Romance, Precision and Generalization - Unthinking the Rhythm of Education in Whitehead's Process Philosophy of Education

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Abstract: Alfred North Whitehead, one of the greatest philosophers of the twentieth Century, is the first person who proposes the "Event Philosophy", and constructs a comprehensive Organic Philosophy, which is different from traditional metaphysics and tries to reconcile the binary opposition between mechanism and teleology in psychology. At the same time, based on the Organic Philosophy and his achievements in the educational philosophy field, Whitehead puts forward his teaching ideology—Rhythm of Education. It claims that education is rhythmic and changeable, which has three stages: the stage of romance, to inspire romantic mood; the stage of precision, to get an accurate and correct understanding of details; the stage of generalization, to systematically grasp the general cognition of the gist. However, problems also emerge since it only explains the rhyme of education from a single dimension, which determines some universal laws concluded are also single and irreconcilable.

1. Are there changes in value during the alternation of Romance, Precision and Generalization?

Whitehead believes that in the arrangement of subjects, the principles of "from easy to difficult" and "necessary priority" are not reliable because not all knowledge follows the process of from easy to difficult, simple to complex. The view that "some knowledge must be acquired before in the process of learning" does not mean only when you have to obtain some literary attainments or have rich life experiences can you go to read the book "Hamlet". Since education practice is a process full of complexity, these basic teaching principles sometimes appear to be so weak that they cannot be used as important clues to solve the current problems in education. In this regard, Whitehead argues "we should strive to weave a harmonious pattern in the minds of the students by combining different teaching contents based on the certain cycles, which enables students to have intuitive understandings of their intrinsic values and enables us to harvest the right crops at the right season." Therefore, Whitehead puts forward his own theory of "Rhythm of Education". Here the "rhythm" is what Whitehead perceives about the real world. "Rhythmic way exists universally in all life, and even exists in all matter." He accepts Hegel's concept of development which divides development into positive, negative and universe stages, and divides the rhythm of education into three stages, that is, the stage of romance, the stage of precision and the stage of generalization. Combined with the intellectual development of teenagers, the stage of romance is from the age of 0~13/14 years old, the stage of precision is from the age of 14~18 year old, and the stage of generalization is from the age of 18~22 yeas old. These three stages exist in every phase of education. In fact, in the process of education, there are "big circles" and "small circles", or even "smaller circles". Though it involves a complex process, those circles share the same property. At each established stage, it does not mean that there is no other stage. Actually, romance, precision and generalization exist all along. That is to say, in the stage of romance, there are precision and generalization penetrating; and in the stage of precision, there are romance and generalization. Similarly, romance and precision also exist in the stage of generalization. With the only difference being n emphasis, those three stages alternately occupy the dominant position, and form different alternative cycles.

Based on this, in the words of Whitehead, the problem of "creativity" appears correspondingly. According to Whitehead's explanation of the event, he believes that events are generally related which reflect the continuity, duration and relevance of nature. In general, the relationship among all things is like a "net" structure. It has no center with only continuous generation. In terms of the theory of events, there is romance in any stage of the three rhythms. But whether this romance shares the same value as the romance at the previous stage or at the next stage, and whether they match with each other have yet to be confirmed. Obviously, in Whitehead's rhythm of education, romance is at the beginning of all things in education courses; but will the initial romance develop or evolve later? How does it evolve? And what kind of romance will be evolved into during different stages? Those problems remain to be identified, one by one. In addition, whether the romance will be halted or even gradually die out when the initial interest of exploration no longer remains is also worth thinking about.

Whitehead does not mention how the stages bring out evolution of romance in learning and what the driving force of the evolution is. Here what the author would like to propose is that the measurement of romance, precision and generalization can be achieved by making a quantitative analysis of the mental development. Through the data we can define the exact romance value at which point the stage of romance will transit to the stage of precision. Similarly, we can also get the certain precision value that allows the occurrence of generalization. If we only measure from the perspective of age and education experience with no values to support, the results tend to be ambiguous since it is difficult to define the dividing lines of every stage. This value does not necessarily to be a specific mathematical logic, or to be clearly quantified. It can be a mathematical model, or a teaching indicator.

2. The rhythm of education should be a process of multidimensional volatility combined with time, subjects and knowledge points.

