

Kant's Philosophy and the "Copernican Revolution": Implications and Significance

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Abstract: The "Copernican Revolution" in Kant's philosophy marks a pivotal epistemological turn in the history of Western philosophy. Drawing primarily on Kant's *Critique of Pure Reason*, this paper systematically examines the background, content, and significance of this revolution. It first elucidates the inspiration Kant drew from Copernicus's heliocentric theory, then analyzes how Kant inverted the traditional relation of conformity between objects and concepts, thereby shifting the center of human cognition from the object to the subject and laying the foundation for synthetic a priori judgments. Subsequently, the paper further demonstrates how Kant's "Copernican Revolution" transcends both rationalism and empiricism, and, by limiting speculative reason and making room for faith, ultimately aims at the reconstruction of a moral metaphysics. Kant's "Copernican Revolution" not only delimits the legitimate boundaries of rational cognition but also defends the practical realm of human freedom and dignity, exerting a profound influence on subsequent philosophy.

Keywords: Kant; Copernican Revolution; *Critique of Pure Reason*; Epistemological turn

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1. Introduction

In the history of philosophy, "nature" and "the self" have always stood as two towering peaks. Before the dawn of modern science had fully illuminated the European continent, Copernicus displaced the Earth from its central position in the cosmos with his heliocentric theory, thereby initiating the great process by which natural science broke free from theological dogma and embarked on the path to autonomy. This was not merely a paradigm shift in astronomy, but a profound intellectual revolution that fundamentally undermined the authority of immediate human experience and forced a reexamination of the relationship between the cognizing subject and the objective world.

Nearly two and a half centuries later, this seismic event found an equally momentous resonance within the domain of philosophy. In his *Critique of Pure Reason*, Kant explicitly characterized his epistemological turn as a "Copernican Revolution." Kant acutely perceived that the root cause of traditional metaphysics' endless disputes lay in its tacit assumption that cognition must conform to objects—a passive model of knowing. Kant inverted this relationship, proposing that objects must conform to our mode of cognition, thereby shifting the center of philosophy from the external object to the internal subject.

This paper first reviews the historical background of the Copernican Revolution and Kant's philosophical

appropriation of it. It then delves into the text of the *Critique of Pure Reason* to systematically expound the specific content of this “Copernican Revolution”—the fundamental inversion of the human cognitive model and the demarcation between the “thing in itself” and appearance. Subsequently, this paper will analyze how this revolution transcends the opposition between rationalism and empiricism, and reveal that its ultimate aim is to clear the ground for the reconstruction of a moral metaphysics.

2. Kant and the “Copernican Revolution”

In 1543 CE, Europe had not yet fully emerged from the shadows of the Middle Ages; the dawn of the Enlightenment still lay below the horizon, and the Church maintained a firm grip on the dominant social ideology. It was on May 24 of that year that a work entitled *On the Revolutions of the Heavenly Spheres* was quietly published. As its author lay on his sickbed, gazing upon this life’s work, the fruit of over thirty years of labor, he harbored no regrets. Two days later, on May 26, the great astronomer and mathematician Nicolaus Copernicus passed away. The heliocentric theory advanced in his posthumously published work fundamentally challenged the long-venerated geocentric theory. This doctrine not only drove a radical transformation in astronomy but also shook the cosmological foundations upon which the Church had based its authority, ultimately paving the way for the rise of all modern natural science.

In 1787 CE, in the Preface to the second edition of his seminal work, the *Critique of Pure Reason*, Kant invoked the name of Copernicus. He wrote: “This attempt is similar to that of Copernicus who, having failed to make progress in explaining the motions of the heavenly bodies by assuming that all the stars revolved around the spectator, tried to see if he might not be more successful by making the spectator revolve and leaving the stars at rest. In metaphysics, we can likewise try a similar experiment with regard to the intuition of objects”^[1].

Why did Kant call this experiment in philosophical epistemology a “Copernican Revolution”? What are the content and significance of Kant’s “Copernican Revolution”? This paper will answer these questions through an analysis of Kant’s *Critique of Pure Reason*.

3. The content of the Copernican Revolution

In the history of philosophy, the human being has often been regarded as the rational animal. Although humans know and transform the world through reason, the very nature of reason itself impels it to pursue questions that transgress the boundaries of its capacity. Because reason cannot answer such questions by itself, it is compelled to resort to principles that transcend all possible empirical application. These metaphysical principles may appear to have their respective justifications, but they have in fact all removed themselves from the domain of empirical verification. The result has been that, since ancient Greece, philosophers have been engaged in endless disputes on the battlefield of metaphysics.

