

Oriental Water Control Culture and the co-construction of Community of Life between man and nature

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Abstract. With the steady progress of the “Belt and Road” Initiative construction, the economic and cultural ties between China, Japan, and South Korea have become increasingly close. When faced with the global issue of water control, the spirit of harmonious coexistence between human and nature shared by the three countries based on the agricultural culture of the ancient oriental farming civilization will be the key to solving the problem. This paper summarizes the internal relationship, scientific nature and modernity of the oriental water control culture of China, Japan and Korea, and proposes to carry out cross-cultural communication not only between the three countries but also beyond the border of East Asia.

1. Introduction

With various sustainable development mode being strengthened, “water problems”, such as the pollution, wastage, and excessive development of water resources, have become one of the most concerning public issues in the twenty-first century. To carry out radical solutions for these “water problems”, not only is it necessary to enhance practical governance approaches like institutional reform and technology updates, but it is also crucial for policy makers and industrial participants to acquire deeper understandings of the relationship between human and water, which calls for the establishment of “community of life for human beings and nature” and consequently the dialectical coherence between theories and practices.

In the context of “Belt and Road”, the overall progression should be explored in depth and used as a basis for cross-cultural dissemination to the West and other Asian and African countries, which can not only provide solutions for the current “water problems” faced by the world but also lay a solid ideological foundation for building a sustainable development mode of human material civilization and spiritual civilization and the value of “community of life for human beings and nature”

2. Oriental despotism and water cultures

Human civilization originated from water, and ancient civilizations were always born from water. In the East, Guanzi's¹ “Water and Earth” begins with the words “what is water? It is the origin of everything, as well as the place where every life sets root at”. In the West, Thales, the founder of ancient Greek philosophy, put forward the first philosophical proposition that “water is the foundation of the world (the original)”. It can be seen that in both

Eastern and Western thoughts, water represents “origin”. However, despite the shared reliance on water, the water cultures of the East and West are not the same, since the Eastern civilisations featured by the influence of large rivers are highly different from the Western ones that are deeply shaped by oceans and the advocacy for conquering nature².

The difference between the East and the West and the special historical background of the Enlightenment stimulated the activists of the era (such as Montesquieu and Hegel) to use Plato and Aristotle's dichotomy of East versus West and tyranny versus freedom to perceive Eastern water culture. They further portrayed the East as a highly servile oriental despotism, and the culture of Oriental water control became an indispensable feature of such a despotism ideology, and this perception remained a common phenomenon until the late 20th century³.

The early association of oriental despotism with relevant water cultures can be traced back to Montesquieu, whose *The Spirit of Laws*, in which the philosopher establishes causal relations between governmental systems to the geography of states, attaches the virtue of freedom and nobility to peoples living in cold climates and the label of servile despotism to those living in hot ones. Although Montesquieu never visited China, he defined China as an oriental despotism with the self-assertion that the natural environment of a state determines the system of a government, and thus he attributed the natural features of China to the formation of its servile despotism.

By the time Hegel was active, the impression of oriental despotism had already been firm. In Hegel's *Philosophy of History*, he contrasted the civilization of the sea with the one of the rivers from the perspective of water, portraying the sea civilization as being free, adventurous, enthusiastic for conquest and plunder and the spirit of the

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river civilization, in contrast, as being closed, old-fashioned, superstitious and featured by slavery. Adam Smith's *Wealth of Nations*, a contemporaneous work, starts from a political economy perspective, linking the policy of Physiocracy in ancient China, Egypt, and India with the constructions of large-scale water conservation projects in these civilisations. According to Smith, water irrigation, waterways, and roads were public works of these states, and the rulers built them to increase agricultural production and control the people with land ownership, which constituted the political and economic basis for despotic rulings in these oriental nations.

