

The Historical Roots of China's Ecologic Crisis¹

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ABSTRACT Lyn White argued that the historical roots of American ecologic crisis lay in the religious culture. Having no such religious tradition, what, then, are the historical roots of China's ecologic crisis? In the pre-modern society, population propagation is so stressed both in the official Confucian ideology and in daily practice that the anxiety “Having No Progeny” influenced the production and reproduction of China’s population, which in turn influenced the environment. The lasting influence of this anxiety still influences contemporary Chinese society. In the modern society, the anxiety “Lagged Behind” and the desire to catch up with more advanced economies drive contemporary China, and have led the state and the nation’s people to begin up a radical process of economic catch-up with the West. As a result, China now has an even more serious environment problem than the western society of Schnaiber’s “treadmill”.

Introduction

In 1967, Lyn White published a paper titled *The Historical Roots of Our Ecologic Crisis* in the journal *Science*. In this paper he argued that the historical roots of American ecologic crisis lay in the religious culture of the Judeo-Christianity (1). Three years later, Lewis W. Moncriste published a counter-argument in the same journal, titled *The Cultural Basis for our Environmental Crisis*. In his view, the Judeo-Christian tradition is only one of many cultural factors contributing to the current environmental crisis (2). White’s proposal is that Judeo-Christian tradition stimulates the progress of science and technology which further leads to environmental degradation. While Moncriste argues that Judeo-Christian tradition

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influences the capitalism with the attendant development of science and technology and democratization, which further leads to the urbanization, increased wealth, increased population and individual resource ownership. And all these cause the environmental degradation. Moncrife argued instead for approaching a history of the American environmental crisis through a study of American institutions. So, Moncrife has not answered or couldn't deny the question put forward by White.

In yet another counter-argument, Allan Schnaiberg, et al (3) explains the reason of environmental problems through political economy, and the concept of the *Treadmill*. Schnaiberg and his colleagues see *the treadmill* as the modern production process. For them, "the treadmill" is a metaphor for capitalism; the modern economy is like a treadmill, starting slowly but picking up speed over time. People produce ever more goods ever more quickly on the "treadmill of production"; they consume ever faster on the "treadmill of consumption." Only through a cycle of continual production and consumption can the economy run normally; ever-increasing production requires ever more consumption, and the cycle gets worse.

They note, however, that the excessive production and consumption required by the economic treadmill has caused environmental problems. The tremendous amount of raw materials required for ongoing production has caused depletion of natural resources. A large number of waste produced in the production process has lead the pollution problem. The continuous production promotes consumption continuously, and the excessive consumption produces a large number of offal and thus pollutes the environment (3). Because of this, they argue, the economic "treadmill" is not sustainable. Our planet has limited resources, and cannot support the ongoing economic treadmill; ever-increasing capitalist consumption and production cannot continue over the long run.

Taking Schnaiberg's argument as my starting point, in this paper I wish to examine a question that he and his co-authors do not address, namely, the problem of why people get on this treadmill in the first place. I suggest that we consider linking Schnaiberg's political economy approach, White's original argument about the West's Judeo-Christian heritage, and Max Weber's analysis of the "spirit of capitalism."

From this perspective, the tendency of Western capitalist economies to form “treadmill” systems stems from the Protestant ethic and individuals’ desire to achieve before God. This anxiety before God is what I call a “primary anxiety”(4); the discussion below will introduce a “secondary anxiety” as well. According to Max Weber, in order to be favored by God, religious believers began to hold strong anxieties, particularly after the Reformation. Believers, he argued, confirmed the existence of God and verified their special favor in God’s eyes through economic achievement. Capitalism and Protestantism were thus intertwined, as occupational activities became a basis for religious belief and activities.

Moncrife’s paper in *Science* ends with the following quote from Jean Mayer (2):

It might be bad in China with 700 million poor people but 700million rich Chinese would wreck China in no time...It’s the rich who wreck the environment...occupy much more space, consume more of each natural resource, disturb ecology more, litter the landscape...and create more pollution.

