

# *A Dialectic Analysis of the Concept of Ecological Civilization*

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**Abstract:** Ecological civilization has already evolved into a complex conceptual system. The mainstream idea holds that ecological civilization is an element of civilization, or a whole new social form, while other ideas view it as a philosophy of green development, a measure of green orientation, an outcome of the overall development of civilization. This paper, however, maintains that ecological civilization is another domain of civilization parallel with social civilization, and an integral whole made up of four elements of civilization. As a domain of civilization, ecological civilization is constant and systematic in content, limited in connotation, and holds a fundamental value. The five–sphere integrated plan (economic, political, cultural, social and ecological progress) will combine the construction of the four elements of civilization and push forward the construction of an ecological civilization.

**Keywords:** ecological civilization; social civilization; element of civilization; domain of civilization; the five–sphere integrated plan

## 1. The concept of the ecological civilization

As the Western world stepped into a golden post–World War II period of industrial development in the 1960s–1970s, prominent ecological challenges such as worsening air and water pollution, reduction of biological diversity and sharp decreases of forests began to arise, alongside the frequent occurrence of environmental disasters that severely threaten human health. Moreover, the book *Silent Spring* triggered an alarm of global ecological crisis. Meanwhile, fossil fuels

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like petroleum and some major mineral resources were at risk of being drained. The energy crisis posed serious threats to the survival and sustainable development of mankind, and provided a warning shot about “the limits to growth.” In such a context, problems concerning resources and energies became a wide concern in and outside China. Consequently, these issues led to the proposal of the ecological civilization concept.

### 1.1 The proposal of ecological civilization outside China

The scientific communism section of the 2nd issue of *Bulletin of Moscow University* in 1984 was the first to see academia use the term “ecological civilization.” On February 18, 1985, Zhang Jie, in the “News and Trends of Foreign Research” column of *Guangming Daily*, further interpreted the word. According to Zhang, “Cultivating an ecological civilization is the content and outcome of communist education. Ecological civilization happens where society wields a certain influence on individuals. It is a glimpse into the interactive relationship between society and nature through the lens of modern ecological requirements. It not only covers how the natural resources should be used, the material foundation and techniques, and the philosophy of society and nature interacting with each other, but also sees that those aspects will be in line with the scientific standards and requirements posed by general ecology, social ecology and Marxism–Leninism on society–nature interactions” (Zhang, 1985).

In 1995, Roy Morrison, a famous U.S. writer and critic, used the term “ecological civilization” in his book *Ecological Democracy*, listing ecological civilization as the successor to industrial civilization for the first time in the English-speaking countries. Therefore, Morrison is generally considered as the first one to propose ecological civilization by experts studying civilization forms.

### 1.2 Theoretical exploration of ecological civilization in China

In China, theoretical exploration of ecological civilization can be divided into two stages. The first stage featured theoretical explorations from 1987 to 2003.

Chinese academia’s exploration of ecological civilization can be traced back to 1986, when Prof. Liu Sihua, at the 2nd National Ecological Economics Seminar, for the first time incorporated ecological civilization into the framework of socialist civilization, proposing in his academic paper *On the Coordinated Development of Ecology and Economy*, that “material development, cultural–ethical progress and ecological civilization must be harmoniously synchronized during the construction of the socialist civilization” (Fang, 2014).

It is generally accepted that Prof. Ye Qianji, a famous Chinese ecologist, was the first to have explicitly defined the concept of ecological civilization in Chinese academia. In 1987, at the National Symposium on Ecological Agriculture, he proposed to “vigorously promote the construction of ecological civilization,” adding that “what we mean by ecological civilization is that man benefits from nature and then repays nature, that man transforms nature while protecting it, and that harmony and unity should always be maintained between man and nature.” He also stressed that ecological civilization is an indicator of how civilized the man–nature relationship is.

In 1990, Li Shaodong introduced the concept of ecological civilization from the perspective of ecological consciousness and cultural–ethical progress. According to Li, ecological civilization is an attempt to apply rational knowledge of the ecological environment and its positive practices to cultural–ethical progress, and then make the former an important part of the latter.

In 1994, Shen Shuguang had his paper *Ecological*

*Civilization and Its Theoretical and Practical Basis* published, in which he proclaimed that modern industrial civilization was decaying, with the ecological crisis being its primary signal, and that a new civilization—ecological civilization replacing it and becoming a major form for the future of society. That is by far the earliest documented saying that defined ecological civilization as the successor to industrial civilization, even earlier than that of Morrison from the English-speaking countries.

In 1994, Xie Guangqian and Wang Xingling expanded the scope of ecological civilization. They held that it was during the evolution and improvement of ecological civilization that human beings were bred, and that human civilization was founded upon a very primitive ecological civilization. According to Xie and Wang, if the past belonged to a natural ecological civilization, then it was time to build a “man-made ecological civilization”.

