

Ecological Civilization: Creativity and Innovation in the New Normal Era

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ABSTRACT

This paper makes use of Ecological Civilization as a creative and innovative perspective on sustainable development in the New Normal Era. It is a creative product of the Chinese People's Republic of China (PRC) because for the first time a comprehensive approach to sustainability is put forward with the government as key significant player in managing business, society, and culture for the protection and care of the environment. It is innovative because it is an enhancement of the 1987 Brundtland Report on the Triple Bottom-line of People, Profit and Planet harmonious relationship. It is innovative because it makes use of traditional Chinese teachings and the Yin Yang principles in promoting harmony between humans and nature. It is innovative because it is a socialist dialectic idealism, a variant of Marxist dialectic materialism.

Keywords: Ecological Civilization, Sustainable Development, Triple Bottom-Line, Creativity and Innovation.

I. INTRODUCTION

The First International Conference on Economics, Business and Management has the theme: Sustainability and Development of Business Management and Finance: Embracing the New Normal Era.

There are two critical factors in the theme of this webinar. The first is the concept of Sustainability and the second is the New Normal Era. I would like to contextualize this webinar in the New Normal Era. This means that things are no longer the same after we experienced the COVID 19 pandemic. The World Economic Forum (June 2021), in Building Back Better: Policy Pathways for an Economic Transformation, state that a new future of education and skills must address: 1. innovation and creativity, 2. Global citizenship and civic responsibility, 3. Digital technology, and 4. Interpersonal and intrapersonal skills. (p. 27).

Basically, creativity and innovation mean "Thinking of novel ideas, improvements and solutions by combining ideas or information and making connections between different fields and perspectives. Includes skills such as: critical thinking, analytical thinking, creative thinking and systems thinking. Triple Bottom-Line in 1987 and the Ecological Civilization in 2018 shows how critical thinking, creative thinking and systems thinking have been used for the four decades (1987-2012) in viewing and reviewing role of business, society and government in protecting Planet Earth. prehensive approach to sustainable development.

II. LITERATURE REVIEW

On sustainability and development aims to: 1. Demonstrate that Ecological Civilization is a creative document advocating harmony between human and nature. 2. Show that Ecological Civilization is an innovation in the 21st century, updating the 1987 Brundtland Report on Triple Bottom-Line. 3. Establish the fundamental relationship of humans and nature based on the traditional teachings of Chinese philosophers. 4. Apply the Yin-Yang principle as a dynamic dialectic relationship between humans and nature, who interests are diametrically contradictory.

III. THEORETICAL FRAMEWORK

The theoretical framework of this narrative is primarily the viable relationship between humans and nature that would result to a harmonious reality. This concept rests on the Chinese Yin-Yang principle (Zhang & Hudtohan, 2021). The Book of Huang Di Nei Jing illustrates Yin which refers tangible reality in material form ; Yang represents the intangible that make things work, "阴成形, 阳化气". The theory of Yin and Yang in ancient Chinese philosophy

tells the origin of Universe. The interaction between Yin and Yang means production and reproduction of the endless variety of life in the universe.

The concept is also used to describe how the polarity or seemingly contradictory forces are intertwined and interdependent in the natural world. Although Yin and Yang are opposite, they are dependent on each other to exist. Based on these basic concepts, a complete system of opposites was dialectically elaborated. Everything in the universe from six types of quarks with their corresponding types of antiquarks that have equal magnitude but opposite sign (Carithers & Grannis, 1995) to the universe can be identified with either Yin or Yang aspect and functioned as the theory Yin and Yang.

The theme of harmony, balance and equilibrium between Yin and Yang is fully enthused, constituting a dynamic neutral system for understanding events, which has been influencing Chinese people's mindset both consciously as well as subconsciously for more than 3000 years. Western people may polarize their views when two apparently contradictory propositions are presented; while Chinese people would be more likely to accept both propositions (Peng & Nisbett, 1999).



Figure 1. Yin and Yang (Taiji)

According to Peng and Nisbett (1999), "Chinese ways of dealing with seeming contradictions result in a dialectical or compromise approach—retaining basic elements of opposing perspectives by seeking a "middle way." On the other hand, European-American ways, deriving from a lay version of Aristotelian logic, result in a differentiation model that polarizes contradictory perspectives in an effort to determine which fact or position is correct." (p. 714).

