmental disharmonizes, and our life style? Professor Tjeerd Deelstra, one of the directors for the WHO Healthy Cities Project, suggests there are at least three aspects to which city planning can respond: (1) to treat the city as an eco-system and/or economy: to try to relate economic development and ecological functioning coherently and effectively; (2) to enhance the quality of our living environment; (3) to improve our human ecology which consists of political and social life.¹

The Holistic View of the city brings a ray of hope for our common future. In the past, we viewed the world by its size, quantity, density,

¹"An ecological approach to planning cities" by Tjeerd Deelstra in Town and Country Planning Vol. 57 No.4. April 1988.

hierarchy but today we add many other new dimensions: flexibility, sustainability, vitality, and quality. The new way of thinking directs us to re-examine our economic, political, and cultural systems. The Tao (Way) to approach tomorrow is already in our minds. As Frank Lloyd Wright once asserted "The creative artist... must dominate and transform this greatest of machines, the city, and give it A SOUL". The Healthy City Project provides such a chance. "The Creative Artist" required is not one person, but everyone of our time .

4.3. The Tao Towards Future

Changing to a new way of thinking is both a target and a process. So far as we are concerned, the first step is to re-examine our economic, political, and cultural systems. The Chinese have a proverb: "a thousand mile journey starts from a single step"-the Tao for future metaphysics will be also achieved step by step.

The Economy of Harmony

The traditional view of economists normally lacks a connection between economic development and metaphysics, assuming that the economy is a value free and objective scientific truth. From the point of view of the employer, economics simply means the reduction of costs to a minimum by the improvement of technology; from the point of view of the employee, economics means to sacrifice one's leisure and comfort in order to gain a higher wage and quality of life, which used to be indicated by the level of consumption. As a matter of fact, Western civilization is based upon this traditional view of economists and the "miracle" of industrialization of the West is based upon the rapid consumption of natural resources. The U.S., a country whose population is less than 6% of the world population, consumes almost 42% of the world's annual exports of the major mineral resources. In order to keep its high growth economy, America has built up its wealth at the expense of the other 94% of the world. Given the present resource consumption rates and the projected increase in these rates, some futurists have already predicted that the great majority of

the currently important non-renewable resources will be depleted or extremely costly 100 years from now.

Table 6. U.S. CONSUMES: AS % OF THE WORLD TOTAL¹

Aluminum	42%	Molybdenum	40%
Chromium	19%	Natural Gas	63%
Coal	32%	Nickel	38%
Copper	33%	Petroleum	33%
Gold	26%	Platinum Group	31%
Iron	28%	Silver	26%
Lead	25%	Tin	24%
Manganese	14%	Tungsten	22%
Mercury	24%	Zinc	26%

One perilous side effect of our modern economy is that the high growth of the economy has severely jeopardized the ecological world with pollution and the destructive use of natural resources. According to the World Commission on Environment and Development, from 1984 to 1987, most world environmental disasters were triggered by one-sided economic growth:

- The drought-triggered, environment-development crisis in Africa peaked, putting 35 million people at the risk, killing perhaps a million.

- A leak from a pesticides factory in Bhopal, India, killed more than 2,000 people and blinded and injured over 200,000 more.

- Liquid gas tanks exploded in Mexico City, killing 1,000 and leaving thousands more homeless.

- The Chernobyl nuclear reactor explosion sent nuclear fallout across Europe, increasing the risks of future human cancers.

- Agricultural chemicals, solvents, and mercury flowed into the Rhine River during a warehouse fire in Switzerland, killing

¹p 121, *Small is Beautiful* by E.F.Schumacher.

millions of fish and threatening drinking water in the Federal Republic of Germany and the Netherlands.

•An estimated 60 million people died of diarrhoeal diseases related to unsafe drinking water and malnutrition; most of the victims were children.¹

All of these problems provoke one major question: What are the goals of the economy? In attempting to answer it, we soon recognize that the traditional view of economics fails in many ways to incorporate the relationship between ecology and economy. The traditional view of economists professed faith in ecology as an open system within which the economy can achieve unlimited growth. It also over stressed the role of the economy by assuming that better economic performance would automatically improve our living standards and bring us more happiness. Finally, it blinded us from the wider perspective that the economy is just another facet of culture and metaphysics. Schumacher therefore pointed out "From an economic point of view, the central concept of wisdom is permanence (Long run consideration and steady development). We must study the economics of permanence. Nothing makes economic sense unless its continuance for the long term can be projected without running into absurdities. There can be 'growth' towards a limited objective, but there cannot be unlimited, generalized growth. It is more than likely, as Ghandhi said, that 'earth provides enough to satisfy every man's needs, but not for every man's greed.' Permanence is incompatible with a predatory attitude which rejoices in the fact that 'what were luxuries for our fathers have become necessities for us.'"²

A Buddhist economist has already interpreted that the function of the economy should be at least threefold: "to give a man a chance to utilize and develop his faculties; to enable him overcome his ego centredness by joining with other people in a common task; and to bring forth the goods and services needed for a becoming existence."³ Again, a Buddhist

¹ p 3, "Our Common Future" by World Commission of Environment and Development.