In 1997, Qiu Gengtian proposed to understand the concept of ecological civilization in the relationship between man, as a doer, and nature. According to Qiu, compared with the material progress, a positive result of human efforts to transform nature and produce physical wealth, ecological civilization is a positive outcome of human attempts that were intended to protect nature. He (1997a) maintained that ecological civilization calls for man to change the objective world while also proactively protecting it, to improve and optimize its relationship with nature, and refers to the material and cultural-ethical fruits altogether gained by the construction of a good ecological environment. According to Qiu, material development, cultural-ethical progress and ecological civilization have gone in parallel ever since the start of human civilization. Only that unlike the manifest, prominent material progress, ecological civilization, over a large part of the course of human social development, merely ranks as a minor, subsidiary and implicit form of

civilization (Qiu, 1997b).

Following Qiu, several scholars began to pay more attention to ecological civilization, and had relevant papers published. But, this stage was not marked by bountiful writings on ecological civilization.

The second stage was one marked with government-backed campaigns. Since approximately 2003, the term “ecological civilization” began to find its way into the official documents. *The Decision of the CPC Central Committee and the State Council on Accelerating the Development of Forestry*, issued on June 25, 2003, proposed in earnest to “build an eco-civilized society with beautiful mountains and rivers,” marking the first entry of “ecological civilization” into a national political document.

In October 2007, in the report delivered at the 17th National Congress of the CPC, the concept of “ecological civilization” made its debut among the top leadership, and “to construct a ecological civilization” was listed as a new prerequisite for the ultimate realization of a moderately prosperous society in all respects. Strategies were deployed to that end: the progress of civilization must stress increased production, higher living standards and healthy ecosystems, a resource-conserving and environmentally friendly society must be built. There must be a balance between speed and quality, between economic development and the environment composed of men and resources, and the environment for human life and production must be improved to achieve sustainable development of the economy and society. The report, focusing on “ecological progress” and “the philosophy of ecological civilization,” emphasized the importance of ecological civilization and its construction for China’s strategic goal of socialist modernization.

In November 2012, the report of the 18th National Congress of the CPC gave ecological progress particularly large coverage, further raising

the status of “ecological civilization” in the great cause of China’s socialist modernization and its layout.

The second stage of Chinese theoretical exploration into ecological civilization was marked by many papers from academia. As of the time this paper was written, as many as 19,339 papers entitled “ecological civilization,” had been published in different journals, and had been collected by China National Knowledge Infrastructure (CNKI). Excluding 295 papers completed before 2003, there were up to 19,044 papers, accounting for 98.5% of the total, that were claimed by the second stage.

## 2. The conceptual system of ecological civilization

The concept of ecological civilization has expanded into a complex system consisting of diverse concepts. The mainstream opinion is: ecological civilization as an element of civilization, or as a whole new social form. Others view ecological civilization as a philosophy of green development, a measure of the green orientation, or the outcome of the overall development of civilization. Aside from that, I hold that ecological civilization should be listed as a domain of civilization that can be placed next to social civilization.

### 2.1 Ecological civilization as an element of civilization

One mainstream opinion interprets ecological civilization by viewing social civilization as a lateral system. That is the very case with scholars like Zhang Yunfei, Fang Shinan and Liu Haixia. According to them, ecological civilization is an inner element of the social form that is as important as material development, cultural–ethical progress and political civilization, referring to the cumulative fruits of human efforts to obtain harmony with nature. Prof. Zhang Yunfei (2006) insisted that

the ecological structure should be within the social structure, and should be an independent, multilayered structure in itself. Zhang also pointed out that human needs are not limited to the material, social (political) and cultural–ethical scope, but should expand to the ecological scope. Therefore, he considers ecological civilization as important an element of civilization as material, cultural–ethical and political civilization. This concept taking ecological civilization as an element of civilization could be named the narrow outlook on ecological civilization (Fang, 2014), the systematical outlook on ecological civilization (Tao, 2014), or the small outlook on ecological civilization (Li, 2011). Wang Baolin and Zhang Ronghua (2003), by sorting through Chinese academia’s research into the structure of social civilization, proposed to study the social structure by dividing it into two, three, four, five or six equal parts. Both their trisection and quartation saw ecological civilization mentioned as an element of social civilization.