The historical experience of China with dialectic materialism of Karl Marx (1939) continuous to influence a similar approach to the contradictory relationship of two main players in environmental issues. Thus, the Ecological Civilization of Xi Jinping operates in socio-cultural-political-economic dialectical perspective in creating a harmony between humans and nature. Further dialectical analysis of Xi Jinping on environmental crisis led him to create a new sustainable development paradigm: The Ecological Civilization of China.

IV. METHODOLOGY

The methodology of this discourse is qualitative (Marshall & Rossman, 2010); it uses documentary analyses to mine pertinent data in demonstrating the creativity and innovation in China's approach to sustainable development. It is a multi-value (Richardson, 2015) research which presents the pioneering concept of ecological civilization with the government taking a strong leadership posture in managing business, society and culture to be in harmony with nature (ecology). It is a modified case study (Yin, 2003) on China's new approach to sustainable development, which is being offered to the Western world for replicability and sustainability in environmental protection. Thus, it provides an awareness of "the critical role of patterns and context in the achievement of knowledge" (Chisholm, 1966) on the critical role of government in creating an ecological civilization. It is partly storytelling (Pallin, 2018) because it narrates the story of China's new vision on how humans and nature, though dialectically opposite in interests, can be in harmony with each other; it a demonstration of Chinese Yin-Yang dynamic principle. It is heuristic (Mustakas & Douglas, 1989) because it details the national experience of China in reversing the ill effects of pollution. It is historical (Bloch, 1962) because it reviews the values espoused by the government and business sector from the 1990s to the present, which provides a roadmap for a vigorous and lush environment in the future. (Gonzalez & Tirol, 1984; Hudtohan, 2005)). It reviews the 1987 Brundtland Triple Bottom-Line Report and presents the 2012 Xi Jinping Ecological Civilization.

V.RESULT AND DISCUSSION

5.1 Sustainable Development Perspective

I will connect creativity and innovation with the 21st Sustainable Development of President Xi Jinping's Ecological Civilization in China and Brundtland Triple Bottom-line. Creativity is the capacity to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others.(www.csun.edu). It is the ability to transcend traditional ideas, rules, patterns, relationships and to create meaningful new ideas, forms, methods, interpretations. (www.dictionary.com). Innovation is the creation, development and implementation of a new product, process or service, with the aim of improving efficiency, effectiveness or competitive advantage. It is the practical implementation of ideas that result in the introduction of new goods or services or improvement in offering goods or services. (Schumpeter, Opie, & Elliot, 1983). It is change that creates a new dimension of performance." (Drucker, 2002). Creativity and innovation: creativity is defined as "the use of imagination or original ideas to create something." Innovation, on the other hand, means "a new method, idea, and product. (Oxford Living Dictionaries. (2018).

Creative and Innovative Sustainable Paradigms. Triple Bottom-line and Ecological Civilization are both creative approaches to environmental care and protection because they are pioneering perspectives on sustainable development. Creative because in the late 20th century Brundtland for the first time the United Nations, through by the Organization of Economic Cooperation and Development (OECD) opened the eyes of the Western world on the relationship among business making profit, humans as consumers and Mother Earth as resource (Figure 1). Ecological Civilization is innovative because it has upgraded the 1987 sustainable development Triple Bottom-line of Brundtland.

Brundtland Report in 1987 was a creative concept of sustainable development focusing on triple bottom-line: concern for profit, people and the planet. On the other hand, Xi Jinping's 2021 Ecological Civilization is an innovation of the Triple Bottom-line of Brundtland. He updated the concept of sustainable development to an ecological civilization with government as the key player in managing business, society, culture and ecology. In addition, it is a creative landmark document that innovated environmental care from End of the Pipe Governance (1980s-1990s), cleaner production (1990s-2000s), circular economy (2000s-2010s) and a breakthrough with Ecological Civilization (2010s-Present). The innovation is that the business was tasked to primarily care for the environment (1990s-2010s). A creative move was made in 2012 when Government is considered playing a dominant role in sustainable development managing business, society and culture for a green ecological civilization.

Brundtland Triple Bottom-line. The relationship between Mother Earth and Business must be viable, meaning a successful relationship where business makes Profit but Mother Earth is not harmed or destroyed. The relationship between humans and Mother Earth should be bearable, meaning humans can endure living on this planet and Mother Earth can also endure the demands of humans to survive. The relationship between Business and People should be equitable, meaning fair and impartial for both. Business must not take advantage of consumers for economic gain and consumers must not have excessive demands for economic advantage. In this model the role of governance is considered at all; the key players are business, consumers and Mother Earth.



