Phased Analysis of the Evolution of the Ecological Civilization Concept

—A Historical Review from a Global Perspective

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Abstract:

From a global perspective, the evolution of the ecological civilization concept can be divided into four stages. First is the infancy stage (mid 1800s-1950s), during which philosophers and thinkers, including Carl Marx, made in-depth reflections of ecological issues in capitalist societies and laid a theoretical basis for the subsequent development of an ecological civilization concept. Second is the formation stage (1960s-1992), during which the ecological civilization concept gradually came into being and became a basic global consensus. Third is the action stage (1992-2006) during which the ecological civilization concept was globalized. In 1992 the United Nations Conference on Environment and Development (UNCED) proposed a guideline and a blueprint for action to boost coordinated development of the global economy and environment. That marked the beginning of the ecological civilization from theory to practice. The fourth stage is the implementation stage (2007now), during which the social transformation of the ecological civilization has been progressing. In 2007 the Communist Party of China explicitly proposed the concept of an ecological civilization and promoted it as a state goal, thus making a significant contribution to the global basis for an ecological civilization.

Keywords: ecological civilization; environmental protection; sustainable development; ecological civilization promotion

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hroughout history, human civilizations have successively experienced the three eras of primitive civilization, agricultural and industrial civilizations. Due to different levels of production practices, human-nature relationships vary greatly among the three eras. During the eras of primitive and agricultural civilizations, humannature relationships were generally harmonious. Both primitive production (fruit-gathering, hunting, etc.) and agricultural production (crop cultivation) rely heavily on natural conditions such as soil, water, light and heat. The low levels of productivity meant no significant harm to the environment, with only some minor damages to certain regions. In the era of industrial civilizations, however, humans' irrational application of scientific technology resulted in increased deterioration of the environment, which subsequently brought a profound impact on the global ecological evolution and a severe threat and challenge to the ecological security of human societies. The eco-crisis in the era of industrial civilizations clearly tells people that an economic boom at the price of environmental pollution and ecological deterioration is not feasible and that sustainable development is the only possible approach. This indicates that human societies were about to enter a new era. The era of the ecological civilization where harmony between man and nature is a defining feature. Although first proposed by China, the concept of an ecological civilization features scientific connotations and universal relevance throughout human history. At the 9th International Whitehead Conference & the 9th International Forum on an Ecological Civilization, American ecological experts spoke highly of the Chinese government's efforts to promote an ecological civilization, acknowledging China's potential to take the lead in multiple aspects in the development of an ecological civilization. According to American ecological philosopher John B. Cobb

Jr., the future of an ecological civilization lies in China. In the era of industrial civilization, concepts of an ecological conservation developed by scholars formed the ideological sources for the formation and development of the ecological civilization concept. With the joint efforts of scholars, the public and governments, the concept of an ecological civilization has undergone a historical process featuring in-depth development of ideology and theory-guided practice. This process started in ideological infancy and grew through extensive social recognition and global exploration with the help of China's vigorous promotion.

1. The infancy stage of the ecological civilization concept

From the middle and later periods of the 19th Century to the early 1950s, some thinkers gradually developed ecological awareness, which formed the ideological basis for a sustainable development theory. This period is also known as the infancy stage of the development of the ecological civilization concept. Such ecological awareness grew out of Western scholars' reflections on issues concerning social development in modern times. The development of modern natural sciences, along with the industrial revolution, significantly empowered humans to transform nature and advanced human societies to the era of industrial civilization. Yet, while they promoted economic and social development, they also gave rise to the wrong perception of "anthropocentricism." In the mid-19th Century, internal contradictions in Western industrial societies were increasingly highlighted. Ecological destruction happened occasionally from time to time. Under such circumstances, some Western thinkers began to actively explore the underlying causes behind negative environmental issues. Among them were Karl Marx and Friedrich Engels, whose criticisms of capitalist ecology initiated the trend toward the development of an ecological civilization.

It is true that Marx and Engels did not adopt the concept of ecological civilization; nor did they have any work elaborating an ideological system of ecological civilization. However, they both attached great importance to human-nature relationships and provided precious ecological civilization-related ideological resources for later generations, which can be testified by Marx's early work Economic and Philosophic Manuscripts of 1844, Marx and Engels' mature work The Communist Manifesto and Das Kapital, Engels' later-period work Dialectics of Nature, as well as other related books and letters. First, Marx and Engels ruthlessly exposed and strongly criticized humans' destruction of the ecological environment. In a letter to Engels in 1868, Karl Marx (1974) wrote, "Agricultural cultivation, when it progresses spontaneously and is not consciously controlled... leaves deserts behind it like Persia, Mesopotamia etc., Greece" (p.53). In Dialectics of Nature, Engels (2009) listed environmental damages across the world, "The people who, in Mesopotamia, Greece, Asia Minor, and elsewhere, destroyed the forests to obtain cultivable land, never dreamed that they were laying the basis for the present devastated condition of these countries, by devasted the forests, the collecting centers and reservoirs of water" (p.560). As pointed out by Engels, man lives in nature and is an integral part of nature. Only by respecting nature, adjusting to nature and rationally using the laws of nature can mankind benefit from nature. By contrast, one-sided exaggeration of human capacity or vain attempts to dominate, ransack and destroy nature will bring nothing but catastrophe to mankind. He (2009) argued, "Let us not, however, flatter ourselves overmuch because of our human victories over nature. For each such victory, nature will revenge on us" (pp.559-560). These arguments indicate that both Marx and Engels realized that