These words were written before the four decades. Since the reform and opening policy of the late 1970s, China's economy and rate of industrialization have grown rapidly. As a result, the ecosystem has also deteriorated rapidly. Some rivers are black with pollution, and the residents of many areas no longer have water to drink. Desertification and sandstorms are increasingly serious problems. There are shortages of energy and mineral resources. Problems such as global climate change due to increased energy consumption are also more obvious every day. At the same time, the world ecosystem is entirely inter-related; with one-fifth of the world’s population, China’s environment problem has an incomparable impact on the entire planet.

What, then are the historical roots of China's ecologic crisis? China has no Judeo-Christian tradition, and the influence of Protestantism is very slight. Moreover, the market system of China is not mature. What, then, are the cultural and historical origins of China’s serious environment problem? I argue that we can understand the China’s environment problem by looking closely at two different aspects of Chinese society: the institutional systems that are in place in the Chinese economy, and the cultural traditions that still govern many aspects of Chinese society. Rather than trying

to analyze the roots of China's environmental crisis from the perspective of individual actors, this paper will instead look at structural forces that have contributed to the current state of ecological deterioration. To do so, I will divide my discussion of Chinese history into two sections. The first is pre-modern society, represented by Confucian culture; the second is modern society after China began being influenced by the western world or globalization. The assumption of this paper is in China's pre-modern, the primary social anxiety was not having enough children; this anxiety influenced the production and reproduction of China's population in pre-modern time, which in turn influenced the environment. Moreover, I argue that the lasting influence of this anxiety still influences contemporary society.

In modern Chinese society, the pressure of the Western imperialism meant that China's most serious anxiety was to survive as a nation or perish. The concern about lagging behind Western society and the desire to catch up with more advanced economies drives contemporary China, and has led the state and the nation's people to begin up a radical process of economic catch-up with the West. As a result, China now has an even more serious environment problem than the western society of Schnaiber's "treadmill."

"Having No Progeny": Chinese Historical Anxiety(5)

There are two schools of thought about the relationship between human beings and the environment. One is "anthropocentric" or "egocentric". The other considers that human beings are a part of the ecosystem.

Although there have been many influences on Chinese traditional culture, Confucianism, Buddhism and Taoism were the three main sources of what is now considered Chinese tradition. Confucianism was espoused by Confucius and Mencius, while Taoism's main thinkers were Lao Tse, Chuang Tse; all came from China originally. Buddhism originally came to China from India; however, Buddhist thought in China was strongly influenced by local Confucian and Taoist ideas, just as they were transformed through contact with Buddhism. Buddhism and Taoism both strongly emphasized that human beings should live in harmony with nature. Taoism,

as represented by Lao Tse and Chuang Tse, places supreme value on human beings' integration with the environment. Lao Tzu's world view is nothuman centred, but instead views that humans as a part of the ecosystem. In this school of thought, Man takes should follow natural laws that derive from the Earth; the Earth derives its natural laws from Heaven, while Heaven takes its natural laws from the Tao. In Lao Tse 's words:

There was something undefined and complete, coming into existence before Heaven and Earth...Therefore the Tao is great; Heaven is great; Earth is great; and the (sage) king is also great. In the universe there are four that are great, and the (sage) king is one of them. Man takes his law from the Earth; the Earth takes its law from Heaven; Heaven takes its law from the Tao. The law of the Tao is its being what it is. (6)

The attitude towards desire of human beings influences the Taoist's understanding of the relationship between human beings and nature. In Lao Tse's view, human's behavior in and towards nature should always be appropriate. He emphasizes that *human should be content with what they have and stop to avoid danger and to enjoy free long life. (7)*

For individual, the thought of *being content and stopping* advocates people to be indifferent to fame or gain, to have a natural, simple and unadorned life and to keep in good health. As regards to society, he puts emphasis on being governed by doing nothing that goes against nature, praises highly the sovereign in the little country, and not visiting each other all their lives. For this reason, Taoism was frequently criticized by Confucianists. However, Lao Tzu's thought played an important role in political ecological practices in China.

