Why is Pragmatism Liable to be Oversimplified and Misunderstood?

发表日期：未知 作者：未知 【编辑录入：俞吾金】

[前沿问题研究]

《理论新视野丛书》新书首发式

克服唯心主义与唯物主义的对立——胡塞尔与马克思的思想尝试（Ante Pazanin著，牟春译）

Why is Pragmatism Liable to be Oversimplified and Misunderstood?
--A Reflection on C. S. Peirce's Review of John Dewey's *Studies in Logical Theory* and an Interrelated Letter

Prof. Dr. Zhang Qingxiong
(Department of Philosophy, Fudan University)

Abstract: Pragmatic doctrine has been subject to oversimplification and misunderstanding. This happened not only in China but also in America. Besides the external occasions, are there any internal grounds? Peirce revealed that Dewey didn't pay enough attention to clarify a set of important concepts such as normative logic and method of inquiry theory so as to cause such kind of confusion and distortion. It is worth to think much of this Peirce's Critique in order not to follow the same old disastrous road.

Key Words: Pragmatism, Peirce, Dewey, Normative Logic, Theory of Inquiry

—

John Dewey's Pragmatism has been often oversimplified and misunderstood. This happened not only after his death but also during his lifetime, not only in an alien land such as China but also in his homeland USA. Why? This problem should not to be sneezed at. Here I would like to quote a remark from *the Columbia History of Western Philosophy* which was published in 1999:

> Dewey tried to do this by transforming education into training in problem solving. The progressive educational movement that grew out of Dewey's views has changed what is taught in school and how it is taught. The role of formal subjects such as mathematics and foreign-language training has been decreased in favor of subjects and methods that help youngsters adjust to their world so that they can be productive problem solvers in it. Dewey's teaching have not been followed exactly, and in many ways they have been simplified, watered down, and even distorted. There has been a backlash against progressive education in the last decades, and the teaching of mathematics and physical sciences as formal subjects is again being emphasized (partly to solve problems in a world concerned about atomic energy, computers, astrophysics, and molecular biology).[1]

Dewey strived to put his Pragmatic ideas and methods into practice in many domains, especially in education. He taught first at the University of Michigan (1884–1894), next at the University of Chicago (1894–1904), and finally at Columbia University (1904–1931). One of his major works was in reforming education by emphasizing learning through experience rather than learning in terms of studying a fixed formal curriculum. Dewey opposed authoritarian teaching, and instead proposed that students be taught through problem-solving activities. He set up an experimental laboratory school within the University of Chicago, and his work led to the progressive education movement.

Among foreign philosophers Dewey may the most famous figure in China besides Marx and so on. Recommended and introduced by his student Hu Shi Dewey gave lectures in Beijing, Nanjing, Shanghai and other major cities in China from 1919 to 1921. During that time a new culture movement took placed in China, which had significant influence on Chinese intellectual elite. Since then on pragmatism and Marxism have become two competitive doctrines in Chinese society.

Dewey's Pragmatism was popular, yet unfortunately it was subject to be oversimplified, misunderstood and thereby distorted. The following phenomena were not seldom: the pragmatic theory of truth, in which the workability or effectiveness of any doctrine or proposition in its application is emphasized, has been distorted as that the useful is true; the Pragmatic theory of education, in which training student's ability of problem solving is underlined, has been distorted as that only applied knowledge is useful while theoretical knowledge is not necessary; the pragmatic ethical theory, in which the fulfillment of human needs and acclimatization of environment are stressed, has been distorted as that man is allowed to achieve his goal by any kind of means.

This reminds me of the troublous time of "cultural revolution", during which pragmatism had been oversimplified and then condemned on the one hand, but on the other hand this oversimplified pragmatism has been in fact regarded as principle to guide education reformation. Under the catchword of "real knowledge coming out of practice" and "education combining with productive labour" theoretical knowledge had been despised so that by way of example a professor for genetics had been looked down because as the story goes that his ability of following the plough was lower than an experienced farmer, and a professor for dynamics had been sneered because he could not carry so heavy burdens as a porter, and so on. Therefore students had been sent to factories and countryside to receive the re-education by workers and farmers.