humans must rationally remake nature and live in harmony with nature, and that continuing to blindly pursue economic benefits without caring about the endurance capacity of the environment would not only result in ecological deterioration, but also threaten the survival of mankind.

Second, regarding the specific procedures of industrial production, Marx also proposed a concept of waste reclamation, which is similar to the current concept of a recycling economy. As pointed out by Marx, technological revolution can eliminate backward, pollutive production techniques and reduce pollutants during the process of production and at the same time recycle industrial pollutants to turn "waste" into valuable resources, save resources and protect the natural environment. In Das Kapital, Marx (2009) said, "The so-called waste plays an important role in almost every industry" (p.116). As scientific technology further develops, people know more about the composition, attributes and application of wastes and pollutants. They thus develop more mature techniques to make use of these wastes and pollutants. Thanks to this, their value in use is sure to be fully exploited. Rather than polluting and destroying the environment, they can contribute to human society.

Third, Marx and Engels uncovered the root of ecological crisis, i.e. capitalist systems and also the fundamental solution to ecological crisis, i.e. to transform the capitalist mode of production, eliminate capitalist ownership and eventually reach a higher level—a communist society. As pointed out by Marx and Engels, under the capitalist social system, means of production are in the hands of a few capitalists; capital's inherent proliferation-oriented nature inevitably drives capitalists to try every possible means for more surplus value, regardless of the harm to workers and Mother Nature. Thus, only when capitalist private ownership is overthrown, and more advanced communist systems are established

can man-nature conflicts be completely resolved. According to Marx (2009), "Communism as the positive transcendence of private property as human self-estrangement... Communism, as fully developed naturalism, equals humanism, and as fully developed humanism equals naturalism; it is the genuine resolution of the conflict between man and nature and between man and man" (p.185).

Except for Marx and Engels, most thinkers with an ecological civilization awareness then lived in the USA. The late 19th Century witnessed the emergence of two most preeminent thinkers in the American Environmental Movement. One was American naturalist Henry David Thoreau, who expressed a tendency of eco-centrism in his works. For example, in his Walden, he stressed the integration and unity of everything in nature, holding that man is part of nature, that nature has its own inner life and value, and the existence of nature does not rely on human benefits or interests. What is praiseworthy is Thoreau's persistent interaction with nature for years. Careful observation enabled him to vividly describe nature and discover the greatness of nature and the humbleness of mankind. Based on this, he called on people to adore, respect and protect nature, deny materialism, lead a simple and unadorned life, and fulfill their cultural life. The other preeminent environmentalist is John Muir, who is known for being against utilitarianism, which was prevalent in the then US Government's natural environmental policy. The then US president Theodore Roosevelt showed a strong mindset of anthropocentrism. He regarded nature as something to conquer. Roosevelt's science consultant, Gifford Pinchot, who was also Chief of the United States Forest Service, was an advocate of utilitarianism. According to Pinchot, the top priority of mankind should be controlling and managing everything on earth by means of scientific technology and advanced management systems with high-technology all ecological problems would be solved. John Muir strongly opposed their utilitarian basis, explicitly denied the traditional doctrine of "all things are made for mankind" and turned to "natural aesthetics," a measure of value focusing on nature itself. Considering nature to be the spiritual source of mankind, he called for abandoning the existing cold, utilitarian approach, loving and protecting nature, and appreciating the endless charm of nature.

In the 20th Century, famous French thinker Albert Schweitzer advocated "reverence for life," while American environmentalist Aldo Leopold proposed his "land ethics." Both of them attached great importance to the introduction of human's ethics to care about the human-nature relationship. In The Philosophy of Civilization: Culture & Ethics, Albert Schweitzer argued that traditional ethics focused solely on interpersonal relationships without paying due attention to the relationships between humans and nature, which was indeed a big problem. According to Schweitzer, the basis for ethics should be reverencing all life. His ethical ideology of "reverence for life" held that all living things have their own free will and that they hope to and are entitled to preserve and enrich their lives. Therefore, mankind should reverence all life and regulate our behavior accordingly. Indeed, Schweitzer's philosophy focuses primarily on the human's care of nature, but is not so feasible when it comes to actual rule-making. Therefore, his philosophy did not manage to develop into a whole set of ethics. Still, advocating "reverence for life" highlights contemporary society's concern about eco-environmental issues and can hugely benefit future generations with cultural wealth. Aldo Leopold is widely regarded as the founder of the ecological civilization theory in the USA. In his book A Sand County Almanac published in 1949, he systematically elaborated the significance of "land ethics," which plays a key role in the formation and development of eco-centrism. According to Leopold, it is simply unimaginable to cultivate an ethical care

