#### Research Article

Liu Tongyang\*

## Wilderness Ethics in the Anthropocene

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**Abstract:** The concept of wilderness has been deconstructed with the arrival of the age of Anthropocene, so the wilderness ethics of the Anthropocene was once ignored. But in fact, what has been deconstructed is only the "natural" wilderness as pure nature, not the "untrammeled" wilderness. In addition, the environmental system corresponding to the traditional wilderness concept still exists, and is still the closest to the original natural environmental system. There is a debate on how to treat this environmental system in the age of Anthropocene, so it is necessary to clarify the concept of wilderness in the Anthropocene and rebuild the wilderness ethics. The wilderness ethics of Anthropocene is a responsive one, which calls for both sides to interact and blend without denying the autonomy of both sides: On the one hand, we should establish a holistic view of harmonious coexistence between man and the wilderness, basing on the ideological basis provided by the Anthropocene to break the binary opposition between culture and nature. The view does not include a sacred order. On the other hand, we should affirm the autonomy and uncertainty of the "untrammeled" wilderness. The wilderness ethics of the Anthropocene enlightens us that we should regulate the intervention of human and technology in a certain range when protecting the wilderness, respect "locality" and derive ecological wisdom from indigenous peoples.

**Keywords:** Anthropocene; wilderness; untrammeled; responsive ethics; technology

### 1 Introduction

In 2000, after the annual meeting of the International Geosphere-Biosphere Program held in Mexico, Paul Crutzen, a Dutch chemist and Nobel laureate, and Eugene Stoermer, an American biologist, jointly pointed out that the earth had ended the Holocene, which began 117, 000 years ago, and entered the Anthropocene. Human activity is the main cause of this geological period change, and human has become a

<sup>\*</sup>Corresponding author: Liu Tongyang, School of Humanities, Shanghai Jiao Tong University, Shanghai, China, E-mail: liutongyang@sjtu.edu.cn

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global geological force. They believed that the Anthropocene began at the end of the 18th century, marked by the beginning of the industrial revolution (Crutzen 2002). In the Anthropocene, the integration of human and environment has become increasingly obvious. Human activities have intruded the natural system and affected the survival activities of the Earth's biosphere. As a result, the wilderness that symbolizes pure nature disappeared (McKibben 1990), and people's expectations and imagination of the wilderness were shattered in the reality of global climate pollution. Marris asserted that human intervention in the wilderness led to the end of the concept of wilderness (Marris 2015a). In this sense, the Anthropocene is not only a geological concept that describes the dramatic changes in the geological state of the earth, but also a concept that breaks the binary model between human and wilderness, guides people to redistribute the characteristics of nature and society, and rethink the relationship between human and nature.

The Anthropocene deconstructs the wilderness, seen as a symbol of pure and primitive nature. Although the concept has been deconstructed, the environmental system corresponding to the traditional wilderness concept still exists. How should we define and treat it? In the view of ecologists in the Anthropocene, wilderness is a deconstructed concept, but in the practice of ecological protection, we can still see the trail of wilderness. It can be seen that wilderness is a concept widely discussed in many disciplines and fields, so it is necessary to clarify the meaning of wilderness in the context of the Anthropocene. Will the wilderness disappear in the Anthropocene? If it does not disappear, how should human get along with it? What kind of Anthropocene wilderness ethics do we need?.

At present, the research on wilderness is mainly focused on the practical level, the direct discussion on wilderness ethics is rare. At the practical level, scholars focus on whether human and technology should be allowed to participate in wilderness protection. One view is that the wilderness designated by the United States National Park Service has been increasingly interfered by human beings, weakening its wilderness characteristics, and administrators need to take action such as intervene in the number of species in the wilderness ecosystem (Graber 1995), protect endangered species, and increase the biodiversity of the region, to restore the wilderness characteristics (Vucetich, Nelson, and Peterson 2012). Another view is that this man restoring the characteristics of the wilderness by intervening in the wilderness is a paradox. The deeper the degree of human intervention, the more unable to restore the original wilderness. Therefore, the wilderness must escape the shadow of human control (Cole et al. 2016; Kammer 2013). So the dilemma of wilderness protection in the age of Anthropocene lies in how to get along with the wilderness, and this urges us to clarify the concept of wilderness and wilderness ethics in the Anthropocene as soon as possible, so as to better carry out wilderness protection.