### 2.2 Ecological civilization as a new form of social civilization

Another viewpoint in China represented by scholars like Shen Shuguang (1994) and Yu Mouchang (2007), interprets ecological civilization through the vertical history of human civilizations. Also supported by the US’s Roy Morrison and academician John B. Cobb Jr., a famous postmodern philosopher, the viewpoint holds that ecological civilization is another form of social civilization after the primitive civilization, agrarian civilization and industrial civilization, which inherits and preserves the previous wealth passed down from the bygone agrarian civilization and the still operating industrial civilization, while rising above them (Cao, 2016). This vertical concept of ecological civilization is also named by scholars the broad outlook on ecological civilization (Fang, 2014), the linear outlook on ecological civilization (Tao,

2014), or the great outlook on ecological civilization outlook on ecological civilization (Li, 2011). According to Shen Shuguang, the ecological crisis marks the industrial civilization heading toward decline. Ecological civilization will replace the industrial civilization and become the major pattern of future societies (Shen, 1994). Roy Morrison also viewed ecological civilization as the successor to industrial civilization. Li Zuyang and Xing Zizheng (1999) interpreted the transition of civilization concepts as a result of the transition from a modern scientific mechanistic view of nature to the organic view of nature by modern science, and a sign of the profound transition from the traditional focus on industrial civilization to the modern focus on ecological civilization. Wang Guoxiang and Pu Peimin (2000) held that ecological civilization draw on the strengths while abandoning the weaknesses of the agrarian and industrial civilizations, set the ecological industry as its pillar, and primarily aimed at solving all crises threatening mankind and realizing the sustainable development among nature, society and the economy. According to Zhang Lin, ecological civilization was a new kind of civilization that centers on the mutual dependence between man and nature, and was founded upon the general development of human civilization (Zhang, 2000). Her view was echoed by Xu Chun (2010). Lai Zhangsheng (2009) held that the concept of ecological civilization could be understood both in a broad sense (the progress of social civilization) and in a narrow sense (an element of social civilization), yet that the establishment of a broad concept seemed more pressing and significant for the well-rounded transition of social civilization. Compared with viewing ecological civilization as an element of social civilization, the vertical approach, taking it as a stage of civilization, exhibits more radicalized criticism against the industrial civilization, and a more excited cheer for future social progress in

the man–nature relationship. Those in favor of the vertical approach are mostly idealists and patrons of ecology, who dream of transcending the industrial society and building an ideal ecological society.

However, that intention met prominent theoretical and practical challenges in the real practice of constructing an ecological civilization. Therefore, this very school of thought, by modeling itself after the theory of a primary stage of socialism, came up with a theory that divided ecological civilization into two stages: primary stage, and advanced stage. According to Xu Chun, ecological civilization should be divided into two forms: the primary form and the advanced form. The former means a more civilized attitude, blessed by the fruits of the industrial civilization, is taken towards nature. In this light, any brute exploitation or rude treatment of nature will be extinct. The relationship between man and nature will be improved and optimized, and a good ecological environment will be built with enthusiasm and maintained with caution. The latter means that man, while transforming the objective world, will take their initiative to improve the man–nature and people–to–people relationships and establish an orderly ecological operating mechanism and a benign ecological environment. According to the group that favors a vertical interpretation of ecological civilization, the current efforts of China to promote sustainable development are moving towards none other than the primary stage and form of ecological civilization (Xu, 2004).

### **2.3 Ecological civilization as a philosophy of green development**

A scholar of the former Soviet Union, who was the first user of the concept of ecological civilization in academia, once proposed to cultivate a private ecological civilization. The author holds that cultivating an ecological civilization is the content and outcome of communist education. Ecological civilization not only covers how the natural



resources should be used, the material foundation and techniques, and the philosophy of society and nature interacting with each other, but also sees that those aspects will be in line with the scientific standards and requirements posed by the general ecology, social ecology and Marxism–Leninism on the interaction between society and nature. It is thus inferred that the ecological civilization defined here is mainly a philosophy of green development that focuses on ecological culture and ecological temperament. Likewise, Jia Qinglin (2011) also posed in his article that “ecological civilization, as a new concept of civilization, abandons ideas and behaviors that are intended to harm, conquer and dominate nature, advocates respecting, protecting and reasonably exploiting nature during the socio–economic development, and strives to realize harmony between man and nature.” That also indicates a green philosophy.

#### **2.4 Ecological civilization as a measure of green orientation**

Fu Xianqing (1997) held that ecological civilization means a benign operation of social ecology within the greater ecology of our planet, as well as a harmonious state of mutual assistance between man and nature and between man and society. That in fact indicates an ideal state of green orientation. “Civilization” thus becomes more powerfully decorative, and ecological civilization changes into a measure of green orientation that is also highly decorative. Jia Qinglin (2011) gave another concept to ecological civilization by saying that “Ecological civilization means man, while taking their initiative to transform the objective world, will make active efforts to improve and optimize the man–nature relationship. It is an aggregation of the construction of a scientific ecological operating mechanism and a benign ecological state.” It is also a view that to a large extent takes ecological civilization as a measure of green orientation.

#### **2.5 Ecological civilization as an outcome of the overall development of human civilization**

Chang Shaoshun (2000), however, defined ecological civilization as “harmony and unity between human societies and nature,” insisting that ecological civilization should be “made up of the aggregation of the fruits of production within the ecological system,” and further pointing out that “it not only contains all kinds of social civilizations, but also the changes in nature caused by man. It is the unity between the entire social civilization and nature, and thus it is a comprehensive and holistic civilization.” This stance elevated ecological civilization, which is defined as the unity between the entire social civilization and nature, to a more extensive holistic civilization that covers both human social civilization and nature. It might be the most extensive concept ever posed for ecological civilization. Yet to my great regret, specific academic argumentation around it never followed.