of the land without a great love and deep respect for land and the recognition of its value. The proposal of "land ethics" is not only a shift of emotional value, but also sublimation of the inner world, which extends the scope and realm of mankind's ethical care. From the perspective of "land ethics", man and nature have formed a moral community. Man, other living things and the natural environment are all indispensable parts of a sound ecosystem and are extensively interconnected. It is worth mentioning that man and other living creatures do not have absolute dominance over all. Life is only part of the ecosystem, which also includes irreplaceable natural objects like inorganic soil, rocks and running water. These natural objects also deserve respect. Given this, "land ethics" advocates "safeguarding the harmony of the ecological community" to be the guiding moral principle and "striking an ecological balance and stability" to be the ultimate goal.

From Marx's criticism on capitalism to Leopold's "land ethics," philosophers called for more focus on the ecological environment from different perspectives. More importantly, they took the lead in promoting ecological protection and paved the way for the later development of an ecological civilization theory and the rise of the environmental movement.

2. The formation stage of the ecological civilization concept as a social consensus

In the 1950s Western developed countries successively came into reconstruction after the Second World War. While economies and societies were recovering, the environment was deteriorating, challenged by mounting global ecological crises, such as global warming, climatic anomalies, desertification, depletion of forests and exhaustion of energy resources. Worse still, social hazards caused by environmental pollution were posing direct threats

to the life, health and security of the public. In such a context, there were increasing calls for environmental protection across the globe, accompanied by an wave of environmental protection campaigns. The industrial civilization were analyzed and reviewed from different angles, and a conscious search for a new co-existence model between man and nature began. At some point, in some measure, the value of an ecological civilization became a social consensus that laid a foundation for future enforcements of environment-friendly ideas and the promotion of an ecological civilization in fields like politics, economics and science.

In 1962, Rachel Carson had her famous book *Silent Spring* published in the USA. This book, by drawing public attention to environmental problems, marked a new epoch in the evolution of the concept of an ecological civilization. Carson detailed how pesticides like DDT would pollute the soil, noting that though effective pest killers, pesticides, if abused, may severely threaten beneficial insects and birds, disrupt the biological balance between checks and counterchecks, and finally destroy the entire ecological system. *Silent Spring*, while revealing how industrial pollution influenced ecology, advocated building a well-coordinated and cooperative relationship between man and nature.

In 1972, the United Nations Conference on the Human Environment was held in Stockholm, Sweden. One of its significant fruits was the publication of the Declaration of the United Nations Conference on the Human Environment, which indicated that environmental protection had become a core subject for the international community, countering ecological crises had become a common responsibility for human beings, and global governance had also become a fundamental consensus to handle ecological challenges. In the same year, the Club of Rome submitted its research report The Limits to Growth (LTG),

which thoroughly reflected upon the theory of high growth that long dominated the West, systematically expressed concerns for the environment, formed its own "theory of ecological crisis," and further strengthened the public awareness of environmental protection. According to the report, due to the exponential growth of population, food production, consumption of resources and environmental pollution, the limits to economic growth on earth in food shortages and ecological deterioration would become evident in the 21st century, leading to a disastrous devastation of the world. The report was a wake-up call for mankind and roused a great uproar in the international community. It triggered wide attention on global ecology and its tendencies across the globe, strengthened man's consciousness of environmental protection and advanced the formation of the concept of sustainable development.

In February 1987, the Eighth Meeting of the World Commission on Environment and Development was held in Tokyo, Japan. In its guiding document Our Common Future, the key concept of "sustainable development" was proposed, enhancing international basic consensus on the concept of an ecological civilization and wielding a profound influence upon an ecological civilization. Briefly speaking, sustainable development refers to a kind of development that can satisfy the needs of the current generation without threatening the chance for future generations to meet their demands. It is a new development model oriented to ecological and environmental protection that is based on a holistic perspective of the man-nature relationships. Fundamentally different from the economic growth patterns in the industrial civilizations that damage the environment, the sustainable model marks a revolutionary breakthrough in human social development. It represents human efforts to rethink the industrial civilization models and try to seek and build a new kind of civilization,

displays a new concept concerning civilization, and constitutes a basic idea for social development in an ecological civilization. The concept of sustainable development comes from human cognition about and reflection upon the relationship between man and nature, stresses the importance of coordinating the relationship between development and resources/ environment, and aims at a perpetually continuous development. That is intrinsically consistent with the concept of an ecological civilization. Under the influence of the sustainable concept, the social consensus on building an ecological civilization spread across borders and ideologies, and active attempts were made to explore a path of sustainable development that could balance socio-economic development and ecological and environmental protection, advancing the transition of human societies from the industrial civilization that led to ecological crises to an ecological civilization where man and nature harmoniously co-exist.