This paper first introduces the concept of the Anthropocene and analyzes how the age of Anthropocene deconstructs the wilderness. By combing through the concept of wilderness, this paper discusses whether the wilderness disappears in the Anthropocene. Secondly, it discusses the wilderness ethics in the Anthropocene. Finally, it analyzes the enlightenment of wilderness ethics to the practice of wilderness protection.

### 2 Has the Wilderness Vanished?

The concept of wilderness and wilderness protection have become increasingly complicated in the Anthropocene: from the conceptual perspective, ecological modernists in the Anthropocene believe that the ideal wilderness has disappeared and there is no wilderness independent of human beings. However, the natural system corresponding to the wilderness still exists. How to define and protect this natural system has become a problem that ecological modernists have not explained clearly. From the practical perspective, there are disputes on wilderness protection. Some points out that the Anthropocene puts more emphasis on the role of human subjectivity in environmental protection. "human beings now shoulder the responsibility of planetary management" (Thompson 2009). In the Anthropocene, the earth is like a huge garden waiting to be developed and protected (Kareiva, Marvier, and Lalasz 2012; Marris 2013). What humans can do is improve their management and control ability (Marris 2015b). In order to cope with the reduction of biodiversity and the degradation of wilderness, human beings should intervene like gardeners (Marris 2015b). The key to intervention is the use of technology, and human needs "utilize the right kinds of technology to enhance the well-being of both human and nonhuman natures" (Kareiva, Marvier, and Lalasz 2012). More intelligent modern technology will recover the ecosystem and realize wilderness protection by decoupling the impact of human production and life on the natural environment. While others oppose human intervention in the wilderness (Asafu-Adjaye et al. 2015). It is a paradox to restore the wilderness without human influence through human intervention, and the wilderness must get rid of human control (Cole et al. 2016; Kammer 2013). Phillips believes that human intervention is a "more enlightened means of conquest", which actually reflects the arrogance of human (Phillips 2015).

The above problems are related to the confusion of the concept of wilderness. Wilderness has been discussed in many fields, but there is no unified definition of wilderness. The understanding of wilderness must be judged according to the context. In fact, even in the same field, the meaning of wilderness changes over time. Wilderness used to be synonymous with abandonment and barbarism. It was related

to the negative meanings of darkness, evil and disorder, which was frightening (Cronon 1995). At the beginning of the 19th century, influenced by European Romanticism, wilderness was initially associated with ecological thought, symbolizing primitive nature and displaying aesthetic value. A binary opposition between wilderness and civilization was gradually formed. At the end of the 19th century and the beginning of the 20th century, the wilderness landscape brought people aesthetic pleasure beyond industrial civilization. In the late 20th century, the relationship between wilderness and civilization was further deepened. Snyder believed that the intersection of wilderness and civilization was the most ideal state of human existence (Snyder 1974). Holmes Rolston believed that the wilderness is the source of all values, including human values. The wilderness is the source of value first, and then is a resource. Therefore, we should make "philosophy go to the wilderness" and "value go to the wilderness" (Rolston 1986). In recent years, the wilderness has been endowed with cultural value, yet it was more recently been seen as a term of philosophy and land management (Scott 2002). In terms of land management, the Wilderness Act in the United States defines wilderness as "an area where the earth and its community of life are untrammeled", and it's protected and managed to "preserve its natural conditions" (Wilderness Act 1964). The author of the Wilderness Law pointed out that he chose the word "untrammeled" instead of "undisturbed" to show that the characteristics of the wilderness develop freely without human's control and manipulation, and "we are guardians, not gardeners" (Scott 2002). It should be noted that the synonyms of "untrammeled" are "unconfined", "unfettered", "unrestricted", "uncompleted", "unencumbered", "unlimited", and "untrained". These synonyms indicate that "untrammeled" suggests freedom from human control more than lack of human effect (Cole 2000).

By combing through the definition and usage of wilderness, it is not difficult to find that there are two types of wilderness: the first type of wilderness is completely free from human culture, independent of human activities, and represents pure nature. This paper summarizes it as natural wilderness. The most typical representative of which is the wilderness that symbolizes the binary opposition between human culture and nature. The second type of wilderness is the wilderness intertwined with culture, which is affected by human beings but still maintains its independence. This paper summarizes it as the untrammeled wilderness, the most typical representative of which is the wilderness in the *Wilderness Law*. These two kinds of wilderness are neither this nor that. When the degree of the untrammeled reaches the extreme, that is, it is neither controlled nor affected by human beings, then the untrammeled wilderness can be transformed into a natural wilderness. As Hettinger hypothesized, human influence can eventually "flush out" the natural system, and the wilderness can finally return to its original state (Hettinger 2014).