The central tenets of Buddhism including mandates to cherishing life, not kill lives, these concepts helped protect animals and plants, and also helped maintain ecological balance. Other Buddhist customs such as maintaining a vegetarian diet, or freeing captive animals, also contributed to the natural balance between man and the environment in pre-modern China. Confucianism comes from Confucius. Developed by Mencius, it was adopted as China's official state ideology during the Han Dynasty

(BC206-AD220). For over 2000 years, Confucianism was China's leading ideology, and has had a deep and lasting impact on Chinese society. On the question of people's relationship with the natural world, Confucianism calls for an approach firmly grounded in the observable universe. For example, when one of his disciples asked him to define "wisdom," Confucius replied:

To give one's self earnestly to the duties due to men, and, while respecting spiritual beings, to keep aloof from them, may be called wisdom. (8)

Confucius not only advocated keeping ghosts and gods at a respectful distance, but also avoided discussing them:

The subjects on which Confucius did not talk, were-extraordinary things, feats of strength, disorder, and spiritual beings. (9)

Doesn't like the Christian tradition, Confucianism does not emphasize people to be antagonistic to nature. Compared with Taoism, Confucianism is active. However, it influences the environment mainly through the population factor (10).

Confucius very strongly concentrated on filial piety, which was mentioned 19 times in *The Analects*. Maintaining that the younger generation should care and provide for their parents, Confucius emphasized that the younger generation had to respect their elders emotionally.

Tsze-yu asked what filial piety was. Confucius said, "The filial piety nowadays means the support of one's parents. But dogs and horses likewise are able to do something in the way of support;-without reverence, what is there to distinguish the one support given from the other?" (11)

Confucius emphasized that people should not only be filial to their living elders, but also had to show appropriate respect for deceased ancestors:

That parents, when alive, be served according to propriety; that, when dead, they should be buried according to propriety; and that they should be sacrificed to according to propriety. (12)

Generally speaking, Confucius emphasized the younger generation's obligation and responsibility to the older generation. To fulfill these obligations and responsibilities required that each generation produce heirs. Without sons, how could

the younger generation carry out their responsibilities to their elders?

Historically, Mencius took Confucius' concept of filial piety even further, stating: *There are three ways to be unfilial, the worst is to not produce off-spring.* (13) Throughout Chinese history this was not only a quote from a philosophical classic, but a very common saying in daily discourse.

There is a large literature explaining the importance of flourishing population in Chinese folk proverbs and customs. For instance, there are many sayings such as *the more sons, the more blessing*. In another example, in Chinese tradition guests gave Chinese dates and peanuts(14) to newly-married couples, symbolizing “we wish you the quick birth of a son” and “may many children be born to you, not only the male, but also the female”. These traditions point to two aspects of the emphasis on population in Chinese traditional society. The first is the total amount of the population; namely the more children, the better. The second is gender partiality, regarding men as superior to women.(15)

In traditional China, focusing on offspring had a social function. First of all, there were no material or social welfare systems, so children were responsible for supporting their parents when they aged. Without offspring, the older generation had no one to rely on when they became physically weak, sick, and lost their ability to labor. At the same time, this functional need drove the development of traditional Chinese cultural systems. For example, village culture – the main social form of Han Chinese people in pre-modern times – has had a tradition of male domination and preference for sons for over two thousand years.

There are many other examples of how Confucian ideology influenced population growth. Two examples are given below.

In China, the influence of Confucianism was weaker in minority areas than the areas dominated by the Han majority. My research confirms that China's minority peoples evince less desire for many children than Han people. For example, the central government has loosened family planning requirements among minority groups in China, who are legally allowed to bear two or more than two children. However, according to studies I conducted in the Hulun Buir Mongol communities in

Inner Mongolia and the Abo Tibetan communities, some minority families voluntarily have only child. In rural Han communities, however, in spite of the central government's extensive efforts to implement its one-child only policy, many couples still chose to be punished by the government and bear two children. Some families even have three or four children, continuing to bear more progeny until they have a boy.

Gender ideology about male domination is also a clear difference between Han and minority areas. In some ethnic Mongol communities in China, women hold political power, serving as local village cadres with wide public acceptance. In Tibetan communities, women have higher status and more power than men in the domestic sphere. If Tibetan families have both a son and a daughter, parents prefer to keep the daughter at home in the family, and bring a son-in-law to live with them, rather than marrying their daughters out into their husband's families, as is the case in Han communities. It is also common in Tibetan families for young men to marry into their bride's families, a phenomenon impossible for a normal family in rural Han areas.