The development of studies on the concept of an ecological civilization during this period was strikingly marked by the emergence of Ecological Marxism, which representatives included French philosopher André Gorz, Canadian scholars William Leiss and Agger Ben, US scholars James O'connor and John Bellamy Foster, and German scholar Reiner Grundmann. More specifically, André Gorz basically inherited Marx's way of thinking, pointing out that ecological problems in modern society were still caused by capitalism's profit motive, and analysis of this very profit motive to a rational critique of capitalistic economies. He held that capitalistic production only aimed at infinite growth of capital value, and this irrational impulse to pursue value growth would merely lead the society into severe ecological crises. William Leiss and Agger Ben focused on the alienation of consumption in the capitalistic societies. They delved into the mutually stimulating interactions between the expansion

of commodity production and the increase of consumer demand, and noted that human demand has been alienated and made equal to consumer demand. The prevailing consumerism, while forging illusions about material prosperity and spiritual fulfillment, was in fact worsening the alienation of man. Madness for commodities would only lead to crazier exploitation of natural resources. In the modern society characterized by high production and high consumption, alienation of consumption had become an immediate source of ecological crises, which posed as the major threat overthrow the capitalistic system. James O'connor, based on Marx's basic contradiction of capitalism, proposed the dual contradiction capitalism was facing, namely that, apart from the contradiction between productive forces and relations of production, there was another contradiction between productive forces, relations of production and the external production conditions. The former struck at capitalism from the angle of demand, while the latter hit at it from the angle of cost. The two interactive factors indicated that the capitalistic societies were in the face of a dual crisis in the economic and ecological sense. The latter contradiction, while contrasting capitalistic production's infinite pursuit of profit with the finite material conditions nature could provide for human living, implied that ecological crises were an outcome of capitalism's intrinsic contradiction, and the basic reason behind the contradiction was still "capitalism's economically self-destructive appropriation and use of labor power, urban infrastructure and space, and external nature or environment" (O'connor, 2003, p.284). Unlike O'connor, Foster insisted that Marx's philosophical ideology contained an intrinsic complete set of ecological ideas. In his book Marx's Ecology: Materialism and Nature, Foster associated the materialistic view of nature and history as well as Marx's ideas about nature and society's "metabolism" with ecology and tried to interpret all

these ideas in the sense of ecology. He thus theorized and systematized Marx's criticism on capitalism's damaging influence on ecology and marked the fulfillment of Marxist ecological ideology.

This period also witnessed environmental protection instant upgraded as a social consensus once it was advocated by the CPC leaders. During the early days after the founding of the People's Republic of China, the crucial role of environmental protection had already been realized by the first generation of the CPC leadership headed by Chairman Mao Zedong, who proposed a raft of related measures. In 1956, Mao Zedong initiated a call to "make the motherland green," and turned it into the action of "gardenizing the land." To draw on experiences of foreign countries, in 1972, the Chinese government sent a delegation to the UN Conference on the Human Environment. In August 1973, the First National Conference on Environmental Conservation was held, marking the first conference on ecology and the environment on a nation scale, and the beginning of China's undertaking of environmental protection. After the reform and opening-up, Deng Xiaoping, while inheriting Mao Zedong's thoughts about afforestation and environmental protection, placed more emphasis on developing an ecological civilization, and the crucial role of planting trees and grass and beautifying the environment played in China's social construction. Deng also realized the new contradiction between the increasing population and the shortage of resources that marked China's new-era economic development. He explicitly noted that economic construction must value economic effectiveness and must not stick to a one-sided pursuit of increasing the value and volume of production. The ecological and environmental ideas of Mao Zedong and Deng Xiaoping were well carried out throughout the substantive process of China's economic and social construction, gained wide social recognition, and drew up guidelines for future wideranging promotion of an ecological civilization in China.

Since the concept of sustainable development become a social consensus, environmental protection had been launched across the globe through substantive and effective efforts in various facets, such as public opinion, political campaigns and institutions. Since the 1960s and 1970s, mass environmental protection had been thriving in the Western countries. Citizens expressed their concerns for ecology and the environment by filing complaints, parades, gatherings and demonstrations; all kinds of non-governmental organizations, such as Greenpeace, Friends of the Earth International and Green Future Movement, emerged and expanded; the appearance of the green party finally brought civic calls to protect the environment into national politics. The worldwide campaigns for environmental protection, when united, drove an ecological civilization forward into the sphere of reality. After the UNCED in 1992, the global ecological civilization entered a practice stage.