²p 33, *Small is Beautiful* by E.F.Schumacher.

³p 232, *Buddhist Economics* by E.F.Schumacher in *Toward A Steady-State Economy* ed. Herman E. Daly. c.1973.

economist would also consider that it is not wealth standing in the way of liberation but the attachment to wealth; not the enjoyment of pleasurable things but the craving for them. The keynote of Buddhist economics, therefore, is simplicity and nonviolence.

To target simplicity and nonviolence for the economy reveals the Tao for the future economy. We should therefore re-associate our economic development strategy to the Holistic View of the world, a better quality of life to the consumption of the natural resources, and a high growth economy to ecological capacity. Sustainability and vitality of the economy become significant. The harmony between man and nature, economic development and ecological capacity, and man's material health and his spiritual life should be the primary consideration.

The Politics of Separationist Approach

Accompanying the change of the meaning of economy is a new type of politics. Each community will be more accessible to the political decision-making process and eventually bring up a demand for freedom. Yet freedom can mean many things such as physical freedom the physical autonomy of moving from one place to another, or psychological freedom a sort of primordial spontaneity that is inherent in man's nature. Freedom may also imply civic freedom, according to which a person is free to act within the framework of the law. In Adam Smith and Ricardo's discussion, freedom basically refers to free enterprise. What is meant by freedom here is the freedom of the community to seize the political decision-making rights and the freedom of an individual to achieve an authentic way of living in the post-industrial society.

Our century is often referred to as the era of democracy. Utopian thinkers naively expressed their desires for freedom in different "Manifestos" "Communist Manifesto", "Independence Manifesto", "Emancipation Manifesto", etc.. However, the biggest enemy of freedom seems to be not the determinism of politics but, as Sartre said, "fatalism" of life. Although autocratic politics has collapsed in the international arena after the Second World War , in many of the

industrial countries we often see that the right of freedom has been truly abused. The endless debates about AIDS, Prostitution, and Drugs all relate to life-style, which is the personal interpretation of living. The loss of meaning of life, therefore, is the biggest enemy in terms of finding our way to live. Only when we reach the new view of life could we also understand the balance between individual rights and social responsibilities. This is a learning, educating, and regulating process. It needs, first of all, many self-conscious individuals to propose this question; secondly, a group of self-conscious people to promote the new view of life; and finally, the whole society to be aware of this change, to adjust themselves to this change, to find their own interpretation of this change, and then establish the essence of "Separationist politics"¹.

Separationist politics, by its nature differs from so-called Community participation in which the bureaucratic politicians and planners play a leading role. Community Separationists believe that the community should have the right to decide their own affairs; they do not want to control others nor to be controlled by others. They hope to build a peaceful community with their own efforts and intelligence but they depend upon the social support system. They do not reject aid from others but want to build a mutual friendship. Separationist politics is a Pop-Politics, full of creativity, balance, and vitality. Separationists firmly believe that one individual cannot change the world, only that through oneself, and many of others committed to this change, the world can be changed.

The Cultural Regionalism in Planning

Economy, politics, and more significantly culture, are the basic pivots for tomorrow's world---the last of these as a way towards the future is to enhance the regionalism of culture. There is no doubt that, with the rapid assimilation and exchange of culture in the world, there is a need

¹See "Future Metaphysics" in "Renchantment of the World" by Morris Berman. The author predicted that community would play the basic and significant role in political decision-making process in the coming future.

for the local community , to preserve its own cultural identity. People need identity and affinity which can only be provided by their own culture which consists of their language, belief, philosophy, arts, and history.

If one does not want to be identified with one's own culture, it is not because something is wrong with the culture itself, but because of lack of understandings and acceptance of the particular culture by outsiders. Unlike wealth which can easily be compared, it is difficult to compare culture---one cannot say one culture is superior to the other. Through lack of communication and mutual-understanding, one sometimes judges another culture or another civilization by their standards. The most ironic mistake that is made is the belief that materialism and technology has led to our improved living standards to "modernity", whereas, modernity in fact only reduced our culture into its most simplistic form devoid of any character.

Cultural Regionalism brings a desire to seek the lost naiveness and natural style of living. Indeed, the advocacy of regionalism of culture should not exclude the renovation of technology. We should never consider the preservation of tradition, the enhancement of community culture, and the pursuit of pluralism of regional styles as being something backward or simply regressive. Many Japanese Architects have already successfully proven this notion. By taking the advantages of modern technologies, architects such as Taka Ando¹ have already created many famous modern Japanese architecture which are expressive of the Japanese Spirit and which harmonize between history and modernity.

The primary challenge of modern society is not only to find a way of design, but for a new way of life beginning from inside out. The God for Medieval City, cosmology for Renaissance, methodology for the modern city are totally different and cannot be, simply repeated. The future regionalism of culture cannot simply copy any style or version from the previous history or another culture. It has to evolve its own The only

¹Taka Ando is one of the foremost famous Japanese architect and maybe the most well-known Japanese architect in North America at the present time.

resource to renovate a culture is to cure the psychic dualism in that culture, and the problem of thinking has to be solved by thinking itself, i.e., a new type wisdom.

