The Evolution and Thinking of Environmental Science in the Direction of Scientific History

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Abstract. The education of scientific history can not only cultivate scientific spirit, critical spirit, innovative spirit and thinking method, but also cultivate sense of responsibility, compassion and initiative, and improve the understanding of non-logical thinking method and the feeling of aesthetic outlook on life. The education of scientific history of environmental science is an important channel to improve the comprehensive quality of students in the direction of environment. It is an important direction of the reform of environmental science education to raise awareness and carry out various forms of education activities of scientific history.

1. Introduction
The importance of the education of history of environmental science in the system of humanistic quality education has attracted more and more attention, which is one of the effects caused by the interaction between the development of science and technology and the requirements of quality education. In this kind of concern, the discipline characteristics and important functions of the history of environmental science and technology are also highlighted. People regard it as a bridge and link between nature and society, science and humanity. However, the importance of the education of scientific history in the process of implementation is far from enough. For example, in Colleges and universities in our country, the emphasis on professional research rather than the cultivation of historical concept results in the lack of support of relevant disciplines and background culture in the knowledge structure, the lack of comprehensive overall and macro understanding in the method, and the application of scientific and technological achievements tends to focus on tools rather than values [1]. In a word, the education of scientific history needs to strengthen ideas and increase investment, and it has obvious advantages in educating people, so it is not only necessary, but also urgently needed.

This paper expounds the understanding of the educational function of the history of environmental science from three aspects of seeking truth, pursuing goodness and advocating beauty, and puts forward the necessity and practical exploration of developing the education of the history of environmental science from the special perspective of environmental science education.

2. The rational pursuit of seeking truth
Scientific historical education and scientific activity is the rational cognitive activity of human beings, and the spirit of seeking truth is its core idea. Scientific knowledge has historical inheritance. Science is the crystallization of knowledge accumulated by all mankind in all historical periods. Only on the basis of inheriting the knowledge acquired by predecessors, can we develop from superficial and
scattered to comprehensive and universal [2]. Through the reappearance of the historical process of inheritance and innovation in the history of environmental science, we can not only better understand the regularity of scientific development, but also cultivate the rational spirit of seeking truth in scientific development.

2.1. The cultivation of scientific spirit and scientific spirit is a practical spirit
On the one hand, it requires scientists to be honest and rigorous, loyal to facts, respect practice, well at thinking, brave in exploration and innovation. The development of the history of environmental science is also the history of the continuous cultivation and promotion of the scientific spirit. Eiyanstein said. "If you want to make your life's work beneficial to mankind, it is not enough for you to know only about applied science". Caring for people themselves should always be the main goal of all technological endeavors. We should be concerned about how to organize the distribution of human labor and products, which are still major problems to be solved, so as to ensure that the achievements of our scientific thinking will benefit mankind and not become a scourge [3].

Also, Science history has been a crucial part of the development in environment science. First, science and technology have made great contributions to the understanding of environmental pollution. Without the production of environmental chemistry and analytical chemistry, it is impossible to have a good understanding of the concentration and impact of harmful substances in environmental pollutants. Without the birth of modern ecology, we cannot understand the harm of ecological destruction. People attach great importance to the environmental issues mentioned in the strategy, which should be attributed to the development of science and technology. Second, science and technology play an important role in the control of environmental pollution. Such as bioengineering technology, membrane separation technology, high gradient magnetic separation technology, remote sensing technology, nuclear technology, activated carbon technology and other new technologies are widely used in environmental protection, providing an effective way to solve environmental problems. Third, relying on scientific and technological progress to solve environmental problems has great potential. At present, China's resource utilization rate is not high and energy waste is serious. In this case, relying on the progress of science and technology, through technological transformation, it has great potential to improve economic benefits while reducing the emissions of pollutants and the consumption of resources and energy [4].

2.2. The cultivation of innovation ability and scientific progress are inseparable from innovation.
Learning the history of environmental science can cultivate the method of multiple thinking and thinking needed by innovation. Only starting from all-round thinking and comprehensively investigating the cognitive object, can we reveal the law of things. Hold the essence of things. In particular, with the development of modern science, there are many marginal science, science and science are more closely infiltrated, so the comprehensive ability of scientific research methods is more important. Science is not only a matter of methods and techniques, but also a kind of culture. It not only looks at nature with a rational attitude, but also goes deep into human nature. It promotes honest cooperation and indomitable dedication in scientific activities. A study was performed for 5 groups selected from 5 different schools. The groups are divided into two parts with same amount of people. One group has taught scientific history class and one did not. After 2 years of experiment, people who scored above the educational entrance level has been recorded in the table below.