The action stage of the ecological civilization concept as a global initiative of sustainable development

In 1992, the UNCED was held in Rio de Janeiro, Brazil, which ratified a series of documents, including Agenda 21 and the United Nations Framework Convention on Climate Change (UNFCCC), which provided a guideline and blueprint for humans to coordinate between socio-economic development and the environment in the 21st century, and inspired countries over the world to model their action plans after the blueprint and carry out the concept of sustainable development into practice. In some measure, the proposal of the concept of sustainable development marked the completion of the concept of

an ecological civilization, while the implementation of sustainable strategies led thoughts to actions. Human societies, leaving behind their industrial civilizations, began to progress into an ecological civilization. That was a landmark in the historical evolution of the concept of an ecological civilization. The UNCED in 1992 brought the exploration into an ecological civilization out of its theoretical stage, proposed a global sustainable strategy, turned it into a common undertaking of human beings, advanced the process of global governance of ecological problems, and in a real sense inaugurated an era when pursuit of an ecological civilization stopped being mere ideas and entered into the implementation stage.

The UN played an essentially leading role in the global governance of ecological problems, which was witnessed by the significant documents ratified by the 1992 UNCED, which included the Rio Declaration and Agenda 21. The thought of sustainable development inside those documents laid an ideological foundation and provided the basic values for future actions to be launched by the world to protect ecology and the environment. As for specific subjects concerning environmental protection such as forest protection, climatic changes, sustaining biological diversity, conservation of marine ecology and cross-border governance of harmful waste, the UN and its subsidiary bodies count on multiple approaches to achieve pragmatic solutions, such as holding consultative meetings, making international treaties, establishing special organizations, providing special training and offering special funding. Take climate change as an example. Ever since the UNFCCC came into effect in 1994, the UN had developed a yearly routine of holding a conference for the parties to the UNFCCC," commonly known as the UN Climate Conference, which aims to monitor each party's action plans, oversee the implementation of UN resolutions, and sometimes adjust action plans to the real-time climate

changes or political and economic circumstances. Some very important outcomes, such as the Kyoto Protocol and the Paris Agreement, were made on the conference, and offered guidance to global efforts to counter climate changes. The UN subsidiary bodies, such as the United Nations Environment Program (UNEP), the Intergovernmental Panel on Climate Change (IPCC) and the World Meteorological Organization (WMO), also provided support based on their focus, engaged in their own fields, built ties with related countries and regions, and made sure that UN arrangements would work.

Inspired by the concept of sustainable development, international organizations and cross-border nongovernmental organizations launched their own campaigns, for example, the World Bank (WB), the Global Environment Facility (GEF) and the Asian Development Bank (ADB) increased their aid funding to environmental conservation programs and non-governmental environmental organizations such as the World Wide Fund for Nature (WWF), Greenpeace and Friends of Nature, based on their respective missions, principles and operational mechanisms and commitments to specific undertakings which included the protection of biological diversity, prevention of land desertification, promotion of recycling renewable resources and annihilation of those poisonous pollutants. On top of that, international environmental treaties began to emerge as the carrier of the international community's environmental consensus. These treaties, compared with their precursors, were more detailed, and easier to regulated and implement, for they were all about problems in concrete environmental fields. Among them were the International Tropical Timber Agreement signed in Geneva in January 1994, the UN Convention to Combat Desertification ratified in Paris in June 1994, the Convention on the Conservation and Management of Pollock Resources in the Central

Bering Sea effective in December 1995, and the Stockholm Convention on Persistent Organic Pollutants passed in May 2001, in Stockholm, just to name a few.

The countries, as the main bodies of the international community, also took actions. A few years after the Agenda 21 was ratified by the 1992 UNCED, governments across the globe, while analyzing their distinctive conditions and developing their ensuing schedules as guidelines for their future ecological and environmental protection. In terms of details of the work, these governments supported ecological industries by providing fiscal subsidies or incentives like tax reductions and exemptions, highlighted a recycling economy, bred renewable energy industries, advocated green consumption and made active efforts to integrate economic development with ecological protection. For example, Japan, due to its scarce resources, especially valued a recycling economy; the USA developed the more environmentally friendly shale-gas to reduce its dependence on the international oil supply; Ireland, accurately locating its position in the industrial divisions of the information age, increased its investment in hi-tech industries in a bid to escape the mire of pollution caused by their heavy industry. For those production behaviors that polluted environment and damaged ecology, the governments also issue laws, regulations and administrative measures. For example, Denmark, since 1993, has established 16 items involving energy that would face tax penalties, including industrial effluents, waste and CO₂ emissions; the US, with a more complete tax system, allowed both its federal government and state governments to levy environmental taxes. There was such a large list of items that almost all economic sectors were involved, such as raw material supply, industrial production and daily consumption.

