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Environmental History and World History

Abstract. This paper deals with three major aspects of world environmental historiography. Firstly, based on a bird’s-eye view of the world environmental historiography, the ‘received wisdoms’ were deconstructed. Secondly, observing from three schools of world history incorporated with the new thinking of the environmental history, four main contributions of environmental history to the world historiography were figured out. Thirdly, this paper predicts that the future of environmental history depends on the balance of five pairs of relations that regulate the nature and the path of the environmental history.

Keywords: Environmental History, world history, received wisdom, new thinking, balance of relations

Introduction

Environmental history deals with the interaction of the man and the rest of the nature over time. To understand this definition better, there are two aspects that should be emphasized. First, the man mentioned here is not only the biological creature that exists in the singular, but also a social and a collective one. In the traditional history writing, man’s sociality was emphasized, meanwhile the biological attributes were ignored. In the deeper studies of ecology, man’s biological attributes were emphasized; however, the sociality that differentiates the man from the ordinary organisms was ignored. As a matter of fact, the human being is integral part of the nature; however, the man is a unique creature who specializes in the sociality. Furthermore, the emphasis of man’s sociality could not go beyond man’s biological attributes. Second, why is the term ‘rest of the nature’ reinforced? Because it is underpinned by two theories, namely holism and organism. In holism, the man and the nature are regarded, that is different from dualism and reductionism in which the man is regarded
as the opposite of the nature. Furthermore, the quality of the nature is not determined by the average quality of its different parts, but by the least, just as the volume of a bucket is determined by the shortest edge. In any organism, the nature is regarded as the integral whole, in which different parts have their own intrinsic values together with its instrumental value. Additionally, the nature has its limitation. It means that the nature would not be able to supply resources unlimitedly and has a limited capacity to absorb pollutants. Namely, if the pollutants exceed the self-purification capacity, the nature will be contaminated and furthermore, the contaminated nature will threaten the survival of the human beings. Thus, environmental history does not simply focus on the human being only, on ecology or nature, its focus is on the interaction of the human being and the rest of the nature.

To speak more specifically, environmental history consists of four aspects. First, the changing process of environment. Here, it is not the natural transformation that resulted from the natural power, but the environmental change would result from the human activity. The former kind of environmental transformation was usually called the history of environment, whilst the latter type of environmental change was usually called environmental history. Second, there is the material or economic environmental history. It focuses on the interaction of the economic activity and the physical environment, especially the change of productivity and the mode of production. Third, there is the political environmental history. It focuses on the environmental consequences of political power and the political consequence of environmental changes. Fourth, there is cultural or intellectual environmental history. It focuses on how the human being perceives the environment and how this perception influences their adaptation and utilization of the environment. Although the emphases of these four aspects are different, they share some commonalities, such as the interaction between the human being and the rest of the nature, including the role of the human in the environment and vice versa, organic connection of different elements and aspects in nature, etc.

Since the turn of the century, environmental historians have been researching the history of environmental history on a large scale. In 2001, the journal *Pacific History Review* issued a special column on “environmental history, retrospect and prospect.” In 2003, Prof. John McNeill’s masterly paper ‘Observations on the Nature and Culture of Environmental History’ was published in a special issue of the journal *History and Theory.* In 2004, the journal *Environment and History* published its tenth anni-

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versary issue on the timeline of environmental history. In 2005, the journal *Environmental History* published a special column on “What’s next for environmental history?” Meanwhile, four scholars published three books on the timeline of environmental history in different languages, including J. Donald Hughes’s *What is environmental history*, Frank Uekötter’s *Umweltgeschichte im 19. und 20. Jahrhundert*, and Verena Winiwarter and Martin Knoll’s *Umweltgeschichte: Eine Einführung*. All these works began by summarizing the origins, development, and nature of environmental history, and outlining some fields ripe for exploration in the future. These works will undoubtedly be very helpful for the maturing of environmental history as a subdiscipline of history or as an interdisciplinary arena for academic research. Although the authors listed above did not provide a generalized view of the development of environmental history across the globe, they certainly opened the way for further research in environmental historiography.

Based on their research, this paper will go beyond and deal with three aspects of world environmental historiography further.

**Main Body**

I  **Deconstruction of ‘received wisdoms’ in world environmental historiography**

Observing from world environmental historiography, one can single out the three ‘received wisdoms’ to be deconstructed.