Formerly I conceived that such kind of follies could happen only in China because of its extraordinary politic situation and its low education level at that time. As I read the paragraph from Popkin's book referring to oversimplification of Dewey's pragmatic teachings I could not help to feel astonishment. I wonder if there is any other element outside of the above mentioned to cause this result. Whether or not Dewey expressed his ideas not enough clear or not balanced so that his teachings are liable to be simplified, watered down, and even distorted?

二

I think my consideration in this aspect have gotten an important support from a criticism on John Dewey by Charles Sanders Peirce (1839-1914). Peirce, the founder of Pragmatism, introduced to this characteristically American system of philosophy Dewey, who was a student at Johnes Hopkins University where Peirce was then teaching. Owing to this special relationship between the both we have to think much of Peirce's opinion.

As we know, Dewey's Pragmatism is also called as Instrumentalism or Experimentalism, which had its first comprehensive exposition in 1903 with the appearance of *Studies in Logical Theory*, a volume written "with the co-operation of Members and Fellows of the Department of Philosophy" at the University of Chicago. Just about this book Peirce wrote a review, which was published in *The Nation* (Volume 79, 15 Sept 1904), and accordingly he wrote a letter to Dewey on 9 Jun1904.

In *Studies in Logical Theory* Dewey set forth that "logic" is a "theory of inquiry", that is, all logical forms (with their characteristics properties) arise within the operation of inquiry and are concerned with control of inquiry so that it may yield warranted assertions. He defined Instrumentalism as an attempt to constitute a precise logical theory of concepts, of judgments and inferences in their various forms, by considering primarily how thought functions in the experimental determinations of future consequence. Further more, he called "logic" as "a natural history of thought", because, according to him, human's epistemological progression is a natural process, in which human as a natural organism must adapt himself to natural environment and solve the problems he meets in order to fulfill human needs, this being the final outcome of logical inquiry. In the wake of Charles Darwin, who founded a theory of biological evolution through anatomy of biological species, Dewey wanted to set up a logical theory by means of anatomy of thought. According to Darwin, all species of organisms arise and develop through the natural selection of small, inherited variations that increase the individual's ability to compete, survive, and reproduce. According to Dewey, Logic, namely the theory of inquiry should be developed through forwardly selection of such thinking methods or procedures that increase the individual's ability to compete, survive, and achieve a better life.

Peirce's criticism in his "Review of John Dewey's Studies in Logical Theory" mainly referred to Dewey's problematic expression about the above mentioned viewpoint. Here Peirce raised crucial questions: when "logic" is regarded as "a natural history of thought", should we recognize or not logic as normative Science? When Dewey does not recognized logic as normative Science or want to replace the normative logic by the natural history of thought, he must demonstrate why this negation or replacement is reasonable. When Dewey recognizes both the normative logic and the logic of inquiry, he should clearly define these two terminologies. What we usually under logic understand is normative logic, that is, a formal system of valid deduction, concerned with the conditions of valid reasoning or the structure and principles of correct inference. For Peirce, what the logic as normative science deals with are *mere possibilities*, whereas what the logic as a natural history of thought deals with are *not* mere possibilities, but empiric process of thoughts and experimental methods.