We should first clarify what kind of wilderness the ecological modernism of the Anthropocene deconstructs when we face different meanings of the wilderness. The eco-modernists of the Anthropocene believe that the pristine wilderness has never existed, and even if it existed, the wilderness has now disappeared (Asafu-Adjave et al. 2015). They do not make a clear definition of wilderness, but the word "pristine" indicates that they regard wilderness as untouched place (Marris 2023). This kind of wilderness is regarded as the opposite of culture, so what they eliminate is the natural wilderness. Since the human civilization emerged, the nature has been constantly interfered and transformed in human production and life. At present, except for the natural environment in some extreme climates, all land is being directly used by human beings. Scientists believe that there are various signs that human beings have deeply changed the natural process of the earth (Steffen et al. 2006). The emergence of global climate change and nuclear energy indicates the end of the wilderness (McKibben 1990). In the past century, we have accelerated the loss of some complex ecosystems, but this does not mean the end of the wilderness. Different fields have cracked the concept of wilderness, but it is in the cracks that the wilderness can continue to exist. To be more precise, in the Anthropocene, the wilderness that symbolizes pure nature is indeed facing the end, but the untrammeled wilderness that maintains autonomy is not over, and will evolve with mankind to form shared future. At the same time, on the basis of the characteristics of the untrammeled, the wilderness ethics of the Anthropocene will be constructed. The deconstruction of natural wilderness and the existence of untrammeled wilderness can help us better understand the wilderness of the Anthropocene. The deconstructed natural wilderness means the end of the binary opposition between man and nature. The wilderness is no longer an abstract concept, and human beings should give up the imagination and construction of the wilderness. The untrammeled wilderness is not only affected by human beings, but also has natural factors beyond human cognition and is independent of human activities.

Clarifying the definition of the concept of free wilderness not only shows that the wilderness has not disappeared in the Anthropocene, but also solves the dilemma of wilderness protection. First of all, the answer to whether human beings should control the wilderness is given by the characteristics of the untrammeled: untrammeled means that it is not allowed to be manipulated by human beings but allowed to be influenced by human beings. Therefore, it is not allowed to use technology to control or intervene the natural evolution process of the wilderness. However, human beings can use technology protect the wilderness, as long as the technology is controlled within the scope that does not affect the autonomy of the wilderness. Secondly, human's protection of the wilderness is indeed contrary to the desire to restore the natural wilderness, but a reasonable extent of intervention can prevent the untrammeled wilderness from devastating disasters such as war and man-made

fire. So the Anthropocene does not exclude the participation of human and technology in wilderness protection, but what is the scale of human and technology's participation in wilderness protection? What kind of wilderness ethics should be built? These problems need to be solved urgently.

# 3 Responsive Ethics: The Wilderness Ethics in the Anthropocene

The discussion of ecological crisis is inseparable from the reflection of human collective responsibility, and requires universal environmental ethics to regulate individual behavior (Kawall 2017). The basis of ethical relations is the interaction between multiple subjects. In the Anthropocene, the untrammeled wilderness has become one of the subjects, which will inevitably lead to new requirements for the wilderness ethics. Specifically, there are two aspects:

First, the wilderness ethics of the Anthropocene should be based on the holistic view of the symbiosis between human and the wilderness. It should be based on the particularity of the Anthropocene context, and this particularity and significance of the Anthropocene lies in its breaking the binary opposition between human culture and nature. Under the binary mode of traditional environmentalism, nature is the absolute object of objectification, and human beings are the subjects irrelevant to nature. Thus it is believed that scientists and technicians can deal with and control the consequences of human's behavior, and even change genes and land composition (Latour 2003). In the Anthropocene, traditional naturalism will end with anthropocentrism, because whether it is human-centered or natural-centered, it is based on the idea that opposes human and nature (Latour 2017a). Kruzen, the proponent of the Anthropocene, pointed out that in this era, natural systems and human systems are mutually inclusive and intertwined (Crutzen and Schwägerl 2023). Humans need to change the current way of understanding their roles, consider the human system and the natural system as two integrated and indivisible entities (Shellenberger and Nordhaus 2004), and establish a culture of harmonious coexistence with the natural system.