First, in the science, the rise of environmental history was generally recognized as the result of the interaction of anti-mainstream cultural movement and creative impulses in history. In fact, this is a received wisdom, or indeed an overgeneralization of the American environmental history experience. The rise of African environmental history mainly resulted from the exploration of African agency and initiative in the nationalist history. In Russia and the former Soviet Union, environmental history has not developed as rapidly as one might expect, given that its environmentalism has expanded greatly in scope, and its environmental problems have become more and more serious. Although environmentalism has appeared to be a backlash since Ro-

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nald Reagan took in office, the development of American environmental history did not parallel the environmentalism’s decay. In France, where the historical tradition was very strong and active, the rise of environmental history occurred later and developed more slowly. In the Arabian world, where there is a unique historical writing system, environmental history has not taken root yet. These cases illustrate that the rise of environmental history in different regions and countries has resulted from a mixture of different variables. The changing permutations and combination of these variables has exemplified the different dynamic mechanisms and characteristics of environmental histories in different regions and countries.

Second, the rise of environmental histories in the rest of the world resulted from direct imports from the USA, as some American environmental historians asserted many years ago. This is the second ‘received wisdom’. While American environmental history started earlier indeed and advanced much more quickly than in the rest of the world, this does not testify to the idea that environmental history movements in other countries were merely overseas branches and tendrils of the American one. Even within the industrialized countries, there are differences; for example, the main themes of environmental history movements in Western Europe and Japan are different from the ones in the American environmental history, reflecting the different structures of physical environments and human-made environmental problems. Even when the same theme, such as nature conservation and national parks, is studied, its foci are different from the African environmental history perspective compared with the American one. American environmental historians emphasize environmental preservation that excluded human utilization, whereas African environmental historians urged conservationism to focus on the human rights of existence and development.8 We might say that environmental history was founded on a strong sense of the local, and the world environmental history was a big ‘garden’ in which the environmental histories of different regions and countries coexisted and competed peacefully.

Third, in world environmental historiography, the American paradigm of environmental history diffused unilaterally all over the world. This is the third ‘received wisdom’. Although the main themes and research conditions were different in various regions and countries, the environmental history of different regions and countries was in frequent dialogue with one another and influenced each other in a reciprocal manner. In the international community that deals with environmental history, the American environmental history was undoubtedly endowed with an export surplus. Meanwhile, although the environmental history in India or Africa was, without doubt, importing more than it exported, the historians in these countries contributed distinct approaches and perspectives to the deepening and expanding American environmen-

tal history⁹ and provided indispensable help for the internationalization of American environmental history and the construction of world environmental history in the USA. Although this exchange was not balanced, it broke up the myths of ignorance and disparagement of the southern local knowledge, and further paved the way to end Americentric and eurocentrism in the environmental history writing. In other words, the contributions of environmental historians from the Global South will be helpful for moving forward in constructing the world environmental history with characteristics of “Every form of beauty has its uniqueness, precious is to appreciate other forms of beauty with openness. If beauty represents itself with diversity and integrity, the world will be blessed with harmony and unity”.

II Environmental history and world history

Although the level of development and the main themes of environmental history in various regions and countries are divergent and/or diverse, all environmental historians assume that the nature can create history or be an actor center-stage in the history. Traditional thinking, e.g. that the environment was too passive to create the history, or that the environment was a mere background against which the history developed, or that the natural phenomena were at most catalysts for the historical development, is not just one-sided (and the typical expression of anthropocentrism in history), but also exhibits lack of conformity with the latest findings of brain science and ecology. The environment is not only an agent in the historical processes; however, it creates history through the interaction with the whole humanity. As a result, environmental history cannot be researched solely using historical methodologies; it needs to be researched by using the transdisciplinary or interdisciplinary methods which incorporate the methods of history, natural science, engineering science and social science. This kind of environmental history will finally balance and unite the social and natural laws and will further shift the historiographical paradigm from the isolated and progressive human history towards the integral, complex and authentic global history.

In a narrow sense, environmental history will provide the part that traditional history lacks. In a broad sense, environmental history will contribute a new way of thinking to the history writing that will result in a paradigm shift in the historiography. With regards to the former, there are quite a few books and essays, and it is so much easier for the scholars to do so. Speaking about the latter, it would be difficult to do it in this way. However, there are some books in which environmental histo-

rians had already explored these approaches. I categorized them into three schools. The first would be the new world history. The second is the new world-system history. The third is the ‘big history’.