4.4. City Planning Tomorrow

"Observe, however, that there have been, and still are, in the world many different and even contrasting epistemologies which have been alike in stressing an ultimate unity and, although this is less sure, which have also stressed the notion that ultimate unity is aesthetic".¹ As Gregory Bateson delivered the above message, modern scientists also confidently presented their idea of unity between knowledge and life : "Science is not the enemy of humanity but one of the deepest expressions of the human desire to realize that vision of infinite knowledge. Science shows us that the visible world is neither matter nor spirit, the visible world is the invisible organization of energy." ² So far, modern physics has revealed that there should not have an obsolete boundary between humans and nature, between subjectivity and objectivity. As Heisenberg concluded: " what we observe is not nature itself, but nature exposed to our method of questioning."³

If one agrees that humans cannot be separated from nature, one should also agree that the traditional methodology of planning which tends to analyze the people, community, and city statistically and statically is no longer sufficient. Planning based on a new science and Holist metaphysics will integrate the quantitative science and qualitative philosophy and thus become a subject of art consisting of both rationality and intuition. Fifteen years ago Grabow and Allan Heskin had envisaged in their essay "Foundations for a Radical Concept of Planning" that " the paradigm rising to challenge this present concept of reality is based on systems change and the realization of a decentralized communal society which facilitates human development by fostering an appreciation of an

¹p 20, *Mind and Nature* by Gregory Bateson.

²p 312, *The Cosmic Code* by Heinz R. Pagels.

³p 57, *Physics and Philosophy* by W.Heisenberg. c.1963.

ecological ethic based on the evolutionary process: spontaneity and experimentation." Fifteen years later this is yet to be realized.

Planning for Fulfillment

A fundamental change in planning will be that planning no longer plans for future growth but for the sustainability and vitality of the social and economic systems. Whereas the majority of Westerners are fond of "change" directed to the new and the more, the ancient Chinese had always held a strong caution and mistrust for such changes. Lao Zi repetitively dictated: "be extremely careful observing the world, and you will find the world is changing in a subtle but dynamic circular way from time to time. Changes will always return to their starting point which is called 'origin'; To know the circular way of change, one should be wise not to take reckless action." ¹

It is widely known that Taoism is the philosophy dealing with "the way of change". From "I Ching" to "Tao Te Ching", every paragraph of Taoist essays depicts changes. However, the concept of "change" in Taoism is not the same as the one in the Western context. In Taoism, "Change" is a natural and spontaneous process without any artificial interference. Lao Zi considered the best governor in the world as the one who knows the way of change and does not meddle or stem change, he governs people without governing. In contrast, the Western philosophies are regarding change as a conscious effort to manipulate the society. Hegel, Karl Marx, and Nietzsche set up a revolutionary ideology; Medieval man was also excited in helping God to accelerate the production process from the womb of the earth through exploration; Modern planners invent many theories to operate the community, such as Advocacy planning, Comprehensive planning, Incremental planning, and so on.

Beyond the different attitudes towards "change" in the East and West, there is an inherent epistemological distinction between the East and West. For Western philosophers, change ultimately leads to evolution, and

¹p 94, *Tao Te Ching* by Lao Zi.

evolution ultimately leads to a higher civilization, eventually ending with the idealistic Utopian state. For Eastern philosophers, change is a natural process whereby the process follows a circular path and the value of life primarily comes from the process of transition and fulfillment. Lao Zi therefore proposed that "DOING NOTHING" is the optimal way to follow the Tao of change.

"Doing Nothing" will become one of the options in future planning theory. Instead of controlling or stimulating the economy, planners in the post-industrial society should allow for example Community Economic Development to take place and fulfill itself. As well future planning have to take a strong role in helping the community to build up a sustaining but dynamic economy. The planner, as the one who knows the Tao of change, obtains his joy through the gradual fulfillment of the planning process.

Planning with a Systematic View

In order to have an appropriate intuition and rationality, ancient Chinese Ideology advocated to view change in a coherent and contextual way. Confucius said "To review the old, one will know the new." A vital cultural system must consist of two forces the self negation ability and the balance ability; Negation usually breaks the traditional balance by self correction, which does not simply mean to neglect tradition, however, but the combination of preservation and criticism of history with a responsible attitude.

The Chinese have a game called "GO"(played by Taoists). With only black and white pieces, the two players try to win the game by gaining the largest enclosed territorial space. There are absolutely no rules in this game, but one has to form a systematic, overall, connecting pattern. The premise of GO requires the two players, playing with their intuition, to communicate through interaction in the playing of GO game. One has to understand the other's thinking and build an intuitive linkage with each other.

One incredible strategy in GO is called "Self-Sacrifice" or "Subtraction". Such strategy is not seen very often in other games in which whoever is more aggressive wins the game. But GO in some ways needs the way of "paradoxical thinking". To let your "enemy" eliminate your forces (pieces) in a certain area will help form a more powerful pattern that becomes more coherent after the "subtraction" on the partial territory.