This holistic view is not to connect human beings with the wilderness in an intermediary way, nor simply to mix human beings with the wilderness, but to blend human beings with the wilderness. The wilderness is affected by human activities, and human are also shaped by the wilderness, like the coexistence of North American Indians and the wilderness. For thousands of years, millions of Indians have thrived in the wilderness of North America (Denevan 1992). By adopting various ways of using fire, Indians have shaped diversified ecological structures, improved

their living and production conditions, and they also have a profound impact on the wilderness system and distribution of animals and plants in the North American continent (Van der Donck 1993). But the wilderness, in turn, also shapes the character of Indians. They take animals and plants in the wilderness as totems and gods, and construct national identity under the influence of the wilderness. Charles A. Eastman, an Indian social activist, pointed out in *The Soul of the Indian* that, Indians have no temples and sacred objects apart from the wilderness, and Indians are people in the wilderness (Eastman 1980). The wilderness also affected the Indian epistemology. They believe that the wilderness is not desolate. There are vast plains, beautiful undulating mountains and flowing streams (Bear 2006).

It is also a holistic view without hierarchy. Inside the entirety, there is no hierarchical order between human beings and the wilderness. Outside the entirety, there is no higher level of holiness. In the Anthropocene, the hidden perspective of God that runs through the western scientific and religious traditions should be disorganized at the same time (Latour 2017b). That is to say, in the new era, we should break away from all kinds of centralism, including "anthropocentrism" and the provocative slogan "return to nature" (Latour 2017a). There should be no more authoritative totality and order similar to the theocratic era in environmental ethics, and neither human beings nor the wilderness within the totality accept the rule of higher rules.

Secondly, the wilderness ethics of the Anthropocene should fully respect the autonomy of the untrammeled wilderness to highlight its free characteristics. The "Anthropocene" represents a complete and irreversible upheaval. At present, the basic form and evolution characteristics of the earth's terrestrial biosphere are mainly formed by human influence. Even if human beings disappear, this form will continue for a long time. Due to the emphasis of the Anthropocene on human activities and human responsibilities, the wilderness of the Anthropocene is often misunderstood as a natural system that cannot exist independently (McKibben 1990; Thompson 2017). As Holmes Rolston said, the arrival of the Anthropocene is not a pleasant thing, but it is inevitable. It is a warning to the current environmental problems, but it is not an excuse for human beings to further affect the ecosystem. What we need to do is to recognize the impact of human beings, but more importantly, to find ways to control the excessive intervention of human beings (Rolston 2017). In the Anthropocene, on the one hand, we should admit that the wilderness is affected by human beings, but on the other hand, we should also acknowledge the independence of the wilderness, and admit that the wilderness has content beyond human power and knowledge.

Some eco-modernists actively advocate rescuing the wilderness out of recognition of the intrinsic value of the wilderness, but this intrinsic value is the pursuit of the spiritual and aesthetic value of the wilderness (Asafu-Adjaye et al. 2015).

After all, the value evaluation of the wilderness in the sense of aesthetics and morality is based on human beings and man can beautifies nature according to his own will (Wang 2009). Holmes Rolston pointed out that the value of wilderness is an internal value independent of human, which is generated by the internal purpose of the subjectivity of wilderness. This internal purpose and value existed before the emergence and intervention of human beings. Therefore, the value of wilderness is objective. The ecological modernists deconstructed the wilderness. While opposing the traditional environmental ethics, they also denied wilderness's identity of the otherness and as an autonomous subject. The value of nature can only be reflected through human beings. The wilderness value they promote is the product of human culture and society, and depends on human's aesthetic and spiritual judgment on the wilderness. This value is for itself, not in itself (Teng 2019). However, even in the Anthropocene, we still cannot control the process of nature. Both the complexity of the wilderness ecosystem and the unpredictability of natural disasters show that the wilderness system and other natural systems are independent existence which human beings cannot completely control. To some extent, the untrammeled means that human's understanding of the wilderness is full of uncertainty (Fremaux 2019). Even though the wilderness has been given special significance by human culture in modern history, we still cannot deny that the wilderness is still evolving according to its own purpose outside human civilization.