In Marxism, from the perspective of political economy, the Oriental water control and the oriental despotism are summarized as the "Asian mode of production". In *The Distant Heavenly Kingdom* by Ning Zhou⁴, he writes "Marx and Engels pointed out two features of the oriental despotism from the perspective of economic system, which are the state or communal ownership of land and large-scale public water works. The intrinsic connection between these two features is the common basis of all the Eastern empires in Asian history".

This Asiatic mode of production was further developed by Max Weber and Karl Wittfeff, which is associated with a type of highly rational but despotic oriental bureaucracy built on the organizational system of water control, or in other words, an autocratic ruling approach based on civil works such as large-scale water control projects. Wittfeff defined it as "water control oriental despotism" and extended it to the Incas, Maya, Egypt and almost all the countries of the Soviet Union except Western Europe.

But in reality, China had already established private ownership of land as early as in the Spring and Autumn Period and the Warring States by "abolishing the well field and opening up the roads"(*chu jingtian, kai qianmo*)⁵, and had long abandoned slave society, so the Chinese feudal monarchy was not the same as the Eastern despotism known in the West. But until modern times, even though China, Japan, and Korea account for more than half of the WHIS⁶, most Western societies have only appreciated their designs, engineering, preservation, and longevity, while they seldom explored its ideological contents and inspiration. However, with the rise of the Third World and the changes in the international political landscape, the image of the oriental world and its culture of water control have been re-recognized to a certain extent, especially after the negative effects of "anthropocentrism" have been confronted by Western societies and many countries are gradually moving into "knowledge-based" nations.

3. DISSEMINATION AND DEVELOPMENT OF ORIENTAL WATER CONTROL CULTURE

3.1 The construction of "Belt and Road" and the construction of Oriental water control culture

The Korean Peninsula and the Japanese islands are

located in the core of East Asia and have a long history of cultural exchange with China. Japan and Korea, both located in the Eastern part of The Silk Road, have been influenced by Chinese culture since ancient times, and their respective cultures as a whole have inherited part of the Chinese one. The cultural communication between China, Japan and Korea can also be found in the ancient water projects of the three countries.

The oldest surviving water control project in China, Quebei Pond, was built in the Spring and Autumn Period, and the technology of straw and earth pile dams was used in Korea's oldest water conservancy project, the Byeokgol-je Reservoir, built in 330 AD. This technology was later introduced to Japan through the Korean Peninsula by the Baekje people, and was also used in the Sayamaike Reservoir, the oldest waterworks in Japan, which was built in the mid-seventh century⁷. In terms of water rights regulations, Japan and Korea have also long used the "Water Ministry Style"⁸ of the Tang Dynasty. The common core philosophy of water control is even more self-evident. The intrinsic connection between the irrigation engineering heritage of China, Japan and Korea is the best evidence of the friendship between the three countries since ancient times, and is also the basic premise of spreading the Oriental Water Control Culture as an organic unity.

The construction of modern China's "Belt and Road" and "Cultural Road" once again connects the three countries, providing a platform for the construction of the Oriental Water Control Culture system and making it possible to further deepen the integration, interoperability, and co-prosperity of the entire Eastern culture system. The construction of the Oriental Water Control Culture can serve as a bridge between the cultures of China, Japan and Korea, and lay the ideological foundation for the win-win cooperation of the three countries to face the world's water problems together in the future; on a global scale, the effective dissemination of water control culture can enhance the strength of the dissemination of Eastern culture as a whole, expand its influence, break the solidified impressions of the East and rebuild its overall images, and transform the Eastern culture from the "other-shaping" dominated by Western discourses to the "self-shaping" guided by the Eastern world itself.

3.2. Reinventing "anthropocentrism" and the spread of Oriental Water Control Culture

The relationship between human beings and nature has been one of the main issues in human society since its inception. The attitude of Western societies toward nature turned to "anthropocentrism" under the influence of the Renaissance and the Enlightenment. In this background, Eastern societies, influenced by the intellectual liberation movements of the late 19th and early 20th centuries, gradually turned to such Western "anthropocentric" ideas as well. Driven by anthropocentrism, modern social science has made a radical leap, but the subsequent environmental problems that go increasingly serious have gradually become the core issue limiting the development of human society. As a result, the original

anthropocentrism is no longer in line with the development of contemporary society, and after the 1970s, various "non-anthropocentric" ideas have emerged.