Shandong Province, the historic home of Confucianism, provides another example, for population density is higher there than in other parts of China. The historical facts of migration from central China towards the Northeast China can explain this. At present, ethnic Han people constitute 97.6% of the total population of the three northeastern provinces of Liaoning, Jilin and Heilongjiang (16). Historically, the residents in these regions were not ethnically Han, and the population density there was low. A large number of ethnic Han people from central China began to immigrate to the region starting in the mid-17th century; Shandong people accounted for up to 80% (17) of this immigrant pool. Although Hebei and Shanxi provinces are better located for immigration to the Northeast, Shandong, the home of Confucius and Mencius, generated far more migrants than other provinces. I argue that this stems from the stronger influence of Confucianism in Shandong, which led to greater desire for large families, producing a high population density that led to pressure to immigrate (18).

Thus, on one hand, the preference for bearing multiple sons was central to traditional Chinese society, rooted in both official state ideology and folk tradition. On the other hand, during pre-modern times people had limited ability to control nature. Because of floods, famines, and other natural disasters, families could not guarantee that they would have male offspring to carry on caring for the next generation and conducting ritual ancestor worship. From this came the anxiety of “Having No Progeny”. As a result, China has a history of a high population growth rate. Chinese historians and statesmen already noted the cycle of Chinese dynasties’ boom and wane. (19) In the early years of every new dynasty, social and political stability led to high rates of population growth. Eventually, this growth rate would exceed the rate of land development. Later in the dynastic cycle, however, problems of land annexation, political corruption would develop, generating social and political conflict. Finally, a peasant uprising would form to challenge dynastic authority. The wars that ensued would greatly reduce population, until a new cycle began. The contradiction between population and land (environmental capacity) is thus the reason for as well as the result of cultural competition and the subconscious drive of the Chinese people towards population production and reproduction.

The base of China’s population of the Hans is huge. This influences the modern Chinese society too. All the contemporary China's social problem including environment problem, can find the influence factor of China’s huge population base.

Lagged behind: Chinese Modern Anxiety

There is a long history of China’s environmental problem. For example, the banks along the upper and middle reaches of the Yellow River were once lined with forests. However, due to deforestation, the Yellow River has long been heavily sedimented. In history, many areas of China were once elephant habitats (20). However, the elephant long ago retreated to very limited areas such as Xishuangbanna in Yunnan Province in the southwest China at present. These examples clearly show that environmental degradation has long been a problem. However, comparatively

speaking, the speed of the environmental degradation in pre-modern society has been calculated in millennia or centuries, while the speed of present environmental degradation is calculated in decades or even years. So although there are long historical antecedents, today's rate of environmental change deserves to be called an ecological crisis. And if the environmental problems of pre-modern society were caused mainly by population growth and agricultural overexploitation, then the present ecological crisis is the result of trying to catch up with modernization.

If American ecological crisis stems originating from the primary anxiety of Protestants to obtain special favor from God, it can be argued that China's present environmental problems stem from what I call a secondary anxiety, produced by China's modern society. I call it a secondary anxiety because it is secondary, having no relation to China's pre-modern anxiety of having no progeny, or the western Protestant anxiety or the relation between man and God.

It has taken around 200 years (21) -- essentially from the mid 19th century to the mid 21st century -- to complete its drive towards modernization, with 1949 -- the year the Chinese Communist Party founded the People's Republic of China -- as a watershed. During the first century of this process, China mainly sought to preserve its independence from western imperialism, while after 1949 it moved the country began to strive for strength and prosperity. During these 200 or so years, China has faced strong external pressure to modernize. In the first century, China faced the threat of colonization, while in the following 100 years it was the specter of poverty, lagging behind the rest of world, and even its ability to exist as an independent nation have driven China's push to modernize. China's long history and national pride made the nation unwilling to be colonized by others or to remain mired in poverty. The path of developing independently and becoming prosperous was seen as the country's only choice. In its long history, China had never faced these kinds of double pressures -- external threats and internal anxieties -- and in response it chose the route of radical modernization.