The stage of romance to precision experiences the overall process to disperse process, while the stage of precision to generalization

returns from disperse process to comprehensive process again. Whitehead once had investigated the normal development of various abilities of medium intelligence children to illustrate the rhythm characteristics of their intellectual development, but he also suggested that there might be a reasonable misunderstanding of this process. It was a normal phenomenon because the complexity of the facts causes difficult to identify, making this misunderstanding completely possible. "The inner life of the human mind is like a network with threads woven together. The strands are not all joined together with the same length of extension."

Whitehead believes that education contains many circles interwoven together, and one circle is under the control of a periodic phase of development with other circles in the same phase having equivalent properties. Besides, each cycle contains all three stages above. Education is the repetition of three stages throughout every day, every week, every semester, and even every minute.

In this regard, the author believes that on the concept of time, the rhythm of education is mechanical in essence. Regardless of the development of person's intelligence, it endures the circulation of the stage of romance, the stage of precision and the stage of generalization. Although Whitehead points out that the there are differences in focuses and characteristics among three stages, "romance, precision and generalization exist from beginning to end with the dominant stage alliteratively presenting, and the alternation forms various circles."

But will there be a grasp of knowledge which enables the process to develop from the stage of romance directly to the stage of generalization? Or will there be a possibility that develops from the stage of precision as the initial stage and to the stage of generalization as the end? These problems are not known yet. The occurrence of one knowledge is bound to be accompanied by the extension factors of the knowledge. Take Newtonian Mechanics as an instance, when examining Newtonian Mechanics, we have already more or less known something about Einstein's Theory of Relativity. Thus we can say that at the aspect of Newtonian mechanics, we are now in the stage of precision. As for Einstein's Theory of Relativity, we just stir up some of romantic manner. In addition, education is closely related to ways of understanding as well as intelligence level. If we put it to the common law level to examine the Rhythm of Education, the absolute developing way of this intelligence rhythm makes the growth from infant to adult become a mechanical metaphysics.

On this basis, the author believes that education should be a mutli-demensonal rhythm fluctuation which includes the time, objects and knowledge points. This is not to deny the correctness of the Rhythm of Education, but to illustrate in detail about the philosophy. For example, comparing the master of knowledge points at every stage of education to using mathematical model, in the stage of romance, the mastery of one or more general knowledge points is like several "set points" on a piece of paper, during which stage one can not yet recognize the relevance between the knowledge of the system though he is thirsty of abundant knowledge, and this can be seen as the embryonic stage of knowledge; when it comes to the stage of precision, the knowledge points gained in the first phase will be gradually refined. This process is like connecting "points" into "lines" and knitting "lines" into "nets", whose focus is to seek for the truth of knowledge. Whitehead believes that this stage mainly reflects the attention of integrating different subjects. "They don't start learning these subjects, but through systematically describing the main concepts of these subjects they combine branches of knowledge."; in the stage of generalization, they will apply "line" and "face", which they have learned in the stage of precision, into comprehensive application, and will "stand up and look around" by conducting their own study on the "body", which means to learn how to apply the conceptual knowledge into specific situations.

Other factors in different stages of development of education can be constructed through such similar methods, but what the author wants to emphasize is that not all factors such as knowledge, intelligence, are fixed as the development model mentioned above. For example, starting from a point with the same radiation radius, can finally obtain a sphere, but it can also obtain the status of a line segment or a plane, not necessarily through a process of "point-line- plane-sphere" one by one.

3. The rhythm of education is unified in the process of present life practice.

Based on the three stages of the rhythm of education, Whitehead also puts forward the corresponding three-cycle form of "freedom—training—freedom", which covers the whole process of intellectual development. Like the rhythm of education, he believes that the whole process of intellectual development is composed of a plurality of three-cycle form. The author believes that the three-circle form here is a relative concept, which means it can be applied to explain the whole process of education development, or a teaching plan, or even the life time of a teacher and a student. A teacher's freedom may be a student's training, and an elderly's lifelong training perhaps becomes the accumulation of future generations' freedom. Only the process is fundamental, and what becomes reality is what happened in the process.

Similarly, the process has rhythm, and the development of the individual shows the characteristics of the rhythm above, so education should be given by order. The whole process of education in general should be a continuous repetition from the stage of romance to the stage of precision, but does not to be too observant of conventional standards. It is a kind of trend, a kind of education philosophy that should be promoted in the process of education. "What is similar to this process is the process by which biological organisms digest foods as we know how necessary good food is for health under the right conditions."

