A Deeper Understanding of Key Issues in Kant's "Prolegomena to Any Future Metaphysics"

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Abstract: The treatise of "*Prolegomena to Any Future Metaphysics*" has analyzed the probability of Metaphysics' emerging as a science, which needs to be understood by clarifying crucial concepts such as "synthetic apriori judgments, " time and space, sensibility, understanding, and reason. Additionally, it is essential to understand Kant's layered deductions on the possiblity of mathematical and natural scientific knowledge as well as of metaphysics. This article serves as a preliminary step in studying "Critique of Pure Reason. "

Keywords: Understanding; Prolegomena; Grasping; Crucial; Issues

1. Introduction

An Introduction to Any Future Metaphysics That Can Appear as Science (hereinafter referred to as the Introduction) serves both as a preface to the abbreviated version of *Critique of Pure Reason*, providing a concise and accessible overview of "critique, " and as an introduction to "scientific metaphysics, " analyzing whether metaphysics can emerge as a science. Kant's focus lies in exploring whether a new metaphysics will emerge. However, before drawing conclusions, Kant believes it is necessary to conduct a "pure" examination of human "rationality, " i. e., our cognitive abilities. Only after having a comprehensive understanding of human cognitive abilities can, we determine whether metaphysics can be established. During this examination, Kant did not solve the problem as expected, i. e., he did not rejuvenate new metaphysics, as metaphysical propositions such as "entities have permanence" have never been proven. Instead, he demonstrated the universal necessity of scientific knowledge as a "byproduct. " Therefore, the *Introduction* is merely an introductory remark and an initial exploration of future metaphysics. Kant firmly believes that metaphysics can emerge as a science; he only raised the "question" but did not solve it at all. If we follow Kant's thinking, there has been no significant progress in rejuvenating metaphysics to this day.

2. The Knowledge of "Metaphysics Must Be Constituted by Synthetic Judgments A Priori"

Immanuel Kant divides judgments into two types: analytical judgments and synthetic judgments. Analytical judgments are "merely explanatory and add nothing to the content of knowledge"; [1] whereas synthetic judgments are "extensive and increase existing knowledge. " [1] Therefore, knowledge, whether it be mathematical knowledge, natural scientific knowledge, or metaphysical knowledge, must be constituted by synthetic judgments rather than analytical judgments. In fact, Kant emphasizes the role of "synthesis" in both his *Critique of Pure Reason* and the *Prolegomena to Any Future Metaphysics That Can Be Presented as a Science*. Consequently, the question of the possibility of knowledge can be simply reduced to a key issue: how is synthetic judgment a priori possible? Why must it be "a priori"? the main reason could be that Kant believes that knowledge must possess two conditions: first, universal and necessary validity; second, the expansion of new content. Therefore, it is safe to conclude that only synthetic judgments a priori can construct the edifice of knowledge.

2.1 The Possibility of Mathematical Knowledge

The scientificity of mathematical knowledge probably derives from the fact that humans possess the two "a priori forms of intuition": time and space, which guarantee the universal necessity of mathematical knowledge. For instance, in the field of geometry, when we observe a sphere, we perceive it as round. This particular judgment of "roundness" is primarily based on the "a priori form of intuition" of space

in our minds, from which the validity of our judgments derives. Thus, geometric knowledge is possible, and so is arithmetic knowledge. Of course, the term "a priori" mainly refers to logical precedence, which, according to Kant, pertains to the relationship between cognition and cognitive abilities, rather than between cognition and objects. Additionally, it is worth mentioning that Kant believes humans possess not only a priori forms of intuition but also transcendental categories, which will be discussed later. This belief is primarily based on his division of the external world into two realms: the "phenomenal world" and the "noumenal world. " What we can know or what our senses perceive are only the phenomena of objects, while the "noumenon" remains forever beyond our grasp. Kant argues that whenever we encounter the external world, our "transcendental forms of intuition" come into play, like a pair of "colored glasses, " making it impossible for us to understand what the noumenon itself is like. the division of the "two worlds" and humans' possession of transcendental cognitive forms are mutually causal. As for which came first, we have no way of knowing. Furthermore, there is an issue worth discussing: in Kant's view, time and space serve merely as human "a priori forms of intuition. " He opposes the spacetime views of Newton and Leibniz and differs from Marx's viewpoint that "time and space are forms of material existence. " However, he did not provide a compelling proof. Some scholars today argue that "Kant has never proven that time and space are not objective forms of object existence (noumena). Because the form of intuition can also be proven to be the form of the object of intuition. " [2]