Before Kant, the main opposing forces in this metaphysical war were the “rationalists” and the “moderate empiricists.” Although the two camps attacked each other incessantly, when faced with the challenge of “radical empiricism” in the form of “skepticism”, they joined forces to strike back under the common banner of “dogmatism.” In Kant’s view, however, both the disputes between rationalists and empiricists and the confrontations between dogmatists and skeptics were essentially futile struggles, because any attempt to seek truth beyond the bounds of reason’s own capacities was doomed to remain fruitless. Kant was deeply dissatisfied with the confusion and obscurity that pervaded traditional metaphysics, as his resounding declaration makes clear: “This age cannot be put off any longer by pretended knowledge; it is a call to reason to take on anew the most difficult of all its tasks, namely, that of self-knowledge”^[2].

Kant held that reason must undergo a thorough self-examination, and that all abuses extending beyond the limits of its capacity must be ruthlessly abandoned. Only through a critique of pure reason in general—a critique of the faculty of reason itself—can human reason achieve genuinely legitimate employment, and only then can the fog and obstacles within

metaphysics truly be cleared away. In this overall project of a critique of pure reason, Kant's "Copernican Revolution" constitutes a crucial and foundational moment.

Copernicus's heliocentric theory showed that when one stands on a rotating Earth, one is easily led to believe mistakenly that the Sun revolves around the Earth. Only by combining everyday experience with human reason can we correctly recognize that the Earth in fact revolves around the Sun. Kant then pointed out that this mode of thinking of Copernicus might also be applicable to philosophy: "If humanity wishes to explain nature scientifically, it cannot rely solely on the phenomena that nature directly presents to us, nor merely on our sensory experience. It must rely on something that transcends both of these and has nothing to do with immediate experience—namely, reason produced by the active spontaneity of the human subject"^[3].

Kant's fundamental inversion of the subject-object cognitive model in traditional metaphysics is precisely a "Copernican Revolution" in philosophy. By means of the historical precedent of Copernicus's heliocentric theory, Kant's unique contribution to philosophy can be more thoroughly understood. Earlier philosophers, when addressing metaphysical problems, without exception treated the object of cognition as an unchanging given and held that the subject's cognition (concepts) must conform to the object. This presupposition is analogous to the view that the Earth is the stationary center and the Sun a celestial body revolving around it. In the *Critique of Pure Reason*, however, Kant proposed a diametrically opposed subject-object cognitive model. He argued: "If intuition must conform to the constitution of objects, I do not see how we could know anything of them a priori; but if the object (as an object of the senses) must conform to the constitution of our faculty of intuition, then I can readily conceive of such a possibility"^[4].

In Kant's philosophical picture, all objects in a certain sense "revolve" around the human subject. It is not that people's cognition passively conforms to external objects; rather, external objects must be structured by our a priori forms of cognition in order to appear to us. These two formulations may seem to be merely a reversal of word order, but the epistemological turn expressed by the latter is as striking to the imagination as the realization that the Earth revolves around the Sun.

If one clings to the traditional philosophical view that all people's knowledge must conform to objects, then all knowledge can only be a posteriori and empirical, since a priori knowledge is supposed to transcend experience and not be subject to contingency. Yet the core subject matter of metaphysics is precisely such a priori knowledge. Hence, without the philosophical "Copernican Revolution"—without this fundamental epistemological turn in Kant—metaphysical inquiry would remain mired in an insoluble impasse due to its own internal contradictions. Likewise, the source of the long-standing, interminable disputes between dogmatists and skeptics lay precisely in their failure to grasp this deep-seated contradiction within traditional metaphysics.

As Kant put it, "We can know a priori of things only what we ourselves have placed into them." Human reason requires that we know objects through experience, but this by no means implies that the concepts we derive from experience must passively conform to objects. On the contrary, under the a priori determination of reason, all empirical objects necessarily conform to our a priori concepts in being known by us, and must be congruent with them. That is to say: "Although all our cognition begins with experience, it does not on that account all arise from experience"^[5].