Peirce pointed out that two schools of logical studies could be roughly distinguished, namely the English school and the German school. "The group of writers whom, abandoning all attempt at finding a descriptive designation, we may roughly call the English school of logicians, meaning, for example, Boole, De Morgan, Whewell, J. S. Mill, Jevons, Venn, Pearson, MacColl, ets., while pursuing studies often purely theoretical, are nevertheless taking a road which may be expected to lead to results of high value for the positive sciences. Those whom we may as roughly call the German school of logicians, meaning such writers as Christoph Sigwart, Wundt, Schuppe, Benno Erdmann, Julius Bergmann, Glogao, Husserl, ets, are engaged upon problems which must be acknowledged to underlie the others, but attack them in a manner which the exact logicians regard as entirely irrelevant, because they make *truth*, which is a matter of fact, to be a matter of a way of thinking or even of linguistic expression. "[2] In other words, the logicians of the English School regarded logic as a normative science, whereas the logicians of the German school wanted to reduce logic to a way of thinking, and therefore the former were called as exact logicians, while the latter as psychologist. Husserl in his early phase belonged to this psychologist school, and latter he attacked this psychologism. Peirce might not know the philosophy of latter Husserl, and German logician G. Frege (1848-1925), because he didn't mention him.

Which school was the Chicago school led by Dewey similar to? Peirce pointed out that the Chicago school was more like to the German school other than to the English school. "The Chicago school or group are manifestly in radical opposition to the exact logicians, and are not making any studies which anybody in his senses can expect, directly or indirectly, in any considerable degree, to influence twentieth-century science."[3] "Prof. Dewey regards himself as radically opposed to the German school, and explains how he is so. We must confess that had he not so much emphasis upon it, we should hardly have deemed the point of difference so important; but we suppose he must know what his own affiliations are and are not."[4] Peirce meant, I think, that there were affiliations between Dewey and German school because they all wanted to explain logical laws in accordance with psychological laws and on the basis of historical experiences about knowing, that resulted to confuse normative science with empirical science, and to ignore the fundamental difference between the necessary truth of logic and the relative truth of empirical sciences.

In the end of this review Peirce expressed his core concern:

> If calling the new natural history by the name of "logic" (a suspicious beginning) is to be a way of prejudging the question of whether or not there be a logic which is more than a mere natural history, inasmuch as it would pronounce one proceeding of thought to be sound and valid and another to be otherwise, then we should regard this appropriation of that name to be itself fresh confirmation of our opinion of the urgent need of such a normative science at this day.[5]

三

Had Peirce periphrastically expressed his opinion in his Review on Dewey's *Studies in Logical Theory*, he has criticized Dewey and

his Chicago school frankly and directly in his a private letter to him. He firstly explained why he wrote this letter:

> I mean, if I can manage it, to get some notice of the book of your logical school into the Nation. But the editor fights very shy of the subject as I write about it and it is necessary to dilute and decorate it so that the result has not much value for serious students. I will therefore write to express how your position appears as viewed from mine.[6]

Then he clearly pointed out why he opposed to Dewey's theory of logic:

> You propose to substitute for the Normative Science which in my judgment is the greatest need of our age a "Natural History" of thought or of experience. Far be it from me to do anything to hinder a man's finding out whatever kind of truth be is on the way to finding out. But I do not think anything like a natural history can answer the terrible need that I see of checking the awful waste of thought, of time, of energy, going on, in consequence of men's not understanding the theory of inference.[7]

Dewey illustrated logic as a natural history of thought in virtue of the two concepts "evolution" and "comparative anatomy" that came from biology. According to Dewey, thought is a process of evolution, and we can find out the logic of thought by comparative anatomy of thought, just like that we can find out law of biological evolution though comparative anatomy of living organisms. For Peirce, "evolution" is indeed a very important concept, but it cannot be used to explain everything, even in the biological domain, for example, the doctrine of evolution has not much affected physiology, because by means of "evolution" biological function per se cannot be explained, though its process of developing may be explained. The comparative anatomy of thoughts is certainly useful for explaining the development of thought concerning how human beings inquire the world, but it is not able to explain the "thought" of normative logic. Peirce wrote:

> Thereupon, I remark that the "thought" of which you speak cannot be the "thought" of normative logic. For it is one of the characteristics of all normative science that it does not concern itself in the least with what actually takes place in the universe, barring always its assumption that what is before the mind always has those characteristics that are found there and which Phänomenologie is assumed to have made out. But as to particular and variable facts, no normative science has any concern with them, further than to remark that they form a constant constituent of the phenomenon. Now nothing like the study the Comparative Anatomists are occupied with can be made of *mere possibilities*.[8]