This "subtraction" to balance a system is one alternative. For Westerners planning in seeking balance is more of an additive process rather than a subtractive process. If one sees planning as a subtractive process, then the question arises as to the future of planning and planners--- it could be argued that the future may not need planning nor planners.

Planning with Education

To practice "Self-Sacrifice" or "Subtraction" is not easy. It depends upon education and its success. "the essence of education, I suggested is the transmission of values, but values do not help us to pick out ways through life unless they have become our own, a part, so to say, of our mental make-up. This means that they are more than mere formulae or dogmatic assertions: that we think and feel with them, that they are the very instruments through which we look at, interpret, and experience the world. When we think, we do not just think, we think with ideas....What, then, is education? it is the transmission of ideas to enable man to choose between one thing and other."¹

Education transmits two types of knowledge, one is to know-why and the other is to know-how. Know-why is about philosophy, and Know-how is about technology. A balanced education system would combine both without discriminating either of them. The future planning system has to be therefore based upon these two aspects the establishment of a Holist view on the world as well as the ways to practice this new epistemology.

¹p 82, *Small is Beautiful* by E.F.Schumacher.

Planning definitely becomes a process of "education" for both what the future should be and how the future could be achieved. Planner and citizen "learn from each other, live each other, and share each other", in this sense, Chairman Mao's "Three Services" are correct

The current "planning educational system"(school) fails to achieve those goals. First of all, planning should not only be treated as a highly professional career which becomes gradually alienated from practice. Instead, it should be taught in many local community colleges to serve for those who are volunteers from the community and wish to serve the community. Secondly, planning is not only a career which people come to learn statistics, engineering, policy, and sociology, it should most directly relate to the epistemological roots of planning which forms so many utopian dreams, and to the planning technologies which are currently being taught in schools. In this way, the Planner is a generalist(philosopher) as well as a specialist(problems solver).

From a political assistant, an engineer expert, a community social worker, to an artist and Jungian psychologist for modern man and modern society, the planner has much more social responsibilities and obligations than ever before. This dream from long time ago is seen clearly again and again and much stronger from this moment of the last decade of twentieth century. The world has become excited about this Gospel. The Westerners finally realize and willingly change their world view, and in the past ten or twenty years, Chinese and many Easterners began another path of correction as well. Many friends who wrote me recently told me that modernization in China indeed should not be a one-sided change which only brings up the material richness, but one which produces a vital culture at the same time.

Mysteriously, I have a faith to, but cannot explain, the phenomenon of the psychic connection between the East and West. In the past thousands of years, Easterners and Westerners merely had chances to meet and communicate with each other, however, the parallels of ideology, thoughts, mythology, religion, arts between the East and West has so many resemblances, and more significantly, so many complimentary aspects.

Today, as we are able to fill in the communication gap between the East and West, can we appreciate this precious opportunity and fuse the East and West to a common future?

4.5. Design with the Future Metaphysics

Before concluding this thesis, I would like to discuss some specific questions how to design with the Holistic Metaphysics? For me, the failure of modern design is its lack of meaning. To design with Symbolism has become a slogan without deep understanding. A Symbol is an object chosen to typify or represent some ideas or quality in something else, on account of resemblances in one or more of their characteristics. What we usually refer to by a "SYMBOL" actually implies those "Religious Symbols" such as a Cross for Christianity or the Yin-Yang Circle for Taoism. According to C.G.Jung, religious symbols were and are created by human's unconsciousness, however, realization of the existence of "religious symbols" and conscious application of them to design is the direct product of man's consciousness, and emerges after the "wholeness psyche" is split into a dualist one. Yet, it is obvious that in return symbolism aims at the reunion of consciousness and unconsciousness.

For a fully devoted religious pilgrim such as our Medieval brethren, everything was a symbol of the spirit, therefore, there was no specific "symbol". For a pure Atheist or Existentialist, on the other hand, everything is a wreck and nothing more than themselves in an existential state. Hence designing with symbolism only exhibits a meaning to those who have both the "Heaven Soul" and the "Earthly Soul". Design Symbolism builds up a staircase or a bridge which connects the two souls and aims at the reunion of body and soul. In this sense, many modern architects or landscape architects have failed to cope with this psychic problem in their design. Modernism or Post-Modernism merely relates to something called the "psychic split".