From the above discussion, it can be found that in the Anthropocene era, the relationship between human beings and the wilderness is similar to the two sides in response. It is difficult for the Anthropocene not to be affected by the other, so the existence of each subject is similar to a response to the other. The two responding parties jointly build a life community without hierarchy. Maintaining the harmonious operation of the community depends on listening to the needs in response instead of the authoritative order established by one party. This is a communication that does not need language. After the destruction of the wilderness, the biodiversity decreases sharply. This is the response of the wilderness to human destruction, and human wilderness protection activities are the response to the wilderness. Finally, in the process of response, both parties reached rules and contracts of harmonious coexistence. At the same time, response also means that both sides can maintain their own autonomy, otherwise it will be a group's self talk. Different people have different responses to the free wilderness, so there are different aesthetic evaluations. It is exactly the diverse aesthetic values that remind us that these value judgments come from external humans rather than the wilderness itself.

### 4 Practice of Wilderness Protection

The Anthropocene is not a crisis but an opportunity to face human power, we need to reconsider the relationship between man and the wilderness and construct new environmental protection strategies (Asafu-Adjaye et al. 2015). The concept of untrammeled wilderness and the wilderness ethics of the Anthropocene both explain that human beings can participate in wilderness protection, but at the same time, they also emphasize the limit of human participation, the way of coordinating non-anthropocentrism and human wilderness protection activities in practice. It needs to focus on the degree of human and technological intervention, the reference of local ecological wisdom, the improvement of laws, and the cultivation of individual ecological views.

First, the holistic view of symbiosis between human beings and the wilderness means that human beings need to take the responsibility of environmental ethics. Therefore, human beings and technology can be allowed to participate in the protection and recovery activities, but at the same time, the degree of human and technological intervention should be minimized to respect the independence of the wilderness. An Ecomodernist Manifesto argues to use more environmentally friendly modern technology to decouple the impact of human activities on natural ecology (Asafu-Adjaye et al. 2015). They call for the universal use of modern energy in the world and the development of new energy. The affordable modern energy can make the poor people in some areas no longer use wood for fire. At the same time, the development of science and technology can promote the energy to transform to low-carbon one, thereby reducing the damage to the ecosystem. In short, in their view, complying with the requirements of the times of the human world means that human society should use further economic, social and technological development to transform the original development model that destroys the wilderness environment, and strive to protect the wilderness ecosystem while realizing human development. The concept of the Anthropocene inadvertently encourages human and technology to participate in wilderness protection, human's sense of responsibility and initiative has expanded unprecedentedly. In some cases, technology can alleviate or even solve the problems of the sharp decline of biodiversity in some wilderness areas, but this should not be an excuse for human beings to control nature. The wilderness ethics of the Anthropocene era requires humans to examine their own behavior, prevent artificializing and technicalizing wilderness during the wilderness protection, and avoid accelerating the entry into the "Machinacene" in which the wilderness is controlled by machines and technologies (Mackey 2020).

Respecting the independence of the wilderness and allowing human intervention at the same time requires us to pay special attention to the participation of

human and technology in the process of wilderness protection. This paper believes that human intervention should not lead to the destruction of other species as the minimum requirement. For example, in order to protect endangered fresh water fish, an agency proposed to use chemical methods to eliminate nonindigenous fish. but the court rejected the proposal, because it did not consider the impact of this approach on non-target native insects (Kelly and Landres 2022). Wilderness is a complex ecosystem, in which organisms interact with each other. If the work of restoring the original state of the wilderness to the greatest extent, or saving one of the endangered species lead to the extinction of another species, then the protection is meaningless. The impact on species needs a strict and objective assessment, which means that our wilderness protection process should at least include the following two elements:a scientific research team consisting of staff and professional scholars from the local wilderness protection area, being responsible for providing and evaluating relevant proposals; the other one is closely monitor the protection action to ensure the implementation of the action plan, or timely adjust the action strategy according to changes. The restriction of environmental protection activities does not equal to absolute prohibition, but careful consideration, adopting "conservative approach" to the possible impact, duration and spatial extent of the protection strategy (Kelly and Landres 2022).