Figure 2. Brundtland's Triple Bottomline: People, Planet and Profit (1987).

Jinping's Ecological Civilization. The sustainable development paradigm of Xi Jinping (Figure 2) Ecological Civilization shows that in 2010 Politics or Governance has the dominant role in managing the Economic (business), Culture (way of life), Society (civilian population) and Ecology (Planet Earth). Take note that governance was focused on controlling pollution of nature (1980s-1990s), cleaner industrial production (1990s-2000s), and circular economy of business (2000s-2010s). Business production and consumer consumption were addressed to minimize harm to Mother Earth in the context of Brundtland Triple Bottom-line formulated in 1987. Jinping's integrated approach to sustainable development puts governance as a key player on top of sustainable development paradigm pyramid. It must lead and manage business making money, cultural behavior, and citizens' legal compliance for an ecological civilization as a way of life on Planet Earth.

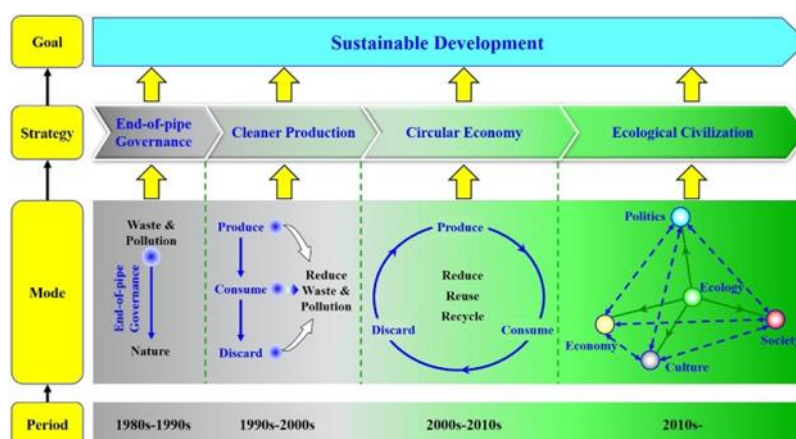


Figure 3. Ecological Civilization and Sustainable Development (Pan Xiang-chao, 2018)

Ecological perspective (Figure 3) shows that humans who are Self-Centered promote Ego-logical civilization, standing on top of the pyramid of the rest of creation. Humans who respect the right of all creatures on

Planet Earth shares with them living space and acts as one with them living on the Planet Earth. Ecological perspective shows that humans stand on top of the pyramid of life, dominating all of living creatures. This old paradigm in the West is based on a theological interpretation of power called Divine Rights of Kings to rule and dominate others. It is also supported by a Biblical view that says: Man shall have dominion over the whole Earth. Thus, in the Age of Colonialization Western countries exploited the New World and the East to have dominion over the whole world. There was a time when Spain owned West of the Demarcation Line and Portugal East of the Demarcation Line; and it was the Pope that legitimized this division of the Planet Earth.

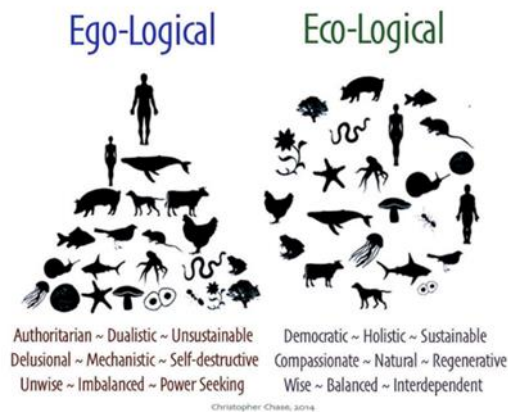


Figure 4. Ego-logical and Eco-logical Perspectives

Western Ecological perspective in support of Chinese Ecological Civilization promotes harmony between Nature and Humans (Figure 4) that makes their relationship bearable. Humans protect the environment and the environment in return provides life support to humans.



Figure 5. Harmony between Nature and Humans

5.2 Ecological Civilization

Arthur Hanson (December 2019) in his report on Ecological Civilization in the People's Republic of China: Values, Action, and Future Needs. No.21, Asian Development Bank have made the following remarks.

Ecological civilization is a set of values and development concepts enshrined in the Constitution of the People's Republic of China (PRC) in 2018, and now a key driver in the country's transition to high quality development for the "New Era" (Pan 2018). It is simultaneously a philosophy, vision, and compass for a green and prosperous future. Ecological civilization has been a "Made in PRC" endeavor but with global implications.