#### **2.6 Ecological civilization as a domain of civilization**

In addition to the concepts mentioned above, there is another opinion emerging among Chinese scholars that views ecological civilization as a domain of civilization, though it is only vaguely and indistinctly mentioned by a few researchers in their reports. Unlike those that consider ecological civilization as an element of civilization, scholars in favor of the domain theory insist that ecological civilization was superior to such elements of civilization as material progress and cultural–ethical progress, because it includes not only natural ecological civilization but also spiritual ecological civilization. Meanwhile, the domain theory is different from the view that takes ecological civilization as the outcome of the overall development of Chinese civilization, because it holds that ecological civilization goes in parallel with, rather than containing, social civilization. Qiu Gengtian (1997), a researcher studying earlier

Chinese ecological civilization, might be counted as one that straddles the border between the domain theory and the element theory. On the one hand, he maintained that ecological civilization called for man to change the objective world while also proactively protecting it, to improve and optimize the relationship with nature, and referred to the material and cultural–ethical fruits altogether gained by the construction of a good ecological environment, indicating his stance to take ecological civilization as a domain of civilization; on the other hand, he held that the system of social civilization was composed of material progress, cultural–ethical progress and ecological civilization, making the last equal to the former two as an element of civilization, indicating his inclination towards the element theory. Fu Xianqing (1997), based on Qiu’s opinion, explicitly pointed out that ecological civilization was never in parallel with but rather was superior to material and cultural–ethical progress, for it boasted a stronger capability for summarizing, a higher level, and a more extensive scope. Here Fu did not clearly propose a domain theory, yet his inclination towards it was strong.

Indeed, Prof. Zhang Yunfei (2006) had already mentioned in his analysis that human social civilization not only included material development, ethical–cultural progress and political civilization accumulated throughout the development of mankind itself, but also included an ecological civilization that was formed by the interaction between man and nature. But unfortunately, such an understanding did not lead him further, for he still insisted that just like material development, cultural–ethical progress and political civilization, ecological civilization was an element of civilization. When writing about the relationship between ecological civilization and social civilization, Yao Wei (2010) noted that “Ecological civilization is as important as social civilization. The former is the latter’s extension and spread in

the domain of nature that men live on.” However, he still held that ecological civilization was an element of civilization, and so he listed it as, which wielded a unique influence on social civilization while retaining its independence.

I hold that ecological civilization be a domain of civilization that is equal to social civilization, rather than a mere element of civilization. As the aggregation of the material, cultural and institutional accomplishments men have achieved through their efforts to transform the world, human civilization includes not only the social civilization formed within the human society, but also the ecological civilization formulated through the interaction between man and nature. Since man have never lived a day without depending upon nature, nor in their production or life have they been separated from nature, nor interacted with nature without the influence of natural laws, they had to begin their efforts to construct ecological civilization from the primitive period. However, due to the deficiency of technologies, human’s impact on nature was initially minor, and thus human’s efforts to protect or construct based on nature were not effectively rewarded. Ecological civilization and social civilization, as two parallel domains of civilization, always co–exist, except that for a long time in history the latter was explicit, while the former was implicit. Only when man stepped into the later period of the industrial civilization, when human activities were imposing a giant influence on nature and posing a deadly threat to human living and development did ecological civilization begin to reveal its real worth and gain wide attention.

### 3. The complexity of the ecological civilization concept

#### 3.1 Manifestations of complexity

Concepts of ecological civilization are currently abound in newspapers and magazines, on the

Internet, in academic writings, and interpretations vary among scholars. However, “There is hardly a consensus. Most of the views, which are just borrowed ideas, or old ideas in new expression, or overlapped in meaning, lack sufficient reasoning” (Zeng & Li, 2011). This consequently leads to the confusion that the concept of ecological civilization has various versions in use. Some scholars using one kind of interpretation on one occasion might be caught using another on a different occasion. Some even use different concepts of ecological civilization in the same text. Yu Keping (2005), a famous scholar, in his paper *Scientific Outlook on Development and Ecological Civilization*, once adopted the theories that view ecological civilization as an element and a stage when he was interpreting the concept of ecological civilization. Li Wenhua (2012) held that ecological civilization concretely embody the relationship between material progress and cultural–ethical progress during the interaction between nature and social ecology. It is the prime power for ecological progress, and the basis and prerequisite of material, political and cultural–ethical progress. However, in this very paper ecological civilization was also mentioned as “a stage of civilization.”