2.2 the Possiblity of Pure Natural Science

Also based on a "transcendental philosophical" approach, similar to how mathematical knowledge is proven possible, the key to the possibility of pure natural scientific knowledge lies in human beings' possessing innate forms of intellect, namely categories. Of course, this process of proof is more complex than that of proving how mathematical knowledge is possible. Especially when it comes to connecting categories with phenomena, the "temporal schema" plays a bridging role, and when it comes to how transcendental categories can have objective validity for experience, "self-consciousness, " or "transcendental apperception, " is crucial. Here, the explanation of how intellect acts on phenomena to produce natural science is omitted. However, some issues are worth raising for discussion: the first is the issue of the number and system of categories. Kant's table of categories is mainly based on Aristotle's ten categories with modifications. But the question is, can these twelve pairs of categories comprehensively explain the possibility of all-natural knowledge and exhaust all modes of existence of things? "This deduction carries a great deal of subjective arbitrariness. " [3] Of course, I am merely raising this issue and do not yet have the ability to discover other new categories. This is because when Aristotle first proposed the ten categories of entity, quantity, quality, relation, place, time, posture, possession, activity, and passivity, he believed they encompassed all substantial modes of existence of things. Later scholars, such as Kant, added and subtracted to form twelve pairs of categories. Therefore, I firmly believe that more categories will emerge in the future to explain new existences.

The second issue is that Kant did not truly resolve Hume's problem of "causality. " Kant attempted to elucidate the causal relationship by utilizing the unidirectionality and irreversibility of time. As he illustrated with the example of perceiving a boat floating downstream, we must first perceive the boat at the upstream location before perceiving it at the downstream location; the order cannot be reversed. This implies a certain rule is obeyed, and thus this successive relationship is objectively necessary. That is how we designate the phenomenon that appears first as the cause and the subsequent phenomenon as the effect, thereby constituting empirical knowledge. [4] In fact, Kant's example does not thoroughly prove causality but only demonstrates one characteristic: that the cause precedes the effect. However, two phenomena that appear successively do not necessarily constitute a causal relationship. the existence of necessary conditions does not prove the validity of a proposition. Kant did not advance much beyond Hume's "habitual causal association. "

2.3 The Possibility of Metaphysics

As it is know, space and time endow perceptual knowledge with universal necessity, and categories leads to intellectual knowledge.

However, when it comes to "ideas, " humanity is powerless. Rational knowledge finds no basis in the realm of experience, and humans do not possess a transcendental form or cognitive ability that can endow rational knowledge with universal necessity. Therefore, propositions concerning metaphysics have never been proven. Consequently, true metaphysics has yet to emerge. Yet, looking back at history, there have indeed been "metaphysics, " but these were merely old fallacies mistakenly labeled as "metaphysics. " Kant summarized them into three main categories: rational psychology, rational cosmology, and rational theology. Rational psychology commits the "four-term fallacy" in its syllogistic proofs, making it impossible to prove the existence of the "soul. " Rational cosmology inevitably leads to "antinomies, " failing to prove the existence of the "world. " the proof of rational theology is even more untenable, as it is impossible to deduce existence from concepts. Therefore, "God" does not exist.