Let us illustrate this paragraph by way of example. When A implicates B, and B implicates C, then A implicates C. According to Peirce, this is an inference of meme possibilities. By doing this inference, we only consider the relation of these possibilities, and we don't need care what really happens in the world. The truth of this inference only depends on the normative principle. What the comparative anatomy of thoughts deals with is not normative principles and mere possibilities of deductive thoughts, but empirical methods and real processes of discovery thoughts. So far as normative logic is concerned, there is no anatomy of possibilities because one can say in advance how pure possibilities vary and diverge from one another. Namely, they do so in every possible way. What renders a comparative anatomy possible is that certain conceivable forms do not occur. This is essential characteristic of empirical sciences. Though anatomy of empirical thoughts we can improve our empirical sciences and our discovery methods.

What is the relation between normative sciences and empirical sciences? What is the relation between logical principles and psychological laws? Here Peirce didn't want to be involved in such kind of very difficult problems and to make any assumption like phenomenologists did. But one thing for Peirce was very clear, namely, that it is wrong to reduce logical laws to psychological laws, and to replace normative logic by the natural history of thought. A severe consequence of confusing normative logic with the natural history of thought will be neglect the normative rules of logic, and this will leads to loose reasoning and disordered thoughts. Unfortunately Peirce had already found this consequence in the writings of Dewey and his Chicago school. Peirce wrote:

> The effect of teaching that such a Natural History can take the place of a normative science of thought must be to render the rules of reasoning lax; and in fact I find you and your students greatly given over to what to me seems like a debauch of loose reasoning. Chicago hasn't the reputation of being a moral place; but I should think that the effect of living there upon a man like you would be to make you feel all the more the necessary for Dyadic distinctions, —Right and Wrong, Truth and Falsity. There are only to be kept up by self control. Now just as Moral Conduct is Self-controlled conduct so Logical Thought is Moral, or Self-controlled, thought.[9]

After this severe critique Peirce expressed his basic attitude to pragmatism and his sincere friendship to Dewey:

> Although I am strongly in favor of your Pragmatistic views, I find the whole volume penetrated with this spirit of intellectual licentiousness, that does not see that anything is so very false. Of course you will understand that I should not write in such underscored terms to any man with whom I did not feel a very deep respect and sympathy.[10]

The more deep respect and sympathy between friends are, the more frankly they should express their attitude with each other. What Peirce did concerning his attitude to Dewey can serve as an example, from which we can learn a lot about sincere friendship.

四

As we know, Peirce was a pioneer of pragmatism. Dewey's theory of inquiry had been inspirited by Peirce's theory about how to fix our beliefs and how to make our ideas clear. Concerning the central thesis of Pragmatism, Peirce and Dewey held the same position, namely, that speculative thought cannot be divorced from action, that the function of speculative thought is the production of habits of action, and that the perceptible consequences of any theory constitute the test or explanation of its validity because such results fulfill the very purpose of speculative thought. But, could we draw out from this central thesis the conclusion that all sciences including normative logic can be ascribed to experimental results? About this issue Peirce was very careful. He saw very clearly the difference between normative sciences and empirical sciences. He waked up to that we still needed to make great efforts to explain the relation between normative sciences and empirical sciences, between logical demonstration and experimental verification. Therefore on the one hand he supported the Pragmatic movement led by Dewey, on the other hand he criticized Dewey, when he found that Dewey and his Chicago school confused the normative logic with the natural history of thought.