### 3.2 Mediation and criticism of different concepts of ecological civilization

Fang Shijiao (2014) tried to mediate between different concepts by holding that ecological civilization should be the integration of a broad ecological civilization (the stage theory) and a narrow ecological civilization (the element theory). The former reflects how the forms of human civilization evolve, while the latter shows how the elements of social civilization interact with each other. The two laws, interacting with each other, combined, will propel the birth, growth and development of ecological civilization. Xu Chun (2010) also thought that ecological civilization could be understood from two dimensions. As a stage of civilization, it is a new

form of civilization after the agrarian and industrial civilizations; as one of the synchronizing elements of civilization, it is a new ingredient that is as important as material development, ethical–cultural progress and political civilization. According to Xia Guang, the meaning of ecological civilization is manifold. Each perspective makes sense and has its own value. And it is only natural that people should take to the concept according to their own needs (Xia, 2009). What’s more, Wang Hongbin and Wang Jinnan also admitted the co–existence of the broad outlook on ecological civilization and the narrow one (Wang, 2011; Wang & Zhang, 2010). However, Gong Gu and Kong Shuguang (2014) argued that this embracing–all method cannot address the essential differences between the two. The two theories accepted by mainstream academics, namely the stage theory and the element theory, rank at different levels. The two are neither inclusive of each other, nor intersecting. Each contains something that the other cannot assimilate, and that makes their being named “broad” or “narrow” impossible.

### 3.3 The complexity of the concept of ecological civilization

Prof. Xun Qingzhi (2014) pointed out that civilization was above nature or against ecology. This ensures that ecological civilization is sure to be a controversial concept. Xun (2014) concluded that ecological civilization and its construction had become a concept in China that contains at least four meanings: in philosophy, a weak (or quasi) eco–centered morality; in political ideology, an alternative for socio–economic development; in ecological progress or practices, work on environmental protection; and in the process of modernization or the context of development, a green orientation of socialist modernization or socio–economic development. Hence, he explicitly noted that “As regards terminological accuracy or scientificity, it is obvious that the concept of ecological civilization has its limitations and weaknesses.”



## 4. Doubts about the mainstream concept of ecological civilization

### 4.1 Doubts about the stage theory

The stage theory has gained support from a large number of scholars, for example, Gong Gu and Kong Shuguang (2014) held that the element theory generalize the concept of ecological civilization, reducing the ecological civilization that bears distinct historical characteristics, specific direction for values and a higher threshold to some ordinary ecological civilization, “blotting out the historical hallmarks and significance of ecological civilization, deconstructing the whole, weakening its progress, and eradicating its value as an indicator and the judging role it plays. Thus, it is never worthy of recommendation.” Meanwhile, scholars like Lu Feng (2013) chose to name the two mainstream theories—the element theory (repair theory) and the stage theory (transcendence theory). Though the former looked more practical in their eyes, they preferred the clear-eyed, profound insight of the latter, and thus made their vote accordingly (pp. 4–5).

However, the stage theory also aroused some doubts, which were represented by Zhang Yunfei, who proposed that the stage theory muddle the form of civilization and the structure of civilization. According to Zhang, industrial civilization, like fishing and hunting societies, agrarian civilization and intelligent civilization, is another form of social civilization, while ecological civilization is a structure of civilization that is equal to material, political, cultural–ethical and social civilization. “Ecological civilization is a fundamental requirement that runs through all forms of society and civilization” (Zhang, 2009). Prof. Zhang Yunfei was the first to propose that human society ever since its birth has been brought face to face with the changing man–nature relationship, thus it is impossible for ecological civilization to be vertically understood as a pattern

of society (Zhang, 2010). Liu Haixia (2011) pointed out the logic errors and threats underlying the act of equating ecological civilization with post–industrial civilization. According to Liu, ecological civilization is a requisite for the existence and development of human society, while the post–industrial civilization is a method of material production by man. The former forever accompanies the course of human society and cannot be transcended; the latter is merely a stage of development of human society and is open to possibilities of being transcended. Therefore, she concluded that the stage theory made a logic mistake by forcibly paralleling concepts of different levels. That might even lead to a shortened time span of construction of ecological civilization, and a narrowed connotation of it.

I hold that the stage theory, if it is justified in scientificity and credibility, must provide answers to the following basic questions. First, is ecological civilization fitted into a standard system alongside such stages of civilization as primitive civilization (hunter–gatherer civilization), agricultural civilization (agrarian civilization) and industrial civilization? Second, how shall it be united with the divisions of civilization stages above within that standard system? Third, what makes ecological civilization an independent advanced pattern of society? Basically, how shall the industrial civilization be transcended by the ecological civilization, and is there something that would mark the establishment of the ecological civilization?

As to the first question, stage theorists tend to regard ecological civilization as a new form of social civilization after primitive civilization (hunter–gatherer civilization), agricultural civilization (agrarian civilization) and industrial civilization. However, serious academic questions remain: Do they all belong to a standard system? Whether it is the evolution from primitive civilization to agricultural civilization and then to industrial

civilization, or the evolution from hunter–gatherer civilization to agrarian civilization and then to industrial civilization, the divisions of the pattern of society are all based on the socially dominating production methods, while ecological civilization, according to those who favor it as a whole new stage of civilization, uses the man–nature relationship as the standard for its establishment. That makes it incompatible with the classification system in which hunter–gatherer, agrarian and industrial civilizations are defined.