Although "non-anthropocentrism" reflects that today's society is already rethinking the negative effects caused by anthropocentrism, the completely self-defeating "non-anthropocentrism" is also inherently flawed as it excessively prioritizes the interests of nature while neglecting the ones of humans. It can be seen that rather than completely rejecting anthropocentrism, it is more important to dialectically and critically redefine the relationship between human beings and nature, and to use nature rationally for the benefit of human beings. The reestablishment of the relationship between humans and water is an important part of reshaping anthropocentrism from a dichotomy to "monocentrism", from "contradictory struggle" to "contradictory oneness", and from "unbridled" to "moderation".

The three East Asian countries, China, Japan, and Korea are featured by their respective unique philosophy of human-nature relations. In China, there is the idea of "tian ren he yis" (the unity of heaven and humanity)⁹; in Japan, people worship the concept of "onozukara" (being naturally)¹⁰, and in Korea, the spiritual pursuit of "manmulrilryu" (All things in one category)¹¹ has been inherited by different generations of Korean. The core idea of "man and nature being one" is the best interpretations of the "oneness center", which is manifested in these ancient oriental traditional cultures; The traditional culture of "harmony and unity between man and nature", together with the core of "adapting to local conditions" and "sparing mainly", has influenced the construction of water control projects, which is also the perfect expression of the thinking of "contradictory sameness". The concept of water use is based on the basic idea of "taking in moderation and using in moderation", which coincides with the sustainable development pursued by modern society.

From the perspective of the common interests of mankind, the dissemination and development of the Oriental Water Control Culture is in line with the interests of the world and can be a catalyzer for raising public awareness of water conservation and reshaping anthropocentrism.

3.3 The ethos of "second modernity" and the development of Oriental Water Control Culture

In the development of industrialized society, many ancient water conservation projects were either replaced by "modern" ones or destroyed in the process of modernization¹², and many excellent water control spirits were also forgotten in the blind pursuit of "first modernity"¹³. Therefore, under the background of rapid development of science and technology and economy, water culture is facing the predicament of degradation or even disappearance.

Taking the destruction of Dujiangyan as an example, because the upstream trees were cut down, the water of Minjiang River was continuingly reducing. Due to the pursuit of economic interests, the irrigation area in

Chengdu expanded from 2.83 million mu in the 1940s to 10 million, which even became the material of propaganda when a monument that claimed "Dujiangyan actual irrigation 10 million mu" was built up in 1994¹⁴. However, the long-term over-exploitation of water resources and the destruction of vegetation upstream, combined with the natural reasons for the reduction of precipitation, resulted in serious water shortage. The people who had already abandoned the principle of "four or six water divisions"¹⁵ and the spirit of "harmony between man and nature" attached to Dujiangyan built the Zipingpu Dam upstream. Also, because of the destruction on Dujiangyan, the historic dam was only awarded the title of World Heritage Site and was not included in the World Natural Heritage List. Moreover, due to large-scale hydroelectric development, the upper reaches of the Minjiang River are dehydrated more seriously, and even cut off many times¹⁶. Subsequently, in the name of science and economy, the construction of Yangliuhu Reservoir and Shengxing Power Station was planned at only 1,300 meters from Dujiangyan, but fortunately, these two projects were not approved by the relevant authorities after being prevented by environmental protection authorities and heritage conservation organizations as well as local residents, and the tragedy of Zipingpu did not repeat itself¹⁴.