The Leap Forwards (the concept Leap Forward is from the historic event Great Leap Forward <1958-1960>) are good examples of China's modern *secondary*

anxiety (22). I describe the path of China's *Leap Forward* (abbreviated as LF) in the following figure, where I summarize the course of China's development. The first peak in the figure describes *Plans for National Reconstruction* put forward by Sun Yat-sen (1866-1925). These plans were never implemented, so they are drawn with a dotted line. The second peak shows the *Great Leap Forward* from the end of 1950s to the beginning of 1960s. The amplitude of the graph is greatest here, and the event had the most violent impact on Chinese society. I call the subsequent development phases the *Post-Leap Forward Movement*. There have been several *Post-Forward Movements* since the Great Leap Forward event. However, the total trend is that the amplitude declines gradually.

Former LF Great LF Post LF

Figure1: Leap Forward Movement of China

The ideology of the *Great Leap Forward* can be traced back to a document called: *Plans for National Reconstruction* which *Sun Yatsen* wrote at the beginning of last century. Sun Yat-sen, the first president of the Republic of China (1911-1912) was a western-educated medical doctor who lived abroad for many years. He had a deep understanding of western countries and Japan, as well as the national conditions of China. In Sun Yat-sen's view, it had taken more than a century for America to become prosperous and strong, and only half a century for Japan. Therefore, he predicted, it would take only ten years for China to become prosperous and strong as well:

By the 8th year of the Republic of China (AD1919), it had only been 143 years since [America] declared independence on July 4, 1776. However, the US has already become the most prosperous and strongest country in the world. At the beginning of

Meiji Reformation (1868), the population of Japan accounted for less than 1/10 of that of China, and its landmass was not even as large as China's Sichuan Province. Its technology at that time was still not as good as China's is today. But Japan quickly became aware of its role in the world. Knowing that isolated countries could not be stable, Japan changed its tactics from repelling foreigners, to instead trying to learn foreign technology and make full use of it and to overpower it. It employed technologically skilled personnel from various countries, adopted American-European practices, and then carried out reforms. It took more than a century for America to be prosperous and strong, but it only took half a century for Japan, accounting for only a third of that of the U.S. According to this logic, ten years will be enough for China to become prosperous and strong (23).

Sun Yat-sen's goal hadn't been achieved. But nearly half a century after Sun's proposal, the Chinese Communist Party began to implement a plan in an organized way. The original goal of *Great Leap Forward* was to surpass Great Britain and catch up with the United States. The overall plan was surprisingly similar to Sun's original plan. In the 1950s, steel output was the key index of industrial development, and a key indicator of the economic achievement. In 1956, the Chinese government published its Second Five Year Plan. This plan determined that steel output increase to 10.5 million-12 million tons by 1962, and that grain yields reach 250 billion kilograms (24). In actuality, in 1957, the steel output was 5.35 million tons, while the grain yield was 185 billion kilograms. However, after the *Anti-right Deviation Movement*, a revised *Second Five-Year Plan* was announced on August 3, 1958. According to this new plan, steel output would grow to 80 million - 100 million tons, and the grain yield would reach 650-750 billion kilograms by 1962 (25). In this plan, steel output would be much higher than that of the original plan "exceed the Great Britain's within 7 years, and catch up with the United States within 15 years". The planned steel output in 1962 would 14.9-18.7 times that of the actual steel output in 1957, with an average annual growth of 71.6-79.6%. In fact, China's steel output exceeded 100 million tons for the first time in 1996, 35 years later. The planned grain yield for 1962 would be 3.5-4.1 times that of 1957. It is a myth that grain production could quadruple in five

years in conditions where land development is already sufficient. During the Great Leap Forward, in order to reach the steel output goal, people disregarded the cost and ignored the conditions of production, and attempted to carry out a policy of “everyone in society becoming steel makers.” At the same time, agricultural production was invented the “satellite launching” (26).

During the Great Leap Forward, China did complete some important infrastructure projects. But it has since been proven that the Great Leap Forward did not achieve the goal of rapid economic growth, but the methods it employed instead caused serious economic recession and famine. Meanwhile, environmental disruption was very serious, due to the big-scale steelmaking and widespread culling of forests. Today, even the Chinese government has acknowledged that the action of Great Leap Forward was wrong.