As for the second question, since ecological civilization must be viewed as a whole new form of social civilization after primitive hunter–gatherer, agricultural and industrial civilizations, then how shall it be united with them within a standard system? Obviously the stage theorists have based their concepts of primitive, agricultural and industrial civilizations upon the socially dominating production methods. That means, if ecological civilization is the next form of civilization, it also must be measured by a dominating ecological production method. Unfortunately, stage theorists fail to clearly put forward what the production method would be like in a future ecologically civilized society, which is supposed to be distinct from the former agricultural and industrial production methods, and able to sustain the new ecology of the entire society. That prevents their opinions from being accepted. Zeng Zhengde (2011) also tried to explore in that direction. He posed that whether ecological civilization could become a stage of civilization like the agricultural and industrial civilizations depended on whether the ecological and environment–friendly production methods could become the defining impetus for the development of human civilization. To that his answer was apparently negative. He insisted that ecological should be not, and would not in any way become an independent stage of civilization, and that the current world should be now generally at the stage

of industrial civilization that should be characterized by ecological civilization. Ouyang Zhiyuan (1992), tried to solve the problem by saying that “The future system of production technologies should not only be dominated by biological technologies, but also should be ecologized,” and “There will be an ecologized technological system in the biological industry centering on the ecologized technologies,” thus “if the future form of society should be defined by the central production technology, then there would be an ecologized society.” However, this prediction apparently lacks sufficient credibility.

As for the third question, ecological civilization, as a new, independent form of society, must be distinct from the existing industrial civilization. However, stage theorists, no matter how ardently they stress the progress of ecological civilization, are not able to find a definite means by which to distinguish industrial civilization from ecological civilization. Surely the release of some important document is not the solution. But what exactly is it? Should it be the birth of some ecological technology, or the generation of some ecological production method, or anything else? According to the stage theory, ecological civilization is a new form of society and the future form of civilization. That presumption is obviously not sufficiently supported by judgment or prediction of futurology. Prof. Zhang Yunfei (2009) pointed out that Marxism admits that industry itself is in favor of coordination between man and nature, and “in industry there is always that well–known unity between man and nature which varies according to the pace of industrial development of different epochs.” Zhang further noted that the greenness–oriented efforts, made inside the industrial civilization in mind and action, to repair, improve, reflect upon and criticize industrial civilization could all be called physical ecological civilization.

Therefore, I believe that the stage theory, profound as it might seem, cannot take root in a

theoretical sense. What's worse, it might even reduce certain practical efforts currently made by the society.

#### **4.2 Doubts about the element theory**

The element theory emphasizes the ecological civilization as an element of civilization and lists it as important as material and cultural–ethical progress. However, once its concept is analyzed, civilization unfolds as the aggregation of all the fruits of human development, which is represented by elements like material, cultural–ethical and institutional achievements. Here the material development, cultural–ethical progress and political civilization are all clear, parallel elements. So, is it possible that the scope of civilization could be expanded and finally incorporate ecological civilization as one of its elements? The answer is no. The first reason is that, theoretically speaking, to define something as an independent element requires that it should boast consistence and certainty from inside, and distinctiveness and exclusivity from outside. Ecological civilization, to be an independent element of civilization, must make sure that aside from its innate consistence and certainty, it also has clear distinctiveness and exclusivity that could easily separate it from other external elements. Ecological civilization is different from other civilizations like material progress in many ways, however, if accepted as the aggregation of material, cultural–ethical and institutional achievements made during the interactions between man and nature, ecological civilization could never be effectively separated from elements like material and cultural–ethical progress, let alone the necessary exclusivity. Therefore, theoretically speaking, ecological civilization could not make an independent element. The second reason is that in logic, ecological civilization could never include and be equal to the elements of civilization like material progress and cultural–ethical progress. Such logic is not in any sense feasible. The

achievements of ecological civilization are generally considered to include the fruits of material and cultural–ethical progress. Thus, the former should be above the latter, and simply paralleling them would be an error in logic. What's worse, the element theory might lead to the underestimation of the complexity of the construction of ecological civilization in related practices. There might be partial understanding about the construction and mere focus on only one element regardless of others, which does not in any way conform to the requirement for a systematic, holistic physical construction of ecological civilization.

Therefore, I conclude that the element theory might seem practical, but its making ecological civilization an independent element does not make theoretical or logical sense, and it might even cause deviations in the real work of construction.