Regarding the new world history, two scholars and their masterful books will be introduced. In their best-known book “Something new under the sun: An Environmental History of the Twentieth-Century World”, John McNeill argues that the human impact on the environment in the 20th century is utterly unprecedented in the human history, but the conventional historiography of the 20th century has missed it. His most important contribution to the world history writing is that different spheres, instead of nation-states or periods, was used to frame his world history, such as the lithosphere, the pedosphere, the atmosphere, the hydrosphere and the biosphere. This approach is unique, it showed us the unique world history. The other scholar is Felipe Fernandez-Armesto. In the textbook ‘The World: A Brief History’, Armesto argues that the history interweaves two stories, the environment-centered story that is about humans distancing themselves from the rest of the nature and searching for a relationship that strikes a balance between the constructive and the destructive exploitation, and the culture-centered story that is of how human cultures have become mutually influential and yet mutually differentiating. That means environmental history underpinned the human history. However, he announced that he was not an environmental determinist who regarded the environment as a deterministic factor in the human history, meanwhile the human initiative or agency was ignored.

Regarding the new world-system history, two scholars and their works will be shown. In the world-system history, there are two different ways of thinking. The one is Immanuel Wallerstein’s 500-year-old world system. Based on this world system history, Jason W. Moore argues that capitalism-in-nature – rather than capitalism and nature – is key to understanding the world system and our predicament in the century ahead. Furthermore, capitalism was regarded as a way of organizing nature, including the human nature. World capitalism was regarded as a ‘world-ecology’ of wealth, power, and nature. The greatest strength of capitalism’s – and the source of its problems – is its capacity to create ‘cheap natures’: labor, food, energy and raw materials. The other is Andre Gunder Frank’s 5000 years of world systems. Based on

this world system history, Sing Chew published his trilogy on the world ecological history, in which he sponsored that the world systems should be greening deeply.  

Regarding the ‘Big History’, two scholars and their works will be mentioned here: David Christian and his book ‘Maps of Time; Big History: Between Nothing and Everything’ and Fred Spier and his book ‘The Structure of Big History: From the Big Bang until Today.”

Big history examined the history from the Big Bang until the present using a multidisciplinary approach; it frames the human history in terms of cosmic, geological and biological history. In Big History, it is provided that if the Universe began its existence 13 years ago, then our own species, Homo Sapiens, would last only for 53 minutes; the agricultural societies would have existed for five minutes; whereas the modern industrial societies would have existed just for six seconds. Through going further backtrack, one should know that the history of the universe should be understood if you want to understand the history of humanity. From the point of view of this ground-breaking research, we will rethink anthropocentrism and destroy human’s arrogance and psychological consciousness. The most important thing is that we will find the commonality in complexity of the human history and the history of the universe.

Although this glorious book on the world history dealing with the approach of environmental history has not been published yet, this thinking had already showed some advantages, as being observed from these three schools mentioned above. First, environmental history helps overcome entrenched anthropocentrism in the conventional history writing. Without environmental history, the world history would be, without any doubt, incomplete. Due to dealing with interaction of the human and the rest of the nature, the environmental history broadens the subject of history horizontally and shortens the human history vertically in comparison with the history of the universe.

Second, the environmental history helps correct the defects of the progressive view of history that allies with eurocentrism and orientalism to some extent. To the contrary of this progressive view of history combined with teleology, the environmental history recognizes the intrinsic value of its integral parts. Based on this value, various civilizations do not only exist reasonably, however should be also evaluated by their sustainability (adaptation to its environment), instead of their advancement.


(opposition to backwardness). Furthermore, the future of the world will be sustainable, rather than when the advanced replaces the backward.

Third, the environmental history helps break through the bottleneck of the world history writing based on the nation-state approach. Since Leopold von Ranke, the national history has been the dominant paradigm and the world history has, in fact, been the mosaic of history of some strong nation-states. Based on holism and organism, the environmental history could mainstream the interaction of human and the rest of the nature at different levels (niche, Eco regionalism, global environmentalism, etc.), just like John McNeill’s world environmental history.

Fourth, the environmental history helps integrate the laws of social development and environmental change. In the conventional world history, the law of social development is separated from the law of nature. In environmental history, the law of social development can only be subordinated to the law of nature. Their common point is that both go through the process of increase in complexity and enlargement of scale. Its dynamism is that human’s ability of collecting and spreading information increases, based on the law of thermodynamics of energy flow.

III The future of environmental history

The future of environmental history depends on the balance of five pairs of relations, as follows: firstly, the balance of environmental history as a subdiscipline of history and as a multidisciplinary arena for research must be achieved in determining the properties of the environmental history. Environmental history has the status of a subdiscipline of history in the USA, Africa and India, where environmental history seemed to be more readily accepted by history and was able to develop in the traditional framework of this discipline; however, it has the status of a multidisciplinary ‘arena’ in Australia, Japan and Latin America, where environmental history seems to be a common pool without any accepted definition and a unified organization, to which every discipline could be integrated if it so needs. As a matter of fact, both of these two frameworks are helpful for the development of the environmental history. To reach sustainable development in the future, the best way is to learn from the advantages or other ways of thinking. Environmental history as a subdiscipline of history should be more tolerant and open, which could be achieved through attracting more scholars from other disciplines; Environmental history as a multidisciplinary ‘arena’ should be more coherent; it could become as such through identifying the existed framework of discipline in a certain way.