3. **The knowledge of Time and Space**

In Kant's view, time and space constitute a form of "a priori intuitive cognition"; they are something that exists apriori in our minds and serve as the foundation or subjective condition for all cognition to be possible. Regarding space, Kant stated: "Space is not a concept derived from external experience; rather, it is an inevitable apriori representation that underlies all external intuition. Space is not a general argument about the relations of things, nor is it a universal concept as we commonly understand it; it is a pure intuition. Space is presented as an infinite given quantity. " [5]

Kant's discussion on the meaning of space mainly aims to clarify that space is not obtained from external experience. Space is unrelated to the summation or abstraction of experience. It exists apriori in our minds. Conversely, the possibility of external experience is due to the "intuitive cognition of space" in our minds. Space is an inevitable representation that exists in our minds. Without space, all cognition would be impossible. Kant did not provide excessive argumentation on this point, which can be attributed to his distinction between the "two worlds, " or alternatively, it can be considered that space is a prerequisite for cognition to occur, requiring no proof. Just as propositions such as the "infinity of a straight line" in the field of mathematics are theoretical premises that do not need to be proven, space is a pure intuition that does not originate from specific or individual phenomena. It exists before specific individual things and exists in the form of a whole. It inherently indicates its infinity, without any contamination from experience, and is thus pure.

The discussion on time follows a similar line of thought and formulation as that regarding space, so it will be briefly mentioned here. the difference lies in the fact that space is connected with outer senses, governing external consciousness, while time is connected with inner senses, governing internal consciousness. Time serves as a "bridge" connecting external and internal consciousness. Therefore, the scope of application of time is broader, and in a certain sense, it is more important than space.

In summary, Kant consistently emphasizes the transcendental nature of time and space. This represents a logical priority, serving as a theoretical premise and a "framework" within perceptual cognition. This "framework" is inherently present in the mind, akin to a pair of colored glasses through which all perceptions must pass. Whenever cognition occurs, the functions of time and space activate first; otherwise, cognition cannot take place.

4. The knowledge of Synthetic Judgment A Priori

Kant divides judgments into two categories. "According to their content, they are either merely explanatory, adding nothing to the content of knowledge, or they are expansive, adding to existing knowledge. the former can be termed analytical judgments, and the latter can be termed synthetic judgments. " [1] Analytical judgments serve to explain the subject, and the predicate does not expand the content of the subject. For example, "A body is extended, " where the property of extension is inherently contained within the subject "body, " so it does not increase our understanding. Therefore, this type of judgment cannot constitute knowledge; however, such judgments are necessarily true, possessing universal necessity, because the elucidation of the predicate completely originates from the subject. the other type of judgment is synthetic, which serves to expand the content of the subject and can thus produce new knowledge. For instance, the judgment "All bodies have weight" cannot necessarily deduce

the presence of weight from the concept of a body alone. In other words, weight is something we subsequently add. Regardless of whether this judgment is correct, it indeed adds new content to the subject, and knowledge is inevitably composed of such judgments. However, these judgments are not necessarily correct, as the predicate we add does not necessarily correspond to the subject.

On this basis, Kant introduces the concept of "synthetic judgment a priori. " He believes that scientific knowledge must meet two conditions: first, universal and necessary validity; second, the addition of new content. the edifice of scientific knowledge is inevitably composed of the concept of "synthetic judgment a priori. " In summary, what is meant by "synthetic judgment a priori"? It refers to a type of judgment that both expands the scope of knowledge about the subject and possesses universal necessity. For example, in the mathematical proposition 7+5=12, 12 is synthesized from "7+5, " expanding the scope of knowledge about the subject and potentially producing new knowledge. On the other hand, with the aid of intuition, such as seven fingers plus five fingers or other intuitive objects, within the one-dimensional dimension of time, adding 5 to 7 inevitably yields 12, thereby proving its universal necessity.