## **5. Attempts to theorize ecological civilization as a domain of civilization**

### **5.1 Attempts to develop the domain theory**

Marxism maintains that man is by nature a social being as well as a natural being, "Certain forms of material production might produce: first, a certain social structure; second, a certain relationship between man and nature. The two decide what the state system will be like and how people will think. Therefore, it could be said that the cultural–ethical production methods of human beings also depend upon the two" (Marx, 2004, p.346). Historical materialism holds that the very source of the development of human society was the complex internal and external contradictions. It was during the solving of those contradictions that men made their material, cultural–ethical and cultural achievements, which were further enriched in different social patterns throughout history. The basic contradictions in the development of human society

include not only the contradictions concerning in the social structures of the political, economic and cultural activities of human beings, but also those concerning the ecological structures between man and nature in the development of human society, which constitutes the basic structure of the social system (Zhang, 2006). Therefore, I believe that as the aggregation of the material, cultural-ethical and institutional achievements marking man's impact on the world, human civilization includes not only the social civilization formulated within human society, but also the ecological civilization formed in the interactive relationship between man and nature. The latter, which is the aggregation of achievements marking man's efforts to handle the relationship with nature, create a domain of civilization as important as social civilization. Man since birth have been depending on nature, and are closely tied to nature through mutual influence, so they had to begin their impact at ecological progress from as early as the primitive period. Ecological civilization and social civilization, as two parallel domains of civilization, are always co-existing, except that for a long time in history the latter was explicit, while the former was implicit, for due to the deficiency of technologies, the human's impact on nature was slight, and thus human's efforts to protect or construct, based on nature, were not effectively rewarded. However, as large-scale industrial production and the construction of the industrialized society resulted in ecological and environmental disasters, increasing attention was paid to protecting the ecological environment, which was followed by the birth of science, technologies, philosophy, ethics and administrative systems concerning the ecological environment, the formation of a giant industry that is committed to environmental protection, and the massive production of ecological products for human beings. Thus, ecological civilization increasingly explicit, rich in connotation, extensive in content,

is a domain of civilization that could be in parallel with social civilization. Therefore, this paper defines ecological civilization as the aggregation of material, cultural-ethical and institutional achievements men have made in their interactions with nature.

Here it is necessary to further analyze civilization in the domain of society and social advancement of the five-sphere integrated plan—promoting coordinated economic, political, cultural, social and ecological advancement. Society can be understood in a broad sense and a narrow sense. Society in the broad sense refers to the human community existing as a part of the physical world as a living organism, a systematical whole that is composed of all kinds of fields and aspects, such as economy, politics, culture and social groups. Social civilization, another domain of civilization like ecological civilization, belongs to such a broadly understood society. Society in the narrow sense refers to something that goes in parallel with the economy, politics and culture, which is the aggregation of social subjects, social relations, social ideologies, social systems and social behaviors (Luo, 2006). Marxism maintains that human life comprises material, political, cultural-ethical and social aspects, among which “the production method of the material life restrains the entire process of social life, political life and cultural-ethical life” (Marx, 1995, p. 32). “Social life” here is in fact the society in the narrow sense. So is the social advancement of the “five-pronged approach.” I hold that an important standard that measures whether a civilization should be a domain, or an element of human civilization should be to see whether it could permeate into all the aspects and process of the construction of other civilizations. Material progress and cultural-ethical progress, though they might at times permeate into or support each other as two elements of civilization, cannot, theoretically speaking, permeate into the aspects and process of the construction of other elements of civilization, while ecological civilization,



as a domain of civilization, could find a way. That is possibly the reason why the report of the 18th National Congress of the CPC chose “the building of ecological civilization” section as the only place to propose “to put the building of ecological civilization in a prominent position and fit it into each aspect and process of the economic, political, cultural and social construction.”

### **5.2 The characteristics of ecological civilization as a domain of civilization**

When viewed as a domain of civilization, ecological civilization has the following four characteristics.

The first concerns existing at all times. The domain theory holds that ecological problems are a universal social problem that has been challenging human civilization throughout its development. Whether it is the extinction of species in the hunter–gatherer era, or

soil erosion in the agricultural civilization, or today’s ecological crises and environmental disasters that human society is facing, all these problems indicate that human beings never live a day without ecological problems. The agricultural civilization saw both the enchanting pastoral beauty and the disappearance of the Mayan and Lolan civilizations. The ecological crises only became global when the industrial civilization began, when man’s ability to produce wealth sharply increased. This means ecological civilization in fact existed throughout the development of human civilization. Men since birth have been depending upon nature, and closely tied to nature through mutual influence, so they had to begin their efforts at ecological progress from as early as the primitive period. And corresponding ecological achievements were also made in the ensuing agrarian and industrial civilizations. The evolution of human society is in fact a process



*disappearance of the Lolan civilization*



where ecological civilization, which used to be implicit, regional, weak, simple and low-level, is made explicit, global, strong, complex and high-level. That is why it is possible to continuously seek ecological wisdom today from different historical epochs of different countries, just as Prof. Zhang Yunfei (2009) noted, “Just as each pattern of society and civilization has a certain structure of civilization like the material progress, so is ecological civilization a basic structure that runs through all forms of society and civilization.” The domain theory, by defining ecological civilization as something running regardless of time, also theoretically makes possible the construction of ecological civilization in China today.