Ecological civilization is being used by the People's Republic of China (PRC) to provide a coherent conceptual framework for adjustments to development that meets 21st century challenges. It differs from sustainable development in the emphasis placed on political and cultural factors, as well as on defining new relationships between people and nature that would permit living well, and within the ecoenvironmental bounds of planet Earth.

While ecological civilization is sometimes described as sustainable development with Chinese characteristics, it will benefit through inputs from outside, and will have value in many of the PRC's international activities including meeting the United Nations 2030 Sustainable Development Goals, creating green supply chains, greening of the Belt and Road Initiative, and accelerating efforts to achieve goals related to climate change and other global environment concerns. The ecological civilization concept places emphasis on safeguarding ecological services and natural resource protection and improvements.

Putting nature first is a fundamental distinction between ecological civilization and the PRC's intense focus for the past 40 years on high gross domestic product (GDP) growth. The new ecological civilization approach is also intended to abide by the PRC central government pledge of "Putting People First" by opening up new quality of life options based on a moderately prosperous lifestyle and living within ecological limits. As the PRC moves toward the medium-term and beyond, to address 2035 and 2050 modernization and prosperity aspirations—ecological civilization can be expected to play a significant role.

The UN and many international organizations and scientific bodies have signaled that time is running out for timely, integrated solutions to problems such as climate change and other global ecological problems. We need accelerated progress throughout the world during the decade ahead in order to avoid very high costs later. The PRC's

sustainable development and ecological civilization experience is already of strong interest beyond its own borders. There is a need to explore the three aspects of ecological civilization: (i) its significance as a concept; (ii) challenges for applying it widely as a catalyst for reform and progress within the PRC; and (iii) strategic opportunities for its use in transformative change toward a new relationship between people and nature to guide future development in the PRC. In addition, it explores the potential value and roles of ecological civilization beyond the PRC.

5.3 Philosophical Foundation Of Ecological Civilization

Creativity and Innovation. One of the challenges for educators of the New Normal Era, according to the World Bank Forum, is to develop creativity and innovative skills for sustainable economic performance. This paper presents the Ecological Civilization of Pres. Xi Jinping to demonstrate how far creativity and innovation has been used to manage the economy, Chinese society, Chinese and culture in addressing the ever global concern over ecological crisis.

Historically, Chairman Mao Zedong used Marxist dialectic materialism as a creative means to address socio-economic imbalance propagated by dynastic rule for centuries. Deng Xiaoping was innovative in embracing Western market economy to propel China's prosperity, after four decades of Mao's Great Leap Forward and Cultural Revolution. Pres. Xi Jinping is both creative and innovative in promoting an ecological civilization for China and for the rest of the world to address global ecological crisis.

Ecological Civilization is a creative product of human imagination because presents a new idea on how humans and nature should relate with each other. The need for harmonious relationship is for humans to treat nature with respect and judicious use of its abundant life-giving gifts to mankind.

It is innovative because it has an enhanced continuity for the 1987 Triple Bottom-line: People, Profit and Planet as critical sectors in sustainable development, where people (society), profit (economy) and planet (ecology) must relate harmoniously. Ecological Civilization in 2018 created a pyramid, where a new key player, Politics (governance) sit on top to manage Society (people), Economy (profit) and introduced a new element, Culture (belief). Culture is driven by one's belief and attitude toward ecology (environment), economy (profit), and society (people). Culture hints at a higher level of human existence where, which Laszlo and other metaphysical gurus call consciousness. A new consciousness vis-à-vis ecological civilization calls for a human behavior based on spiritual values the guide and promote harmony with nature. Ecological civilization is leading mankind towards a Spiritual Civilization.

The ecological civilization pyramid situates the government (politics) at the pinnacle of the pyramid and at the base are society, culture and economy. From the Analects, Confucius says, "Only when personal lives are cultivated are families regulated; only when families are regulated are states governed; only when states are governed is there peace all under Heaven. Therefore, from the Son of Heaven to the common people, all, without exception, must take self-cultivation as the root." He also says that the fundamental unit of the state is the family. He says in the Analects, "To put the world in order, we must first put the nation in order; to put the nation in order, we must put first the family in order." (In Marinoff, 2007),

Principle of Yin and Yang. Yin is a symbol of earth, femaleness, darkness, passivity, and absorption. It is present in even numbers, in valleys and streams, and is represented by the tiger, the colour orange, and a broken line. Yang is conceived of as heaven, maleness, light, activity, and penetration. It is present in odd numbers, in mountains, and is represented by the dragon, the colour azure, and an unbroken line. The two are both said to proceed from the Great Ultimate (taiji), their interplay on one another (as one increases the other decreases) being a description of the actual process of the universe and all that is in it. In harmony, the two are depicted as the light and dark halves of a circle. (www.britannica.com/topic/yinyang).