As for those objects that are completely independent of human experience and reason, Kant calls them "things in themselves." Although the thing in itself is real in its own right, it cannot enter the domain of experience for us and is therefore in principle unknowable. This is even more the case for those objects that exist as ultimate ideas in the realm of the thing in itself—God, the soul, and the world-whole. Kant thus points out that no one can prove either the existence or the non-existence of God, and this very claim makes room for faith.

At this point, Kant's "Copernican Revolution", just as the heliocentric theory once challenged the geocentric theory, fundamentally shook the foundations of traditional metaphysics. In Kant's critical philosophy, a priori knowledge is preserved and is clearly divided into two types: the knowable knowledge of things as appearances, and the unknowable knowledge of things in themselves. Among these, the a priori knowledge that can be known, although closely related to the forms of human reason, must nevertheless have its objective validity tested by experience. That approach which

dogmatically determines a priori knowledge solely by reason, because it exceeds the legitimate limits of reason's capacity, is not endorsed by Kant.

The world constructed by Kant's philosophy is one characterized by the tension between reason and experience, and between speculation and practice. It fundamentally altered human understanding of both the world and one's own consciousness. As one later scholar remarked: "If you assume that the intuitive ideas in our minds are different from what we see and yet filter what we can see, that means you, like the ancient Aristotelian school, regard the scientific investigator as a passive observer, a blank slate—and that would be a true misunderstanding of the concept. After this revolution, Kant and his millions of followers believed that we have acquired a more satisfactory understanding of how we know"^[6].

4. The significance of the Copernican Revolution

At this point, people can return to reexamine the philosophical landscape before Kant's "Copernican Revolution." The rationalists clung solely to the side of a priori knowledge, claiming that reason alone could attain all knowledge, and that the ultimate source of all knowledge lies in the innate ideas and self-evident principles latent in the human intellect. The empiricists, by contrast, adhered rigidly only to the side of a posteriori experience, absolutizing sensory experience in everyday life as the sole source of knowledge, and entirely denying the constitutive role that reason plays in human cognition of the world.

In fact, both reason and experience are indispensable sources for human cognition of the world. On the one hand, when people deny that certain things can be known merely by speculative reason in a presumptuous manner, people must then examine and test them by means of practical reason. And when people acquire knowledge of objects through practical experience, that empirical knowledge is necessarily subject to and must conform to our a priori forms of concepts. On the other hand, people can cognize a priori the possibility of certain non-empirical objects, which not only proves the existence of a priori human knowledge, but also demonstrates the transcendental synthetic capacity with which human reason is endowed. Kant did not, like the rationalists, arbitrarily extend the legitimate territory of human reason, nor did he, like the empiricists, radically deny all certainty beyond experience. Although Kant acknowledged that all knowledge begins with experience, in his view, without the a priori formal conditions provided by reason, all empirical material would be nothing but a manifold of sensory impressions, and could never constitute knowledge with universal and necessary validity.

Through his "Copernican Revolution", Kant elucidated a core insight: human reason can cognize only those objects that are constituted by reason itself—if people do not actively construct the object, people cannot genuinely know it at all. Although reason constitutes the object of cognition for us, this constitution is by no means arbitrary or unbounded: "If we go beyond the bounds of experience, we will certainly not meet with any contradiction from experience. The temptation to extend our knowledge is so great that we stop in our tracks only when we encounter an evident contradiction"^[7]. In other words, "Beginning with Kant's philosophy, the supreme status of reason began to waver, and the human being began to be understood as a comprehensive, three-dimensional being, endowed with both rational and non-rational characteristics, continuously enduring and becoming"^[8].

There is good reason to hold that the fundamental significance of the "Copernican Revolution" in Kant's philosophy lies in its transcendence of the two philosophical traditions that had long stood in opposition in early modern philosophy, namely, the rationalism represented by Leibniz and the empiricism represented by Hume—particularly the far-reaching skepticism that developed out of the latter. On this point, one scholar notes that this was "the only possible justification for Kant's attempt to solve the riddle of metaphysics ... against Hume's skeptical attack"^[9].

Kant subjected both the rationalists and the empiricists to profound questioning and systematic critique. However, the "Copernican Revolution" constitutes only the foundation of Kant's transcendental philosophy. It is on this basis that Kant advanced the fundamental transformation from traditional speculative metaphysics to a moral metaphysics. And "this transformation thoroughly corrected the natural tendency of human reason, so that it no longer pursued an external transcendence in metaphysical epistemology, but instead pursued an internal transcendence in moral legislation"^[10].