Figure 17. The Formation of Symbolism

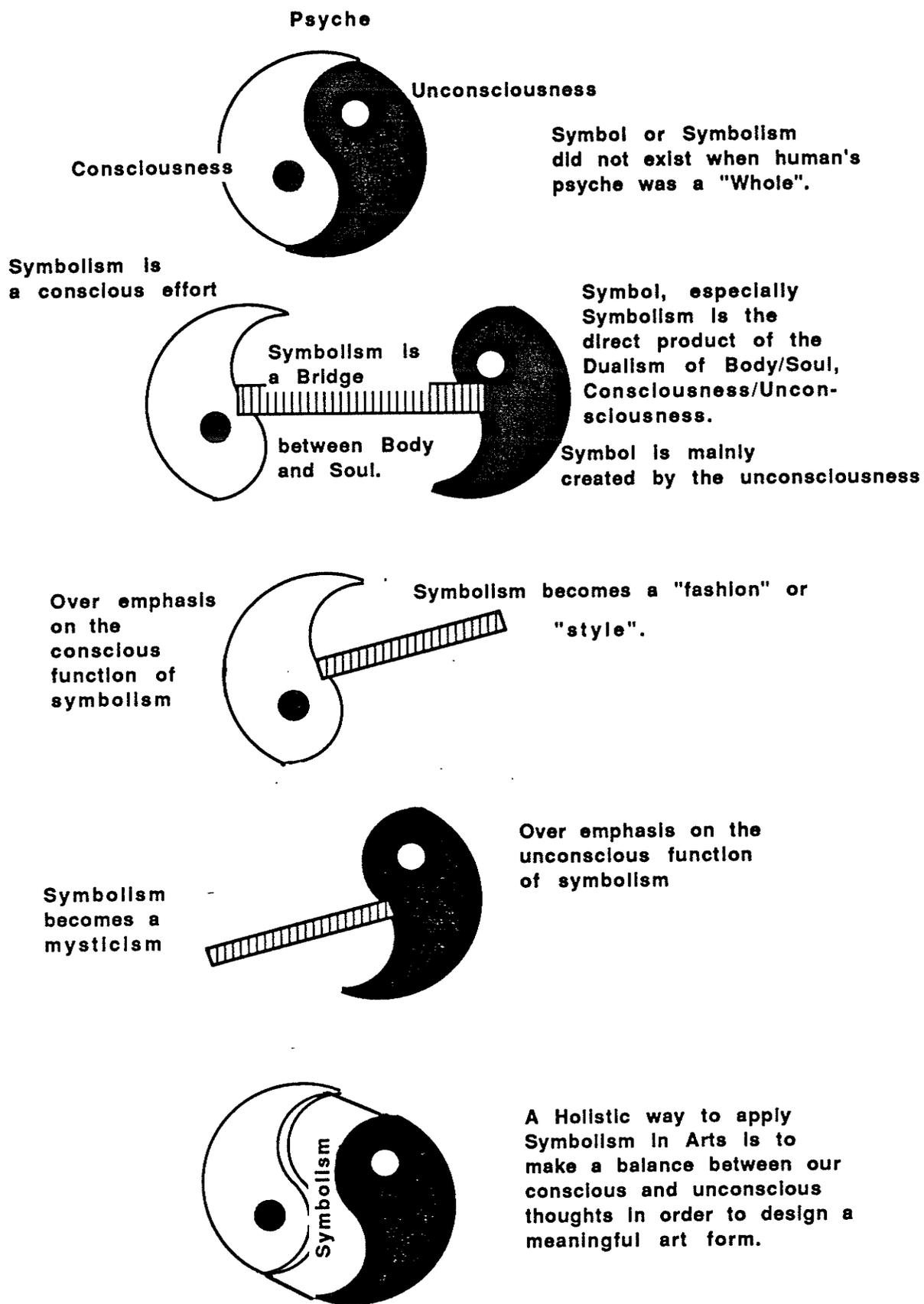
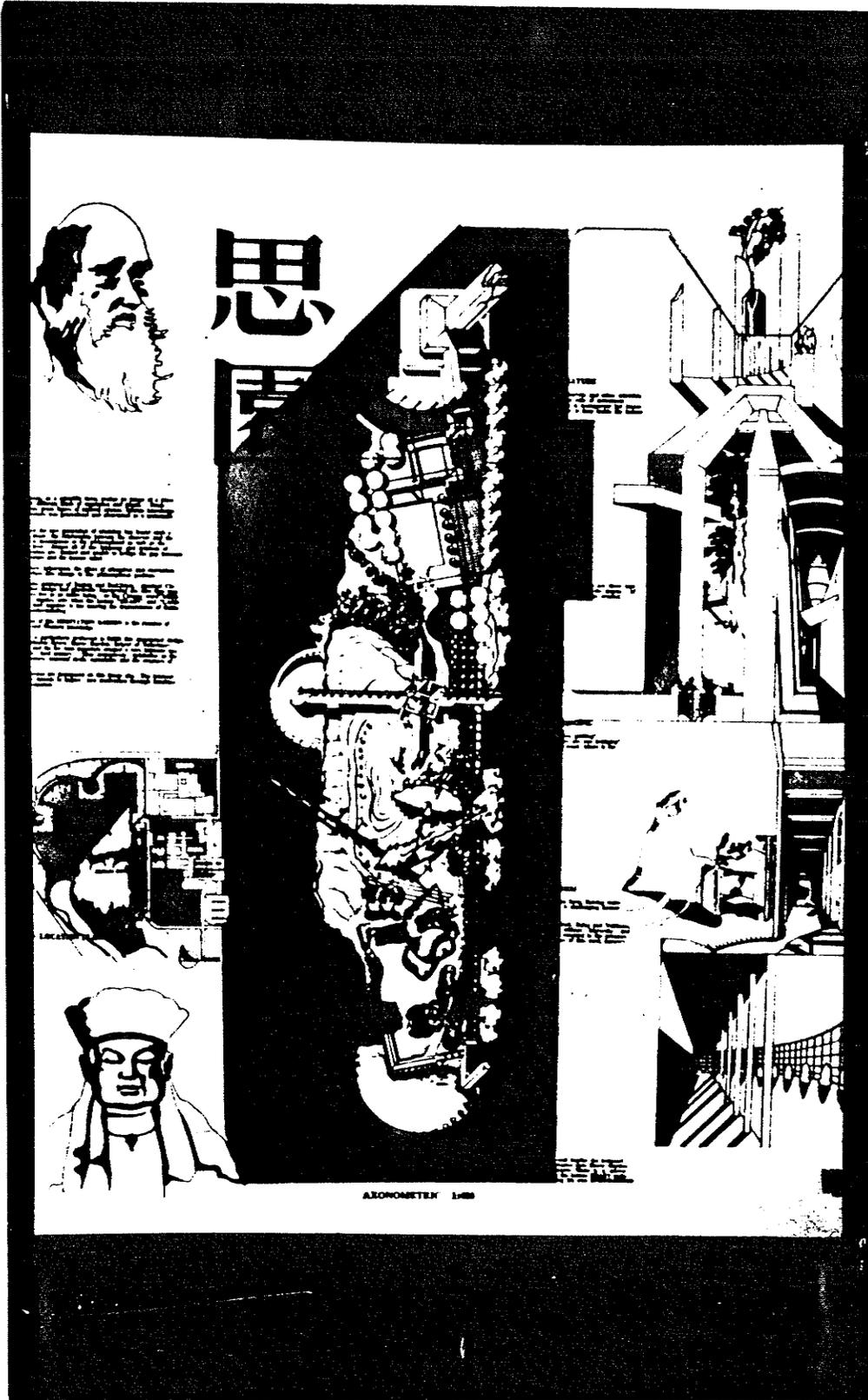