The Great Leap Forward is now history, but if we look closely at the underlying logic, we can see that, both the ideology and the processes of the Great Leap Forward have not disappeared today. After the Great Leap Forward, China has carried a series of “Post Great Leap Forward Movements”. Examples include the Emulating Dazhai in Agriculture Movement(1960s-1970s) (27), and the Development Zone craze across the whole country after 1993. To illustrate, I take the Development Zone craze as an example. By August of 2004, there were 6,866 development zones of all kinds across country, encompassing 38,600 sq. km. To the end of 2004, the government reduced the number of development zones by 70.1%, to 2,053. These zones now are limited to 13,700 sq. km., a 64.5% reduction (28). In other words, the needed quantity and area of development zone actually account for about 1/3. This excludes the data of clearing up incompletely.

From the perspective of individual or organizational action, the most important characteristic of the *Post Leap Forward* Movement is of raising GDP for GDP. The country has the goal of raising GDP at every administrative level, and some lower local governments were assigned GDP index sometimes. In some cases, when local areas have not met their quotas for economic development, local officials simply invent the data they submit to the authorities above them. It is similar to the “satellite

launching” of the Great Leap Forward. This has led to a new saying in China: “officers make up the data, and the data produces the officers”.

From the viewpoint of the social psychology, both the Great Leap Forward and the subsequent Post Leap Forward stem from a long-term national anxiety of being left behind. This psychology has had some common characteristics across recent history. China greatly values its own historical achievements. Through the middle period of Qing Dynasty (AD1616-1911), Emperor Qianlong (AD1711-1799) still saw his county as a realm of paradise. But after a series of failures including Sino-British Opium War (1840-1842), the retributions for the Boxer Rebellion in Beijing (1900), and the Sino-Japanese War (AD1894-1895), the Chinese realized that the nation lagged behind the rest of the world. Subsequently, it is been haunted by this sense of being left behind.

The second feature of this anxiety is the urgency Chinese feel about achieving their development goals. To Chinese, this goal is very clear. For Sun Yat-sen, the goal of Leaping Forward was to catch up with newly developed countries of America and Japan. The goal of the Great Leap Forward was to surpass Great Britain industrially and catch up with the United States. The key goal of the Post Leap Forward period has been to catch up with the GDP per capita of the developed countries. This, of course, is not an easy goal to achieve, but Chinese people are very impatient to reach this economic level.

The third feature is the motivating forces that have produced these visions of China’s future and the institutional framework in which these plans have been executed. The Leap Forward Movements stem from both external pressures from developed countries that have already modernized, and internally, from the national psychology that drives the determination to be as developed as others. Institutionally, these plans have been made possible because of the extremely powerful hierarchy that exists in China, which has been able to mobilize tremendous resources towards this end. Since the Movement to form rural People's Communes (AD1958), the government has been able to totally control and mobilize the rural communities, which until then had been very loosely organized and governed.

It was difficult to avoid the ecological crisis when the radical movement represented by the Great Leap Forward combined modern industry with science and technology. Modern science and technology has strengthened people's abilities, including their destructive abilities towards nature. For example, with an axe, chopper, traditionally person cut only several bundles of firewood per day. With the high-efficiency machinery, today one can cut down several hectares of forests in one day. Across several generations, a traditional smithy could only pollute his own immediate environment – smoking his own house black, and polluting the pond in front of his door. However, a large-scale enterprise, can pollute the water an entire watershed, virtually overnight. By the means of the Leap Forward Movement, a lot of locally environmentally irrational actions have been adopted because of centralized decision-making, and single-mindedness of development targets that did not take the entire environmental system into account. The environment was considered an easy to sacrifice on the way to achieving the historical goal of development, and the resulting pollution was inevitable. We notice that a large amount of forests were cut down in the Great Leap Forward in China. In the period of the Post Great Leap Forward, the river system has been seriously polluted by industry because of technological progress and expansion of the scale of industry. Today, all the main great rivers and lakes of China have already been polluted.