China has always been a proactive participant in the global sustainable development and committed



bred renewable energy industries

itself to its own environmental conservation. It has served as a permanent member of the UNEP since 1973. In 1992, it set up the China Council for International Co-operation on Environment and Development (CCICED). In 1993, the UN Commission on Sustainable Development (CSD) was established and China was a member. In September 1995, Jiang Zemin, General Secretary of the CPC, drew up a strategic vision for sustainable development. In July 1996, during the 4th National Conference on Environmental conservation held in Beijing, Jiang Zemin, General Secretary of the CPC, and Li Peng, Premier of the State Council of China, further emphasized the importance of implementing the basic national policy of protecting environment and the sustainable development strategy. Moreover, China was a co-signer of several international treaties concerning international environmental conservation, which in turn advanced its legislative work. Take the United Nations Convention on the Law of the Sea cosigned by China in 1996 for example, it effectively inspired the formation and introduction of the Marine Environment Protection Law of the People's Republic of China in 2000 and wielded significant influence on several laws and regulations, such as the Maritime Oil Spill Contingency Plan of China issued by the Maritime Safety Administration (MSA). All of these efforts effectively stepped up China's environmental undertaking and contributed to the global sustainable development and the promotion of an ecological civilization.

Stepping into a new century, philosophy of ecological civilization also evolved, with Organic Marxism as its latest achievement. Its representatives included US scholar John B Cobb Jr. and Philip Clayton, as well as Wang Zhihe, the director of the China Project, Center for Process Studies. Organic Marxism upheld the basic principles and values of

Marxism, which thought were of great value for the current era and thus made efforts to expound upon it (John B Cobb Jr., 2015). Standing at Marxism's basic stance, Organic Marxism stressed facing up to history and reality, and incorporating non-Marxist thoughts into the development of Marxism. John B Cobb Jr. and Philip Clayton, for example, tried combining Whitehead's process philosophy and process thinking in ancient Chinese philosophies like Confucianism, Buddhism and Taoism, with Marxism, in a bid to seek a new ecological thinking by further transforming and developing Marxism. Despite a common focus on ecology, Organic Marxism and Ecological Marxism were in fact very different. The latter proceeded from ecology itself, took on historical materialism as its theoretical foundation, tried to seek out an answer with Marxism's criticism of capitalism, and insisted that Marxism was in nature compatible with the promotion of an ecological civilization. By contrast, Organic Marxism featured a broader theoretical view. It saw ecological problems as a key symptom of the modernity crises of human societies. To resolve the ecological crises, it is imperative to first resolve the more fundamental modernity crisis hidden behind them. This was where Organic Marxism came in and asserted that, since Marxism was a branch of modern philosophy, and to a large extent acted as a mere historical determinism, it was thus necessary to introduce process philosophy into the solution to modernity-caused contradictions. Only after the introduction of the process philosophy can the ecological problems be truly addressed (Wang, 2016). Organic Marxism was especially valuable not only for its regular academic research, but also for its special focus on ecological construction. It set down guidelines such as "for the common welfare" "organic ecological thinking" "looking into class inequality" and "long-term holistic vision," attempted to implement them in multiple sectors,

such as agriculture, manufacturing, banking, macroeconomic indicators, economic management and market economy system reforms, and provided aid to specific policy-making. As a newly emerging theory, Organic Marxism has yet to be reviewed by experts in its concrete assertions, it was doubtlessly a beneficial step to develop Marxist ecological theories under a new-century background, and accentuated the ecological construction's influence on the practice since the beginning of the new century.

Ever since the 1992 UNCED, battles against ecological problems and governance of environmental pollution have been in full swing across the globe. International organizations and national governments have launched wide cooperation in all kinds of ecological and environmental sectors, such as related laws and regulations, organizational structures, economic development and scientific communications. And academia has placed more emphasis on the concrete application of ecological thoughts. All these efforts in concert pushed the ecological civilization from mere ideas forward substantive actions all over the world, unveiled the historical transition of human societies from industrial civilizations to ecological civilizations, and brought the concept of an ecological civilization into practice.

4. The development of the ecological civilization theory in China and its implementation stage since 2007

The concept of sustainable development has led all countries to actively engage in efforts to putting the concept of an ecological civilization into practice. In 2007 a report was delivered at the 17th CPC National Congress explicitly proposing the concept of "an ecological civilization" for the first time and incorporating the promotion of an ecological civilization into the CPC's guidelines, consciously mapping out a holistic social plan to advance

an ecological civilization, elevating ecological construction to the higher-level state will and national strategy, driving the actual wide-ranging social transitions toward an ecological civilization-based society, and further propelling the global ecological construction to proceed from the "act" phase on a global scale towards the "fulfillment" phase. A new stage was thus kicked off for the historical evolution of conceptions and practices concerning an ecological civilization, and China's construction of an ecological civilization was brought to the very forefront of all over the world and made an historic contribution to the human undertaking of embracing a new ecologically civilized era.