Figure 18. Meditation Garden Design



In order to illustrate the design principles within the context of the Holistic View of Life discussed in this thesis, the following example is presented. This plan and design for an Arboretum Competition, University of California in Davis campus was submitted by me and won an award of merit. My "Meditation Garden" is located on the southern tip of UC Davis Campus and is about 50 meters wide and 300 meters long. Surrounded by Modern architecture, the Native Indian Four Season Garden, Oak Wood, and a Hydro Tower, the site provides an enclosed intimate space and symbolism, a product of rational artificial civilization, a sense of mysticism, human dignity, and the achievement of a technological society. I have tried to search for symbolism and applied the principles of Chinese FENGSHUI to interpret and render meaning to the design of the Arboretum.

design conception

Arboretum, as a scientific term, imposes the image to people that a place is full of different kinds of vegetation and plants. From Darwin, the greatest scientist, man's knowledge of nature was generalized and abstracted as a systematic pyramid.

But now the new generation of scientists find that such a rationality and definitions about observer and observed objects are inconsistent at the philosophical level. Most of our language and symbols of communication are unable to bridge the gap between the wildness nature and the human mind.

Using the principles of Taoism and Buddhism, the classical Chinese garden physically interpreted the idea that man and nature live in union. As the Chinese word "MEDITATION" implies, only when the human "heart" and "land"scape melt with each other, one is nearing the transcendent "meditation" of nature

Therefore, arboretum, the place of education and recreation, must reflect this philosophical as well as the scientific notion.

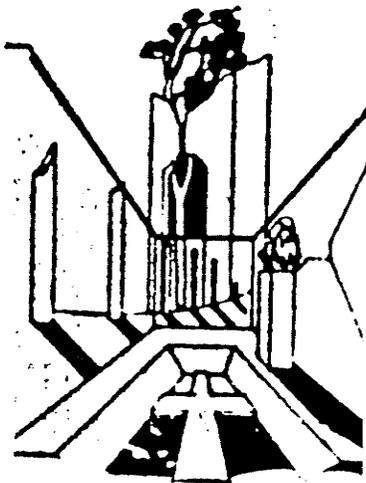
There are five sub-themes in the site where landscape is treated as a narration of philosophical and scientific notions.



(1). "Dilemma and Bridging": In the center of this linear garden, there are two bridges connecting the Campus and the Oak Wood (Man made/Nature), the Darwin Plaza and Buddhism meditation court yard (The West/East). Deep and dark corridors, Suspended bridges, Mysterious Towers, Semi-circular Arch Gate, and Plant Totems. Almost like a Zen statement, the two bridges are disconnected in the intersection point. From one bridge to the other, one has to step down and up the staircase or use action to fill in the "gap".