Conclusion

Here I make a connection between Lyn White, Max Weber and Allan Schnaiberg and his co-author to explain the American's ecological crisis. According to Lyn White, the Judeo-Christian tradition has caused people to be antagonistic to the nature, while the spiritual characteristic of Christianity has promoted the development of the scientific realm. Based Max Weber, that after the Reformation, especially in American society, the Protestant ethic has required economic achievements to confirm the existence of God and verify their special favor in God's eyes. This resulting anxiety placed them in a treadmill, the "treadmill of the production." I argue here that the Treadmill of Production and the Treadmill of consumption are the typical expression

of the Protestant's anxiety. Thus, the treadmill of production and the treadmill of consumption, derived from the former, have caused America's ecological crisis.

Chinese society does not have a Christian tradition. After the foundation of the People's Republic of China in 1949, Marxism has been the dominant ideology. On this development path, Marxism tries to avoid the existing problems of capitalism, including environmental problems. Unfortunately, China has veered onto the path of "pollute first, and then control it later". From the viewpoint of the traditional Chinese thought, China's Buddhist and Taoist traditions emphasize the harmonious relationship between human and nature. Confucianism also had an objective vision of the relationship between people and nature, but the Confucian ideology of filial piety negatively influenced the relationship between humans and nature. The huge population base in China has interacted with other factors in modern society, which has had a continuous influence on this relationship. China has been caught up in globalization since the middle of the 19th century, and later chosen the radical route of catching up with modernization. The *primary anxiety* of *Having No Progeny* in the culture of two millenniums and the *secondary anxiety* of catching up with modernization in the nearly two centuries is the total origin of the present Chinese environmental problem (29).

According to White, "What we do about ecology depends on our ideas of the man-nature relationship. More science and more technology going to get us out of the present ecologic crisis until we find a religion, or rethink our old one." (1). And he thinks that Zen Buddhism, which conceives of the man-nature relationship is very nearly the mirror image of the Christian view. (1). Contemporary China has already been deeply involved in globalization. And radical actions have been produced due to China's anxiety. China can not accept western culture totally. Moreover, it is necessary to review the western legacy constantly that we have accepted intentionally or unintentionally. Likewise, it is impossible and meaningless to resume China's traditional culture totally. However, it is very necessary to comb and scrutinize the traditional thought resources of China. Under the influence of the west, China is forming the new culture in its own practical exploration. It is of great importance to

reflect the practice route that we have already passed by and widen clear our goal constantly. Only in this way, we may avoid the graver ecological crisis.

References and Notes

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3. A. Schnaiberg, D. N. Pellow & A. Weinberg, The Treadmill of Production and the Environmental State, In A. P. J. Mol & F. H. Buttel (Eds.), *the Environmental State Under Pressure* (pp. 15-32). London: ElsevierNorth-Holland.
4. Anxiety a psychological concept refers to the social psychological conditions of a huge social groups.
5. The discussion of Chinese population mainly focuses on Han communities.
6. Chapter 25 in *Lao Tzu*.
7. Chapter 44 in *Lao Tzu*.
8. Chapter 6 of Weiye in *Analects of Confucius*.
9. Chapter 7 of Shuer in *Analects of Confucius*.
10. Population is one of the most important factors that influences environment. Population quantity and human activities influence environment. Due to a low technical level, people of the pre-modern society had limited activities. So, the quantity of population becomes the decisive factor of influencing environment.
11. Chapter2 of Weizhen in *Analects of Confucius*.
12. Chapter 2 of Weice in *Analects in Confucius*.
13. Chapter 26 in *Mencius*.
14. Chinese pronunciation of Chinese dates is “zao” and “zi”, which has the same pronunciations of “early” and “son” in Chinese. Peanut is “hua” and “sheng”, which has the same meaning of the character “multicolored” and “offspring”.
15. The gender partiality is relating to the social and cultural system. China was an agricultural society, and male descent system was the main stream. Institutionally, a married daughter was no longer the member of the family in which she was born.