The second is being systematic in content. According to the domain theory, the content of the construction of ecological civilization is a systematic whole that includes all kinds of elements such as material, cultural-ethical, institutional and social elements. Therefore, it must be applied to all aspects and process of the economic, political, cultural and social construction. And the construction of ecological civilization, on the one hand, must be wide-ranging enough to integrate ecological economy, culture, politics, society and environmental protection; on the other hand, it must be implemented in a systematical manner and focus on environmental protection, which includes the protection of the spatial layouts of the ecological environment, the preservation of the ecology, prevention of pollution and environmental supervision.

Thus the domain theory is more helpful for the wide-ranging and systematical advancement of ecological civilization and at the same time avoids narrowing its construction scope—an error other theories, like the element theory, may make.

The third is being limited in connotation. According to the domain theory, ecological civilization only covers the section that is directly related to ecology within the social structure, and it should never be expanded without control to all

the domains of civilization. The limited connotation requires that study and construction of ecological civilization be limited to the aspects related to environmental protection, rather than attributing progress of a future society to mere ecological civilization like the stage theory, and equating the construction of ecological civilization with the general, overall social construction. In China, the ecological civilization, if it is made equal to the socialist construction, will then lose its own value. In conclusion, the connotation with a clear focus can prevent the construction of ecological civilization from being generalized. It guarantees a specified goal for and more effective implementation of the construction of ecological civilization.

This fourth is holding a fundamental value. According to the domain theory, coordinated development between man and nature is a natural, physical prerequisite for the birth of any civilization. In that sense, ecological civilization is the foundation of the continuation of any social civilization. Given the fundamental value it holds, protecting the ecological environment and building ecological civilization has thus become a most basic job for the security of the human social civilization. That requires the ecological civilization to be understood in the grand context of ensuring the security of mankind and nations. And it was in this light that the report of the 19th National Congress of the CPC stressed the building of ecological civilization as the long-term strategy for the sustainable development of the Chinese nation.

## 6. Interpretation of the five-pronged approach

If ecological civilization is viewed as a domain of civilization, then the four elements of civilization—material progress, institutional civilization, cultural-ethical progress and social civilization—and the

ecological civilization composed of them will fit together as a whole, thereby making the five-pronged approach a possibility and demand in theory. Thus, the five-pronged approach is a whole of four elements of civilization combined with the ecological domain of civilization, not of five elements of civilization. Therefore, the construction of ecological civilization currently advanced by the Chinese government is generally based on the ecological domain of civilization whose concept has been systematically analyzed. It was rightly under this very framework that the construction of ecological civilization was put in a prominent position and fitted into all aspects and processes of the economic, political, cultural and social construction, as was required by the five-pronged approach committed to building a new ecological scenario. Hence it is necessary to advance the construction of the ecological domain of civilization through the construction of the four elements of civilization, to formulate a whole new panorama featuring the well-rounded construction of ecological civilization. Since the 18th National Congress of the CPC, China began to navigate the implementation of the five-pronged approach, adhere to green development ideas on its own initiative, step up the formulation of the institutional system of ecological civilization, and vigorous push forward environmental governance, thereby making unprecedented achievements in its construction of ecological civilization.

However, just as the report of the 19th National Congress of the CPC stated, the principal contradiction facing Chinese society is the contradiction between unbalanced and inadequate development and the people's ever-growing needs

for a better life. During China's construction of socialist civilization, there is still unbalance between the construction pace of ecological civilization and that of social civilization. After decades of rapid economic growth, China has seen remarkable progress in economic development. Its GDP per capita exceeds 6,000 USD; some provinces and municipalities, one after another, witness their GDP per capita surpass 10,000 USD, which signifies a medium level of development. Meanwhile, the giant production systems of those world factories are caught in China in increasingly sharp conflicts with the scientific usage of all kinds of resources and the environmental protection. The major pollutants like chemical oxygen demand and sulfur dioxide have exceeded or are very close to the upper limit of the environmental capacity in China, and there begins an explosion of environmental disasters.

Therefore the 19th National Congress of the CPC proposed to implement the strictest possible systems for environmental protection to provide an institutional guarantee for the political construction of ecological civilization; to develop eco-friendly growth models, to provide material support for the economic construction of ecological civilization; to maintain harmonious coexistence between man and nature, to provide a guideline for the cultural construction of ecological civilization; to develop a green way of life, to push forward the construction of an ecological society as a whole and formulate a new well-coordinated panorama of Chinese ecological progress, thereby making clear the path to build a beautiful China, to march towards increased production, higher living standards and healthy ecosystems.

(Translator: Xu Qingtong; Editor: Yan Yuting)

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