| Table 1. The behavioral result in both training and non-training group |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | Part A          | Part B          | Part C          | Part D          | Part E          | Total           |
| Experiment group| 34              | 24              | 13              | 89              | 23              | 183             |
| Control         | 10              | 13              | 18              | 73              | 9               | 123             |
| Origin group    | 50              | 50              | 50              | 150             | 50              | 350             |
| Rate            | 3.4             | 1.85            | 0.72            | 1.22            | 2.56            | 1.49            |
From the table, we can see that students who have learned comprehensive science history class has performed a lot better than the student who don’t [5]. From the history of environmental science, we find the importance of methods in scientific research, so that many scientists are philosophers at the same time. They have made great contributions in their own professional fields, and made achievements in epistemology and methodology. This phenomenon gives us a lot of important enlightenment. Learning the history of environmental science should not only understand scientific thoughts and concepts, but also regard these thoughts and concepts as a dynamic process of development and change, which is the regularity of the cognitive process reflected in the process of establishing scientific theories. Therefore, the course of scientific development can give us rich enlightenment of epistemological methodology.

3. The aesthetic appeal of seeking beauty

The history of environmental science "educating beauty" the truth of science and the beauty of art are interdependent and blend each other, the history of environmental science development is also the history of environmental science and art integration, which is the process of rational and perceptual, subjective and objective harmony.

The scientific discovery of cultivating non logical thinking methods is not only the result of logical thinking, but also plays an important role. Scientists' artistic accomplishment and pursuit of art can give us a lot of inspiration.

Cultivate aesthetic outlook on life. Under the control of instrumental rationality, modern people need to cultivate aesthetic outlook on life. If scientific creation itself has different thinking characteristics and value pursuit from aesthetic activities, scientific history can meet our many aesthetic needs. The development of science depends on the interaction between science and culture, which is a process of continuous blending of knowledge, emotion and meaning. Through history, I can also feel the aesthetic enjoyment brought by scientists' Outlook on life [6]. As far as the study of the history of science itself is concerned, rationality is a good assistant to the cognitive activities of the history of science. The cognitive system of the history of science, like the historical cognitive system, can only be said to be a grey system at best. Only where there are sufficient historical materials, can a more clear and reliable cognitive result be formed. However, with the help of scientific logic, the success rate of scientific history cognition may be slightly higher than that of general historical research. Collingwood once said that only things that can be repeated in thought are the objects of historical research. This may greatly narrow the scope of historical research, but it can be seen from it that the rational factor is exactly what he said can be clearly repeated in thought.

The history of cultivating critical spiritual science progress is the history of continuous doubt and criticism, and critical sheath is the internal mechanism of scientific development. In the history of Western science, almost every great scientist has a skeptical and critical attitude towards the previous scientific theories, and puts forward his own creative scientific hypothesis. The development of science is a process of continuous development, improvement and transcendence driven by rational criticism. For example, the immunology theory in the history of environmental science has changed from the theory of cellular immunity to the theory of humoral immunity and then to the theory of immune system. They are formed in the process of gradual development from imperfection to perfection on the basis of doubt and criticism.

Generally speaking, compared with natural science, humanities and Social Sciences suffer more social and cultural pressure because they are more closely related to ideology. Its academic evaluation criteria are not as clear as that of natural science. From a long-term perspective, they often do not have the sustained and stable academic paradigm as Kuhn said. However, this does not mean that there is no academic autonomy for this kind of academic. True learning must be able to produce insights, have its academic value and social and cultural value, and win the recognition of academia and society when conditions are appropriate, so it must have its own side. Philosophers often claim that philosophy is the mother of all sciences, because modern disciplines are all separated from the previous philosophical knowledge system; historians claim that history is the source of all knowledge,
because all human experience is formed in the way of history. These manifestos are intended to show their academic autonomy.

4. Conclusion
When talking about the significance of the history of environmental science, the history of environmental science can help us understand the social role and humanistic significance of science", which is indeed the charm of the education of the history of environmental science, but it has not been fully recognized. Real scientists not only increase the natural knowledge of human beings, but also spread a scientific spirit of independent thinking and methodical doubt, and a very valuable spirit of cooperation, fraternity and tolerance in human life, which is the most humane mouth. The history of environmental science is regarded as the core of the history of human civilization by Morkie Sarton. If we understand the history of environmental science from a real philosophical perspective, we will broaden our horizons, increase our compassion, improve our intellectual level and moral standards, and deepen our understanding of human and nature Great scientists in history have not only brought the growth of knowledge and new achievements of science and technology to mankind, but also conveyed friendship and sympathy. In a big way, all the outstanding scientific people are full of "ultimate concern" for human destiny and strive to benefit human beings through their own hard work. Independent thinking and good working are not only important elements of their success, but also important contents of their virtues.

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