16. *Chinese Statistical Yearbook 2007*.
17. D. Z, Liu, *Making a Journey to the Northeast* (In Chinese). Shandong People's Press, 2008, pp. 26.
18. Flood, droughts, and wars were regarded as the main causes of Shandong people's historical migration to the Northeast of China. I argue here that it is the population pressure that explains the large-scale immigration from Shandong, while famine and natural disaster only provide a superficial explanation for this migration pattern. Until the Han Dynasty, Shandong was one of the wealthiest areas in China. However, high population density and ongoing desire for ever-larger families meant there were too many people for the land to support. This excessive population further led to over reclamation of wasteland. The conflicts between human and land were upgraded.
19. K, Ning, "The Cycle of Chinese Dynasties' Boom and Wane", *Xinhua Digest* (in Chinese), 2006(18)
20. E. Mark, *The Retreat of the Elephants—China's Environmental History*, New Haven and London: Yale University (2004).
21. Deng Xiaoping predicted that China would reach to a level of the mid-developed countries in the middle of the 21st century, and would be modernized then. See Deng, Xiaoping, *The Selected Works of Deng Xiaoping, Vol.3*. Beijing: People's Publishing House, 1993, pp. 226.
22. The mistakes of "The Great Leap Forward" were regarded as individuals' faults (for example, Mao Zedong's faults). Such view can not explain the phenomena of the "Pre-Leap Forward" and the "Post -Leap Forward". Sun Yat-sen's plan is very similar to the CCP's plan to surpass Great Britain and catch up with the United States. After the end of the Great Leap Forward, especially the Post-Mao era, China has enough time to reflect the tragedy, but why Chinese people still follow the behavior model of the Great Leap Forward-- raising GDP for GDP. So we should understand "The Great Leap Forward" in a long historic period and macro social structure.
23. Y. S, Sun *Plans for National Reconstruction*, Beijing: People's Press(1956), pp. 163.
24. Finance and Economic Committee Office of National People's Congress, Development Planning Department of the National Development and Reform

Commission(eds), *Important Document Assembly of the Five-year Plan since the Founding of the National Economic and Social Development*, Chinese Democracy and Law Publishing House, 2008, pp. 594-595.

25. Finance and Economic Committee Office of National People's Congress, Development Planning Department of the National Development and Reform Commission(eds), *Important Document Assembly of the Five-year Plan since the Founding of the National Economic and Social Development*, Chinese Democracy and Law Publishing House, 2008,, pp. 607-608.
26. In October 4th, 1957, Soviet Union launched the first satellite in the world. The "Satellite" thus refers to a great achievement in China. During the Great Leap Forward, some high grain yielding achievement is called "satellite." Just like the Soviet Union's Satellite, the grain yield is so high that is beyond ordinary people's imagination. In June 8th, 1958, Weixing Agricultural Productives' Cooperative, Suiping County, Henan Province, declared that the output of the wheat reached 2105 *jin* (one *jin* equals to 0.5 kilogram) per *mu*(equal to 667m²). This is the first "satellite" of high grain yielding, and following that "satellite" many "satellites" were "launched" in China. The headline of the *People's Daily* in 1958 revealed how large the "satellite" is.

Miracle Appearing in the Poor Mountains of Guangdong—the production of Mid-Season Rice Reaching to 60,000jin per mu , *People's Daily* ,1958-9-5 (1)

Guangming Agricultural Productives' Cooperative, Huang County—the production of Corn reaching to 27312 jin per mu, *People's Daily*, 1958-9-7 (4)

Hongan (County) Lanching a "Peanut Satellite"—35,000 jin per mu, Surpassing the Record of Jinjiang (County), *People's Daily* ,1958-9-29 (3)

The First Great Satellite of Sweet potato—560,000 jin per mu in Liuyang (County), *People's Daily*, 1958-10-23 (3)

It is reported that the rice output reached 130,435 *jin per mu* in Hongqi Agricultural Productives' Cooperative, Huangjiang County, Guangxi, which was tilted *Combining and Colse Planting for the Lands' Potential Productivity—Midle-Season Rice's Records from 60,000 to 130,000 jin per mu in Guangxi, Sichuan and Yunnan* in *People's Daily* in 1958.

27. Judith Sharpiro, *Mao's War against Nature—Politics and the Environment in*

Revolutionary China, Cambridge University Press, 2001. She thinks that the Emulating Dazhai in Agriculture Movement also caused environmental degradation. However, her view is mostly of politics perspective.

28. L.Yun, 6866 Development Zones Cleaned up and the Land Supply Recovered for National Development Zones, see <http://www.people.com.cn/GB/shizheng/1027/3027273.html>.
29. Other social problems, such as the education problem, have the same historical roots of the environmental problem.