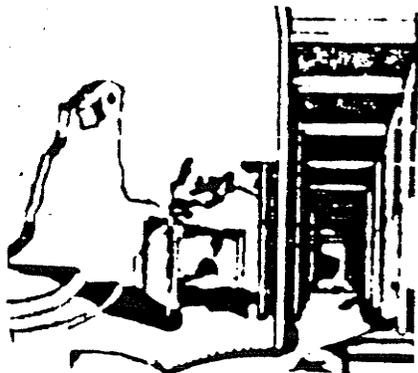


(2). "Evolution": To the west of the center, many Joshua Trees seem to guide as well as confuse one's vision. Three rising territorial plazas, Two Big Crosses, one collapsing wall (through the holes of the wall, one might see the modern Campus), Impassive Glassy Framework, icons of botany scientist including Darwin—all of these images reveal a story from the Medieval Religion to Modern Scientific achievement. Confronting the penetrative but impassive glassy walls, one might reflect how knowledge imposes in his mind.

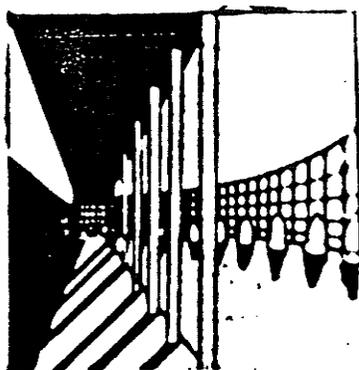


(3). "Memory of Nature": Through a narrow alley, one faces a ruin-like plaza where Darwin becomes another man-made Neon God. Isn't the monument for science just the same as the one for religion? However, any artificial monument is eventually fated to become a tomb, only nature can be everlasting. An oak suddenly rises through the top of the monument... Knowledge and life are

becoming one. (both of these trees live in the Paradise, as the Bible says).



(4). "Order of Disorder": To the east of the center, images become disoriented. Like a scene after an earthquake, distorting Bishop Pines, bizarre Rocks, Destroyed Walls, Broken regular corridors, Cracked ground, disordered fences, a secluded tower, flowing water, silver sand court yard, an organ-like Zen stone, piece by piece, different stylistic corridors (like the Stream of Consciousness in literature) are juxtaposed to enclose a voidness. The dynamics of the chaotic forms challenge our intrinsic, inherent mechanist knowledge.



(5). "Buddhahood": Step out to a long porch, and suddenly there is another bizarre image: a hundred stones (human-like but not exactly) regularly sit confronting the "Four Season Garden" and the outside world. By the reflection from the glassy wall, again, one might realize the silent world is always changing. The water pool mirrors the Sky, the glassy wall reflects you and me, the "meditating" stones have the psyche of all the human being. When one understands the unifying of science and religion, one gains the future metaphysics and consciousness; when one melts himself into the landscape, one closes to the Buddhahood!

Unlike many other arboretums, plants in this Meditation Garden were selected for their symbolic and metaphoric meaning. The Joshua Tree symbolizes God pointing the Way; the Chinese Willow and Lotus are symbols of Rebirth for Buddhism; the Oak Wood represents Human Dignity; etc..... Yet I do not expect the audience to interpret all of those metaphors. I

believe there are many interpretations of the garden which is why I don't like to explain my concept in a literal manner. I leave the richness to individual experiences.

To design this "Meditation Garden", I went through several stages of thinking. I would like to note two movies which inspired me greatly-one is "Angel Heart", the other is a documentary about C.G. Jung's life. For me, the films opened up the intuitive part of imagination and creativity. The psychic towers, Zen stones, and Tomb-like monument are the direct products from these two movies.

I personally do not concern with the name the jury gave to my design- a Chinese Garden. For me, the intent is to combine the Eastern and Western thoughts. I would rather say:"Look! It is a time to re-think many of our preconceived notions, such as 'knowledge', 'time', 'space', 'subjectivity', 'objectivity', and so on." I like this sweet battle between my modern consciousness and Chinese background. Although my entry finally won a merit and has been published in Landscape Architecture (August Issue, 1988), I soon realize my inability to transform the future metaphysics into city form. This is a task not for one person but for everyone.

I end my thesis with a poem by Martin Heidegger:

.....

*We never come to thoughts. They come
to us.*

That is the proper hour of discourse.

*Discourse cheers us to companionable
reflection. Such reflection neither
parades polemical opinions nor does it
tolerate complaisant agreement. The sail
of thinking keeps trimmed hard to the
wind of the matter.*

*From such companionship a few perhaps
may rise to be journeymen in the
craft of thinking. So that one of them,
unforeseen, may become a master.¹*

Summary of Chapter 4

The Holistic View of Man asserts that wholeness and fulfillment of life is central to the new way of thinking for a balanced and systematic approach to design. This idea has recently aroused many significant changes for planners and planning and has put the city in a new perspective. The Healthy City Project can be seen as part of this global change. The Tao of the future relies upon a harmonious economy, a vital community politics, and a changing culture, which can be partially achieved by conscious effort. To design with a new type of Symbolism is the inevitable task for modern designers which includes you and me.

¹p 6, *Poetry, Language, Thought* by Martin Heidegger.