But in the modern history of education, Whitehead points out that the old education ideology had almost been shackled by inert ideas, and such inert ideas urgently need to be changed and should be the focus of reforms in modern education. In his point of view, the inert idea is a one-way input, which means the brain accepts the idea but not to use or inspect it, or the brain fails to integrate it with other thoughts. It is a lack of imagination and creation. Embodied in the education field, such a concept has no rhythm since it only focuses on the input of the fixed knowledge, similar to today's "cramming method" in the exam-oriented education. It not only isolates learning from real life practice, but also separates the inner correlation among disciplines and denies people's creativity. From Whitehead's perspective, imagination cannot

be divorced from facts, and knowledge should not be instilled mechanically. Instead, it is essential to make knowledge full of vitality. This is the core of any education.

Whitehead's philosophy of education is geared to the needs of modernization and the future. He believes that the moment is not entirely determined by the past, which is also to a certain extent influenced by the future. And this distinctive feature exactly determines Whitehead's philosophy of education as an innovative one. While in the dimensions of the three rhythms of education, Whitehead focuses most on "present", in Whitehead's view, the process contains two different but closely related phrases—transformation and concrescence. Transformation constitutes temporality, which indicates that the event is not static, and one event will cause another event, embodying the continuity of nature. Events will only pass and will not change; new events will continue to emerge, covering the original events. While concrescence forms eternity because in the process of concrescence every moment is new, and it is called "present". Therefore, Whitehead claims that 'Present' contains everything. It is a sacred realm, which not only contains the past, but also embraces the future.

References

- [1] Whitehead, A. N. The purpose of education [M]. Trans. Xu Ruzhou. Beijing: SDX Joint Publishing, 2002.
- [2] Whitehead, A. N. The organization of thought educational and scientific the function of reason[M]. Trans. Huang Ming. Zhengzhou: Elephant Press, 2010.
- [3] Whitehead, A. N. Process and Reality [M]. Trans. Yang Fubin. Beijing: China City Press, 2003.
- [4]Yang Genzeng: On the Basic Rhythm and its Problem Countermeasures of Assignment Group Teaching Combined with Modern Culture from the Perspective of A. N. Whitehead's The Rhythm of Education.[J]. Bulletin of Chinese Language Teaching,2022(10):5-7.
- [5]Zhang Xiuhua Xu Wenjun: A Neorealism: Whitehead's Metaphysics of Experience.[J]. Journal of Henan Normal University(Philosophy and Social Sciences Edition),2021,48(01):35-41.
- [6]Zhang Shujing. The Study of Whitehead's View of Educational Rhythm and its Contemporary Educational Value. [D]. QuFu Normal University, 2020.
- [7]Liu Hongping. The Study of Teacher- Student Relationship Under The Perspective of Whitehead's Process Philosophy[D]. HarBin Normal University, 2018. [8]Xiao Shiying, Towards a New Vision: Beyond Whitehead's Theory of Wisdom Education[J]. Journal of East China Normal University (Educational Sciences), 2015, 33(04):7-14.
- [9] Mays W. The Philosophy of Whitehead[M]. Taylor and Francis: 2014-06-03.
- [10]Zhao Junying. Whitehead's Process Philosophy and the Methodological Insights it Implies for Educational Research[J]. Education Exploration ,2013(08):4-5.
- [11] Wang Zhihe, Fan Meijun. Toward a Postmodern Organic Education [J]. Journal of Distance Education, 2010, 28(04):3-13.
- [12]Zhu Lin, Liu Haiyan. A Review of Whitehead's Educational Thought [J]. Journal of Southwest Minzu University(Humanities and Social Science),2006(08):242-244.
- [13]Fu Dianying. A Remote but Shocking Eco—Alfred North Whitehead's Education Thought and Its Profound Significance [J]. Studies in Foreign Education, 2004(12):1-5.
- [14]Qu Yuehou, Wang Zhihe. Towards a Postmodern Philosophy of Education Whitehead's Philosophy of Process Education [J]. Philosophical Research, 2004(05):85-91.
- [15] Huang Ming. On Whitehead's Philosophy of Education [J]. Journal of Zhejiang University (Humanities and Social Sciences), 2004 (02):122-127.
- [16]Hammerschmidt William W.. Whitehead'S Philosophy of Time[M]. Columbia University Press:1947-12-31.