Second, respect "locality" and draw the wisdom of wilderness protection from minority cultures and indigenous cultures. Globalization is an important feature of the current ecological crisis, and the global ecological crisis has intensified the ecological destruction of the wilderness. Nevertheless, the "locality" of wilderness cannot be ignored in wilderness protection, and wilderness protection should be carried out according to local conditions. In this regard, some practices of indigenous people and Chinese minorities are worth learning. The attitudes and environmental management practices of many indigenous communities to nature have been proven to promote biodiversity and help maintain healthy ecosystems (Díaz et al. 2018). For example, the Native Americans of North America use fire to accelerate the decomposition of fallen leaves, promote the metabolism of local vegetation, and to some extent, they even become part of the wilderness biological chain. After they left, elk had no natural enemies, so the number of them increased sharply, causing great damage to the plants and wild animals, such as beavers. Many other species that depended on these plants lost their living space, extinct or on the verge of extinction. The normal ecological chain in Yellowstone National Park was broken (Lowry 2009). Another example is the War people in China, who live in remote mountainous areas and earn a living by hunting, gathering, farming and animal husbandry. They hold a holistic view of living with the land, "we don't own the land, the land owns us. It's bestowed upon you" (Shao 2019). According to the characteristics of mountain terrain, water source and altitude, Wa people summarize the local way to plant upland rice, and plant hundreds of plants in succession, which greatly protect the local plant diversity (Shao 2019). The ecological wisdom contained in the traditional knowledge of indigenous or Chinese minorities is highly local, because it is often rooted in the place where it lives and is affected by specific natural conditions. Indigenous ecological views in different wilderness areas may be similar, and all of them show respect for the wilderness, but specific ecological measures are different due to the impact of the natural environment. Therefore, when protecting the wilderness, we should adjust measures to local conditions and actively seek ways to protect the wilderness from indigenous traditional knowledge.

Third, improve the wilderness protection law and use laws and regulations to reconcile the contradiction between wilderness and economic development. Since the Industrial Revolution, human beings have destroyed forests and soil in order to pursue economic development, and the wilderness has gradually degenerated. After World War II, with the continuous deterioration of the environment, human beings began to realize the dialectical relationship between development and environment. Put forward in the 1980s, the sustainable development theory allowed development and environmental protection to coexist. The sustainable development of the ecological environment can guarantee the sustainable development of the economy, and in turn, the sustainable development of the economy can promote the sustainable development of the ecology, and finally realize the harmonious coexistence of human and nature. Therefore, the provisions of wilderness protection laws should be improved, including: clarifying the objects of wilderness protection; Set the independent characteristics of wilderness protection as the fundamental purpose; Strengthen the responsibility mechanism of the protection link, clarify the punishment mechanism, and adopt various forms of incentives to mobilize the enthusiasm of the public to participate in wilderness protection; Establish wilderness ecological compensation system, which should not only provide compensation for the original residents, but also encourage them to participate in wilderness protection activities.

Fourth, cultivate individual wilderness ecological view. The close relationship between man and the wilderness in the Anthropocene puts forward higher requirements for people's environmental virtue. Thomas Hill, an American environmental ethicist, pointed out: the research strategy of environmental ethics needs to be changed, it should shift from only focusing on the moral act to the actor, and to the research of the actor's moral quality (Hill 1983). This means that the research of environmental ethics should not only focus on the abstract general behavior of human beings towards nature, but also on the specific human and human moral quality. This environmental virtue requires us to pay attention to whether people have the good moral character of respecting nature, treating nature well, and living in harmony with nature in the relationship with nature. The protection of the

wilderness by laws and regulations is to reduce the destruction of the wilderness by regulating human behavior. However, the long-term coexistence of human and wilderness in the Anthropocene depends on external constraints, so the laws and regulations are not suitable to the implementation in long-term practice. The better way is to update the wilderness ecological view, change from focusing on human destructive behavior to excavating the possible positive behavior of human, make people consciously protect the wilderness.

### 5 Conclusions

In the age of Anthropocene, the interaction between wilderness and human is frequent, and the binary model between human and wilderness has been broken. The natural wilderness as a pure nature without any influence of human is difficult to exist, but as an untrammeled wilderness that is not controlled by human and only limited by human, it still exists. The clarification of the concept of wilderness provides the possibility for human and technological participation in wilderness protection. Wilderness ecological protection is limited, but not prohibited (Long and Biber 2014). The wilderness ethics of the Anthropocene should be based on the holistic view of man and the wilderness on the one hand, and protect the independence of the wilderness on the other hand. The wilderness ethics of the Anthropocene is not an isolated issue, it is linked to many other areas, such as the natural orientation of science and technology ethics and wilderness stakeholders, intergenerational ethics, and environmental justice. Further reflection on these issues will lead to better wilderness conservation, so that wilderness can still be the most autonomous natural system in an era when human influence is widespread.

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