The concept of "an ecological civilization" was an outcome of the deepening of the CPC's understanding about sustainable development through concrete practices. "An ecological civilization" was first explicitly proposed in the agenda by the CPC Central Committee headed by its then General Secretary Hu Jintao, In October 2007 the concept of "an ecological civilization" found its way into the report of the CPC national congress. The report of the 17th CPC National Congress stipulated building an ecological civilization as a general task, and mapped out requirements and plans in concrete aspects like resources saving and environmental protection. The CPC's establishment of the historical task of building an ecological civilization marked the social transition of China from an industrial civilization to an ecological civilization. It was a strategic move by the CPC after reflecting upon the traditional economic development model and abandoning the old ideas of the industrial civilization, an outcome in theoretical innovation of the 17th CPC National Congress. It is a further step to enrich and improve theories of humans and an ecological civilization. It is also a basic requirement for China to accomplish the grand goal of finishing building a moderately prosperous society in all respects, and also a solemn pledge by

China to take on its responsibilities as a major power in the face of the increasingly challenging global environmental problems (Ba, 2008).

In finishing building a moderately prosperous society in all respects, the central leadership of the CPC, headed by General Secretary Hu Jintao, adhered to Marxism as the guiding ideology, proposed a scientific outlook on development based on the requirements of the times, highlighted the wideranging, coordinated and sustainable development of the economy and society, as well as the harmonious coexistence between man and nature; they incorporated an ecological civilization into key documents of the CPC, emphasized the importance of firmly building a consciousness of an ecological civilization among the general public, and expounded upon the profound connotations of an ecological civilization. They proposed to insist on humanism as the primary principle when addressing the conflicts between socioeconomic development and environments, and to list environmental pollution as a primary threat to people's health and security that must be solved as soon as possible; to weigh and consider all kinds of factors to realize a well-coordinated development between socio-economy and environments; to pursue a kind of civilization that consists of growth of production, prosperity of life, and protection of ecology; to follow the basic national policy of saving resources and protecting the environment, and endeavor to build a resource-saving and environmentally friendly society; to make headway in green, circular and lowcarbon development; to raise the whole nation's saving awareness, to promote a frugal, civilized, appropriate and reasonable consumption across the country, to advocate modern consumption types such as green consumption, and to improve consumption in quality and efficiency. All these thoughts and proposals effectively led Chinese society to transform from an industrial civilization to an ecological civilization, and set down the basis for building an ecologically

civilized society.

After the concept of "an ecological civilization" made its debut in the Report to the 17th/18th CPC National Congress, China's ecological construction was elevated to the will of the CPC and the state in a real sense—a whole new political height. In 2012, the Report to the 17th/18th CPC National Congress explicitly proposed to "strive to promote an ecological civilization," and emphasized that an ideology of an ecological civilization, which should follow and respect nature, must be established, and "the promotion of an ecological civilization must be accentuated, and be integrated with all aspects and the whole process of economic, political, cultural and social construction" (Hu, 2012). This demonstrated that the CPC adopted an overall plan for promoting economic, political, cultural, social, and ecological progress to ensure coordinated progress to lead China into a new era with a socialist ecological civilization. It was a significant decision that complied with the tide of the times and aspirations of the people.

A new era featuring a socialist ecological civilization means the completion of an ecologically civilized society. It is a sociological pattern that marks the harmonious development, co-existence and mutual prosperity between man and nature. It endeavors to achieve harmony between man and man, man and society, by balancing man and nature. The coordinated, sustainable development of human production, living, consumption and a natural ecological system is the core connotation of an ecologically civilized society, which views the harmonious co-existence between man and nature and the ecological welfare of man as its ultimate goal. Unlike former sociological patterns, the ecologically civilized society, which goes with the tide of an ecological civilization, is characterized by some hallmarks of the age, which might be summarized as follows. First, an ecological morality caring about and protecting nature must be established among the