According to Peng and Nisbett (1999), "Chinese ways of dealing with seeming contradictions result in a dialectical or compromise approach—retaining basic elements of opposing perspectives by seeking a "middle way." for harmony between Nature and Humans

Dialectic materialism asserts that everything that exists is material and is derived from matter; that matter is in a process and constant change; and that all matter is interconnected and interdependent. There are three principal laws of dialectics: the law of the transformation of quantity into quality, and vice versa; the law of the interpenetration of opposites; and the law of the negation of the negation. Dialectical materialism accepts the evolution of the natural world and the emergence of new qualities of being at new stages of evolution. The law of the opposites may help us understand the Chinese principle of yin and yang. Historical materialism, also known as the materialist conception of history, is a methodology used by scientific socialists and Marxist historiographers to understand human societies and their development through history, arguing that history is the result of material conditions rather than ideals.

Marxist dialectic materialism may be conceived as Thesis (Nature) having a self-interest to provide abundant provisions to earth's inhabitants and Antithesis (Humans) having a self-interest to survive by seeking resources from the earth. Thesis and antithesis ought to related with each other in such a way that results to Synthesis (harmonious bearable co-existence). Marx proposed dialectic materialism but Chinese Yin Yang may as well be a dialectic idealism, a non-material concept of two opposing relationships. I am led to assume that ecological civilization is founded on dialectic idealism of Yin Yang and is supported by the wisdom of traditional gurus like Confucius, Lao Tzu and Mencius.

Confucius said, "The woods on Ox Mountain were once beautiful on account of its being on the edge of a large country, it had been attacked with axes and hatchets, and then how could it remain beautiful? The refreshing breezes of day and night, and the moisture provided by rain and fog, did not fail to give rise to sprouts of vegetation.

But cows and sheep have been repeatedly pastured there, and for that reason it has remained desolate. People observe its denuded state and assume that it never had any good resources. But how could this state be the true nature of this mountain?" (in Tu Weiming, 2013).

Confucianist Wang Yangming (1572) narrates, "When we see a child about to fall into the well, we cannot help a feeling of alarm and commiseration. This shows that our humanity (ren) forms one body with the child. It may be objected that the child belongs to the same species. Again, when we observe the pitiful cries and frightened appearances of birds and animals about to be slaughtered, we cannot help feeling an "inability to bear" their suffering. This shows that our humanity forms one body with birds and animal. It may be objected that birds and animals are sentient beings as we are. But when we see plants broken and destroyed, we cannot help a feeling of pity. This shows that our humanity forms one body with plants. It may be said that plants are living things as we are. Yet even when we see tiles and stones shattered and crushed, we cannot help a feeling of regret. This shows our humanity forms one body with tiles and stones."

Pres. Xi Jinping says, "Man and nature coexist, and harming nature will eventually hurt mankind. The use of natural resources such as air, water, soil and blue sky is unconscious and unsustainable. We should follow the concept of the unity of heaven and man and the law of nature to seek the road of sustainable development." (in Report, LiuYang, 2021).

VI. CONCLUSIONS

I end this narrative with the following conclusion:

1. Ecological Civilization is rooted in the Chinese Yin-Yang principle of two opposing environmental realities: humans and nature working towards harmony to the benefit of both parties.
2. Ecological Civilization is an integrated approach to sustainable development; viewed from a socio-cultural-economic-political dialectic perspective, governance takes the center stage.
3. Ecological civilization is a 21st century sustainable development perspective conceived after 34 years when Brundtland Report on Triple Bottom-line was published the Organization of Economic Cooperation and Development of the United Nations.
4. Ecological civilization envisions a healthy global environment where Mother Earth is considered a person. The air and the atmosphere are her lungs, the rivers and the oceans are her blood system, the rocks and minerals are her bones and the trees and plants in the forests are her skin.
5. The symbiotic relationship between humans and Mother Earth must be respected and supported by the business and government sectors.
6. Ecological civilization beyond China calls for regional and global Ecological Civilization promotion and action (ADB Report, 2019).

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