Secondly, the research in the environmental history should balance the macro- and the micro themes. With further specialization of the environmental history, the themes selected by the environmental historians are often of the micro type but represented on the spatial and temporal scale. It seems that more micro themes mean more profound results. Undoubtedly, this will improve the diversification of the themes and the methods found in the environmental history. However, it will inevitably result in ignoring the general trends of the environmental history, and in the phenomenon of not being able “to see the forest, but for the trees.” In fact, the first-generation environmental historians aimed to challenge the traditional historiography, which excluded the environment, when they explored the environmental history. Now, it will be more important to grasp the bigger trends of the environmental history. Namely, the environmental history should start from the bases of the macro research that some pioneers, such as Alfred Crosby, set up in the 1970s. Additionally, macro and long durée research topics do not necessarily collide with the thematic work and case studies. Furthermore, macro research could appear in the form of thematic studies; and the thematic studies should have room for growth within the macro perspective.

Thirdly, the research in the environmental history should balance pessimism and optimism in its basic motion. When the environmental history originated, it was with the strong characteristics of ‘advocating history’, parallel with the pessimistic narrative notions of ‘decay’ and ‘degradation’. Without doubt, these narratives would raise worries and concerns about serious environmental problems; however, they will also result in the emphasis on the hopelessness of environmental history and the human inability to adopt the lessons on environmental governance as taught by the environmental history. With the development of environmental history, the historians in this field need to focus on both environmental disasters created by human agency and environmental protection and improvements made by the humans through cultural adaptation to created environments. This will correct the one-sided thinking in the relationship between the humans and the nature and help boost optimism and build confidence. Thus, the balance of these two notions will not only become one of the symbols of maturing for the environmental history but also offer the basic security for it to attract the readership and march forward towards a greater success in the future.

Fourthly, the environmental history emphasizes its pure academic foundation, meanwhile its application should be strengthened. After the environmental history became more popular, the historians in this field worked very hard to make it more

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specialized and standardized, with the main aim of exploring the historical truth. Although this promoted the academic nature of the environmental history, it resulted in its becoming separated from the reality and distanced from its readers. As a matter of fact, the environmental historians were concerned about the social function of their research; however, they hoped their academic achievements would trickle down automatically and inspire some people who are interested to take the matter further. During this period that could be considered as the period of an intellectual ‘bombing raid’, this kind of expectation means that there is eventually no one left to read the texts. The environmental history should recover its traditions and pay more attention to the social and environmental hotspots from now on. The environmental history should continue maintaining its academic credentials; meanwhile, it should also pinpoint specific lessons to be learnt and help the policymakers and the environmentalists find practical solutions and guidelines for solving the environmental problems. It goes without saying that reinforcing the main areas of its application should not result in the weakening of its academic base.

Fifthly, the environmental history should satisfy the dual demands of history and environmental science, evenly. On the one hand, the environmental history is eager to become mainstream in history, or to reconstruct the history with its new thinking; on the other hand, it absorbs the evidence and the method from non-historical sciences, such as environmental science. In the process of making the environmental history mainstream, apart from the emphasis on the topics that the traditional history did not focus on, it is necessary for the environmental history to explain the main themes in the traditional history from its own perspective, such as the Enlightenment, the French Revolution, the New Deal, The Two World Wars, decolonization, transformation in East Asia, etc. By borrowing the concepts and results from the environmental science, the environmental history should be concerned about the hotspots in the said science and provide its own evidence and methods, on topics such as hurricanes, a sea level rise, global warming, etc.\(^\text{20}\) This comprehensive research will cross the artificial divide between the natural science, social science, engineering science and the humanities and will promote the development of the environmental history, equally in every discipline, within the broad framework of science.

**Conclusion**

The brief review of the world environmental historiography shows that the rise of environmental history in different countries resulted from various factors and their specific interactions. The American experience in the field should not be overgenera-

lized. As a matter of fact, the environmental history in its broad sense expands the scope of historical agency or initiatives that will result in a paradigm shift in the world historiography. Without doubt, the prospective future of the environmental history could be envisaged, provided the five pairs of relations that regulate the nature and the path of environmental history are to be balanced.

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