Appendix 1. News From Quantum Physics

The following passage is quoted from "The Tao of Physics"

"Relativity theory has had a profound influence on our picture of matter by forcing us to modify our concept of a particle in an essential way. In classical physics, the mass of an object had always been associated with an indestructible material substance, with some 'stuff' of which all things were thought to be made. Relativity theory showed that mass has nothing to do with any substance, but is a form of energy. Energy, however, is dynamic quantity associated with activity, or with process. The fact that the mass of a particle is equivalent to a certain amount of energy means that the particle can no longer be seen as a static object, but has to be conceived as a dynamic pattern, a process involving the energy which manifests itself as the particle's mass.

This new view of particles was initiated by Dirac when he formulated a relativistic equation describing the behavior of electrons. Dirac's theory was not only extremely successful in accounting for the fine details of atomic structure, but also revealed a fundamental symmetry between matter and anti-matter. It predicted the existence of an anti-electron with the same mass as the electron but with an opposite charge. This positively charged particle, now called the positron, was indeed discovered two years after Dirac had predicted it. The symmetry between matter and anti-matter implies that for every particle there exists an antiparticle with equal mass and opposite charge. Pairs of particles and antiparticles can be created if enough energy is available and can be made to turn into pure energy in the reverse process of annihilation. These processes of particle creation and annihilation had been predicted from Dirac's theory before they were actually discovered in nature, and since then they have been observed millions of times.

The creation of material particles from pure energy is certainly the most spectacular effect of relativity theory, and it can only be understood in terms of the view of particles outlined above. Before relativistic particle physics, the constituents of matter had always been considered as being either elementary units which were indestructible and unchangeable, or as composite objects which could be broken up into their

constituent parts; and the basic question was whether one could divide matter again and again, or whether one would finally arrive at some smallest indivisible units. After Dirac's discovery, the whole question of the division of matter appeared in a new light. When two particles collide with high energies, they generally break into pieces, but these pieces are not smaller than the original particles. They are again particles of the same kind and are created out of the energy of motion ('kinetic energy') involved in the collision process. The whole problem of dividing matter is thus resolved in an unexpected sense. The only way to divide subatomic particles further is to bang them together in collision processes involving high energies. This way, we can divide matter again and again, but we never obtain smaller pieces because we just create particles out of the energy involved in the process. The subatomic particles are thus destructible and indestructible at the same time.

This state of affairs is bound to remain paradoxical as long as we adopt the static view of composite 'object' consisting of 'basic building blocks'. Only when the dynamic, relativistic view is adopted does the paradox disappear. The particles are then seen as dynamic patterns, or processes, which involve a certain amount of energy appearing to us as their mass. In a collision process, the energy of the two colliding particles is redistributed to form a new pattern, and if it has been increased by a sufficient amount of kinetic energy, this new pattern may involve additional particles.

High-energy collision of subatomic particles are the principal method used by physicists to study the properties of these particles, and particle physics is therefore also called 'high-energy physics'. The kinetic energies required for the collision experiments are achieved by means of huge particle accelerators, enormous circular machine with circumferences of several miles in which protons are accelerated to velocities near the speed of light and are then made to collide with other protons or with neutrons. It is impressive that machines of that size are needed to study the world of the infinitely small. They are the supermicroscopes of our time.

Most of the particles created in these collision live for only an extremely short time-much less than a millionth of a second-after which they disintegrate again into protons, neutrons and electrons. In spite

of their exceedingly short lifetime, these particles can not only be detected and their properties measured but are actually made to leave tracks which can be photographed! These particles tracks are produced in so-called bubble chambers in a manner similar to the way a jet plane makes a trail in the sky. The actual particles are many orders of magnitude smaller than the bubbles making up the tracks, but from the thickness and curvature of a track physicists can identify the particle that caused it...

The high-energy scattering experiments of the past decades have shown us the dynamic and ever-changing nature of the particle world in the most striking way. Matter has appeared in these experiments as completely mutable. All particles can be transmuted into other particles; they can be created from energy and can vanish into energy. In this world, classical concepts like 'elementary particle', 'material substance' or 'isolated object', have lost their meaning; the whole universe appears as a dynamic web of inseparable energy patterns. So far, we have not yet found a complete theory to describe this world of subatomic particles, but we do have several theoretical models which describe certain aspects of it very well. None of these models is free from mathematical difficulties, and they all contradict each other in certain ways, but all of them reflect the basic unity and the intrinsically dynamic character of matter. They show that the properties of a particle can only be understood in terms of its activity-of its interaction with the surrounding environment-and that the particle, therefore, cannot be seen as an isolated entity, but has to be understood as an integrated part of the whole...

In modern physics, the universe is thus experienced as a dynamic, inseparable whole which always includes the observer in an essential way. In this experience, the traditional concepts of space and time, of isolated objects, and of cause and effect, lose their meaning. Such an experience, however, is very similar to that of the Eastern mystics. The similarity becomes apparent in quantum and relativity theory, and becomes even stronger in the 'quantum-relativistic' models of subatomic physics

where both these theories combine to produce the most striking parallels to Eastern Mysticism."¹

¹ Page 88 to 92. *The Tao of Physics* by Fritjof Capra

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