On the one hand, Kant delimited the range within which reason can legitimately employ its capacities in metaphysics. On the other hand, in moral practice, he “denied knowledge in order to make room for faith” ^[11]. In fact, “the real significance of the ‘Copernican Revolution’ in Kant’s philosophy is not to provide a justification for science but to provide a justification for morality; it is not to limit metaphysics but to limit science; its ultimate aim is the reconstruction of metaphysics, namely, the reconstruction of moral metaphysics” ^[12]. Kant’s “Copernican Revolution”, as a key component of his critique of pure reason, reexamines the fundamental relations between concepts and objects, and between reason and experience. Through bold hypotheses and rigorous demonstrations, it made a foundational contribution to setting metaphysics on the secure path of a science.

5. Conclusion

In summary, Kant’s “Copernican Revolution” represents a profound awakening concerning the spontaneity of the cognizing subject. By inverting the traditional relation of conformity between objects and concepts in epistemology, Kant successfully redirected the philosophical inquiry from “How can we know a world independent of us?” to “How does the world appear to us as structured by our cognitive constitution?”

This turn not only provided a legitimate ground for synthetic a priori judgments, thereby opening a new critical path between the dogmatism of rationalism and the skepticism of empiricism, but also, through the strict demarcation between appearance and the “thing in itself”, set insurmountable boundaries for reason’s cognitive capacity while reserving an independent territory for faith and moral practice.

Just as Copernicus moved the center of the cosmos from the Earth to the Sun, thereby reshaping humanity’s worldview, Kant moved the center of philosophy from the external object to the internal subject, thereby reshaping humanity’s self-understanding. Kant’s aim in so doing was not, as later positivism would have it, to submit all questions to the arbitration of science. On the contrary, by limiting knowledge and the scope of rational capacity, Kant’s ultimate aim was “to deny knowledge in order to make room for faith.” This limitation is itself an expression of a deeper spirit of reason: a mature reason capable of self-critique and self-demarcation (i.e., reason purified through critique). Just as later generations admire Copernicus for his heliocentric theory, so too will people admire Kant once they truly understand his “Copernican Revolution”—admirable not only for his significant transformation of philosophical modes of thinking, but also for his equal respect for human reason and faith.

In the present age, long after the Enlightenment, when the development of technological reason constantly challenges the boundaries of ethics, and when the certainty of knowledge is continually overturned by new discoveries, the prudence and wisdom at the heart of Kant’s philosophy remain a lighthouse for our reflections on the relationship between science and humanity, as well as knowledge and value.

Disclosure statement

The author declares no conflict of interest.

References

- [1] Kant I, 2004, Critique of Pure Reason. People’s Publishing House, Beijing, Prefaces, Second Edition, 15.
- [2] Kant I, 2004, Critique of Pure Reason. People’s Publishing House, Beijing, Prefaces, First Edition, 3.
- [3] Cheng HL, 1989, Kant’s Idea of Subjective Activity in the “Copernican Revolution”. Journal of Hunan University, 1989(3): 33–34.
- [4] Kant I, 2004, Critique of Pure Reason. People’s Publishing House, Beijing, Prefaces, Second Edition, 15.

- [5] Kant I, 2004, Critique of Pure Reason. People's Publishing House, Beijing, 1.
- [6] Pirsig RM, 2011, Zen and the Art of Motorcycle Maintenance. Chongqing Publishing House, Chongqing, 88.
- [7] Kant I, 2004, Critique of Pure Reason. People's Publishing House, Beijing, 6.
- [8] Chen L, 2015, Kant's "Copernican Revolution" and Its Transformation and Significance for Philosophical Modes of Thinking. Journal of Culture: Philosophy of Culture, 2015(10): 180.
- [9] Henrich D, 2006, Between Kant and Hegel: Lectures on German Idealism. Taiwan Business Weekly Press, Taipei, 33.
- [10] Deng AQ, 2009, From Metaphysics to "Metapraxis": The Essence of the Copernican Revolution in Kant's Philosophy. Fudan Journal: Studies in Western Philosophy, 2009(4): 91.
- [11] Kant I, 2004, Critique of Pure Reason. People's Publishing House, Prefaces, Second Edition, Beijing, 22.
- [12] Li W, 2016, The "Copernican Revolution" in Philosophy: Kant's Reconstruction of Metaphysics. Journal of Wuhan University of Science and Technology, 18(1): 49.

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