5. The knowledge of Sensibility, Understanding, and Reason

Regarding sensibility, Kant defines it as: "The receptivity of the mind, when it is affected, for the reception of representations, which may be called sensibility. " [6] In simpler terms, sensibility refers to the ability of the subject's senses to receive representations, which is also known as sensation. Kant refers to the cognition of sensibility as "sensible intuition, " which has two meanings: firstly, through sensibility, the senses obtain raw "material" from the outside world, which is "empirical intuition"; secondly, the innate forms of intuition, space and time, organize this material, which is referred to as "pure intuition. " the possibility of mathematical knowledge arises from this process. Through these two steps, mathematical knowledge is both synthetic and universally necessary.

Regarding the faculty of understanding (or intellect), Kant stipulates: "The ability to generate representations from itself (i. e., the spontaneity of knowledge) shall be termed understanding. " [6] the primary role of understanding lies in thinking. the knowledge acquired through sensibility (which is essentially phenomenal) consists of fragmented materials and is relatively inferior. When understanding processes these materials, it can form systematic and more advanced knowledge. Just as the production of sensible knowledge relies on the two "a priori forms of intuition, " namely time and space, the production of understanding's knowledge relies on "transcendental categories, " thereby granting universal necessity to the knowledge derived from understanding. Regarding the relationship between sensibility and understanding, Kant believes: "These two faculties are indeed without superiority or inferiority. Without sensibility, no objects can be given to us; without understanding, no objects can be thought by us. Thinking without content becomes empty, and intuition without concepts becomes blind. These two faculties or capacities cannot interchange their functions. Understanding cannot intuit, and the senses cannot think. Only through the union of both can knowledge arise. " [6] the interaction between the two constitutes the source of knowledge.

The term "rationality" refers to "the ability within the human mind to 'synthesize and unify' various kinds of knowledge, rules, and laws obtained through understanding, summarizing them into the most comprehensive and complete system of knowledge, in order to grasp unconditional and absolute knowledge. " [7] the primary function of rationality lies in systematically synthesizing knowledge into a coherent system. This is the positive role of rationality, enabling individuals to acquire a comprehensive knowledge system. Due to its inherent natural tendency, rationality constantly seeks to "get to the bottom of things, " inevitably inquiring into the possibility of the "thing-in-itself" and "ideas, " thereby generating "transcendental illusions. " This is the negative role of rationality.

6. The knowledge of Mathematical Knowledge, Natural Scientific Knowledge, and Metaphysics

The theory of sensibility makes mathematical knowledge possible, while the theory of intellectuality renders natural scientific knowledge feasible. As for metaphysics, its

possibility remains to be proven. In his epistemology, Kant provides proof for the first two kinds of knowledge and conducts a thorough analysis on the possibility of the latter kind of "knowledge". Why did he only classify knowledge into these three types? In the author's opinion, Kant made such classification or exemplification because he believed he had exhausted the proof of the possibility of knowledge and there was no need for overly detailed proof of knowledge. For instance, Kant did not conduct a separate analysis on the possibility of art. the reason lies in that if metaphysics can be proven, the proof of art will follow suit. Of course, the exhaustion I referred to is of types rather than of specific knowledge.

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References

[1] Kant. Introduction to Any Future Metaphysics That Can Present Itself as a Science (Abbreviated as "Introduction") [M]. Commercial Press, 1978:18.

[2] Zehou Li. Critique of Critical Philosophy: A Commentary on Kant [M]. Tianjin Social Sciences Press, 2003:98.

[3] Zehou Li. Critique of Critical Philosophy: A Commentary on Kant [M]. Tianjin Social Sciences Press, 2003:115.

[4] Litian Miao & Yuzhang Li (Editors). A New Compilation of Western Philosophy History [M]. People's Publishing House, 1990:539.

[5] Kant. Critique of Pure Reason [M]. Commercial Press, 1960:51-52.

[6] Kant. Critique of Pure Reason [M]. Commercial Press, 1960:73.

[7] Litian Miao & Yuzhang Li (Editors). A New Compilation of Western Philosophy History [M]. People's Publishing House, 1990:540.