As for Peirce himself, he made a great contribution to the theory of signs and symbolic logic so that we can say that he attained a position of importance comparable to that of George Boole (1815-1864) and Gottlob Frege (1848-1925). But unfortunately his legacy in the theory of logic had not been inherited and carried forward by classic pragmatists such Dewey and James. This might interpret why logical positivism from European continent could conquer American local pragmatism for decades by right of its predominance in logical studies. Although a Pragmatic turn in analytic philosophy has taken placed since W. V. O. Quine (1908-2000) had published his epoch-making article "Two Dogma of Empiricism", this means in no way that we can overlook the importance of logical analysis. Truly Quine rejected that there is a fundamental cleavage between truths which are analytic, or grounded in meanings independently of matters of fact, and truths which are synthetics, or grounded in fact, but this didn't imply he maintained that there is no difference between normative logic and empirical science. Quine never wanted to replace logical truth by synthetic truth. It is worth to mention

that Quine rejected to identify logical truth with analytical truth:

> Logical truth (in my sense, excluding the additional category of essential predication) is, we saw, well enough definable (relatively to a fixed logical notation). Elementary logical truth can even be given a narrowly syntactical formulation, such as Carnap once envisaged for logic and mathematics as a whole (cf. §VII); for the deductive system of elementary logic is known to be complete. But when we would supplement the logical truths by the rest of the so-called analytic truths, true by essential predication, then we are no longer able even to say what we are talking about. The distinction itself, and not merely an epistemological question concerning it, is what is then in question. [11]

Of course, debates about these problems of philosophical logic are still ongoing. As far as I concern in this article is only to remind that Pragmatic doctrine should not be oversimplified. In many ways Pragmatic position as a whole is admirable. But as long as this position is absolutized, it will fall into absurdity. There are different kinds of logics (such as normative logic and discovery logic of inquiry theory) and truths (such as truth of normative logic and truth of empirical natural science), and therefore we should not confuse them with each other. It is wrong to take the division between analytic propositions and synthetic proposition as a dogma, but it is a more terrible error to ignore the difference between normative sciences such as deductive logic and natural sciences such as zoology. Any theory including theory of deductive logic is an instrument to deal with experiences, and in this way we can say that meaning of a theory of logic in the last analysis lies in its observable practical consequences. But we must remember that the way how they contact with experiences and the way how they are testified by observable practical consequences are totally different. Theories of natural sciences are more or less directly testified by observable practical consequences, because they can be provided with observation sentences that impinge on experiences. Normative Logic self doesn't possess of any observation sentence, and therefore its truth or validity is not directly depended on observable facts. As we know, the truth or the validity of a logical inference is decided by logical norms or rules. However, we use logical theories in different scientific domains. One logical theory maybe more convenient than others for a specific scientific domain, for example, logical law of the excluded middle has been proposed to revise in order to simplify quantum mechanics. Only this meaning we say that validity of a logical theory depends on its practical consequences.

Today Pragmatism has revived its popularity both in America and in China. Will this popularity once more induce an oversimplification of Pragmatic doctrine? In order not to follow the same old disastrous road, it is worth to think much of what Peirce wrote in his Review and his letter concerning Dewey's *Studies in Logical Theory*.

---

[1] Richard H. Popkin, *The Columbia History of Western Philosophy*, Columbia University Press, 1999, p. 602.

[2] C. S. Peirce, "Review of John Dewey's Studies in Logical Theory", in *Collected Papers of Charles Sanders Peirce*, Volume VIII, Edited by Arthur W. Burks, Cambridge Harvard University Press, 1958, p. 146.

[3] Ibid., p. 146.

[4] Ibid., p. 146.

[5] Ibid., p. 147.

[6] C. S. Peirce, "a letter to John Dewey dated 1904 June 9", in: *Collected Papers of Charles Sanders Peirce*, Volume VIII, p. 180.

[7] Ibid., pp.180-181.

[8] Ibid., p.181.

[9] Ibid., p. 182.

[10] Ibid., p. 182.

[11] Quine, "Carnap and Logical truth", in: *New Readings in Philosophical Analysis*, edited by Herbert Feigl, Wilfrid Sellars, and Keith Lehrer, New York, 1972, p. 108.