In recent decades, tragedies such as these between man and nature have occurred frequently in the midst of rapid modernization. On the contrary, compared with many modern projects like Sanmenxia Dam, Dujiangyan uses the characteristics of water flow to design a diversion fish spout, an overflow drainage flying sand weir, and a water diversion treasure bottle mouth design to achieve the comprehensive effect of flood control and sand drainage, water transportation and irrigation water supply without damaging the environment. It has withstood the test of 2300 years of history. The many Oriental Water Control Cultures and ancient water conservancy projects represented by Dujiangyan are representative of the harmonious unity and the scientific, rational and consistent spiritual values pursued by modern society¹⁷.

With the comparison between the two cases above, people began to reflect on the negative effects of the first modernity and re-examine some of the good traditions that had been drowned, abandoned or even destroyed in the modern industrial revolution. Nowadays, the reflection on the first modernity has gradually become the mainstream consensus. In this process, people have also realized that the so-called "tradition" and "modernity" are not completely opposed to each other, and that the elements of Oriental Water Control Culture, such as the technique of "damless water diversion" based on the value of "understanding nature and following nature", are highly scientific and modern.

In particular, in the 21st century, when human world is transforming itself from an industrial society to a knowledge-based one and from a single era to a pluralistic one of globalization, the consciousness of "second modernity"¹⁸ has gradually become prominent, and the idea of "harmony and unity between humans and nature" in the Oriental Water Control culture aligns with the goal of sustainable development. The increasing number of the

oriental water projects in the WHIS year by year also shows that the "advanced" and "traditional" nature of Oriental Water Control Culture has been universally acknowledged by the world. The current international cooperation to strengthen the research, protection and inheritance of traditional water culture is also an objective need for the cultural development of modern society. All these have provided a favorable environment and conditions for the spread and development of Eastern water culture in the world.

4. Conclusion

The Oriental Water Control Culture has been handed down to the present day, and as a crystallization of the wisdom created by the working people of the East for thousands of years, it owns breathtaking water engineering heritages and widely worshipped water control spirits. There is no need to elaborate the historical and cultural value of these Oriental Water Control Cultures. But more importantly, in today's knowledge-based countries, the dissemination and development of Oriental Water Control Culture has certain inspirational and practical significance, both in terms of increasing internal ties and cooperation within the Eastern region, and in terms of solving "water problems", building new values, and even technological innovation for the whole world. This is also the most fundamental guarantee for the further spread and development of Eastern water culture in the context of "Belt and Road".

In today's new historical changes, "telling the Chinese story" under the strategy of "culture going out" does not mean "only telling the Chinese story", but is also about increasing regional mutual trust and connection within the Eastern Asian region, which is to strengthen regional cooperation to protect, research and develop Eastern culture, and to jointly disseminate the excellent values of Eastern culture to the outside world, creating ecological, intellectual, international and global public values.

Therefore, grasping the new historical direction is the first step for the dissemination of Oriental Water Control Culture. The second step is to make the culture distinctive from the Western one with the help of common cultural heritages. The third step is to deepen the cooperation and mutual trust among the three countries in the process of jointly building the Oriental Water Control Culture, to make comprehensive use of the communication resources of the three countries, to broaden the communication channels of water control culture, and to enrich the communication media. The fourth step is to make use of WHIS, which is already widely known nowadays, and utilize the trend of reexamining anthropocentrism to stimulate the dissemination of Oriental Water Control Culture. The last step focuses on the pursuit for "second modernity", which highlights the economic and environmental win-win, and aims to secure the long-term development of Oriental Water Control Culture on the basis of conservation by developing the technologies of oriental water engineering designs.

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6. According to the latest data (International Commission on Irrigation and Drainage, ICID, Retrieved 14/10/2022 from <https://icid-ciid.org/home>) as of October 14, 2022, there are 140 registered WHIS, of which China and Japan are firmly in the top two and South Korea is in sixth place, with a total of 83 in China, Japan and South Korea (46 in Japan, 30 in China and 7 in South Korea), accounting for more than 65% of the total.
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