public. It is necessary that people in an ecologically civilized society boast a higher ecological awareness, respect and protect nature, and the whole society must construct an ecological civilization that cares for and protects nature. Second, people's ecological welfare must be guaranteed. That is an important sign of an ecologically civilized society. Ecological welfare is a subjective feeling of people about their ecological environment, and also a measure of happiness people are obtaining from their current ecological environment (Chen & Peng, 2014). General Secretary Xi Jinping noted that "the environment is our livelihood, lush mountains are the real beauty and a blue sky is a source of happiness" (The Editorial Office of Contemporary Social Sciences, 2015). An ecologically civilized society is blessed with a good ecological environment that comprises blue sky, green land and clear water, thereby meeting people's demand for beautiful production and living environment and healthy, green products, refreshing people's spirits, and endowing them with adequate ecological welfare. Third, ecological justice must be achieved by the entire society. The ecologically civilized society must distribute the ecological benefits among all its members in a fair way and coordinate ecological interests among all stakeholders. Natural resources must be equally shared by and distributed among the social members, and the fruits of ecological construction must be shared by all the people, rather than become privileges enjoyed by only a few (Zhang, 2014). Meanwhile intergenerational equity must be upheld during the promotion of an ecological civilization, namely the current generation must not over-exploit natural resources for fear of affecting the sustainable development for future generations. Fourth, a healthy and complete ecological civilization system must be established. An ecologically civilized society is based on the law and must be equipped with a sophisticated system supporting and maintaining the ecological

civilization. Sound and complete environmental laws, ecological regulations and environmental administration are crucial signs of an ecologically civilized society.

After the 18th CPC National Congress, the Central Committee of the CPC, headed by General Secretary Xi Jinping, proposed a raft of new thoughts and strategies about the promotion of an ecological civilization, expounded upon a number of ecological facets, such as the establishment of the concept of an ecological civilization, the transformation of development patterns, the balance between economic development and environmental conservation, green development, green consumption, improving people's living environments, and strengthening institutional construction of the ecological civilization, and pointed out the direction and path for China to build an ecologically civilized society. Institutional construction had been a focus of the CPC-led ecological civilization promotion throughout the period from the 18th CPC National Congress to the 5th Plenary Session of the 18th CPC Central Committee. "The CPC Central Committee and the State Council jointly issued the" opinions on Accelerating Ecological Progress, Ideas, Principles, Objectives on May 5, 2015 was the first to note that "improving the institutional framework for promoting ecological progress" should be the key to stepping up the promotion of an ecological civilization. The Integrated Reform Plan for Promoting Ecological Progress, issued by the CPC Central Committee and the State Council of China on September 22, 2015 systematically stipulated the guidelines, ideas, principles, and objectives of the promotion of ecological progress and how concrete reforms should be conducted. It gave clear instructions on each step of promoting ecological progress and endeavored to provide a solid institutional guarantee for China's promotion of an ecological civilization. In April 2014 the Eighth Session of the Standing Committee of the 12th National People's Congress of the People's Republic of China ratified the Amendment to the Environmental Protection Law, making further adjustments and improvements in the original Environmental Protection Law to better cater to the new social conditions and environmental circumstances. The Amendment, which took effect on January 1, 2015 provided a powerful legal guarantee for China's promotion of an ecological civilization.

The 5th Plenary Session of the 18th CPC Central Committee listed "green development" in the "Five Concept for Development" that would guide China's socio-economic development. That was an ecological reflection of the CPC's thoughts about social development. Green development is not merely developing environmentally friendly industries though. Instead, it refers to a neverending pursuit of harmonious unity of economic development and the ecological environment during the social construction. Green development being viewed as a guiding thought throughout new-era social development in China indicated that the concept of an ecological civilization had been firmly embedded into the intrinsic logic of China's vision of its socio-economic development and had become a crucial and basic prerequisite for the country's social development, leading its historical transition from an industrial civilization to an ecological civilization.

The promotion of an ecological civilization has also been prospering ever since the concept of "an ecological civilization" was raised in the Report of the 17th CPC National Congress, especially since the Report of the 18th CPC National Congress incorporated the promotion of an ecological civilization into China's Five-pronged Overall Strategy for the socialism with Chinese characteristics. The Beautiful China Initiative was proposed, and local governments have made great efforts to implement the initiative, build eco-

civilization demonstration areas, vigorously develop green technologies, drive green development, and provide institutional guarantees for the construction of an ecological civilization by establishing and regulating related regulations and implementation rules, and achieved marked results. The public and non-governmental organizations were both proactive participants in this undertaking. China's construction of an ecological civilization is unfolding smoothly and gaining momentum, propelling China to transit into an ecologically civilized society.

In conclusion, an ecological civilization has been elevated from an academic subject to a state will and an administrative program and has become an important part of China's blueprint for future social development. The 17th CPC National Congress established the promotion of an ecological civilization as a strategic goal and the 18th CPC National Congress expanded the overall development plan from the Four-pronged Comprehensive Strategy to the Five-pronged Overall Strategy and the 5th Plenary Session of the 18th CPC Central Committee proposed the concept of "green development." It is believed that, led by the CPC, the promotion of a socialist ecological civilization with Chinese characteristics is sure to reap a bumper harvest, provide impetus for the Chinese Dream (i.e. the rejuvenation of the Chinese nation), become a role model for other countries and contribute to human society's advancement towards a global ecological civilization.

(Translator: Wu Lingwei & Xu Qingtong; Editor: Xu Huilan)

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